Local Road Safety Plans

Local Road Safety Plan Pilot 2.0
March 13, 2019

Agenda

• Welcome & Introductions
• NACE Annual Meeting Update
• Review of Data, Systemic Analysis, & Proven Safety Countermeasures
• Review of a LRSP
• Funding Safety
• Implementing a LRSP
• Q&A
Participants

**GEORGIA – Lead Contacts**

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<td>Scott Zehnagraf</td>
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<td>Augusta-Richmond</td>
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<td>Cobb</td>
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**INDIANA – Lead Contacts**

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<td>Peggy Siposowski</td>
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<td>Monroe</td>
<td>Lisa Ridg</td>
<td>NIRCC</td>
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<td>Montgomery</td>
<td>Jim Peck</td>
<td>Dan Avery</td>
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<td>Steuben</td>
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**KENTUCKY – Lead Contacts**

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LRSP Pilot 2.0 Website

Safety education program begins on Sunday, April 14th with Low Cost Safety Improvement Workshop. The same workshop that was offered in Savannah. Monday, April 15th begins with Growing Positive Safety Culture which was also offered in Savannah too. Later, Monday afternoon you will learn simple strategies and tactics to communicate technical information to non-technical audiences and will be given some simple communication tools for crafting more effective messages. Tuesday, Rural Roadway Departure will come into focus as you learn about FHWA Everyday Count efforts. Finally, on Wednesday, you will get to ask question of your peers that have or are working on local road safety plans.

**SUNDAY, April 14**
- Low Cost Safety Improvements

**MONDAY, April 15**
- Growing Positive Safety Culture
  - Marketing Safety

**TUESDAY, April 16**
- Rural Road Departure

**WEDNESDAY, April 17**
- Local Road Safety Plan Panel Discussion
- Safety Committee Meeting
- LRSP Hands-on Workshop

**Local Road Safety Plans**
Poll 1

Are you planning on attending NACE in Wichita, KS in April?
- Yes
- No
- Maybe
- I Don’t Know

Poll 2

If you are not attending in person, which option would you like to participate in April 17 from 3-5pm ET?
- Work independently on my LRSP during this time (at your office)
- Schedule an appointment with the Team to get help on your plan (web/phone based)
- I Don’t Know
Review
LRSP Template

The Local Road Safety Plan Template is a tool designed to help communities develop and implement local road safety plans. It provides a structured approach to identifying and addressing safety concerns on local roads. The template is divided into several sections, each addressing a critical component of the planning process. Here is a summary of the key sections:

**Step 1: Establish Leadership**
- Identify and involve key stakeholders.
- Set the tone and direction for the LRSP development.

**Step 2: Analyze the Safety Data**
- Collect data on crashes, near-misses, and other safety indicators.
- Analyze data to identify patterns and areas of concern.

**Step 3: Determine Emphasis Areas**
- Prioritize areas based on the analysis of safety data.
- Focus resources on the most critical problem areas.

**Step 4: Identify Strategies**
- Develop solutions for the identified emphasis areas.
- Consider both engineering and management approaches.

**Step 5: Prioritize and Incorporate Strategies**
- Evaluate the feasibility and effectiveness of each strategy.
- Integrate strategies into the LRSP.

**Step 6: Evaluate and Update the LRSP**
- Monitor progress and outcomes of implemented strategies.
- Adjust the LRSP based on feedback and new data.

By following these steps, communities can develop comprehensive LRSPs that effectively address local road safety issues.
Local Road Safety Plans

Safety Data & Risks

- Crash
- Traffic Volume
- Roadway
- Enforcement
- Maintenance Logs
- Road Safety Audits

2011-2015 County X Data

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Local Road Safety Plans

NACE/FHWA Local Road Safety Plan Pilot 2.0
Webinar 5 – Funding and Implementation
3/13/2019

8
Terminology

• **Systemic approach:**
  • **deploy low-cost countermeasures at locations with the greatest risk**

• **Site-specific “Hot-Spot” approach (aka high crash location):**
  • **deploying site-specific improvements at locations with the highest frequency of crashes**

• **Systematic Approach (aka systemwide):**
  • **deploy countermeasures at all locations**

