

Work Zone Safety Initiatives

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PA
SAFETY
SYMPOSIUM
toward zero deaths

Agenda

- A. WZ Safety Subcommittee**
- B. WZ Safety Summit**
- C. “A PA Plan for Safe Work Zones”**
- D. WZ Traffic Control IOP Review**
- E. WZ Safety Innovations**
- F. Operation Orange Squeeze**

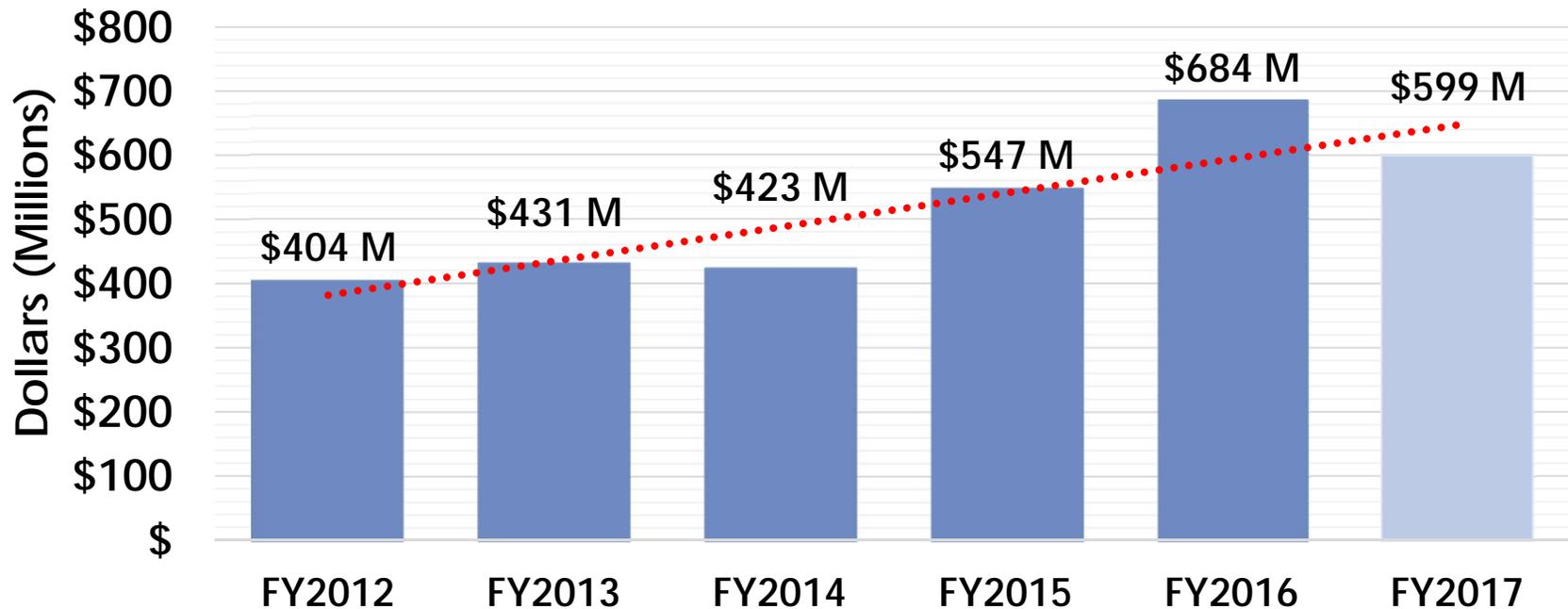


A. WZ Safety Subcommittee



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Historical Capital Plan Spending Summary Highway Program



A. WZ Safety Subcommittee

- **Vision**
 - Foster a collaborative environment
 - Reduce WZ crashes and severity
- **Mission**
 - Facilitate implementation
 - State and national levels
 - Improve customer and emp. safety
- **Scope & Responsibility**
 - Identify action items, champions, and milestones
 - Review, investigate, and report
 - Collaborate and promote



