

IWT Winter 2014 Notes 10.28.14

Welcome/Logistics/Overview:

- Molly Thoerner: coordinated response provides better citizen response and better response to situation.

Overview of December 5-6, 2013 Winter Storm (8:40 am):

Mark Fox:

- Cobblestone ice
 - How do we prepare a region for something that does not have a name yet?
- No one thinks a little bit of ice and snow will be a big deal until it is.
- There will be open discussion after presentations.
- Use of social media is encouraged.
- Goals:
 - Increase understanding of each group in the IWT (NWS, media, Ems)
 - Understand the complexities and limitation of the decision making process
 - Understand each other's main decision points
 - Understand each other's language.

Dennis Cavanaugh (NWS) (8:50am):

- Several rounds of moderate to heavy wintry precipitation (sleet, freezing rain) on Thursday afternoon.
 - Lots of precipitation for a long amount of time (18 hours).
- Impacts:
 - Cobblestone ice, sleet covering roadways
- Why is it so hard to forecast winter weather?
 - Not easy to get information about weather 5,000 in the air, where weather is formed.
 - Weather balloon stations update every 12 hours, clouds impact how much can be seen.

Samantha Davies (NBC5) 9:03 am:

- Event timeline (Thursday-Tuesday)
 - Thursday-elevated surfaces iced first
 - Friday-sleet on streets, mostly frozen
 - Saturday-Cobblestone ice develops
 - Hard freeze
 - Everything still on roads from Friday congealed on roads
 - Sunday-cobblestone ice stayed on road
 - Monday-began to melt/ become slush
 - Tuesday-coldest day of incident, everything refroze into cobblestone ice

Dennis (NWS) 9:09am:

- Ingredients for Cobblestone ice
 - Slush froze in place after traffic, low air temperatures
- Limited mitigation window- special circumstance: why were the impacts so extreme?
 - Salt doesn't always help
 - Ice had to be removed while still slush
 - Once frozen, it is nearly impossible to remove.
- Comparable event in Feb. 2003
 - Difference: sleet is all frozen, no slush. Once above freezing it stayed above freezing.

Discussion Jennifer Dunn, NWS (9:17am):

- How many lives lost? 6 total.
 - Direct and indirect losses from aftermath of incident. Mostly traffic accidents.
- How get track and get information out on storm movement?
 - During event, use radar data to track strongest cells.
 - Graphics-radar estimated precipitation.
 - Rely on on-ground people (IWT) to determine more specific information
 - Will put individual reports on NWS chat.
- How does CASA help?
 - Can see shapes and sizes of what is falling. Can tell difference between freezing rain and sleet.
- People ignored storm warning due to previous storm warning that wasn't bad.
 - Kaufman County: delayed closings until last possible minute
 - McKinney: 80 degrees the day before storm. Didn't believe it would get that cold.
- What is the lead time of knowledge that might likely happen?
 - Hourly data
 - Things that are going to change-6-12 hour timescale
- Who has authority to close highways? TXDOT, freight companies, local jurisdictions.
 - Need to work on increased communication with freight companies.
- Challenges for upcoming season?
 - Expecting weak El Nino-above normal precipitation, below normal temperatures.
 - NWS: when does IWT need information to make decisions? What do you need?
- How do you measure road temperature? So fire departments can start predicting what might happen?
 - It's done poorly. There is no network of temperatures. Need to partner with engineers with this knowledge. Public works, TXDOT, manual temperature taking.
 - Flower Mound: uses vehicles to take temperatures-takes air and road temperatures. Will put in NWS chat.
 - Grand Prairie: sensors on key bridges. Need to work on getting information integrated with other jurisdictions.
 - DFW Airport: sensors on runways. Will share with NWS.

