Collision Landscape Analysis
What happened since our last Task Force meeting:

• City Council adopted the Vision Zero Resolution
• Applied for an OTS grant for a Vision Zero Safety and Outreach Campaign
• Data analysis
Updated Schedule

October 2016: Introduction and Purpose (done)
November 2016: Guiding Principles (done)
February 2017: Data Analysis
March-April 2017: Collision Profiles
June 2017: Draft Actions, Engineering
June 2017: Draft Actions, Non-Engineering
August 2017: Draft Action Plan
Today’s Agenda

1. Review data analysis
   a. Trends
   b. Location
   c. Vulnerable populations
   d. Behavior

2. Breakout discussion

3. Next steps
Transportation Injury Mapping System (TIMS)

• Injury collisions only (not property damage)
• 2009 – 2013 (2014 and 2015 data is provisional)
• Does not include state highway facilities
• Only includes collisions within the City of Sacramento

Key Terms

• “KSI” = killed or severely injured
• “vehicle” includes motorcycle and truck, unless otherwise stated
TRENDS
519 collisions with victims killed or severely injured (KSI) between 2009 and 2013.
Over the same period of time, the number of collisions with victims killed or severely injured increased by 7%
Auto Collisions
Down 14%

Bike Collisions
Up 40%

Pedestrian Collisions
Up 57%
Pedestrian collisions account for 10% of all collisions, but 43% of fatal collisions.
Mode Split

1. **ALL TRIPS***: 84% (vehicle), 13% (pedestrian), 3% (bicycle)
2. **ALL COLLISIONS**: 79% (vehicle), 11% (pedestrian), 10% (bicycle)
3. **KSI COLLISIONS**: 55% (vehicle), 31% (pedestrian), 14% (bicycle)
4. **FATAL COLLISIONS**: 50% (vehicle), 43% (pedestrian), 7% (bicycle)

*2012 California Household Travel Survey, City of Sacramento
The HIN accounts for 64% of all collisions, on 11% of the roadway network.
Commercial Areas

**Total Roadway Network**
- 53% commercial areas
- 47% non-commercial areas

**KSI Collisions**
- 23% commercial areas
- 77% non-commercial areas
Intersections

- All: 68%
- KSI: 61%
- KSI vehicle: 59%
- KSI bicycle: 82%
- KSI pedestrian: 56%
60% of fatal collisions occur on streets with posted speed 40+ mph. These streets account for less than 10% of street network.
Posted Speeds

<table>
<thead>
<tr>
<th>Speed Range</th>
<th>Total Miles</th>
<th>All Collisions</th>
<th>KSI Collisions</th>
<th>KSI Vehicle Collisions</th>
<th>KSI Bike Collisions</th>
<th>KSI Ped Collisions</th>
<th>Fatal Collisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 mph and under</td>
<td>79%</td>
<td>16%</td>
<td>18%</td>
<td>16%</td>
<td>20%</td>
<td>19%</td>
<td>10%</td>
</tr>
<tr>
<td>30-35 mph</td>
<td>12%</td>
<td>36%</td>
<td>40%</td>
<td>41%</td>
<td>46%</td>
<td>39%</td>
<td>29%</td>
</tr>
<tr>
<td>40-45 mph</td>
<td>8%</td>
<td>44%</td>
<td>40%</td>
<td>40%</td>
<td>40%</td>
<td>41%</td>
<td>56%</td>
</tr>
<tr>
<td>50+ mph</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
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<td>1%</td>
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</tr>
</tbody>
</table>
Roadway Types

- **Minor Collectors**
  - All Collisions: 70%
  - KSI Collisions: 16%
  - Vehicle KSI Collisions: 64%
  - Bike KSI Collisions: 62%
  - Pedestrian KSI Collisions: 67%
  - Fatal Collisions: 67%

- **Major Collectors**
  - All Collisions: 13%
  - KSI Collisions: 16%
  - Vehicle KSI Collisions: 15%
  - Bike KSI Collisions: 21%
  - Pedestrian KSI Collisions: 14%
  - Fatal Collisions: 19%

