

Introducing...



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NOCoE
National Operations Center of Excellence

New Jersey DOT



NJDOT Mission

To alleviate traffic congestion and travel disruptions that inconvenience motorists and make New Jersey's highways more efficient and safe for those who travel them every day.

Solution

- Developing a systematic approach to managing New Jersey's highways
- Providing "smart solutions" to assist motorists
- One solution: offering assistance to disabled motorists through the Safety Service Patrol



New Jersey DOT Safety Service Patrol

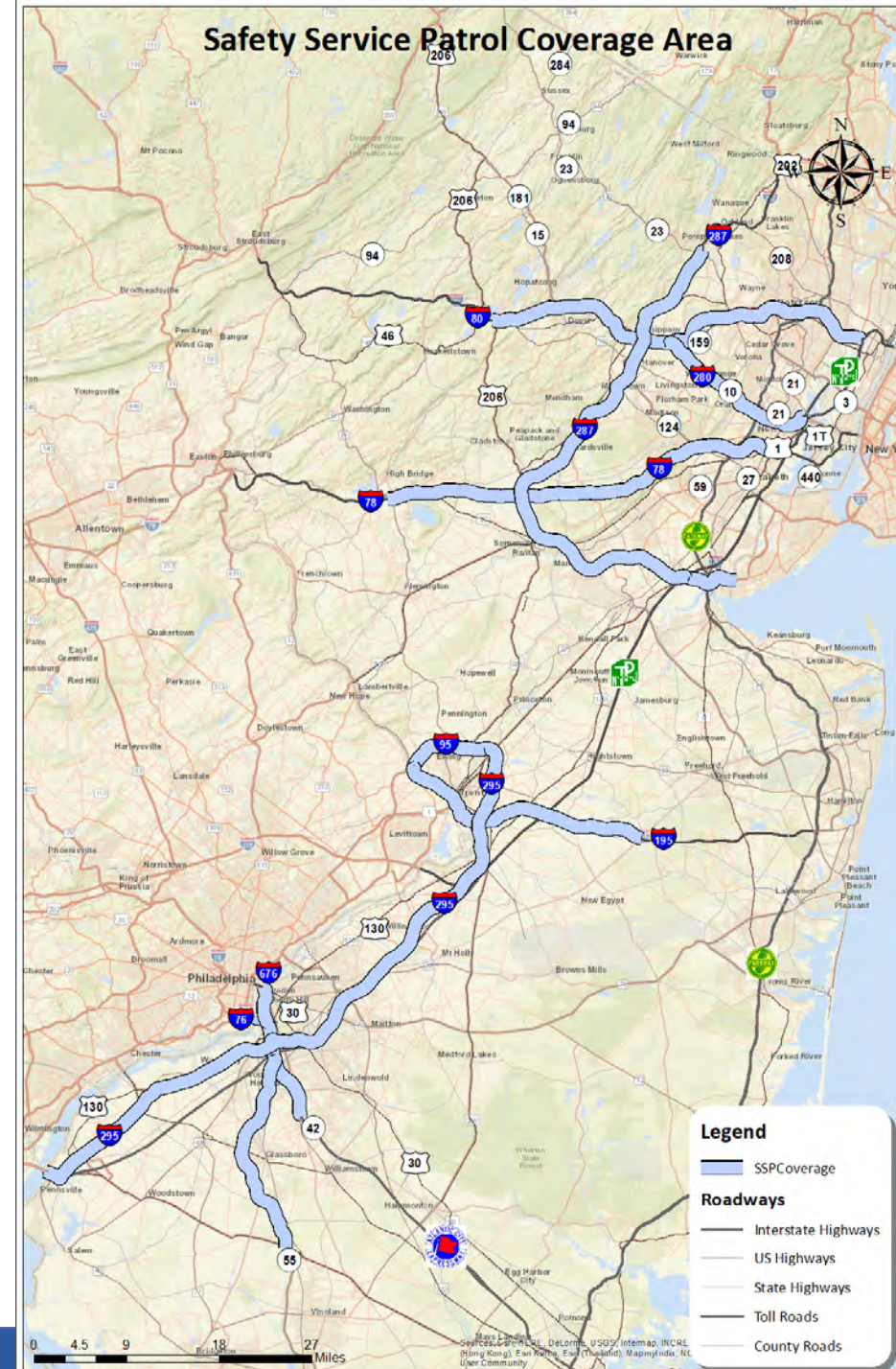


- Launched in 1994; Reorganized in 2011 to concentrate patrol on highway areas
- Nearly 70,000 motorists assisted annually
- SSP drivers also assist:
 - New Jersey State Police (NJSP)
 - Other secondary responders
- Funding:
 - Federal Highway Administration (FHWA)
 - State Farm since April 2012



SSP Coverage Area

- SSP Operation Facilities:
 - Northern New Jersey (Harding)
 - Southern New Jersey (Cherry Hill)
- Hours of operation:
 - Monday-Friday: 4:30 a.m. to 8 p.m. (16 hours/day)
 - Saturday/Sunday and some holidays: 10:30 a.m. to 8 p.m. (10 hours/day)



Data Driven Safety Analysis



- Primary source of data for crashes:
 - NJTR-1 report completed by police officers
- OpenReach is NJDOT's primary traffic management and data entry software
 - A common platform for TOC operators to record information
 - Traffic conditions on major roadways
 - Incident information reported by police or SSP crews
 - Used regionally by all partner agencies
 - Transfers the data to NJDOT's 511 systems



Safety Data Analysis



- Incidents listed in OpenReach's database may not be logged in the police crash records (or vice versa)
- Comparative analysis of crashes compared:
 - State/local law enforcement entities crash response
 - Incidents recorded in the OpenReach management system
- Analysis provided:

A knowledge of crashes (location, severity) that both State and local law enforcement entities respond to and of which NJDOT was not made aware