Systemic Analysis Steps

1. Analyze data to identify focus/priorities
2. Analyze severe crashes to identify risk factors
3. Select over-represented risk factors
4. Analyze roadway network for presence of risk factors
5. Create prioritized list of roadway sections
6. Identify countermeasures to address prioritized locations
7. Develop a prioritized list of projects
Proven Safety Countermeasures

Countermeasures That Work:
A Highway Safety Countermeasure Guide
For State Highway Safety Offices
North Edition 2017

Local Road Safety Plans
Lowndes County Crash Data

<table>
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<tr>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>County/Route</th>
<th>Event Type</th>
<th>Scenario</th>
<th>No. of Accidents</th>
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<td>GA 500</td>
<td>Collision</td>
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<td>10:00</td>
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<td>GA 1000</td>
<td>Crash</td>
<td>Multi-Vehicle</td>
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<td>3/3/2019</td>
<td>14:00</td>
<td>2000 Main Street</td>
<td>GA 2000</td>
<td>Crash</td>
<td>Single Vehicle</td>
<td>1</td>
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Poll 3

GA Counties: Do you have access to GEARS?

- Yes
- No
- I Don’t Know
Poll 4a

GA Counties: Would you like a tutorial on how to get your crash data from GEARS?
• Yes
• No
• Maybe
• I Don’t Know

Poll 4b

• Would you like assistance with your crash data or other data sources?
  • Yes
  • No
  • Maybe
  • I Don’t Know
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)
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


LRSP Walk Through – Nevada County, CA
Poll 5

After seeing this LRSP example and others (Savannah or links provided), do you think your plan will be (choose one)

- Light - like Nevada County, CA or Cowlitz County, WA
- Medium – City of Tacoma, WA or Kittitas County, WA or Larimer County, CO
- Robust - Like Marin County, CA or Otter Tail County, MN or Clackamas County, OR
- I Don’t know

Poll 6

- What do you think are key components to implementation? (open ended)
Larimer County, CO
Plan Assessment

Safety Improvement Monitoring and Evaluation
In previous years, there has been a focus on the state road network and limited on other improvements. As we move forward, we need to ensure that improvements are ongoing.
- CR 10 — eastern section east of I-25
- CR 32 — southern section south of I-25
- CR 12 — eastern section east of I-25
- CR 30 — southern section south of I-25
- CR 20 — northern section north of I-25

The locations are marked on the map above. The color indicates the level of improvement, and the number indicates the location number.

Average for all locations:
- 50% reduction in all crashes
- 70% reduction in severe crashes

The before and after crash counts for each location are listed in Appendix B — Table 1.

Questions

Local Road Safety Plans
100% Federal Share

- 100% Federal Share for the cost of construction of certain Safety Projects - 23 USC 120(c)
  - roundabouts, pavement marking, shoulder and centerline rumble strips and stripes, traffic signs, traffic signal, guardrails, impact attenuators, end treatments, breakaway utility poles…
Streamlined Signing Programs

- Various States have purchased signs, poles and hardware, with the local agency providing the labor, traffic control, and equipment as the “match”
  - Iowa, Nebraska, Ohio, etc.

- Using federal funds to procure signs/devices as “equipment” (deemed as property having a unit cost less than $5,000 – 2 CFR 200
  - Maine

Abbreviated Process for Systemic Safety Improvements

- New Mexico - Proven Countermeasures
  - e.g. Installation of longitudinal rumble strips on rural highways with posted speeds of 45 MPH or greater

- Indiana - Local HSIP Project Selection Guide
  - Projects utilizing these countermeasures only need to submit a cover letter from the Local Public Agency (LPA) and a form with project information.
Noteworthy Practices Links


Force Account – MS Example

- Safety projects are an immediate need
- Approved in 2015
- Set aside HSIP $8
- Work done with MDOT forces (Districts)
High Risk Rural Roads

FUNDING HIGH RISK RURAL ROAD PROJECTS: Overcoming Limited Data in Kansas

Prior to 2015, Kansas was facing challenges identifying projects that would work for High Risk Rural Roads (HRRR) due to limited data on project geometric characteristics, crashes, and costs. The problem was that the state lacked sufficient data on crashes and costs.

To address this challenge, the Kansas Department of Transportation (KDOT) worked with the National Association of County Engineers (NACE) to develop a statewide program that could help identify and prioritize projects based on cost and crash data.