B. WZ Safety Summit



B. WZ Safety Summit

- **Co-Hosted**
- **Date/Location**
 - Nov-2015 / Hershey Lodge, Hershey, PA
- **Keynote Speakers**
 - Leslie Richards, Secretary of Transportation
 - Mark Compton, Chief Executive Officer, PTC



B. WZ Safety Summit



C. "A PA Plan for Safe Work Zones"

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April 2016

Co-Sponsored by:
The Pennsylvania Turnpike Commission
The Pennsylvania Department of Transportation

- **Published April, 2016**
- **13 total initiatives:**
 - Programmatic (7)
 - Eng., Const., & Maint. (2)
 - Enforcement (3)
 - Public Ed. & Awareness (1)
- **Co-managed by:**
 - PennDOT & PTC
- **Status Updates**
 - Quarterly



C. "A PA Plan for Safe Work Zones"

- **Programmatic Initiatives:**

#	Name	Agency ¹	Due ²
1	Implement WZTC Program	PennDOT	Q4-2019
2	Impl. a process to capture & resolve WZ traffic safety issues regardless of owner	PTC	Q1-2018
3	Develop a std. WZTC form	PennDOT	Q4-2017
4	Develop a CV strategic plan	PennDOT	Q3-2017



¹ Lead Agency
² Proposed End Date

C. "A PA Plan for Safe Work Zones"

- **Programmatic Initiatives (continued):**

#	Name	Agency ¹	Due ²
5	Deploy a WZ CV pilot in PA	PTC	Q2-2018
6	Adv. warning mobile apps	PTC	Q4-2016
7	Update the PA WZ Safety and Mobility Policy to focus on managing mobility in WZs	PennDOT	Q1-2020



¹ Lead Agency
² Proposed End Date



C. "A PA Plan for Safe Work Zones"

- **Eng., Const., & Maint. Initiatives:**

#	Name	Agency ¹	Due ²
8	Audible and visual tech.	PTC	Q2-2017
9	Automated speed enforcement (in WZs)	PTC	TBD (leg.)



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² Proposed End Date



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C. "A PA Plan for Safe Work Zones"

- Enforcement Initiatives:**

#	Name	Agency ¹	Due ²
10	Revisit Act 229 to prioritize criteria for WZ enforcement	PTC	TBD (leg.)
11	Revisit PSP MOU w/ PennDOT	PennDOT	Q4-2017
12	Recommend legislative changes that would facilitate WZ Enforcement	Joint	TBD (leg.)



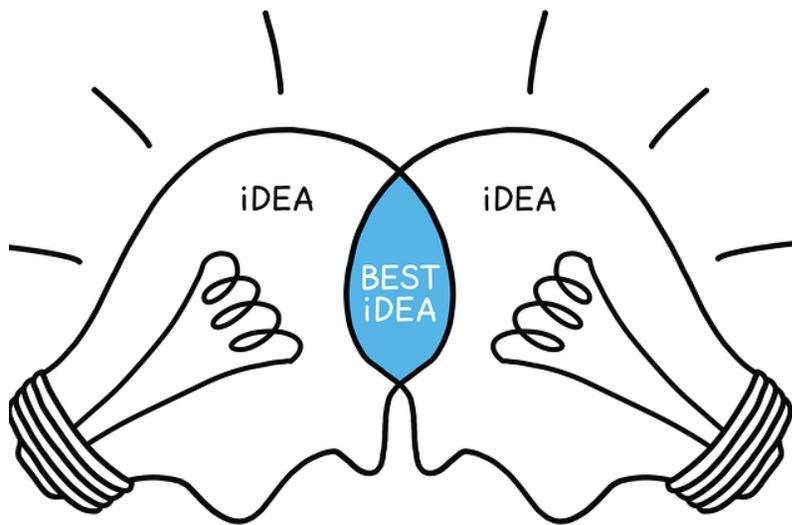
¹ Lead Agency
² Proposed End Date



C. "A PA Plan for Safe Work Zones"

- Public Education and Awareness Initiatives:

