SHSP Action Plan Development

Roadway & Lane Departures EA Team

January 3, 2018

Agenda

- Welcome and Introductions
- SHSP Status
- FY 18 Goals and Objectives
- Action Planning
  - Proposed Approach
  - Meeting Schedule
- SHSP Milestones

SHSP Status

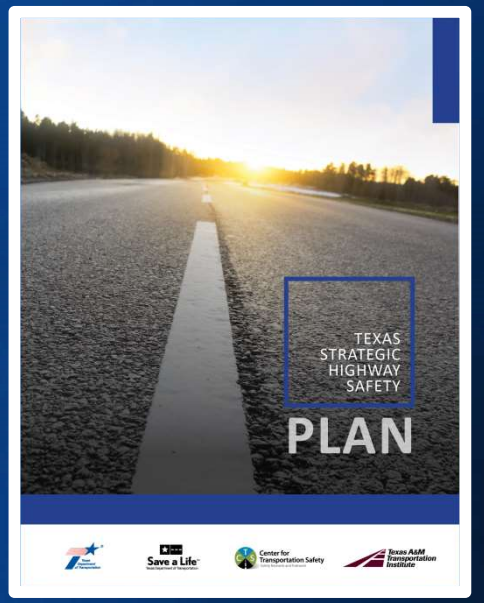
Thanks to you and your teams!

Plan approved by FHWA!! (Woo Hoo!)

Posted at www.texasshsp.com

Next Steps:

- Action Plans
- Evaluation Plan
- Communication Plan
- Regional Workshops



FY 18 Goals and Objectives

- Establish a SHSP Brand
- Extend participation in SHSP
- Document Existing Safety Programs and Projects
- Develop & disseminate a branded “consumer version” of SHSP
- Develop Action Plans for each Emphasis Area

Document Existing Programs and Projects

- Qualtrics Survey
- Classify
  - By EA
  - By other efforts (e.g., motorcycles, bicycles)
- Starting Point
- Identify gaps
- Set priorities

Action Planning Approach

- EA Teams
  - Review, revise, and confirm countermeasure rankings
  - Review, revise, and confirm preliminary Action Plans
  - Develop and confirm additional Action Plans
    - Ensure all strategies covered
    - All EA team priorities covered
- Three Rounds of Meetings

EA Team Meetings

Round 1

- Review, revise, and confirm countermeasure rankings*
- If time allows, begin reviewing, revising, and confirming preliminary Action Plans*
- Identify additional Action Plans needed to:
  - Ensure all strategies covered
  - Cover all EA team priorities

* Developed during 2017 Texas Traffic Safety Conference

STRATEGIES: ROADWAY & LANE DEPARTURES EMPHASIS AREA

Strategy #1	Analyze run off the road and head-on crashes and roadway characteristics using the new safety methodologies (e.g., Highway Safety Manual and systemic approaches)
Strategy #2	Keep vehicles from encroaching on the roadside or opposite lane
Strategy #3	Minimize the consequences of vehicles leaving the road
Strategy #4	Minimize the likelihood of crashing in adverse conditions
Strategy #5	Identify and address behavioral characteristics associated with roadway departure
Strategy #6	Improve emergency response time in rural areas