Applying the Results

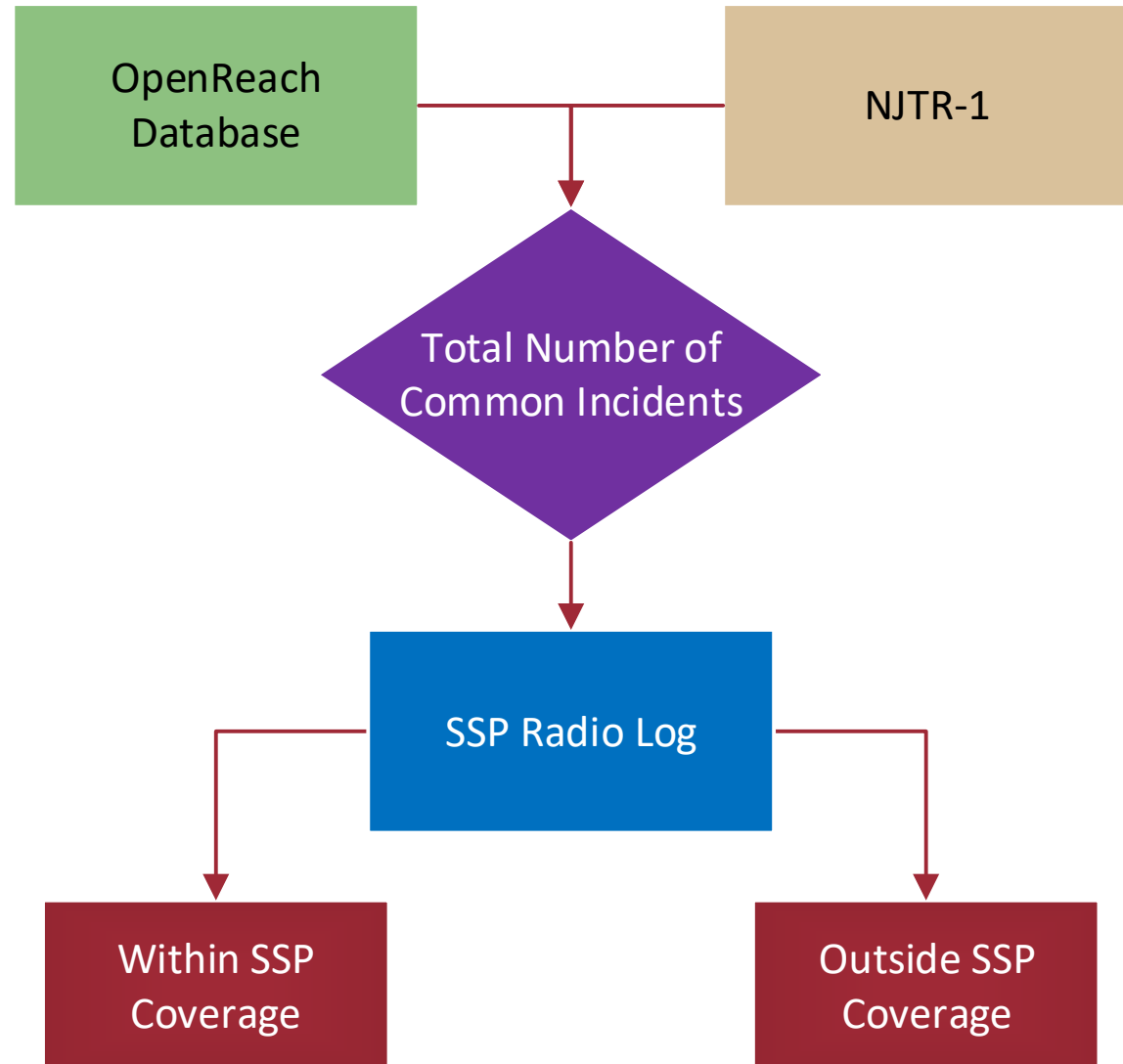
- Pursue broader collaborations in inter-agency information sharing
- Determine TOC and CDU staffing needs
- Potentially expand SSP patrol



Safety Data Study

Objective

Conduct a comparative analysis of the crashes that both State and local law enforcement entities respond to and compare them with the incidents recorded in the OpenReach management system.



