* WEST VIRGINIA TURNPIKE

WINTER’S WRATH

Lessons Learned
On Friday, December 18th and Saturday, December 19th, 2009, a major, historic East coast snow storm struck Southern West Virginia resulting in over two feet of wet, heavy snow falling in a very compressed time period on the West Virginia Turnpike.
**WHAT WENT WRONG?**

* *The Perfect Storm*

* Multiple vehicle crashes, including 18-wheel vehicles, in the southbound lanes.
* Lost communications with radio tower at the Lick Knob tower
  - Could not reach the State Police or Maintenance crews
* Heavy snow prevented access by emergency crews
* Emergency shoulders blocked by vehicles
*WHAT WENT WRONG?

* Standard Maintenance blocked by tree fall on power lines

  ➢ Salt trucks and State Police could not reach the Turnpike

* State of Emergency declared at 8:00 AM on Saturday morning, but it took several hours to mobilize the National Guard

* On Saturday at 1:30 PM, northbound traffic stopped at the Pax toll plaza for emergency vehicles

* Cars had to be dug out and pulled by chain one vehicle at a time
*WHAT WENT WRONG?

*Maintenance employees with 2-wheel drive vehicles could not reach Turnpike to respond
*Busy holiday Christmas travel weekend
*Wreckers in short supply
*Jackknifed tractor trailers could not be removed until wreckers arrived at the scene
*Wrecker driver overcharging truck drivers who refused to be towed
* WHAT WENT WRONG?

* Few detour routes off of the Turnpike
* Concrete median barrier wall
* Few cell towers on the north end
* Ghent toll plaza is a bifurcated plaza
  ➢ Difficult to turn traffic around
Parkways Authority staff met with the WV Secretary of Transportation, WV Division of Highways staff and an Emergency Response Review Team from the Federal Highway Administration to review the Authority’s emergency response capabilities and make recommendations.
The Review Team made recommendations in the following categories:

- Preparation and Planning: Pre-Event
- Preparation, Planning and Training: Pre-Season
- Public Safety
- Communication - Internal
- Communication - External
- Incident Management
PLAN IMPLEMENTATION

Preparation and Planning: Pre-Event

- Maintenance personnel on standby for SRIC operations
- Pre-treating the pavement with liquid calcium chloride
- Monitoring the five road and bridge sensors (RWIS) for pavement temperature and weather conditions on the Turnpike
- Using Federal Stimulus Funds, the DOH will be replacing the Turnpike’s 12 overhead variable message signs with new signs as well as adding more dynamic message signs, complete Sept. 2010
PLAN IMPLEMENTATION

Preparation and Planning: Pre-Event

- DOH will be installing 18 closed circuit television cameras on the Turnpike, complete Sept. 2010.
- DOH’s Traffic Management Center (TMC) and the Turnpike’s Communication Center will integrate and share information.
- DOH is researching a 511 Travel Advisory system.
- Parkways staff is working with DOT Communications Office on media dissemination of information.
- Turnpike website (www.wvturnpike.com) uses Twitter to alert travelers of delays due to accidents, construction, weather, etc.
*PLAN IMPLEMENTATION*

- **Preparation and Planning: Pre-Event**
  - Parkways participates in pre-storm conference calls with WVDOT, the WV Division of Homeland Security, Emergency Management (DHSEM), and the National Weather Service
    - Assessment of resources
    - Validation of situations
    - Weather briefings
  - Installed “hot line” between DOH Traffic Management Center (TMC) and the Parkways Communications Center
  - Maintenance pre-positions employees and equipment at strategic locations for enhanced preparedness
**PLAN IMPLEMENTATION**

- **Preparation and Planning: Pre-Event**
  - Wrecker businesses on stand-by
  - Maintenance Command Center at Beckley
  - Development of unified command manual
    - *Written Protocols for Turnpike Shutdown*
  - Emergency gates and shoulders widened
  - Standard Operating Procedure for gates and detour routes
PLAN IMPLEMENTATION

Preparation, Planning and Training: Pre-Season

- Conduct “Post Summer, Pre-Winter” meetings
- Ensure equipment is serviced and in good condition
- Staffing and manpower schedules established
- One day “snow and ice shakedowns” conducted in each road section
Preparation, Planning and Training: Pre-Season

- Long range - develop annual meetings with DOT, DHSEM and county and municipal emergency responders to discuss incident management
- Utilize Data Transmission Network, National Weather Service (NWS) alerts via State Police teletype, The Weather Channel to receive weather advisories, and pre-storm web conferences with NWS
- Conduct “Post Event” meetings - Lessons Learned
Public Safety

Installation of the emergency gates and development of the detour routes by a consultant

FHWA recommended legislation be introduced for “quick clearance” of vehicles from the roadway

Provide small amount of emergency food, water and fuel as well as tow straps to assist motorists

DHSEM is responsible for long term relief

Use of new message signs to warn motorists of road and traffic conditions
**Communication - Internal**

- Turnpike Communication Center dispatches and communicates via Interoperable and VHF radio systems
- Ensure operational and redundant radio towers
- New interoperable handheld radios were issued to State Police Troop 7 and interoperable mobile radios were placed in their vehicles
- Blackberries® issued to critical staff
- Developed protocol for notifying DOT’s Public Information Officer to disseminate real time information during an emergency
- Working with private cell phone company to construct a tower near the Morton Travel Plaza
Communication - External

- New 511 Travel Advisory, Dynamic Message Signs, Closed Circuit Television Cameras, Signs advising to keep emergency shoulders clear
- DOT’s Traffic Management Center (TMC), which has direct communication with the EOC, will integrate with the Turnpike’s Communications Center to coordinate release of real time information to the public
  - Fusing of information between the Parkways and DOH
- General Manager is the public information officer for the Turnpike
Incident Management

Implemented an enhanced snow emergency response plan when a severe ice storm or 6”+ of snow is forecasted consisting of the following:

1. Reallocation of available 4-wheel drive pickups
2. Critical maintenance managers drive trucks home
3. Prepositioning extra crews and equipment from Facilities, Heavy Equipment and Mechanics Shops to support road crews
4. Established Maintenance command center at centrally located facility
5. Prepositioning small supply of meals and water
6. Prepositioning 4 tandem dump trucks from Heavy Equipment to assist with snow plowing
7. Purchased motor grader from DOH
Incident Management

- Four emergency access gates
- Consultant developing detour and diversion routes
- WV Division of Homeland Security and Emergency Management (WVDHSEM) and the WVTMC contact neighboring states during a major snow storm or other event
- Parkways will advise WVDHSEM and the WVTMC if outside assistance on the Turnpike is needed such as military surplus, contractor, special equipment or manpower
- Use of DMS, Integrated TMC’s, interoperable radio system, RWIS, CCTV, 511 Advisory, Twitter, Blackberries, multi-agency web conferencing, for “Upping the Game”
*CLOSING REMARKS*

- Questions and Answer?