NUMBER	COUNTERMEASURE	RANK
2b	Provide additional positive guidance (i.e., rumble strips, stripe lines, raised pavement markings, chevrons including LED chevrons, curve delineators, speed feedback signs, edge line and center lines, wider edge lines) and conduct public information campaigns to explain the purpose and how to navigate the roadway safely.	1
3a	Implement barriers, median treatments and forgiving roadside objects (e.g., median barriers, safety treat fixed objects, establish safe clear policies, and improve slopes) with consideration given to land use context.	2
1a	Improve data systems for targeting locations with a high probability for roadway departure crashes by: road type, geometric characteristics, vehicle type, and area type.	3
5a	Develop and implement strategies to encourage drivers to adjust speeds appropriately to roadway conditions: wet weather speed advisories, speed feedback signs, and speed advisories for nighttime conditions.	4
5b	Provide consistent curve treatments and advisory speeds for similar conditions.	9
5	Encourage adoption of laws that allow automated speed enforcement. (CHECK SPEEDING EA)	5
2a	Revise roadway configuration to provide additional paved recovery area (e.g., convert four lane roadways to three lane roadways with design features compatible with surrounding land use context).	6
6c	Implement measures to provide faster notification of crashes	7
4b	Identify and address locations subject to wet weather run off the road crashes.	8
4a	Identify locations subject to nighttime crashes. Examples: Develop and use screening and systemic crash analysis tools to identify locations; provide additional roadway delineation; and provide roadway lighting.	
		10
5e	Encourage adoption of laws that require automated recording systems for trucks to monitor driving hours.	11
6b	Provide resources to increase the availability and use of advanced life support (ALS) equipment to first responders	12
5f	Encourage adoption of truck driver health check-ups and driving restrictions.	13

NUMBER	COUNTERMEASURE for ACTION PLANNING	RANK
2b	Provide additional positive guidance (i.e., rumble strips, stripe lines, raised pavement markings, chevrons including LED chevrons, curve delineators, speed feedback signs, edge line and center lines, wider edge lines) and conduct public information campaigns to explain the purpose and how to navigate the roadway safely.	1
3a	Implement barriers, median treatments and forgiving roadside objects (e.g., median barriers, safety treat fixed objects, establish safe clear policies, and improve slopes) with consideration given to land use context.	2
1a	Improve data systems for targeting locations with a high probability for roadway departure crashes by: road type, geometric characteristics, vehicle type, and area type.	3
5a	Develop and implement strategies to encourage drivers to adjust speeds appropriately to roadway conditions: wet weather speed advisories, speed feedback signs, and speed advisories for nighttime conditions.	4
5c	Encourage adoption of laws that allow automated speed enforcement.	5
2a	Revise roadway configuration to provide additional paved recovery area (e.g., convert four lane roadways to three lane roadways with design features compatible with surrounding land use context).	6
6c	Implement measures to provide faster notification of crashes	7
4b	Identify and address locations subject to wet weather run off the road crashes.	8

Action Plan Overview

- Steps (requires most effort)
  - Lead organization
  - Action
- Key points
  - Effectiveness
  - Cost to implement
  - Time to implement (based on 5 year plan)
  - Barriers or issues to implementation

Strategy #1	Analyze run off the road and head-on crashes and roadway characteristics using the new safety methodologies (e.g., Highway Safety Manual and systemic approaches)
Countermeasures and Programs:	
1a	Improve data systems for targeting locations with a high probability for roadway departure crashes by: road type, geometric characteristics, vehicle type, and area type.

Facilitated Discussion Group Notes:

Step 1: Analyze current report process (how can we improve?)
Step 2: Training for law enforcement officers (focus on GPS uploads)
Step 3: Data collection sample/pilot (is it accurate?, different road types)
Step 4: Data analysis
Step 5: Create ranking system for probability
Actors: TxDOT, TTI, local & state law enforcement, TCOLE

Effectiveness: ***
Cost to implement: $$
Time to implement: medium (1-5 years)
Barriers:

- Lack of cooperation buy-in from all stakeholders
- Technical issues

Strategy #1	Analyze run off the road and head-on crashes and roadway characteristics using the new safety methodologies (e.g., Highway Safety Manual and systemic approaches)
Countermeasures and Programs:	
1a	Improve data systems for targeting locations with a high probability for roadway departure crashes by: road type, geometric characteristics, vehicle type, and area type.

{additional notes}

Issues with data systems

- Inaccurate location data
- Incomplete narratives
- Data collection process may not ask the right question
- Not all contributing factors accounted for in report
- Not updating reports with charge information
- Lack of standardization in choice of factors among local law enforcement officers

Most important – accurate GPS data

- Need officers to include GPS location in report
- More training
- Possibly more technology at all levels (ArcGIS)

Strategy #2	Keep vehicles from encroaching on the roadside or opposite lane
Countermeasures and Programs:	
2b	Provide additional positive guidance (i.e., rumble strips, stripe lines, raised pavement markings, chevrons including LED chevrons, curve delineators, speed feedback signs, edge line and center lines, wider edge lines) and conduct public information campaigns to explain the purpose and how to navigate the roadway safely.