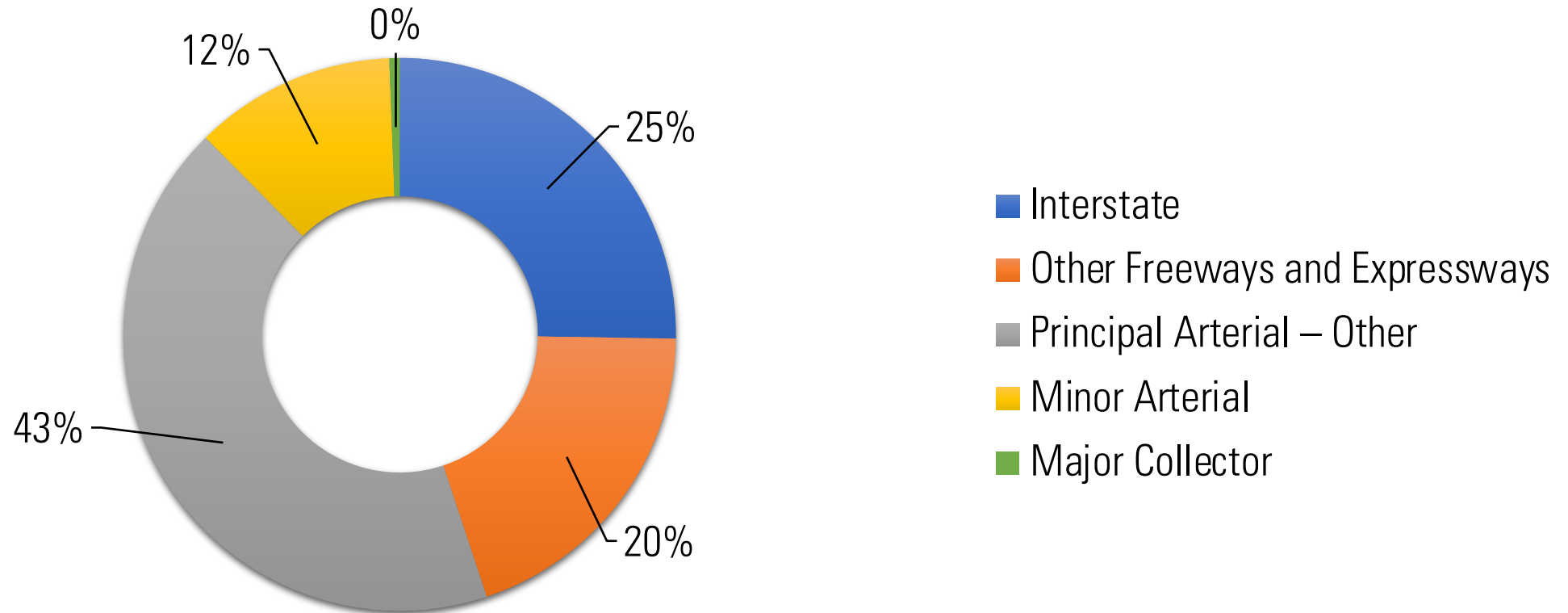
Study Findings

- SSP responded to 64,863 events
 - NJDOT is aware of 10% of all crashes on State owned roadways, or
 - 58,410 crashes are not in OpenReach's database

