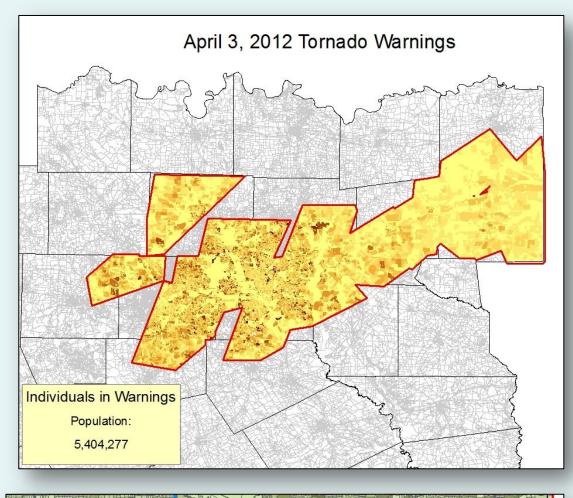
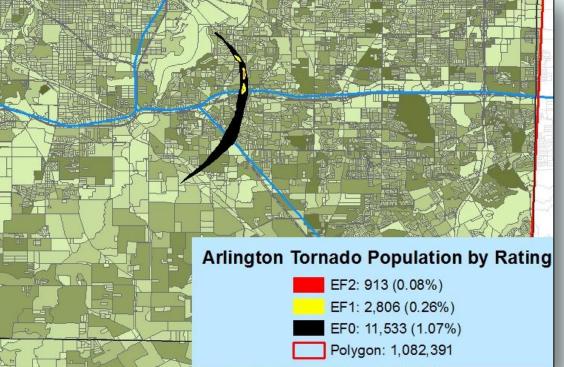
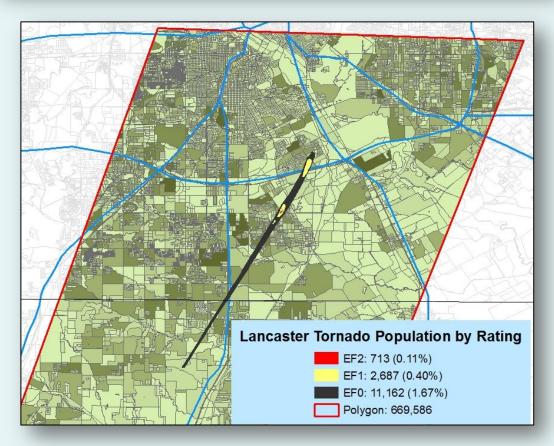
## 3 April 2012 Event Summary

- 20 tornadoes in north and northeast Texas
- 3 EF-2 and 1 EF-3 affected DFW Metroplex
- 5.4 Million people in tornado warnings
- 0 fatalities / 29 injuries
- \$800 million in damages
- Tracked live on television







- Maps show population density and tornado warnings
- Black, and yellow swaths are the surveyed tornado tracks.
- Population data extracted from 2010 U.S. Census blocks
- Tornadoes hit highly populated areas

## The 3 April 2012 Tornado Outbreak: An Analysis of the North Texas Integrated Warning Team



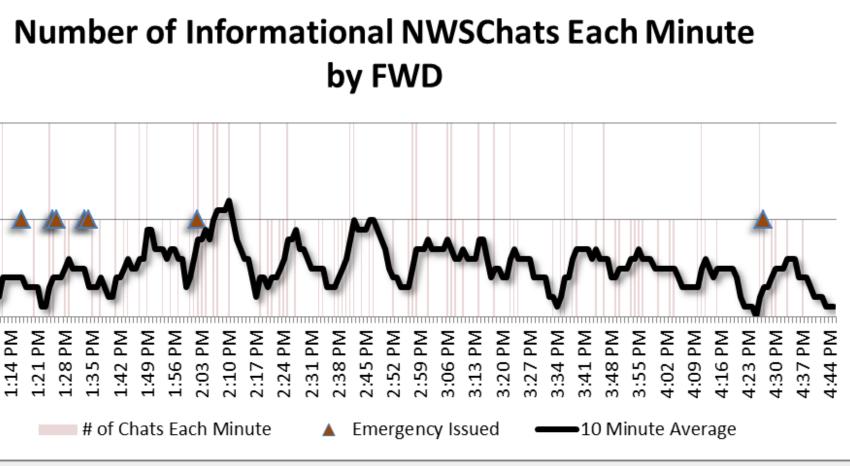


Average time for broadcast media to relay Tornado Emergency Message

When "Tornado Emergency" mentioned in NWSChat:

When "Tornado Emergency" not mentioned in NWSChat: \*Two Tornado Emergencies never mentioned

Dennis Cavanaugh (dennis.cavanaugh@noaa.gov), Melissa Huffman (melissa.huffman@noaa.gov), and Mark Fox (mark.fox@noaa.gov)

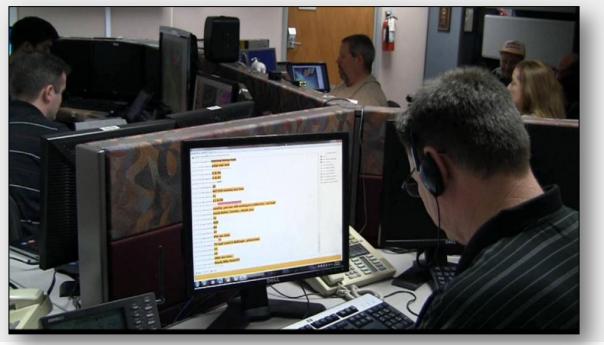


2.7 minutes

4.0 minutes\*

## WFO Fort Worth / Dallas (FWD) Use of NWSChat (1:00 PM to 4:45 PM)

- 130 individual messages
- Averaged approximately 1 message per minute
- nwsbot relayed 184 text product issuance
- 21% of FWD's messages relayed by broadcast media within 1 minute
- 43% of FWD's urgent messages relayed in the same minute as the information was written



• Effective and frequent communication amongst members of the IWT is essential to presenting a consistent warning message

Conclusions

- NWSChat is heavily relied upon for situational awareness by media, and offers an effective way for the NWS to convey urgency and severity of hazardous weather threats.
- Reasons given for a lack of fatalities (by IWT members):
- Broadcast Media relayed consistent information and displayed dramatic coverage of the threat
- Residential areas primarily damaged, many residents were at work or school and not in their homes when tornadoes struck
- Emergency Management able to make decisions rapidly
- Integrated Warning Team Performed Well
- NWS issued good warnings



