Pedestrian Safety
20 Years Later

What's Working, What Isn’t

Rock Miller, P.E.
Why this Study?

• I became Involved in Pedestrian Safety in the 1990s.
  – Helping Cities in Crosswalk Litigation
  – Increasing Role in Pedestrian Litigation
  – Looking to help document historical trends
Early Years of Traffic Safety

2/3 to 3/4 Pedestrians

1/3 Children
Pedestrian Low Point?

- c. 1970
- San Diego Pedestrian Crosswalk study
- Concludes that marked crosswalks are unsafe and should be avoided where possible
- 1000s of crosswalks removed
- Thoughts prevail until 1990’s
Santa Ana Crosswalk Study (1997)

- 150 Marked Crosswalks
- 100% Sample
- Vehicle and Pedestrian Counts
- Correlation with Accidents
Pedestrian Collisions

- Midblock
- In Sidewalk
- Signal or Stop Sign
- In Marked Uncontrolled Crosswalk
- No Control or Markings
- Other

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So Where are we Now?

Pedestrian Deaths in 2019 Were Highest in 30 Years, Report Says

The Governors Highway Safety Association calculates that there were 6,590 pedestrian deaths in 2019, a 5 percent increase from 2018. The national rate of 1.28 pedestrians killed per 100 million vehicle miles traveled (VMT) was the highest since 2006.

By Colin Stewart
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Shout Out to U.C. TIMS Site

- Geolocate Fatal and Injury Crashes
- Create Spreadsheet for Rough Analysis
- Find a Large Dataset for a Place I know
  - Perhaps a City of 2-3 Million?
2008

- 2569 Reported Incidents
- 82 Fatalities

2017

- 3030 Reported Incidents (+18%)
- 117 Fatalities (+42%)
Location Types in 2017

- Within Intersection: 37%
- Within 0-15 feet of Intersection: 20%
- 15-100 Feet from Intersection: 22%
- More than 100 feet from Intersection: 21%
Severity

- Fatal 4%
- Severe 14%
- Visible Injury 37%
- Complaint of Pain 45%
Fatal Crashes: Code Violations

- DUI 3
- J Walk 10
- No Yield to Ped 25
- Ped Immed Hazard 50
- Ped on Sidewalk 1
- TS Don’t Walk Violation 6
- TS Ped Violation 3
Fatal Pedestrian Collisions
2008    2017

- All-way Stop        0    2    1.7%
- Freeway             9    10   8.5%
- Mid Block (> 50’)    31   46   39%
- Mkd UnC XW          4    8    7%
- Unmarked UnC        14   25   21%
- Traffic Signal      24   26   22%
- All Uncontrolled    49   79   67%
Focus Areas

• Locations without Controls
• Important Busy Streets
  – Lots of Pedestrian Activity?
  – Equity / Income
Areas Needing Research

• Marked Uncontrolled Crosswalks
  – Why is it increasing?
  – Are Interventions Working

• Why So Many Near But Not At Intersection
Problems Large but not Increasing

- Traffic Signals
- Pedestrians on Freeways
  - New Systemic Approaches Needed for Improvement
We Still Have a Lot of Work to Do

Questions??

And MAHALO