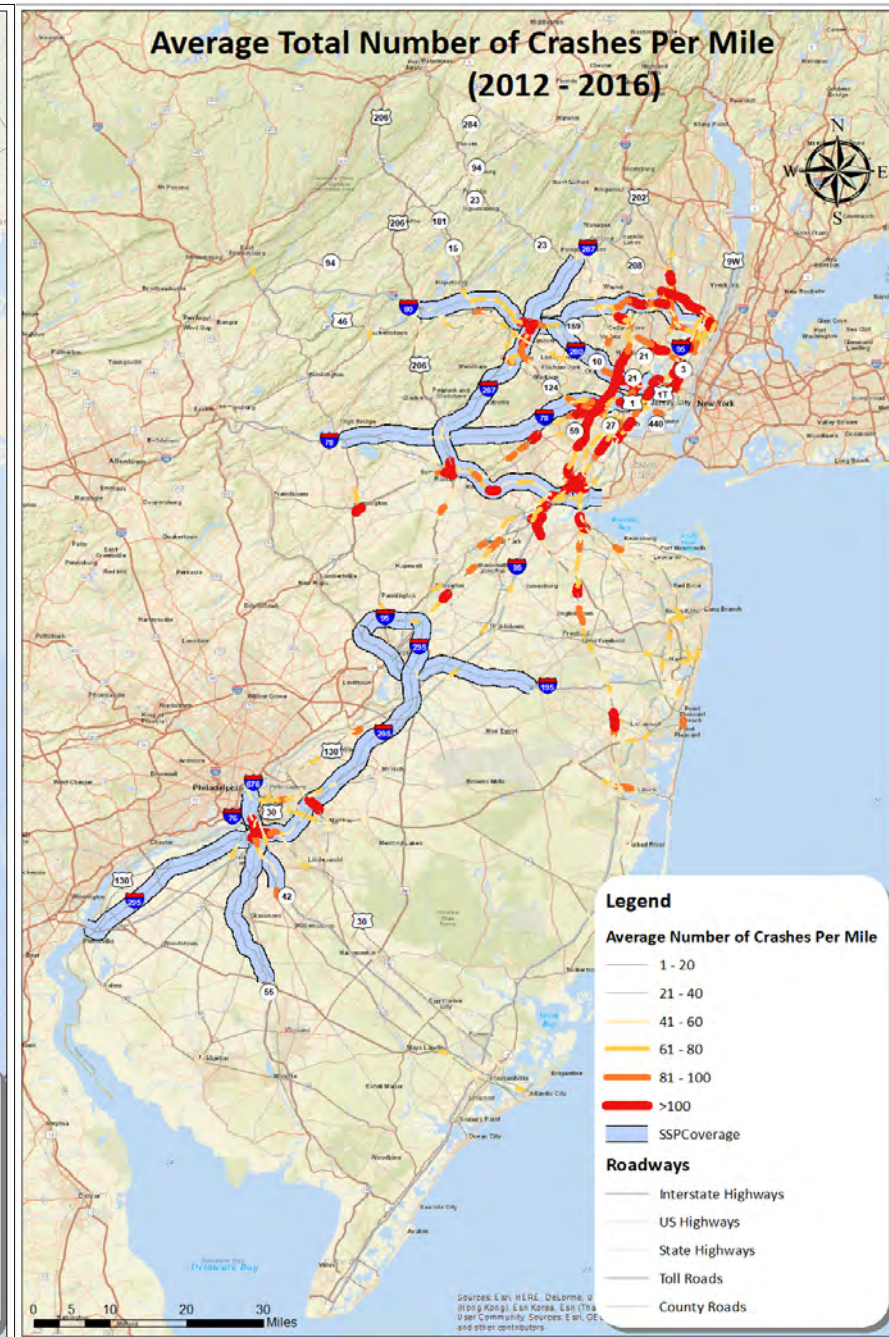
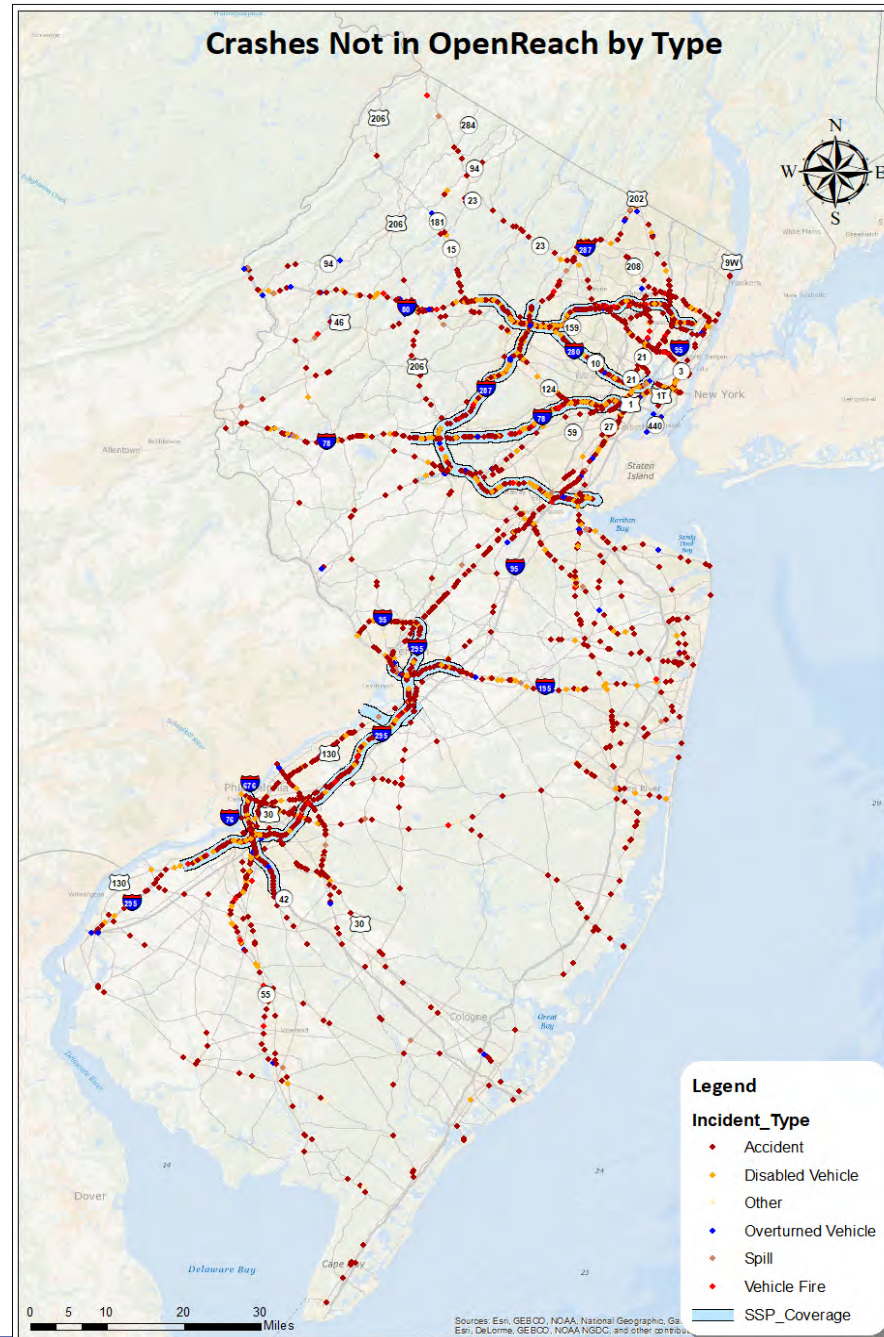
Reason	Statewide Average Yearly Totals
Disabled	48,172
Debris	3,765
MVA	6,227
Abandoned	2,930
Assistance	732
Fire	222
Pedestrian	113
Lost Motorist	42
Other	2,660
Totals	64,863