- **Arterials**
  - All Collisions: 77%
  - KSI Collisions: 11%
  - Vehicle KSI Collisions: 10%
  - Bike KSI Collisions: 11%
  - Pedestrian KSI Collisions: 14%
  - Fatal Collisions: 7%

- **Local/Other**
  - All Collisions: 0%
  - KSI Collisions: 11%
  - Vehicle KSI Collisions: 11%
  - Bike KSI Collisions: 11%
  - Pedestrian KSI Collisions: 14%
  - Fatal Collisions: 7%
Light Rail Stations

All Collisions

- Bicycle collisions: 11%
- Pedestrian collisions: 10%
- Vehicle collisions: 79%

Collisions Near Light Rail Stations

- Bicycle collisions: 10%
- Pedestrian collisions: 17%
- Vehicle collisions: 73%

bicycle collisions | pedestrian collisions | vehicle collisions
VULNERABLE POPULATIONS
KSI Victims

Share of **Auto Driver/Passenger** Victims Killed or Severely Injured: 98% KSI, 2% non-KSI

Share of **Bicyclist** Victims Killed or Severely Injured: 92% KSI, 8% non-KSI

Share of **Pedestrian** Victims Killed or Severely Injured: 80% KSI, 20% non-KSI
People age 60 and older account for less than 10% of all collisions, but over 25% of KSI pedestrian collisions.
Disadvantaged communities account for \( \frac{1}{4} \) of street network, but nearly half of fatal collisions
Disadvantaged Communities are defined under Senate Bill 535 as the top 25% census tracts within the State of California with the highest CalEnviroScreen 2.0 score. The score takes into account indicators related to environmental exposure and effects, sensitive populations, and socioeconomic factors.
HIN in Disadvantaged Communities

38% of the HIN falls within disadvantaged communities
BEHAVIOR
Alcohol Involved

All Collisions
- Alcohol involved: 11%
- No alcohol involved: 89%

KSI Collisions
- Alcohol involved: 27%
- No alcohol involved: 73%
Top Violation for all collisions: Unsafe Speed (25%)

- Under the influence: 22% of KSI vehicle collisions
- Wrong side of road: 18% of KSI bike collisions
- Pedestrian violation: 46% of KSI pedestrian collisions
Driver Action

Drivers in All Collisions:
- Proceeding straight: 56%
- Right turn: 14%
- Left turn: 13%
- Other: 26%

Drivers in KSI Collisions:
- Proceeding straight: 62%
- Right turn: 13%
- Left turn: 14%
- Other: 23%

Drivers in KSI Vehicle Collisions:
- Proceeding straight: 59%
- Right turn: 14%
- Left turn: 19%
- Other: 26%

Drivers in KSI Bike Collisions:
- Proceeding straight: 65%
- Right turn: 9%
- Left turn: 8%
- Other: 18%

Drivers in KSI Pedestrian Collisions:
- Proceeding straight: 70%
- Right turn: 8%
- Left turn: 8%
- Other: 18%
Pedestrian Action

All Pedestrian Collisions

- 49% crossing in crosswalk
- 29% crossing not in crosswalk
- 21% other

KSI Pedestrian Collisions

- 45% crossing in crosswalk
- 28% crossing not in crosswalk
- 27% other
### Bicyclist Action

#### All Bicycle Collisions

- Proceeding straight: 73%
- Right turn: 13%
- Left turn: 7%
- Traveling wrong way: 5%
- Other: 2%

#### KSI Bicycle Collisions

- Proceeding straight: 67%
- Right turn: 16%
- Left turn: 7%
- Traveling wrong way: 7%
- Other: 3%
• What was unexpected?
• Which findings do you think the community will find most compelling?
• Which findings make you want to learn more?
• What follow-up questions do you have?
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June 2017: Draft Actions, Engineering
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