Safety Implementation Assistance Program Update

Safety Data Oversight Committee (SDOC) November 8, 2017

Pam Hutton, AASHTO SHRP2 Implementation Manager
Main Objectives

- Utilize IAP to demonstrate the use of the NDS Safety Data
- Increase states’ understanding of the potential uses of the data
- Identify safety countermeasures based on research projects
- Reduce crashes and save lives!
Concept to Countermeasure - Safety IAP Process

Phase 1 – Proof of concept with a sample reduced data set

Phase 2 – full data set and in-depth research analysis with countermeasure identification

Phase 3 – deployment to adopt, champion or implement countermeasure nationally
<table>
<thead>
<tr>
<th>Schedule</th>
<th>Activity</th>
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</thead>
<tbody>
<tr>
<td>January, 2015</td>
<td>Begin Phase 1</td>
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<tr>
<td>September, 2015</td>
<td>Phase 1 Reports delivered</td>
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<tr>
<td>February, 2016</td>
<td>Begin Phase 2</td>
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<tr>
<td>May 2 – 3, 2017</td>
<td>States reported Phase 2 early findings to AASHTO’s SHRP2 Safety Task Force</td>
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<tr>
<td>May 10 – 11, 2017</td>
<td>Status update presented to TRB SHRP2 Safety Data Oversight Committee</td>
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<tr>
<td>May 23, 2017</td>
<td>AASHTO Safety Task Force reported to FHWA on its Phase 2 early findings</td>
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<tr>
<td>May 31, 2017</td>
<td>FHWA announced Phase 3 selections</td>
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<tr>
<td>June 2017</td>
<td>Debrief with each team (individually) regarding Phase 3 selections</td>
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<tr>
<td>September 30, 2017</td>
<td>Deadline to obligate funding for Phase 3</td>
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<tr>
<td><strong>November 8, 2017</strong></td>
<td><strong>Status update presented to TRB SHRP2 Safety Data Oversight Committee</strong></td>
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<tr>
<td>November 2017 – September 2019</td>
<td>Finalize Phase 2 research and conduct Phase 3 research</td>
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Phase 3 Selection Process

- **4/14/17** – IAP teams submit Phase 2 “Early Research Findings” report to FHWA

- **4/26/17** – STF evaluations of reports due

- **5/2/17 – 5/3/17** – IAP teams present Phase 2 “Early Research Findings”
  - 20 min – Team Presentations
  - 10 min – Q&A
  - 2 min – FHWA Product Lead Comments
  - 2 min – SME Comments
  - 16 min – Open Deliberation
    - STF opportunity to revise original scoring to incorporate presentation/Q&A
    - Group Deliberation before Adjourning

- **5/23/17** – Report delivered to FHWA on behalf of STF with recommendations for Phase 3
STF Deliberations

- Progress/results varied more substantially in Phase 2 ERF than in Phase 1.
- Methodology concerns raised for multiple reports – multiple variables, etc.
- Difficulty focusing on a specific research question
- Some challenges encountered – data procurement, schedule, team organization, team turnover
- Abundance of research proposed for Phase 3; not many countermeasures proposed
- Is the NDS the right tool for countermeasure development and evaluation? Are the findings implementable? Are we still, even now, still learning about how to use this data set across multiple problem areas and research projects?
- Strong link between success of research and level of engagement with DOT
- There was a big difference when the proposed implementation was the product of a precise research plan teamed with consistent feedback and advice from an engaged DOT
## Phase 3 Selections

<table>
<thead>
<tr>
<th>State</th>
<th>Research Topic</th>
<th>Proposed Phase 3 Cost</th>
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<tbody>
<tr>
<td><strong>Washington 1/SP</strong></td>
<td>Examining Episodic Speeding</td>
<td>FHWA Support</td>
</tr>
<tr>
<td><strong>Wyoming</strong></td>
<td>Weather Conditions</td>
<td>FHWA Support (Optional Based on Report)</td>
</tr>
<tr>
<td><strong>Florida</strong></td>
<td>Pedestrians at Signalized Int</td>
<td>Matching Funds (DOT and Other)</td>
</tr>
<tr>
<td><strong>Washington 2/LT</strong></td>
<td>Role of Rdway Lighting in Crashes</td>
<td>Matching Funds (DOT and Other)</td>
</tr>
<tr>
<td><strong>Minnesota</strong></td>
<td>Speed and Distraction in Wrk Zn</td>
<td>Matching Funds (DOT and Other)</td>
</tr>
<tr>
<td><strong>Michigan</strong></td>
<td>Effect of Sp Lmts on Drv Behavior</td>
<td>Matching Funds (DOT and Other)</td>
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</table>

| Total funded amounts for Phase 3 | $1,770,481 | $172,296 | $418,702 |

* Maximum funding available for Phase 3 - $1,987,125

Total funded amounts for Phase 3 - $1,942,777
Phase 3 – Implementation Actions

- Washington State DOT/Speeding
  - Develop reference guide and diagnostic tool to assist engineers in mitigating speeding
  - One-day training course to help engineers apply guide and tool
  - Conduct implementation study to provide further validation of Phase 2 results

- Wyoming DOT
  - Integrate human factors considerations within the Variable Speed Limit system
  - Road segment-based system to communicate adverse weather conditions
  - Develop practice-ready guidelines for establishment and use of Variable Speed Limits

- Florida DOT
  - Develop engineering countermeasures
  - Design education countermeasures
  - Develop enforcement countermeasures
  - Conduct pilot study to evaluate countermeasures
  - Design statewide plan for implementation
Phase 3 – Implementation Actions

• Washington State DOT/Lighting
  o Recommend modifications to existing lighting design guides/standards
  o Develop tools to support/facilitate state roadway lighting design
  o Develop guidelines for potential roadway lighting CMFs

• Minnesota DOT
  o Develop toolbox of recommended changes to traffic control manuals
  o Develop recommended policies for restriction of cell phones in work zones

• Michigan DOT
  o Develop sign placement strategy
  o Develop traffic control strategies
Next Steps

- Finish Phase 2 research (9 teams) – late 2017/early 2018
- Begin Phase 3 (6 teams) – late 2017/early 2018
- SHRP2 Session at TRB Annual Meeting – January 2018
- Communicate findings/countermeasures to safety community as Phase 3 implementations progress
Thank You!

On behalf of FHWA/AASHTO and all partners

THANK YOU!
Questions?

- **FHWA SHRP2 website:** [fhwa.dot.gov/goSHRP2](http://fhwa.dot.gov/goSHRP2)

- **AASHTO SHRP2 website:** [SHRP2.transportation.org](http://SHRP2.transportation.org)
  - Implementation information for AASHTO members
  - Information about SHRP2 safety implementation

- **Safety Implementation Managers:**
  - Aladdin Barkawi, FHWA: [aladdin.barkawi@dot.gov](mailto:aladdin.barkawi@dot.gov)
  - Kelly Hardy, AASHTO: [khardy@aashto.org](mailto:khardy@aashto.org)