Percent Crashes Not in OpenReach by Facility



Study Findings



SSP Operation Analysis



- Prepared a detailed cost analysis supporting SSP expansion
- The annual analysis includes:
 - Additional personnel at TMC's and CDU per shift
 - Additional SSP personnel (Supervisors, Operators & Dispatchers) per shift
 - Equipment cost per truck for additional fleet
 - Flashlights, radios, flares & spare tire kits
 - Employee equipment costs
 - Shirts, pants, coats, badges, safety glasses & winter hats



Roadways Considered for Initial Expansion



ROAD	CURRENT COVERAGE		PROPOSED COVERAGE		CURRENT MILES	ADDITIONAL MILES
	MM TO MM		MM TO MM			
I-80						
ZONE 1	35.5	46.1			10.6	
ZONE 2	42	54			12	
ZONE 3	52	63			11	
ZONE 4	61	68			7	
" "			0.3	19		18.7
" "			19	35.5		16.5
I-280						
ZONE 1	0	8.3			8.3	
ZONE 5	7.5	17			9.5	
I-287						
ZONE 6	0	9			9	
ZONE 7	9	22			13	
ZONE 8	22	30			8	
ZONE 9	30	45			15	
" "			45	67.5		22.5
I-78						
ZONE 8	27.1	33			5.9	
ZONE 10	33	44.5			11.5	
ZONE 11	48.2	58.3			10.1	
ZONE 12	44.5	58.3			13.8	
" "			3.5	19		15.5
" "			19	27.1		8.1
NJ 440						
ZONE 6	0	4.2			4.2	
" "	18	26			8	8

Conclusion and Next Steps



- SSP Expansion is a multi-step process:
 - Pursue regional system integration and interoperability
 - Integrate data between TMC and public safety CAD databases to provide two-way data communication
 - Develop a strategic plan for SSP expansion and secure funds to support the expansion



Pulaski Skyway Project

- SSP deployment for mayor reconstruction project
- During the first 6 weeks:
 - Reduced average incident duration by 55% or 22 minutes
 - Less than 18 minutes per incident
 - Reduced overall duration of incidents by almost 160 hours
 - Savings of \$900,000 to motorists who traveled on Pulaski Skyway Southbound and US 1&9



Questions?



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