Facilitated Discussion Group Notes:

Step 1: Develop guidelines per organization

Effectiveness: ***

Cost to implement: $ - $$

Time to implement: short

Barriers:

- Funding
- Roadway conditions
- Experience
- Citizens
- Politics

Strategy #3	Minimize the consequences of vehicles leaving the road
Countermeasures and Programs:	
3a	Implement barriers, median treatments and forgiving roadside objects (e.g., median barriers, safety treat fixed objects, establish safe clear policies, and improve slopes) with consideration given to land use context.

Facilitated Discussion Group Notes:

Step 1: HSIP

(Lead organizations: TxDOT)

Step 2: different issues

(Lead organizations: MPOs and city governments)

Effectiveness: ***

Cost to implement: $ (currently being implemented within HSIP)

Time to implement: medium

Barriers:

- Municipalities have issues with this because they don't have the flexibility that TxDOT has

Strategy #5	Identify and address behavioral characteristics associated with roadway departure
Countermeasures and Programs:	
5a	Develop and implement strategies to encourage drivers to adjust speeds appropriately to roadway conditions: wet weather speed advisories, speed feedback signs, and speed advisories for nighttime conditions.

Facilitated Discussion Group Results:

Step 1: Identify problem locations and what the problem is (Lead: TxDOT, TTI)

Step 2: More vehicle safety features. What equipment should be installed at locations

Step 3: Explore automotive advancement (Lead: NHTSA)

Step 4: Implementation and installation (Lead: TxDOT and local municipality)

Step 5: Post data analysis and reporting

Step 6: LEA to reinvigorate drivers to avert desensitization

Strategy #5	Identify and address behavioral characteristics associated with roadway departure
Countermeasures and Programs:	
5a	Develop and implement strategies to encourage drivers to adjust speeds appropriately to roadway conditions: wet weather speed advisories, speed feedback signs, and speed advisories for nighttime conditions.

Effectiveness: **

Cost to implement: ***

Time to implement: medium

Barriers:

- Funding
- Getting automotive industry on board

Strategy #5	Identify and address behavioral characteristics associated with roadway departure
Countermeasures and Programs:	
5c	Encourage adoption of laws that allow automated speed enforcement.

Facilitated Discussion Group Notes:

Step 1: Local ordinances
(Lead: TxDOT, cities, TTI, PD)

Step 2: Pilot program
(Lead: TxDOT, TTI, PD)

Step 3: Present findings
(Lead: TxDOT, TTI)

Step 4: Statewide legislation
(Lead: TxDOT PD, AGC)

Step 5: Evaluation
(Lead: TxDOT, TTI)

Strategy #5	Identify and address behavioral characteristics associated with roadway departure
Countermeasures and Programs:	
5c	Encourage adoption of laws that allow automated speed enforcement.

Effectiveness: ***

Cost to implement: $$

Time to implement: medium (1-5 years)

Barriers:

- Legislative
- Privacy issues
- Rural mentality

Wrap Up

- Review plans for next meeting
- Questions
- Comments

Thanks very much!

EA Team Meetings

Round 2

- Complete reviewing, revising, and confirming preliminary Action Plans

- Develop additional Action Plans
  - Ensure all strategies covered
  - All EA team priorities covered

EA Team Meeting Schedule

Round 2

- January
- February

Round 3

- February
- March

EA Team Meetings

Round 3

- Complete Action Plans
- Announce regional workshop dates and locations
- Discuss EA Team role in workshops
- Encourage participation and marketing assistance

SHSP Milestones

Regional Workshops (May)

- Houston
- DFW
- San Antonio
- Midland/Odessa

SHSP Action and Evaluation Plans

- August 1st to FHWA

Traffic Safety Conference

- Focus on success and overcoming barriers
- Interactive workshops

2018 Traffic Safety Conference