



Safety Implementation Assistance Program Update

Safety Data Oversight Committee (SDOC)
May 10, 2017

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U.S. Department of Transportation
Federal Highway Administration

AMERICAN ASSOCIATION
OF STATE HIGHWAY AND
TRANSPORTATION OFFICIALS

AASHTO

TRANSPORTATION RESEARCH BOARD
OF THE NATIONAL ACADEMIES

SHRP2 Implementation Assistance Program (IAP)

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 !**



Role of Safety Task Force (STF)

- Collaborate with FHWA, TRB, and research teams
- Oversee Safety Implementation Assistance Program for AASHTO
- Review research proposals and research findings
- Promote opportunities for State DOTs and their research partners to use the NDS/RID
- Provide a customer/user perspective to TRB Safety Data Oversight Committee (SDOC)

Activities

- Monthly conference calls
- Monitoring progress of teams through series of two interviews – focus on program support, not team evaluation
- Reporting findings to STF, FHWA, and TRB

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

Monitoring Progress

- Interviews to inform TRB, FHWA and AASHTO Safety Task Force of program progress
- Support program, not evaluate teams
 - Novel data set
 - Many users have limited experienced
 - Understand common experiences
- **Two sets of interviews** conducted during **Phase 1**
- **Two sets of Phase 2** interviews conducted, and completed in Sept 2016 and March 2017

Survey Questions Covered Broad Areas

- Contracts
- Data access, including data sharing agreement and specific data requests
- Technical assistance provided by VTTI and ISU
- Programmatic process improvements
- Specific data issues with NDS/RID

Phase 2 User Interviews

- All teams excited with potential research findings
- Teams used knowledge gained in Phase 1 to obtain larger data sets targeted to their needs
- Concern expressed about lack of access to crash location data
- **VTTI providing quick precise response to inquiries**

Observations from Interviews

- Improved clarity and frequency of communication compared to Phase 1
- **User experience in Phase 1 allowed teams to consider alternative study designs with more complex combinations of data**
- NDS data collection is iterative in nature
- Sometimes hard to evaluate data tradeoffs without understanding cost drivers
- Teams interested in better understanding of where they are in the queue.

Safety IAP Project Schedule

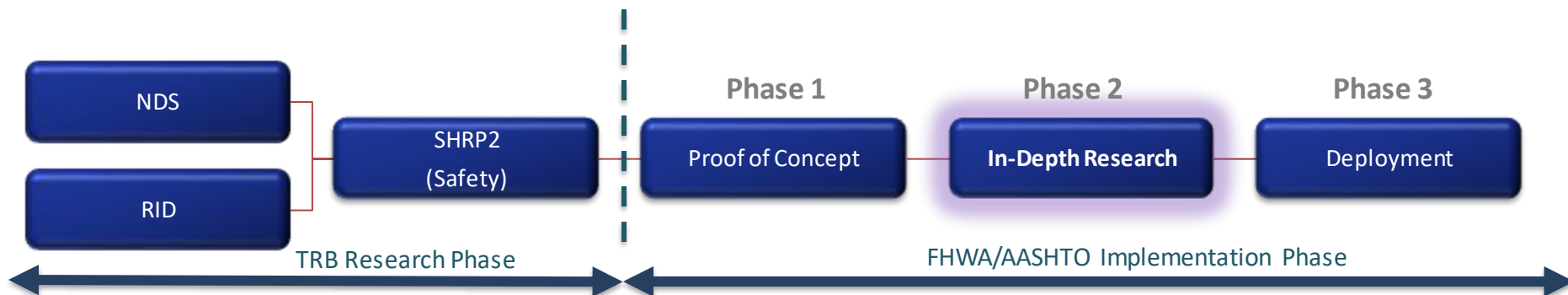
Schedule	Activity
January, 2015	Begin Phase 1
September, 2015	Phase 1 Reports due
February, 2016	Begin Phase 2
May 2 – 3, 2017	States report findings to AASHTO's SHRP2 Safety Task Force
May 10 – 11, 2017	Status update presented to TRB SHRP2 Safety Data Oversight Committee
Late May to early June, 2017	AASHTO Safety Task Force reports to FHWA on its findings
June – August 2017	FHWA determines and announces Phase 3 projects
September 30, 2017	Deadline to obligate funding for Phase 3
October 2017 – September 2019	Project findings are implemented

Phase 1 Results - Summary

- All teams excited with potential research findings
- **No fatal flaws** in research or ability to use NDS data
- Sample of potential outcomes through POC:
 - New data processing tools
 - New highway lighting standards
 - New crash modification factors
 - New methods for establishing speed limits and advisory speeds
 - New understanding about effectiveness of work zone devices/messaging/campaigns
- 2-year, in-depth research proposals
- Lower-than-expected Phase 2 cost proposals

Phase 2 – In-Depth Analysis

- Selections were announced in December 2015
- **Phase 2 began February 2016**
- Research focused on:
 - Conducting in-depth research and analysis
 - Identifying and refining possible countermeasures



Safety Project Topics

Phase 2 In-Depth Research and Analysis Projects

Pedestrian Safety

Florida DOT

Roadway Departure

Iowa DOT

Speeding

Michigan DOT
Washington State DOT

Work Zones

Minnesota DOT

Horizontal and Vertical Curves

North Carolina DOT

Interchange Ramps

Utah DOT

Adverse Conditions

Wyoming DOT

Roadway Lighting

Washington State DOT

Phase 2 – Early Research Observations

- **Observations from Reports/Presentations Prepared/Delivered May 2-3**
 - 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 applied research? Are the findings implementable?
 - Strong link between success of research and level of engagement with DOT
 - **There was a big difference when the proposed implementation was largely the product of the researcher versus the product of a team (researchers and DOT implementers)**

Phase 3 – Anticipated Deliverables

- Policy changes
- Guidance documents
- Education campaigns
- New standards/criteria
- Refinements to existing standards/criteria

Next Steps

- **FHWA to notify teams of Phase 3 selections – soon**
- Begin Phase 3 – late 2017/early 2018
- Debrief with all teams and AASHTO SHRP2 team – candid feedback
- Teams work with FHWA to obligate funding prior to September 2017

Questions ?

- **FHWA SHRP2 website:** fhwa.dot.gov/goSHRP2
- **AASHTO SHRP2 website:** SHRP2.transportation.org
 - Implementation information for AASHTO members
 - Information about SHRP2 safety implementation
- **Safety Implementation Managers:**
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