#	Name	Agency ¹	Due ²
13	Establish a WZ Safety TAG to evaluate WZ initiatives for promotion and impl.	FHWA	Q4-2016



¹ Lead Agency
² Proposed End Date

D. WZ Traffic Control IOP Review

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**Program Review**

FHWA PA Division
PennDOT

**Work Zone
Traffic Control**

March 2016



FINAL REPORT

- **23 CFR Part 630 Subpart J**
 - Biennial review of projects to assess the effectiveness of the state's WZ safety and mobility procedures
- **Construction Season 2015**
- **Total: 31 const. projects**
 - PennDOT: 25 projects
 - PTC: 6 projects

D. WZ Traffic Control IOP Review

- **Key Findings:**

#	Focus	Description
1	Portable Changeable Message Signs (PCMS)	Not following MUTCD or PennDOT Pub 213 messaging guidance
2	Static Signs	Conflicting with TCP or current Phase



D. WZ Traffic Control IOP Review

- Key Findings (continued):

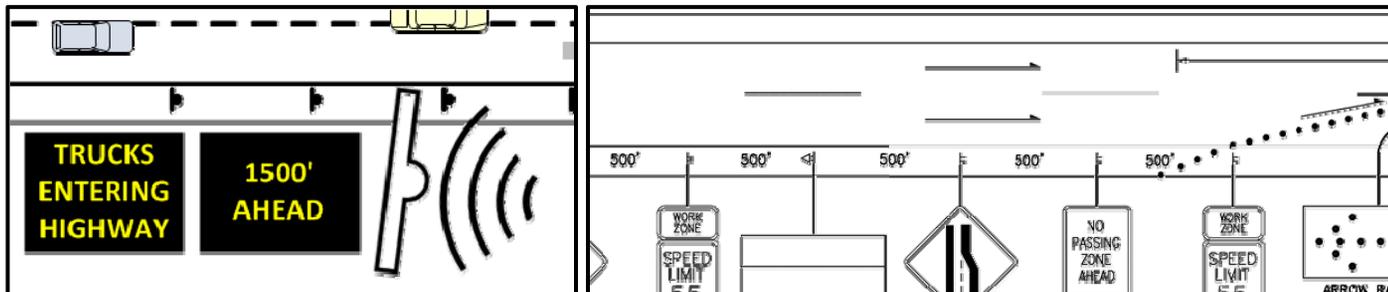
#	Focus	Description
3	Pedestrians	Lacking of sufficient guidance
4	WZ Speed Limits	No statewide guidance



E. WZ Safety Innovations

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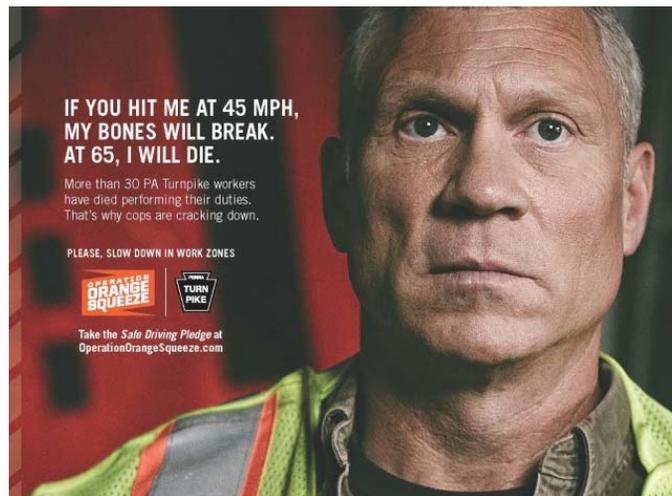
- Sequential Lights
- Prtbl. Temp. Rumble Strips
- Speed Display Signing
- Elimination of Medial Signs
- Durable Pvmnt. Markings in WZs
- Waze™ WZ Implementation
- Smart Const. Vehicle Entrance



