

WINTER STORM JONAS
January 22 – 24, 2016



**PA Senate Joint
Committee
Hearing
Feb. 16, 2016**

Response Entities

More than 40 entities assisted with the response:



Thank you

for your assistance during the Blizzard of 2016.

Alum Bank Fire Co.
American Red Cross
Bedford County 911
Bedford County Emergency Management Agency
Bedford Fire Co.
Berlin Fire & EMS
CoGo's
Customers/Motorists
Emergency Shelters:
Bedford Area School District
United Methodist Church
FEMA
Herring Motor Co. Towing
HMS Host Corp.

Interstate Towing
Lakewood Towing
LaSalle's Garage
Local hotels and motels in Somerset and Bedford
Media
Myers Garage
New Baltimore Fire Co.
PA Department of Corrections (busses and drivers)
PEMA
PennDOT
Pennsylvania National Guard
PA State Police Troop T and off-Turnpike Troops
Pleasantville Dollar General
Private and Public Bus Companies

Salvation Army
Shanksville Fire Co.
Shawnee Market
Shawnee Valley Ambulance
Shawnee Valley Fire Co.
Sheetz
Somerset 911
Somerset County Emergency Management Agency
Southern Cove Fire Co.
Subway
Volunteer citizens from communities along the Turnpike
Walmart Distribution
Waze
Wissingers Repairs
All other local fire and EMS companies responding...



AAR PROCESS

AFTER-ACTION REVIEW (AAR)

- As part of the information-gathering process, the AAR Team met internally with the three maintenance sheds involved in the storm operation from start to finish, including Everett Maintenance, Kegg Maintenance and Somerset Maintenance.
- The AAR Team has begun meeting with all external federal, state and local agencies, examining the decisions made and actions taken before, during and after the event.
- The AAR Team will begin its analysis of the response and decision-making procedures and offer a series of recommendations for future consideration as part of the Phase II work.
- The Commission expects to conclude the AAR in early March.
- A report will be made public after the AAR Team completes, and the Commission approves, the review.

Preparatory Actions and Communications

Thursday, Jan. 21

- Winter Weather Shed Radio Checks schedule issued

Friday, Jan. 22 @ 11:34 AM

- Traffic Operations staff issued its Tow Truck Standby Winter Plan Level 2 and Safety Advisors schedules

Friday, Jan. 22 @ 2:03 PM

- Traffic Operations Center advised PEMA, PennDOT, and PSP of Turnpike's Weather Response Plan Level 2 Activation

Friday, Jan. 22 @ 3:00 PM

- Travel Advisory issued "PA Turnpike Will Reduce Speed Limits on Some Sections Tonight at Midnight Due to Weather"
 - 45 MPH Speed restriction moved up to 8:30 Due to heavy snow starting earlier than expected



Regional Winter Maintenance Operations

FRIDAY, JAN. 22

- Both Everett and Kegg Maintenance units were in snow patrol mode for the storm event during the 7 AM – 3 PM shift.
- **1:30 PM** – Somerset Maintenance units began treating roadways.
- **3:30 PM** – Kegg and Everett Maintenance units began treating roadways.
- **4:00 PM** – Kegg Maintenance units began plowing.
- **Kegg Maintenance Plow Trains:**
 - First plow train left from Kegg at 7:55 PM
 - Second plow train left Kegg at 8:22 PM