Registration Survey Results/Findings (9:50am):

- Handout: general impact from outlook, watch, advisory, warning.
- North Texas NWS Winter Weather Products and Criteria
 - Outlook: 3 to 5 days before onset, moderate confidence
 - Watch: 36-48 hours before onset, moderate to high confidence
 - Advisory: 0-24 hours before onset, high confidence
 - Warning: 0-36 hours before onset of significant hazardous winter weather. Winter storm warning is most common.
 - Warning vs. advisory:
 - Often issue both for our part of coverage area.
 - The difference between the two: expected amounts and/or impacts
 - An advisory is NOT a downgrade from warning-impacts are still expected.
 - NWS has discretion to issue a Warning for an impending hazard, even if our Warning criteria may not be met
 - NWS have issued Warning for Advisory-level criteria
 - Time of day/year
 - Temperatures and impacts
 - NWS will communicate this through our products/chat.
 - Just because it is winter precipitation is in the forecast, doesn't mean we will issue an Outlook, Watch, Advisory/Warning. Will use other means to communicate message.

Discussion:

- Need to have terms that are easier to translate into Spanish
 - Telemundo: tell impacts to audience, rather than using official NWS product words: outlook, watch, advisory, warning.

Open Discussion: Winter Weather Scenario-Amanda Schoerder, Mark Coyne (facilitator) (NWS) 10:33 am:

Scenario to determine what decision are you making? Who are you collaborating with?

Time point #1: HWO issued with first mention of a wintry mix 4 days out

- EM: notify city manager, public works, police and fire
- Media: staffing issues, planning for coverage
- ISDs: look at extracurricular activities (weekend), school closures
- Public works: load sand into trucks
- TxDOT: manpower and staffing
- UNT Health Science: flexible scheduling, campus closures

Most winter weather early in the season is precipitated by very warm weather.

Time point #2: Winter Storm Watch forecasted 2 days out-freezing rain, sleet, and snow

- FD: increase staff, make sure have equipment, work with city.
- FW: open more homeless shelters, work with county
- Media: keep it simple, avoid weather hype, mention what might happen, adjusting schedules
- McKinney: forward message from NWS, public works, fire and police about potential impacts
- ARC: prepositioning of shelters, talking to OEMS
- NTTA: prepare equipment

Time point #3:

Half of region is under Winter Storm Warning (west) while other half is under Winter Weather Advisory (east).

- ARC: work closely with OEMS to determine shelters and warming stations. The biggest risk is safety-don't want volunteers to be on roads when they are dangerous.
- TxDOT: shift to 12 hour shifts.
- ISDs: go out on county roads to determine road conditions for bus routes, determine early release, closures. Superintendents talk about scheduling- no one home to pick up kids, kids rely on school for meals, cascading effects-use the same buses for all schools, will take them a long time going home. Need more coordination across districts.
- Media: ramp up social media, increase cut-ins between news casts, make hotel reservations for staff so they can make it to work.
- NWS: large number of conference calls to make sure everyone has information. Is it the best possible use? Or prefer lots of updated emails?
 - When is a good time to start conference calls and how frequent should they be?
 - Tarrant County: work with ISDs starting at 4am
 - 10-12pm, 2 days out
 - The closer to the event, depending on circumstances-calls should be more frequent and spontaneous
- NWS releases information at 4am and 4pm.
 - Helpful for media if released a little sooner-3:30pm
 - Media uses NWS chat and credible social media information.
- NWS is best way to communicate with IWT in real time.
- Telemundo-issues finding Spanish-speaking PIOs.
- Mbing-app from Oklahoma Severe Weather Center. Allows user to document type of precipitation. NWS monitors; allows them determine where freezing line is.
- European weather warnings: color coded. Red category (worst) based solely on impacts, has no weather criteria.
- TxDOT: can't clear snow if there is ice underneath it.

Action items (12:04pm), Mark Fox:

- Compile list of how many jurisdictions have temperature readings, especially for roadways
- Focus more on impacts and less on terminology NWS uses.
- Watches: better to issue earlier and then pull back, rather than ramp up with late notice.
- Wind speed and temperatures critical to determine how severe weather will be. 10-15 mph winds.
- Mention winds 48 hours out.
- Need to know best guess of when impacts will hit certain areas.
- School conference calls.
- Consolidate conference call.
- Issue warnings before 4pm, as early as possible, especially for media. 3:30 as best case scenario.
 - For all hazards.

Workshop ended at 12:10pm.