F. Operation Orange Squeeze

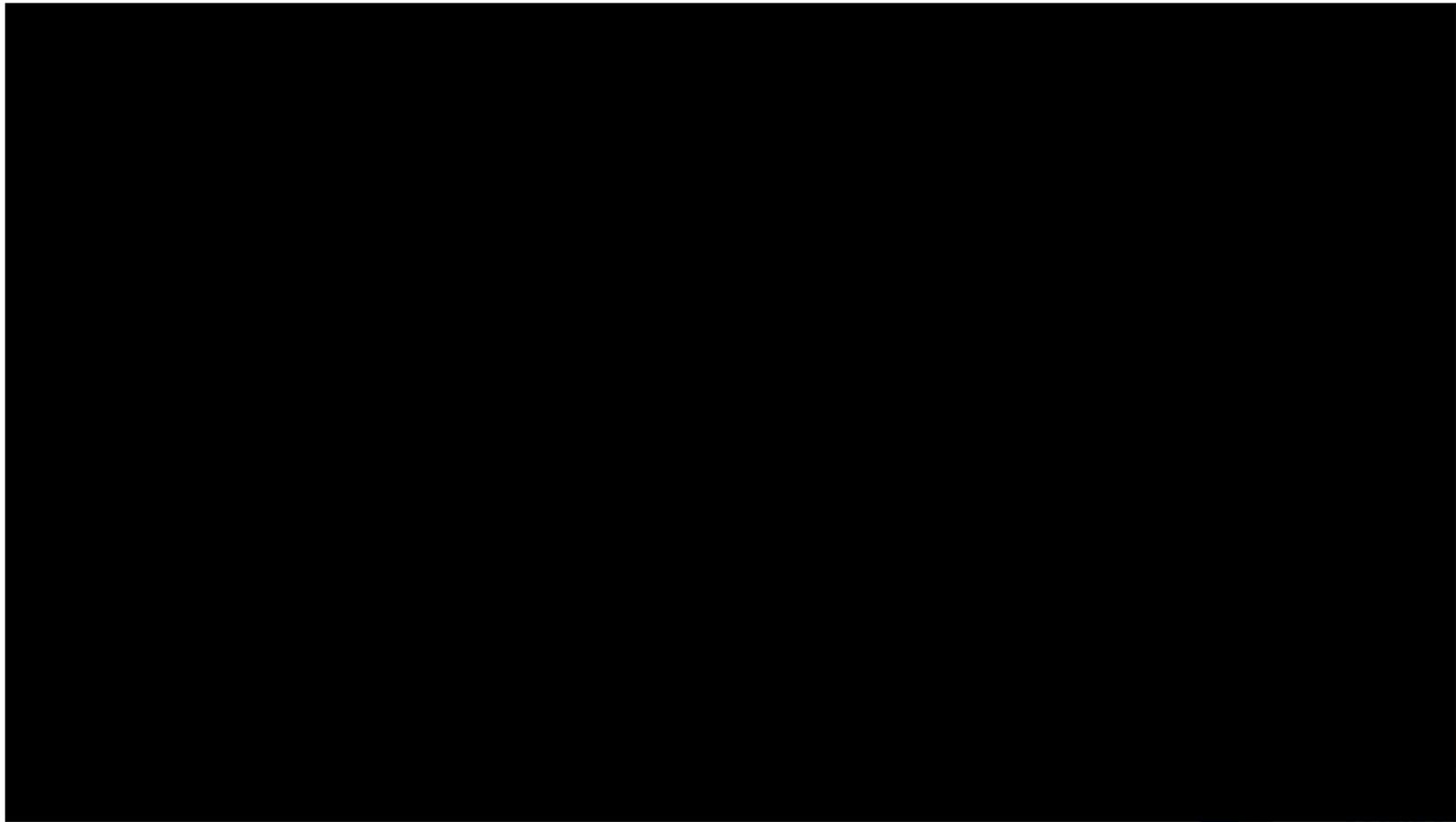
F. Operation Orange Squeeze

- **Overview and Strategy**
 - Marketing Challenges
 - Our Message
 - Our Audience
 - Our Appeals



F. Operation Orange Squeeze

- “Shattered”



Thank You!