Primary Event Locations



Friday, 5:21 PM

MILEPOST 155W

**Single truck crash
at
Everett**



**BREEZEWOOD
6 miles**



6

Primary Event Locations

Friday, 7:40 PM

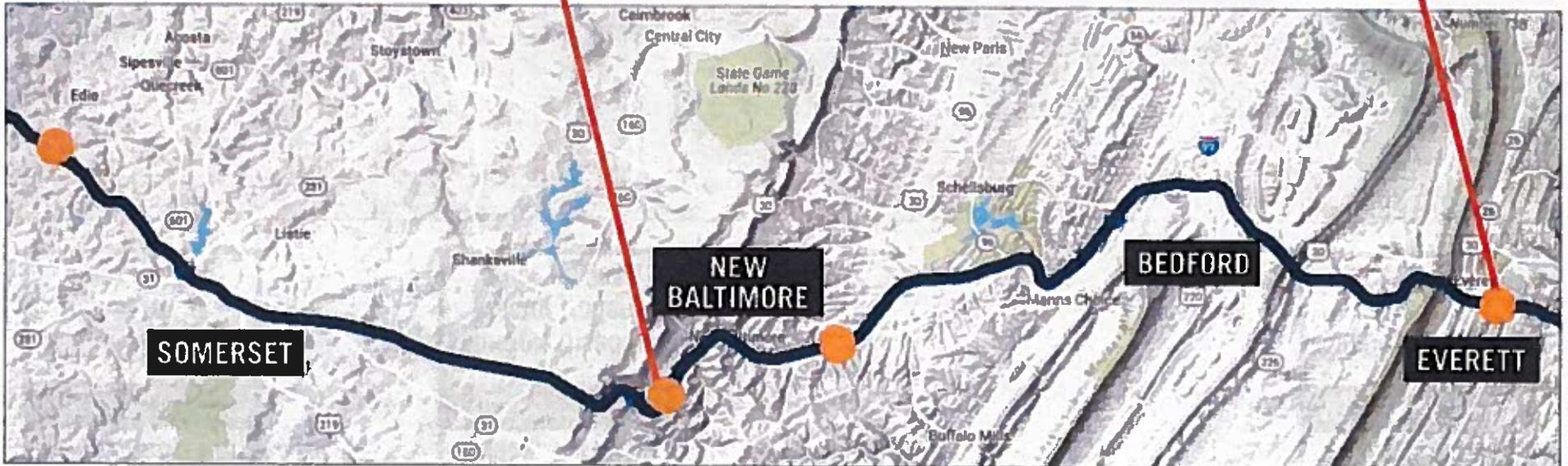
MILEPOST 126W

Multiple disabled tractor trailers stuck in snow

Friday, 5:21 PM

MILEPOST 155W

Single truck crash at Everett



BREEZEWOOD
6 miles



Primary Event Locations

Friday, 8:53 PM

MILEPOST 105E

Multiple disabled tractor trailers stuck in snow

Friday, 7:40 PM

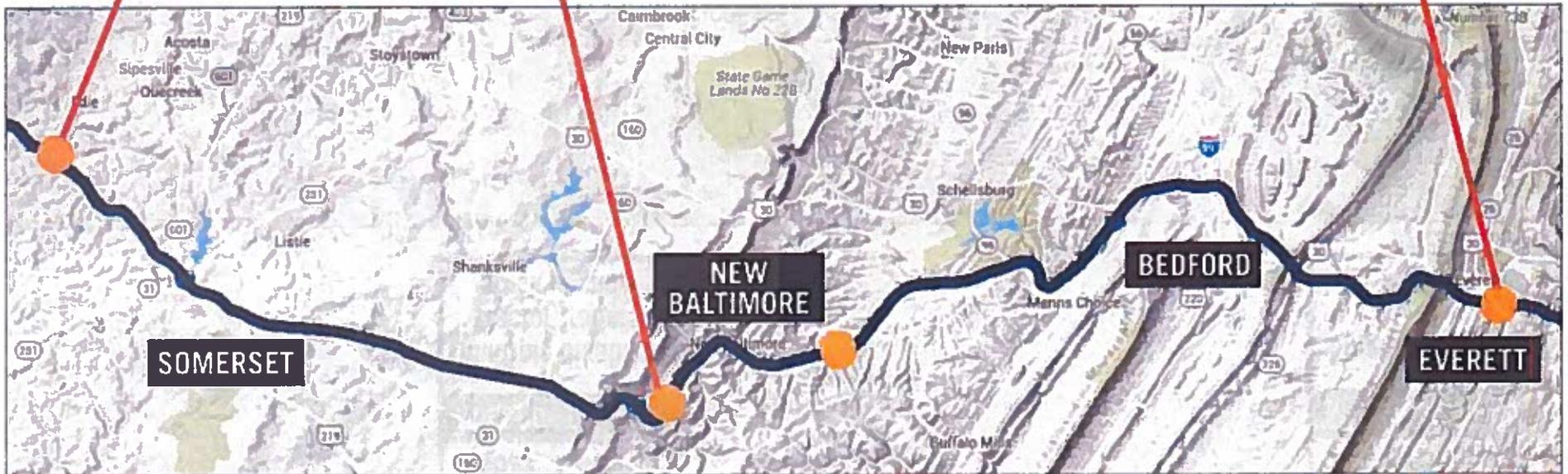
MILEPOST 126W

Multiple disabled tractor trailers stuck in snow

Friday, 5:21 PM

MILEPOST 155W

Single truck crash at Everett




BREEZEWOOD
6 miles



8

Primary Event Locations

Friday, 8:53 PM

MILEPOST 105E

Multiple disabled tractor trailers stuck in snow

Friday, 7:40 PM

MILEPOST 126W

Multiple disabled tractor trailers stuck in snow

Friday, 9:07 PM

MILEPOST 132W

Traffic Stoppage at Kegg Maintenance

Friday, 5:21 PM

MILEPOST 155W

Single truck crash at Everett

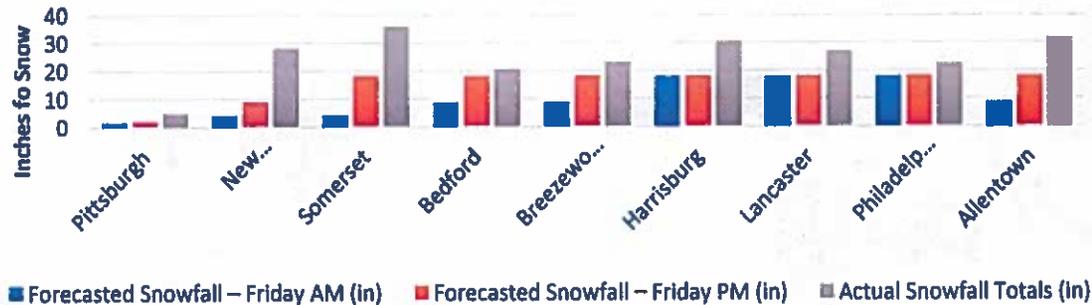


BREEZEWOOD
6 miles



Contributing Factors

Forecasted vs. Actual Snowfall Totals



- Heavy Snowfall began three hours earlier than forecasted.
