



# The WFO Pittsburgh, PA External Users Team



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The National Weather Service is always looking for new and innovative ways to improve communication and understanding of its products and services. Accordingly, the Weather Forecast Office (WFO) in Pittsburgh, PA developed an External Users Team in 2010 to better understand the effect that its services have on its users. The team meets once every two months via conference call and once a year in person. Members of the team represent the media, emergency management, transportation services, utility companies, health services, and education communities.

## Team Members

Members attend webinars regularly and will participate in an Integrated Warning Team workshop.

- John Nicklin – Deputy EMA Director, Mercer County, PA
- Harrison Hove - Ohio News Network
- Jeff Oechslein - WTOV TV, Steubenville, OH
- Pete Manousos - FirstEnergy, Akron, OH
- Steve Cropper – Broadcast Meteorologist, Pittsburgh, PA
- Dave Ivan - EMA Director, Belmont County, OH
- Duane Hamilton - EMA Director, Preston County, WV
- Jason Norville - PENNDOT, Harrisburg, PA
- Jeff Karr- PENNDOT, Western Region, Pittsburgh, PA
- Michael Adametz - American Red Cross, Pittsburgh, PA
- Terry Struble - Superintendent, Mount Pleasant, PA
- Chad Kauffman - Professor, California University, PA
- Elyse Colbert - Student, Penn State University
- Jason Parrish - WTOV TV, Clarksburg, WV
- Dwayne Bittner - Maryland State Highways Administration



## Developing Impact Thresholds

Team members provided feedback on weather-based thresholds that have a significant impact on their operations.

### Department of Energy

- 0.25" is critical for ice accumulation on power lines

### Department of Transportation

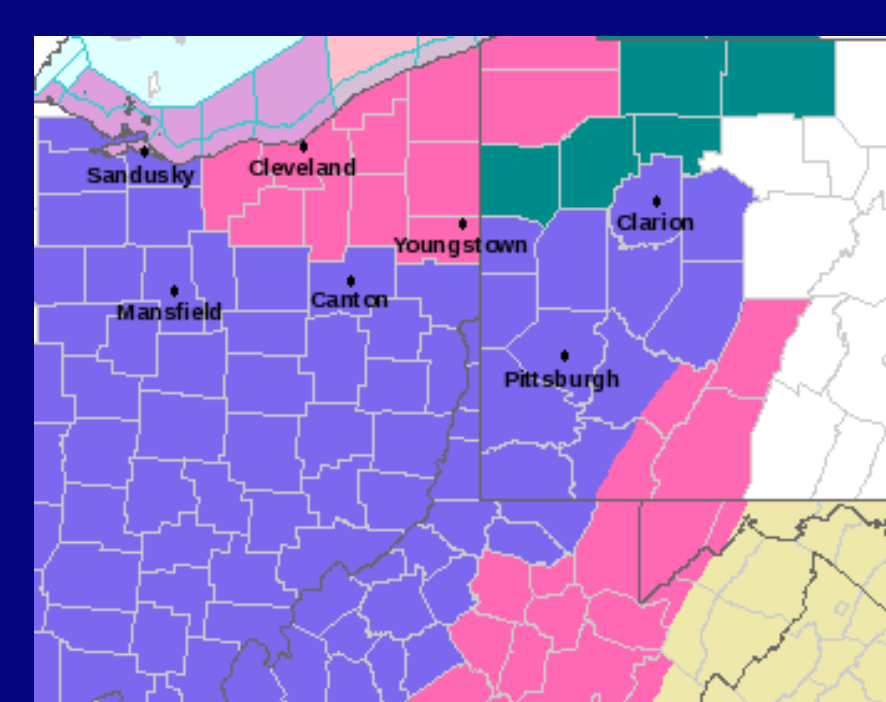
- Utilize road temperature sensors during flash freeze events
- Need approximately a 2 hour lead-time to mobilize effectively
- Snow water equivalent (dry vs. wet snow) forecast helps
- 10" vs. 20" of snow forecast makes a difference
- 34°F is critical for road treatment

## Zone Segmentation

On November 15, 2010, Westmoreland County and Fayette County in Pennsylvania were divided in order to create two new public forecast zones. These two new zones were developed in order to provide more detailed service for the densely populated lowlands of the western portions of the counties and the tourist destinations of the eastern ridges.