The program was designed to be a comprehensive approach to identifying and prioritizing HRRR projects that would work for cities and counties. It involved the development of a statewide database of crash data and cost data, which would be used to identify and prioritize projects that could help reduce crashes and costs.

The program was a success, and it was used as a model for other states to follow. The results were impressive, with a significant reduction in crashes and costs for HRRR projects.

For more information, visit: https://safety.fhwa.dot.gov/hsip/hrrr/fhwasa18070/fhwasa18070.pdf

Local Road Safety Plans
Other Funding Opportunities

- Public Health Grants
- Section 405
  - Education
  - Enforcement
  - TRCC
  - Data Improvement

Local Funding

- Maintenance
- Capital Improvement
Open Discussion by State on Funding Opportunities

• Check notes from Savannah
Thurston County, WA Case Study

Where is Thurston County
Safety Analysis

Focus Crash Type
Roadway Departure

Focus Facility
Arterial & Collector Roads
Horizontal Curves

Analysis Method
Systemic Safety Project Selection Tool

45% of all Fatal and Serious Crashes were reported in Horizontal Curves
Collected data on 270 curves


Funding

Leveraged federal funding
Maintenance program also contributed to sign and wide edge line installations

Awarded almost $6 million in HSIP funds since 2012
What did we do?

1500 Signs
28 miles
65 miles
35 intersections
75,000 lineal feet
30,000 RPM's
2 miles

Note: Improvements were completed over several HSIP funding programs and also through local forces.

Local Road Safety Plans

Results

Horizontal Curve Fatal and Severe Crashes

35% Reduction in curve crashes

2006 to 2010
2012 to 2016
Implementation of a Safety Plan

Implementation Plan

• Do what we can with what we have
• Leverage outside funding
• Getting others involved
• Telling our story
Do what we can with what we have
Taking care of what we have

Do what we can with what we have
System Improvements...
Leverage outside funding
Grant funded capital projects and land use development

- Rumble Strips
- Enhanced crosswalk at school
- Complete Streets

- Roundabouts
- Guardrail

Link to Thurston County 6-year Transportation Improvement Program:
https://www.co.thurston.wa.us/publicworks/Library/2018TIP_FINAL/index.html

Getting others involved

- Thurston County Public Health and Social Services
- Thurston County Public Works
- Prosecuting Attorney’s Office
- County Road Administration Board
- Sherriff’s Office
- Thurston Regional Planning Council
- Washington State Traffic Safety Commission
- Washington State Department of Transportation
- Chehalis Indian Tribe
- Child Care Action Council – Safe Kids
- Grays Harbor County Public Works
- Intercity Transit
- Lewis County Public Works
- North Thurston School District
- Thurston County Medical One
- City of Olympia
- City of Tacoma
Telling our story

• Internal
• Elected Officials
• Community
Where are we at
LRSP maturity model

- Embrace data
- Stakeholder involvement
- Develop, implement, evaluate LRSP
- Communication
- Agency Transportation Policies
- Integrated LRSP
- Agency Strategic Priority

Local Road Safety Plans

The way we do business

- Rumble Strips
- Intersection Lane
  Narrowing (Targeted)
- Maintain
  Investments
- Local Road
  Safety Plans
- High Friction
  Surfacing
- Signing
- Reflective
  Signal
  Backplates
- Roundabouts
- Wide Edge
  Lines (Targeted)

Local Road Safety Plans
Local Road Safety Plans

Homework
LRSP Pilot Homework

- Crash data
- Determine your emphasis areas
- Select Risk Factors
- Analyze network for presence of risk factors
- Select Low Cost Countermeasures
- Start drafting your LRSP
- Ask us for help any time!

Poll 7

What is your next step/action item?
- Open ended
“Do what you can, with what you have, where you are.”

– Theodore Roosevelt
**LRSP Pilot Team**

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<th>FHWA</th>
<th>LTAP</th>
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<td>Hillary Isebrands</td>
<td>Marie Walsh</td>
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<td><a href="mailto:Rosemarie.Anderson@dot.gov">Rosemarie.Anderson@dot.gov</a></td>
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**Local Road Safety Plans**

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**Safe Roads Ahead**
Local Road Safety Plans