- Snowfall heavier than forecasted for the area by up to 24 inches.
- Heavy stream of traffic resulted from the 5.6 mile backlog following the single tractor-trailer crash at milepost 155.
- Commercial vehicles were using all lanes in the lane-restricted construction area and truck-climbing lane.
- PTC staff and equipment were fully deployed on snow operations; limited options for backlog treatment.

Weather Synopsis

- The historic blizzard impacted the southern half of PA on Friday and Saturday, Jan. 22-23.
- Snow fell from roughly 2 PM Friday until 10 PM Saturday and ranged from 0.5" along the I-80 corridor to around 3 ft. in some of the southern mountains.
- Snowfall rates averaged 1-2" per hour with some periods of 2"+ per hour.
- Blizzard conditions affected southeastern PA due to high winds and blowing snow.
- Storm preparations began with all partners starting the weekend prior.

UPDATE. START TIMES ADJUSTED IN THE SOUTH.
 SNOW WILL SPREAD FROM SOUTH TO NORTH LATE TODAY AND TONIGHT ... SNOW WILL BE HEAVIEST ACROSS THE SOUTHEAST WITH STRONG WINDS COMBINING TO CREATE BLIZZARD CONDITIONS. THE HEAVIEST SNOWFALL WILL OCCUR AFTER MIDNIGHT TONIGHT INTO SATURDAY AFTERNOON.