### Why the Change?

- Topography impacts
- Account for localized weather
- Big snowfall differences
- Temperature impacts
- Precipitation type changes
- Wind/wind chill differences
- Population density variance



Warning, watch, and advisory map with new zone configuration during an event in December of 2010. (Pink- Winter Storm Warning, Purple- Winter Weather Advisory)

### Advantages

- Reduction of false alarm area
- More localized and detailed forecast
- Better service
- Ability for forecasters to apply climate and terrain impacts

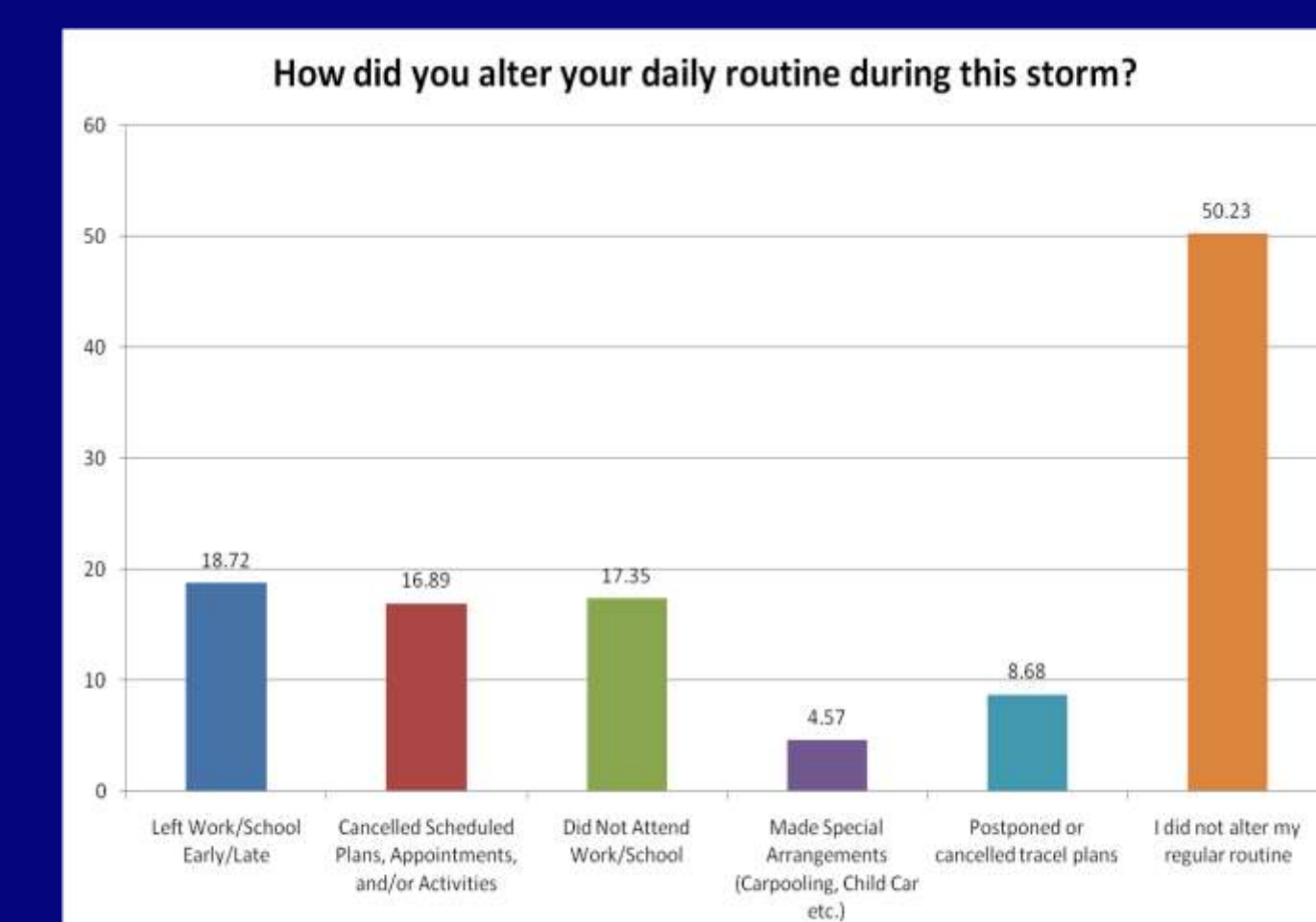
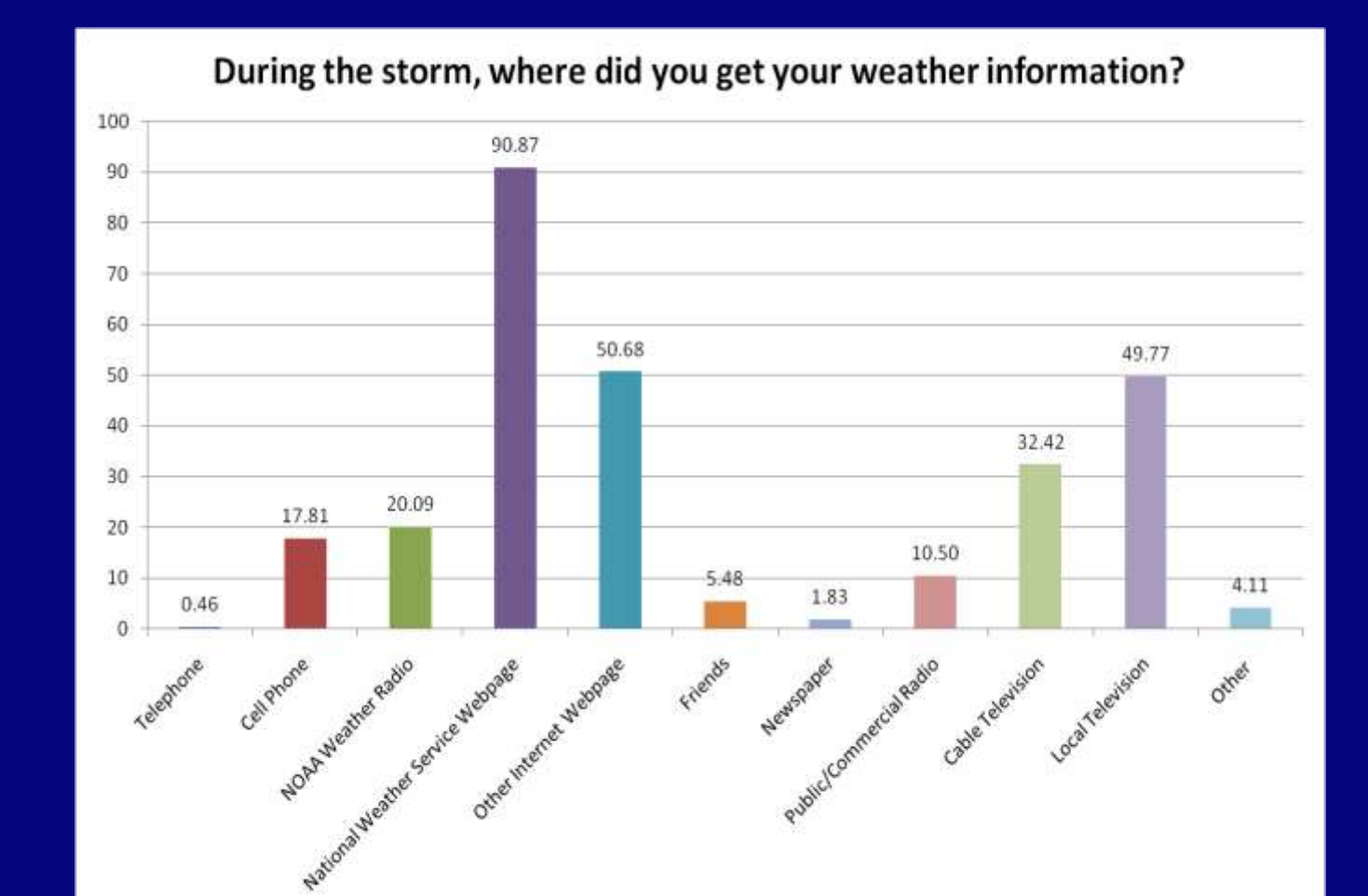
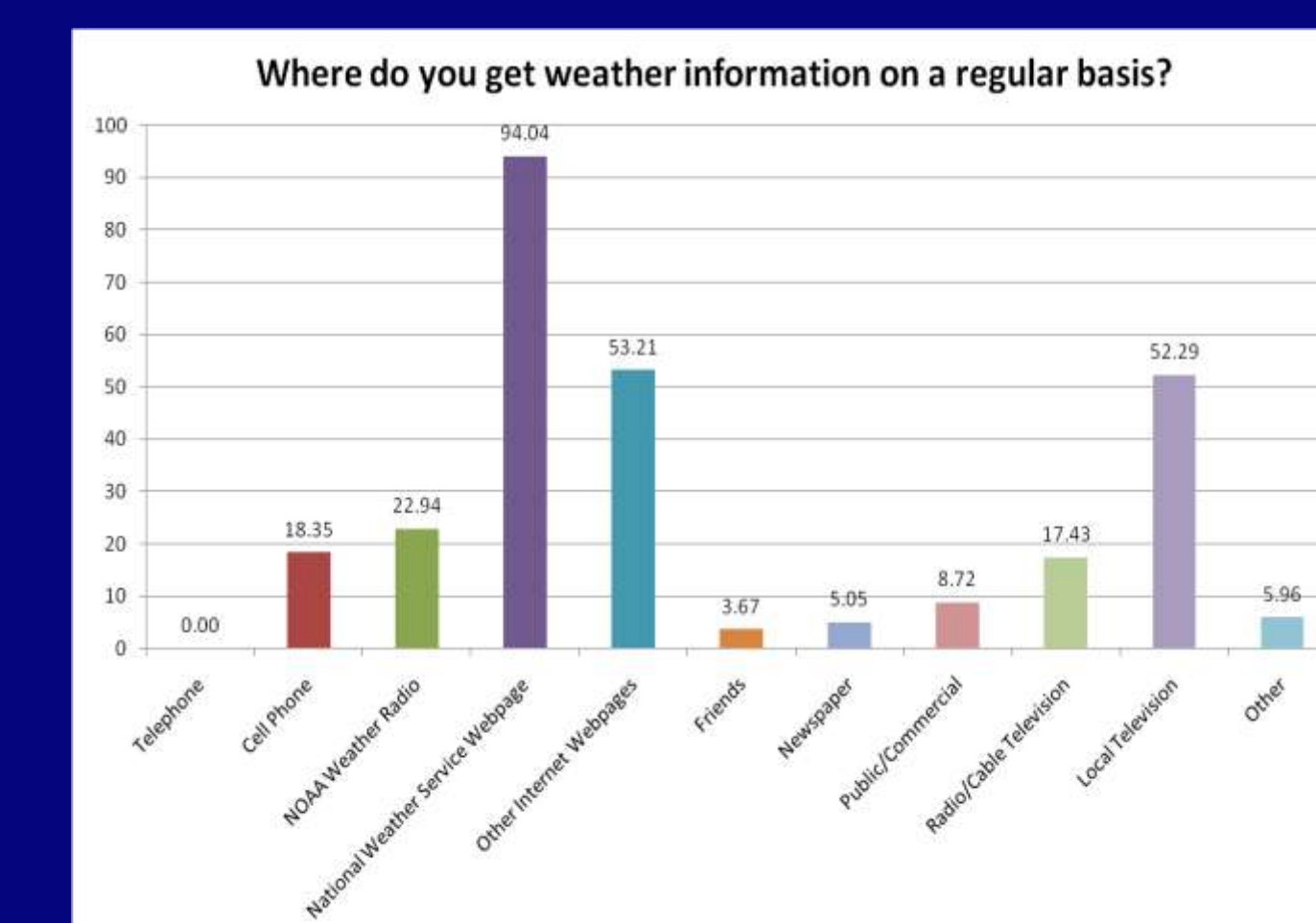
## Accomplishments

### Local Post-Winter Event Survey



During the 2010-2011 winter season, the WFO participated in a post-event survey conducted by St. Cloud State University. There were 1241 participants surveyed nationally and 218 locally. The survey was conducted to develop a better understanding of how our winter products are being utilized by our users and how they are responding to the message being conveyed.

### Results



## Event Feedback Leading to Changes

During each conference call, the team discussed local high impact weather events. Members provided input that led to the following service enhancements.

- Bulleted Long Fused Hazard Text Products
- New Public Zones
- PDF decision support briefings for smart phones
- Impact Thresholds
- SAME toned Special Weather Statements (SPSs)
- Disseminating Weather Reports
  - Local Storm Reports (LSRs)
  - Public Information Statements (PNSs)
- Google Map Displays
- Post Event Maps



December 2010 Freezing Rain event in Belmont County, OH.

## Tone Alerts

Specific Area Message Encoding (SAME) products will now be toned for the following products during high impact events.

- Special Weather Statements
  - Snow squalls with near minimum visibilities
- Winter Weather Warnings/Advisories
  - Short notice for heavy snowfall
- High Wind Warnings
  - Short notice for high winds