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Work Zone Safety

Statewide Consistency of Application

Matthew Briggs, PennDOT

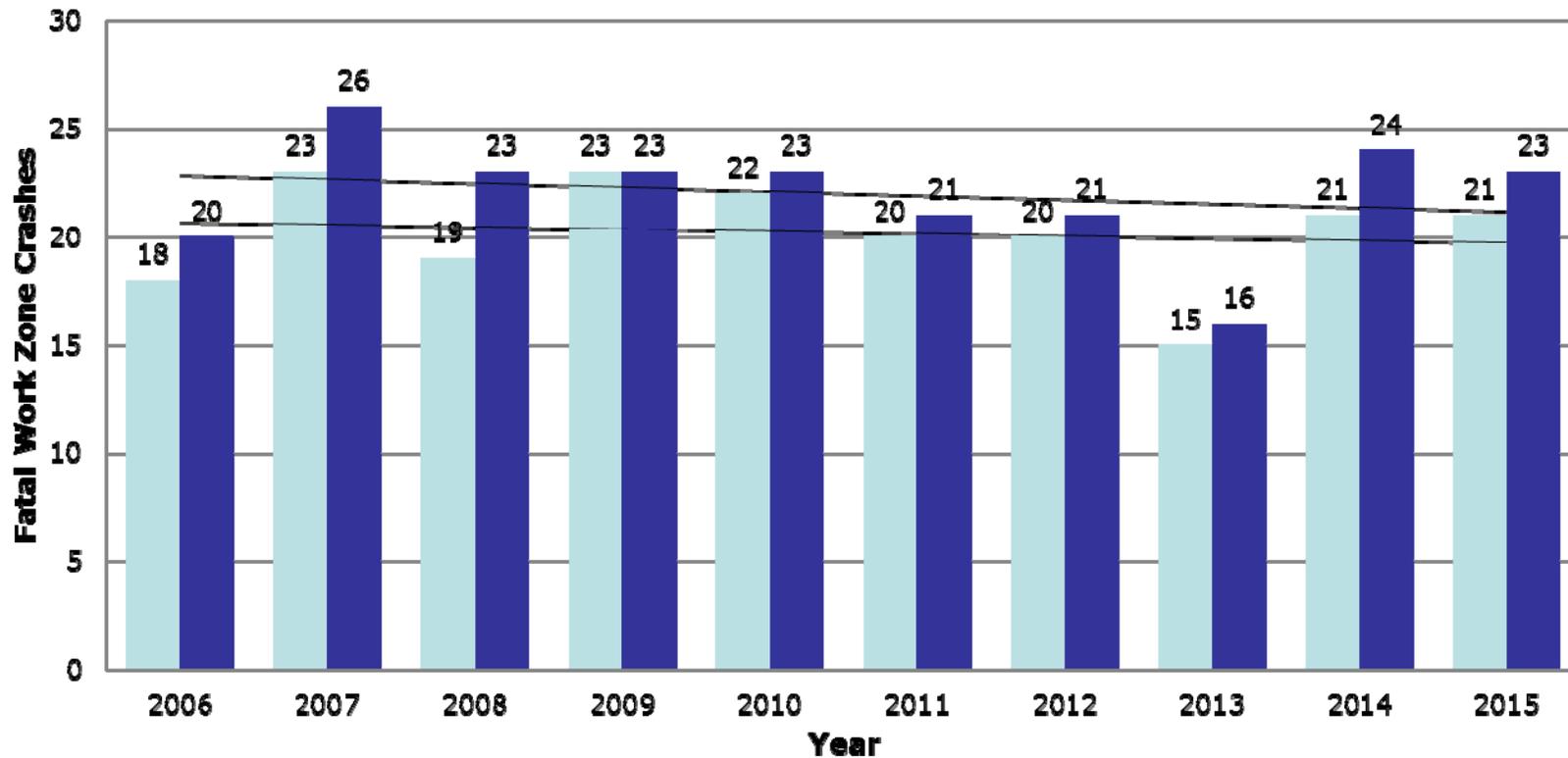
September 28th, 2016

2:25 to 3:05 – Room D



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Annual WZ Fatal Crashes and Fatalities



Work Zone Fatal Crashes
Work Zone Fatalities



Consistency?