305 Delaware Park Road
 State College, PA 16803
 (814) 237-5600

PENNSYLVANIA
 DEPARTMENT OF
 TRANSPORTATION
 PWDMS/JDAH

4 AM Forecaster: PWDMS/JDAH
 Goes Into Effect:
 Dry, FRI Date: 1/22/16
 Time: 3:15 PM
 1 AM SAT



- SNOW AND STRONG WINDS LATE TODAY INTO SATURDAY NIGHT WILL PRODUCE BLIZZARD CONDITIONS. SNOW WILL ACCUMULATE 1-3 FEET. WIDESPREAD BLOWING AND DRIFTING SNOW. WHITE-OUT CONDITIONS.
 - SNOW AND STRONG WINDS LATE TODAY INTO SATURDAY NIGHT WILL PRODUCE BLIZZARD CONDITIONS. SNOW WILL ACCUMULATE 6-12 INCHES. WITH BLOWING AND DRIFTING SNOW. OCCASIONAL WHITE-OUT.
 - SNOW AND WIND TONIGHT THROUGH SATURDAY AFTERNOON WILL PRODUCE NEAR BLIZZARD CONDITIONS. SNOW WILL ACCUMULATE 3-6 INCHES. WITH SOME BLOWING AND DRIFTING SNOW. ROADS SNOW COVERED AND ICY. VISIBILITY BELOW A 1/4 OF A MILE AT TIMES.
 - SNOW TONIGHT THROUGH SATURDAY WILL ACCUMULATE 1-3 INCHES.
 - SNOW TONIGHT INTO SATURDAY WILL ACCUMULATE A COATING TO AN INCH.
- THE DASHED LINE SHOW THE APPROXIMATE START TIMES OF SNOW AS IT SPREADS NORTHWARD LATE TODAY AND TONIGHT.

Jan. 22 @ 3:15 PM



Traffic Management

ROADWAY CLOSURE

- Turnpike Maintenance was responding effectively across the system.
- Traffic was either approaching or already on the roadway at the time of the incident.
- Conditions on alternative routes in the region were also impacted by the storm.
- Closure would have had significant impacts on state and local roads and communities.

TRAFFIC STOP AT KEGG MAINTENANCE (MP 132W) – Friday

- **9:07 PM** – Instituted per pre-determined traffic operation plan designed to minimize impacted traffic prior to New Baltimore construction with steep grades

TURNING TRAFFIC AT KEGG MAINTENANCE AND GATES – Saturday

- **1:30 AM** – Kegg Maintenance Milepost 132W
- **8:35 AM** – Access Gate Milepost 138W
- **1:10 PM** – Access Gate Milepost 129W



Median Barrier Removal Locations

Saturday, 6:04 PM

Barrier @ Milepost 127

Saturday, 5:14 PM

Barrier @ Milepost 128.5

Saturday, 7:44 PM

Barrier @ Milepost 132



Incident Management Changes Since 2014

- Emergency Transportation Operations Plan
- Backlog Assistance Plan (wellness checks)
- Improved coordination: PSP, PEMA, PennDOT
- Increased use of social media and Waze
- Increased coordination with Traffic Incident Management Programs (PennDOT, SPC, and DVRPC)
- Traffic Incident Management (TIM) training for Turnpike and partners (approx. 217 first responder partners in region)
- **Deployment of movable center barrier gate with Northeastern Ext. project**

