Local Road Safety Planning

A systemic approach to reduce traffic incidents
FoRRRwD video

https://www.youtube.com/watch?v=WfdBrrl0WwU
**Emphasis Areas**
- Impaired Driving
- Occupant Protection
- Distracted Driving
- Intersection Safety
- Roadway Departure
- Young Drivers
- Older Drivers
- Pedestrians
- Bicyclists
- Motorcyclists
- Heavy Trucks

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**YTD Fatalities by Route Type**

<table>
<thead>
<tr>
<th>Route Type</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interstates</td>
<td>219</td>
<td>197</td>
</tr>
<tr>
<td>Other State Routes</td>
<td></td>
<td>765</td>
</tr>
<tr>
<td>Non-State Routes</td>
<td></td>
<td>722</td>
</tr>
<tr>
<td></td>
<td></td>
<td>562</td>
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<td></td>
<td></td>
<td>525</td>
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</tbody>
</table>
Local Road Safety Plans
• Second only to Texas, Georgia has the most number of counties in the US (159)
• In Georgia, 83% of roads are maintained by local agencies (87,542 mi of county roads)
• In Georgia, 42% of non-Interstate fatalities occur on locally owned roads
• Georgia ranks 6th in the country for fatal crashes on county-owned roads
LRSP Examples & Implementation
Last year, 347 people died on our roads

https://www.youtube.com/watch?v=ra5LK8x86zU
LRSPs Come in All Shapes and Sizes
Local Road Safety Plans are Scalable

1. Light (2-10 pages)
2. Medium (11-50 pages)
3. Robust (51-300 pages)

• WA State Counties - Hours of staff time to complete local road safety plan
  • Ranged from 20 hours to 500 hours
  • Under 40 hours (2 of 13 counties)
  • Most said about 80 hours (7 of 13 counties)
  • 250+ hours (4 of 13 counties)
Systemic Safety Planning Process

Step 1: Identify Focus Crash Types and Risk Factors

Step 2: Screen and Prioritize Candidate Locations

Step 3: Select Countermeasures

Step 4: Prioritize Projects
Crash Trees
Risk Factors
What is a Crash Tree, exactly?
Bartow County Fatal Crashes by Manner of Collision

Location: Bartow
Date range: 2013 to 2018
Number of Crashes: 20731

Number of Crashes: 121
Percent of Crashes: 1%

- Angle
  Number of Crashes: 28
  Percent of Crashes: 29%

- Head On
  Number of Crashes: 8
  Percent of Crashes: 7%

- Not a Collision with Motor Vehicle
  Number of Crashes: 71
  Percent of Crashes: 59%

- Rear End
  Number of Crashes: 8
  Percent of Crashes: 7%

- Sideswipe-Opposite Direction
  Number of Crashes: 4
  Percent of Crashes: 3%

- Sideswipe-Same Direction
  Number of Crashes: 1
  Percent of Crashes: 1%
Helpful Hints

• Crash trees can include all injury crashes or just severe injury crashes for one focus crash type

• Examine total and severe crash categories

• Experience suggests 100+ crashes for identifying risk patterns
  • *Increase sample size by:*
    • Increasing number of years
    • Increasing geographic area (region instead of county)
    • Include minor injuries

• *Note: For smaller or rural jurisdictions, less crash data can be utilized for analysis.*
## Crash Tree Combinations

### Primary
- State / local
- Rural / urban
- Segment / intersection
- Segment type
  - Freeway, multilane, two-lane, one-way
- Intersection control
  - Signalized
  - Unsignalized
  - Uncontrolled

### Secondary
- Tangent / curve
- High-speed / low-speed
- Street lighting
- District or regions
- Traffic volume
- Lane width
- Shoulder type/width
- Alignment
- Land use
Numetrics Crash Plot
LRSP Pilot Important Dates

- February 25: Webinar 4
- March 25: Webinar 5
- April 15: Webinar 6
- April 19-23: NACE Annual Meeting with in-person sessions, Baldwin County, AL
- May 27: Webinar 7 and Wrap-Up
What are my Action Items/Next Steps?

Examples

• Complete Plan
• Circulate or Share Plan
• Communicate Plan
• Adopt Plan
• …
• IMPLEMENT Plan!
LRSP Links

• Nevada County, CA - https://mynevadacounty.com/DocumentCenter/View/26390/2019-Local-Road-Safety-Program

• WashDOT LRSP webpage - https://www.wsdot.wa.gov/LocalPrograms/Traffic/FedSafety.htm


• Tribal LRSPs - http://www.tribalsafety.org/Resources/Safety-Planning/Safety-Plan-Examples
Safe Roads Ahead