Poor Flagging Techniques



Over-Lapping Detour Signage



PA Turnpike TMA Accident



PennDOT TMA Accident



PennDOT & PA Turnpike Collaboration

- Policy and Standard Protocols
- Standard Traffic Drawings
- Product Demonstrations / Approvals
- Existing Law Evaluations by DOT/PTC/PSP
- PTC WZ Safety Subcommittee Meeting
- FHWA / NCUTCD Peer Exchanges



WZ Programmatic Plan

- WZ Element / Strategic Highway Safety Plan
- National Work Zone Safety Clearinghouse
- FHWA WZ Safety Implementation Plan
- WZ Summit Action Items and Plan
- Action Plans – DOT and Industry
- STIC TAG Work Zone Safety



Consistent Operational Practices

- FHWA Independent Oversight Program
- Policy for Establishing WZ Speed Limits
- WZ Portal – DOT Homepage Under TTC Link
- PennDOT TTC Unit Resource Account



Consistent Operational Practices

- National Standards and Policy Changes
 - Interstate and Freeway Sign Placement
 - Roadway Encroachments
 - Pedestrian/ADA/Bicyclist WZ Standards
 - Narrow Median Sign Placement



WZ Manager Certification Program

- Pilot Effort to Promote WZ Consistency
- Focus on Interstates and entire PA Turnpike
- Additional District-identified Projects
- Requires a field staffer in-charge of WZ
- Required Set-up, Stage Switches, Tear Down



WZ Manager Certification Program

- Expansion to All PennDOT ECMS Projects
- Add All Maintenance Crews / Contracts
- Encourage Locals to Adopt the Program
- Update: Clearance Transmittal – Step 2



Statewide WZ QA Review Form

- Standardized for All WZ QA Reviews
- Construction/Maintenance/HOP/Utilities
- Develop a Quick Reference Document
- BOMO's TTC Unit Staff Re-structuring
- Second Level QA Review – TTC Unit Staff



Approach for an Enforcement Policy

- Promote Statewide Consistency
- Create a WZ QA Review Protocol
- DOT Driven Approach and Follow-ups
- **Goal**: Proactive Enforcement Initiative
 - Communication thru Interaction
 - Education thru Training
 - Follow-ups Directly to Industry



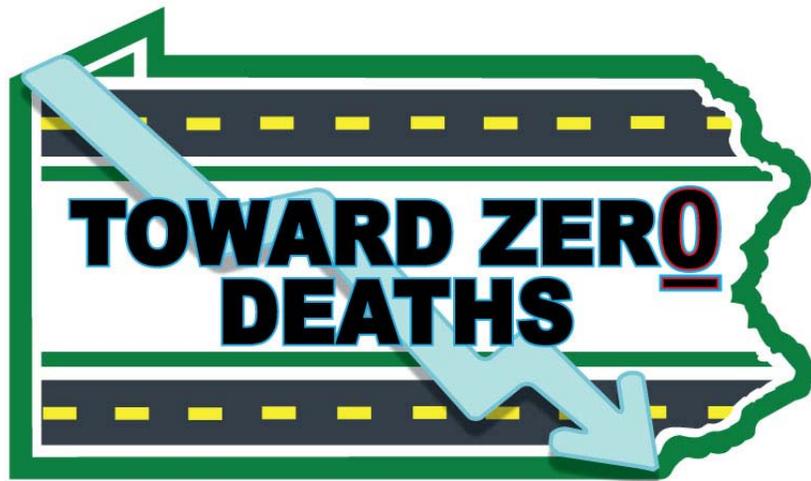
DOT and PSP Upgrading Relationship

- Always Communicated Well
- Handled Issues Appropriately and Timely

NOW

- Continue Open Dialogue / Build Relationship
- Upgrade PSP Assistance in Work Zones
- Upgrade Tracking and Invoicing Processes
- Use of Real-time Data Technology
- Existing Law Enhancements





Thank You!

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