TRUCK DRIVERS

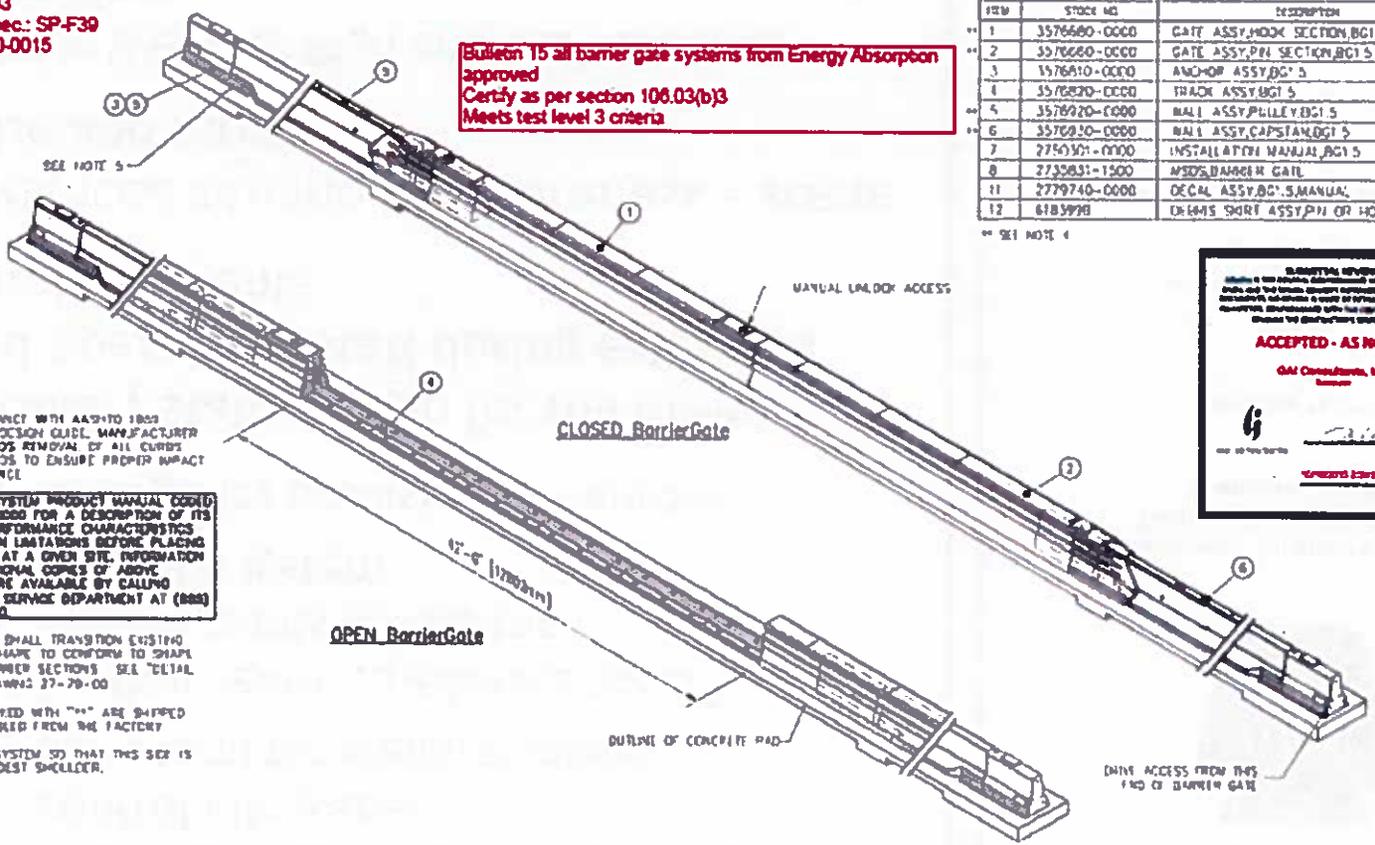
Please obey lane restrictions **IN WORK ZONES.**
IT'S FOR YOUR SAFETY. IT'S THE LAW.



Barrier Gate Design

Submittal 0133
Reference Spec.: SP-F30
Item No. 4000-0015

Bulletin 15 all barrier gate systems from Energy Absorption approved
Certify as per section 106.03(b)3
Meets test level 3 criteria



- NOTES:**
1. IN COMPLIANCE WITH AASHTO 1993 ROADSIDE DESIGN GUIDE, MANUFACTURER RECOMMENDS REMOVAL OF ALL CURBS AND ISLANDS TO ENSURE PROPER IMPACT PERFORMANCE.
 2. SEE THE SYSTEM PRODUCT MANUAL CODED 273021-0000 FOR A DESCRIPTION OF ITS IMPACT PERFORMANCE CHARACTERISTICS AND DESIGN LIMITATIONS BEFORE PLACING A SYSTEM AT A GIVEN SITE. INFORMATION AND ADDITIONAL COPIES OF ABOVE MANUAL ARE AVAILABLE BY CALLING CUSTOMER SERVICE DEPARTMENT AT (888) 332-6282.
 3. CUSTOMER SHALL TRANSFER EXISTING BARRIER SHAPE TO CONFORM TO SHAPE OF BG BARRIER SECTIONS. SEE "DETAIL A" ON DRAWING 27-70-00.
 4. ITEMS MARKED WITH "M" ARE SHIPPED PREASSEMBLED FROM THE FACTORY.
 5. POSITION SYSTEM SO THAT THE SET IS TO THE INGEST SHOULDER.

