VDOT’S FOCUS ON EMERGENCY RESPONSE
Forward Plan From Feb. 12 Springfield Interchange Icing

March 20, 2008
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FEB. 12 EVENT OVERVIEW

Precipitation Amounts in the Northern Virginia Region on 2/12/08

Map of lane closures on Springfield Interchange. Red Lines are closures reported by VDOT and VSP, Blue Lines are closures reported by VDSP Only
RESPONSE TIMELINE

**Weather**


4:22 AM: NWS issues Winter Weather Advisory for Loudoun.

7:30 AM: Vaisala I-66 forecast predicts snow accumulations on pavement after 4 PM. Pavement temperatures forecast above freezing.

10:30 AM: Vaisala I-66 forecast predicts snow accumulations on pavement after 4 PM. Pavement temperatures forecast above freezing.

10:51 AM: NWS revises Loudoun Winter Weather Advisory. Forecast for rest of NOVA District calls for ice accumulation < 0.25 inch.

1:17 PM: Vaisala I-66 forecast predicts snow would begin to accumulate on pavement between 1 PM and 4 PM. Pavement temperature not forecast below freezing.

3:16 PM: NWS extends Winter Weather Advisory to all of NOVA District, forecasting < 0.25 inch of ice.

5:39 PM: NWS revises Winter Weather Advisory for all of NOVA District, decreasing ice accumulation forecast.

6:43 PM: NWS issues Ice Storm Warning for all of NOVA District.

**VDOT Response**

4 AM

7:23 AM: NOVA District issues request for mobilization plans.

8 AM

Approx 8:30 AM: Superintendents put together mobilization plan recommending Level I for Springfield and Level II for I-66 and Dulles Toll Road.

9:47 AM: Mobilization plan distributed.

10 AM

1:00 PM: Conference call to update mobilization plan; 54 trucks stationed along I-95.

2 PM

2:30 PM: Revised mobilization plan distributed.

4 PM

3:00 to 3:30 PM: Precipitation begins to fall and conditions begin to deteriorate. Number of crashes at Springfield Interchange escalates.

5 PM

4:00 to 4:30 PM: Tanker trucks arrive at Springfield Interchange.

6 PM

6:45 PM: First ramp of Springfield Interchange reopens to traffic.

8 PM

Around Midnight: Last ramp reopens to traffic.
KEY FINDINGS

Weather
• Forecasts and weather data not comprehensive for Springfield Area
• Weather event spread across NOVA, not just Springfield
• Rapid change in weather set off events and overwhelmed resources

Mobilization
• Mobilization plan was good, but time to mobilize contractor equipment as conditions changed was 1.5 to 3 hours
• Equipment availability and number of crashes delayed reopening ramps

Communications
• No common interface to communicate between agencies
• Communications protocols between TMCs, TEOC, and field staff not effective

Traveler Information
• 511, VDOT’s Web site and media outreach hindered and delayed
• Variable message signs underutilized

Chain of Command
• Incident command (NIMS) principles not followed for snow and ice, although they exist for other types of emergencies

Snow and Ice Removal
• Insufficient road temperature data to accurately predict pavement conditions
• VDOT lacks comprehensive anti-icing/pre-treatment program
FOLLOW-UP

• Feb. 13 — Press release acknowledging unacceptable level of service and announcing formal review
• Action steps immediately implemented to ensure adequate coverage for Springfield Interchange and around the state
• VDOT schedules debriefings with Maryland, D.C. and State Police to collect data and share information about storm response
• Feb. 14 — Commissioner appears before Senate Transportation Committee to outline agency review and forward plan
• Feb. 20 — Commissioner calls multi-agency after-action meeting to identify contributing factors, lessons learned, and forward correction plan
• Feb. 28 — Interim after-action report submitted to Governor’s Office
• March 7 — 16 immediate actions implemented to ensure appropriate winter weather response for remainder of ’08 season
• VDOT begins work on long-term agency-wide effort to focus emergency response activities and enhance snow and ice removal programs
Implemented 16 immediate action steps by March 7, 2008

- Consolidated Springfield Interchange snow and ice operations to one location, and better deployed VDOT equipment to manage winter weather events
- Designated clear chain of command focusing emergency response to Northern Virginia Traffic Management Center
- Improved communications protocols between VDOT, local, regional and state EOCs, and emergency response agencies such as the Virginia State Police
- Better use of technology and equipment to monitor traffic, report on pavement conditions and communicate with the public
- Established clearer chain of command procedures and training to ensure delivery of emergency response services for snow, ice and other incidents
LONG-TERM FORWARD PLAN

• By April 15, Commissioner will deliver long-term forward plan to address agency emergency response mission

• Launch program to improve emergency response training and practices

• Implement best practices statewide for consistent, dependable and timely response
  – Adopting NIMS principles for all emergencies
  – Clear chain of command and protocols
  – Balancing VDOT and contract resources to speed response and staging appropriately
  – Develop additional funding and equipment policies and resources to strengthen response
  – Streamline maintenance and operations into comprehensive emergency response focus
This event makes it crystal clear that VDOT must refocus on its emergency response mission to address the significant human impact of emergency events.

Emergency response is the driving mission for everything we do to Keep Virginia Moving