



Safety Implementation Assistance Program Update

*Safety Data Oversight Committee (SDOC)
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**Pam Hutton, AASHTO
SHRP2 Implementation
Manager**



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 !**



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

Safety IAP Project Schedule

Schedule	Activity
January, 2015	Begin Phase 1
September, 2015	Phase 1 Reports delivered
February, 2016	Begin Phase 2
May 2 – 3, 2017	States reported Phase 2 early findings to AASHTO's SHRP2 Safety Task Force
May 10 – 11, 2017	Status update presented to TRB SHRP2 Safety Data Oversight Committee
May 23, 2017	AASHTO Safety Task Force reported to FHWA on its Phase 2 early findings
May 31, 2017	FHWA announced Phase 3 selections
June 2017	Debrief with each team (individually) regarding Phase 3 selections
September 30, 2017	Deadline to obligate funding for Phase 3
November 8, 2017	Status update presented to TRB SHRP2 Safety Data Oversight Committee
November 2017 – September 2019	Finalize Phase 2 research and conduct Phase 3 research

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

State	Research Topic	Proposed Phase 3 Cost		
		FHWA Support	FHWA Support (Optional Based on Report)	Matching Funds (DOT and Other)
Washington 1/SP	Examining Episodic Speeding	\$ 349,561	\$ 172,296	---
Wyoming	Weather Conditions	\$ 320,920	---	\$ 43,242
Florida	Pedestrians at Signalized Int	\$ 250,000	---	\$ 75,460
Washington 2/LT	Role of Rdway Lighting in Crashes	\$ 350,000	---	---
Minnesota	Speed and Distraction in Wrk Zn	\$ 200,000	---	\$ 100,000
Michigan	Effect of Sp Lmts on Drv Behavior	\$ 300,000	---	\$ 200,000
		\$ 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 evaluation countermeasures
 - Design statewide plan for implementation

Phase 3 – Implementation Actions

- Washington State DOT/Lighting
 - Recommend modifications to existing lighting design guides/standards
 - Develop tools to support/facilitate state roadway lighting design
 - Develop guidelines for potential roadway lighting CMFs
- Minnesota DOT
 - Develop toolbox of recommended changes to traffic control manuals
 - Develop recommended policies for restriction of cell phones in work zones
- Michigan DOT
 - Develop sign placement strategy
 - 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
- **AASHTO SHRP2 website:** SHRP2.transportation.org
 - Implementation information for AASHTO members
 - Information about SHRP2 safety implementation
- **Safety Implementation Managers:**
 - Aladdin Barkawi, FHWA: aladdin.barkawi@dot.gov
 - Kelly Hardy, AASHTO: khardy@aaashto.org