PARTS LIST			
ITEM	STOCK NO	DESCRIPTION	QTY
1	3576680-0000	GATE ASSY,HOOK SECTION,BG1.5	1.00
2	3576680-0000	GATE ASSY,PIV SECTION,BG1.5	1.00
3	3576610-0000	ANCHOR ASSY,BG1.5	1.00
4	3576820-0000	TRACK ASSY,BG1.5	1.00
5	3576920-0000	WALL ASSY,PILLEY,BG1.5	1.00
6	3576930-0000	WALL ASSY,CAPSTAN,BG1.5	1.00
7	2730301-0000	INSTALLATION MANUAL,BG1.5	1.00
8	2730831-1500	M305,BARRIER GATE	1.00
11	2779740-0000	DECAL ASSY,BG1.5,MANUAL	1.00
12	6183998	DRIMS SHORT ASSY,PIV OR HOOK	2.00

SEE NOTE 4

CRITICAL REVIEW
 Made in the United States of America
 This and the items described herein are certified to meet the requirements of the referenced specification.

ACCEPTED - AS NOTED

GAI Consultants, Inc.
 Engineer

GAI CONSULTANTS, INC.
 15000 E. HIGHWAY 100, SUITE 100, DENVER, CO 80231

REVISIONS					S. Ingester		4/4/2011	
Revisions	Date	Rev.	By	Clk	App			
ADD DRIMS SHORT ASSY	3/21/11	A	STI	JAE	BHT			

REFERENCES			
IN PROJECT	CONCRETE PAD	27 70-00	
	ANCHOR ASSY	35-76-81	
	WALL ASSY,PILLEY	35-76-92	
	WALL ASSY,CAPSTAN	35 76 93	
	TRACK ASSY	35 76-87	
S0	GATE ASSY, HOOK SECTION	3576680 0000	
	GATE ASSY, PIV SECTION	609958	
	DRIMS SHORT ASSY	618399	

ENERGY ABSORPTION SYSTEMS, INC. ENGINEERING AND RESEARCH DEPARTMENT			
BarrierGate® 1.5 MANUAL OPERATION			
PA TURNPIKE PROJECT # A 102.00R001-3-02			
LEBANON COUNTY PENNSA VANIA			
NTS	35 76 80 MAIN	1 of 3	A



Incident Management Changes Under Way

- Backlog Motorist Assistance Plan
 - Ensuring incident command's span of control integrates command for welfare checks
 - Further refine to address specific requirements across the Turnpike system
 - Emergency provisions inventory
- Auxiliary staffing plan for maintenance and operations staff during extended duration events
- Enhanced situational awareness – scene “size and scope”
- Winter Weather Plan and Maintenance Operations
- Median Barrier Access



Pennsylvania Turnpike Commission
Weather Emergency Traffic
Management Plan

December 28, 2015

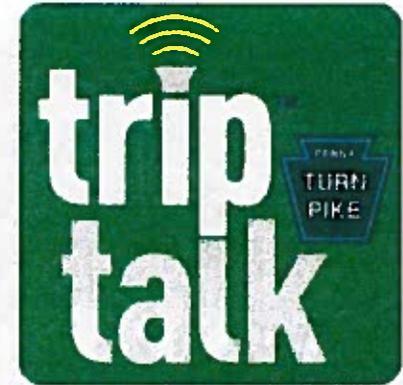
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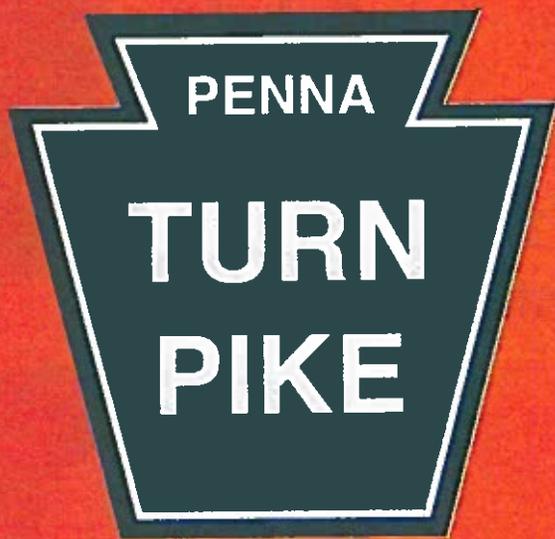
December 28, 2015 FINAL



Incident Management Changes Under Way

- Unified Incident Command Procedures
- Resource Coordination and Deployment
- Median Barrier Access & Access Gates
- Communications (Message Boards, PA511, Waze, Twitter, Facebook, Turnpike Website, TRIPTalk)
- Enhanced Attention to Incident Management during Construction
 - Access Gates
 - Construction Zones





Thank You.