DAY 2 Weather Scenario Messaging Activity - Ohio

Type of weather event/scenario: Lake Effect Snow

Date/ Location of weather event/scenario: Wednesday, Dec 8, 2010  2PM-9PM
Downtown Cleveland, eastern suburbs (Cuyahoga, Geauga, and Lake Counties)

NWS Forecast Information:
Primary means of communication with ODOT Central Operations would be through partner email briefings which would be sent with each change in Advisory/Warning headline (expansion/contraction, etc). Our email briefings typically include the advisory/warning area, time frame, confidence, and greatest impacts expected (temperatures, winds if significant, etc). Social Media posts are a near copy of the email briefing. NWSChat would also be available. Additional information would be found within our Area Forecast Discussion. NWS Cleveland and Wilmington (OH) issue Special Weather Statements (SPS) when we expect squalls to limit visibility to a quarter of a mile or less. When we expect the potential for snow squalls we call the ODOT Central Ops with a “heads up” a day in advance. These snow squall SPS statements have the digital message board (DMB) id numbers tagged at the bottom. Multiple SPSs would be issued during an intense lake effect snow event.

December 2010 started off snowy for the Cleveland metro area. Between Dec 4 and Dec 7, much of the south (less typical area for lake effect snow) and east suburbs had 8 to 15” (most typical for lake effect snow). Closer to the lakeshore, amounts were far less (under 3”)

The day of:
1101 AM WED DEC 8 2010: Lake Effect Snow Advisory in effect until 6PM this evening. “Snowfall accumulations will average an inch or two, but 4 to 5 inches will accumulate in the more persistent snow bands.”
1200 PM WED DEC 8 2010: snow squall Special Weather Statement issued
130 PM WED DEC 8 2010: Report of 2” in 2 hours with now 4” on the ground in downtown Cleveland.
200 PM WED DEC 8 2010: snow squall Special Weather Statement issued
321 PM WED DEC 8 2010: Lake Effect Snow Advisory now in effect until 10 PM this evening. “Lake effect snow showers will continue tonight…especially before midnight. Snowfall accumulations tonight will average 1 to 2 inches, but 5 more inches will accumulate in the more persistent snow bands.”
400 PM WED DEC 8 2010: Report of 6” of snow now in downtown Cleveland. Visibility of less than ¼ mile, roads snow covered.
400 PM WED DEC 8 2010: snow squall Special Weather Statement issued
415 PM WED DEC 8 2010: Report from Shaker Hts (east side) of 10” since this morning, coming down an inch an hour.
426 PM WED DEC 8 2010: Lake Effect Snow Warning in effect until 10 PM. “An intense band of lake effect snow over northeast Cuyahoga Co and downtown will slowly sag south through the
evening. Two to six inches of snow is expected this evening. Visibilities will be a quarter mile or less in the heavy snow bands with 1 to 2 inches of snow an hour. The snow band is expected to push south of downtown between 6 and 7 pm. Travel will be very slow and dangerous. A few locations on the eastside had over 6 inches of snow this afternoon.

920 PM WED DEC 8 2010: Lake Effect Snow Warning cancelled. Lake Effect Snow Advisory in effect until 4 am Thursday.

Any other relevant information:

Notes: Our snow observers report 2X/day around 7 am and 7 pm.
Lake Effect Snow Advisory issued for 4 to less than 6 inches of snow.
Lake Effect Snow Warning issued for 6” or more of snow in 12 hours or 8” in 24 hours. Typical “Call to Action” would read: “In lake effect snow the weather can vary from locally heavy snow in narrow bands to clear skies just a few miles away. If you will be traveling across the region be prepared for rapid changes in road and visibility conditions.”

ODOT: Takes the NWS watch/warning/Special Weather Statement information and relays it to the DMS according to predetermined messages. For example, for a Lake Effect Snow Warning we would use the following message: HEAVY SNOW EXPECTED FRI 9P – SAT 11A. Social media is also used at the State level and at District levels with either our own content or relaying NWS social media messages. Variable speed limits are used in an experimental zone and are based on observations.

Example of a typical NWS partner weather briefing email (not from this event):
**Table Activity Questions to Answer:**

1) How would you (e.g. DOT; industry) determine the level of the storm and expected impacts to various roadway types in the scenario geographic area.
   
   i) What data do you need? Where would you get the data? How is it shared?

2) Given the level of storm/roadway impacts, what consistent and impact-based messages would be appropriate? Explain the types of messages for various dissemination approaches (DMS/VMS, website, 511, social media). Consider messages both before and during the event.
   
   i) What messages are needed 24 hours out, based on the forecast?
   
   ii) What messages are needed 12 hours out, based on the forecast?
   
   iii) Any messages post-event?

3) How would you define roles and responsibilities across sectors (e.g. state DOT, NWS, industry)?
   
   i) Communication
   
   ii) Processes

4) What stakeholders are missing?