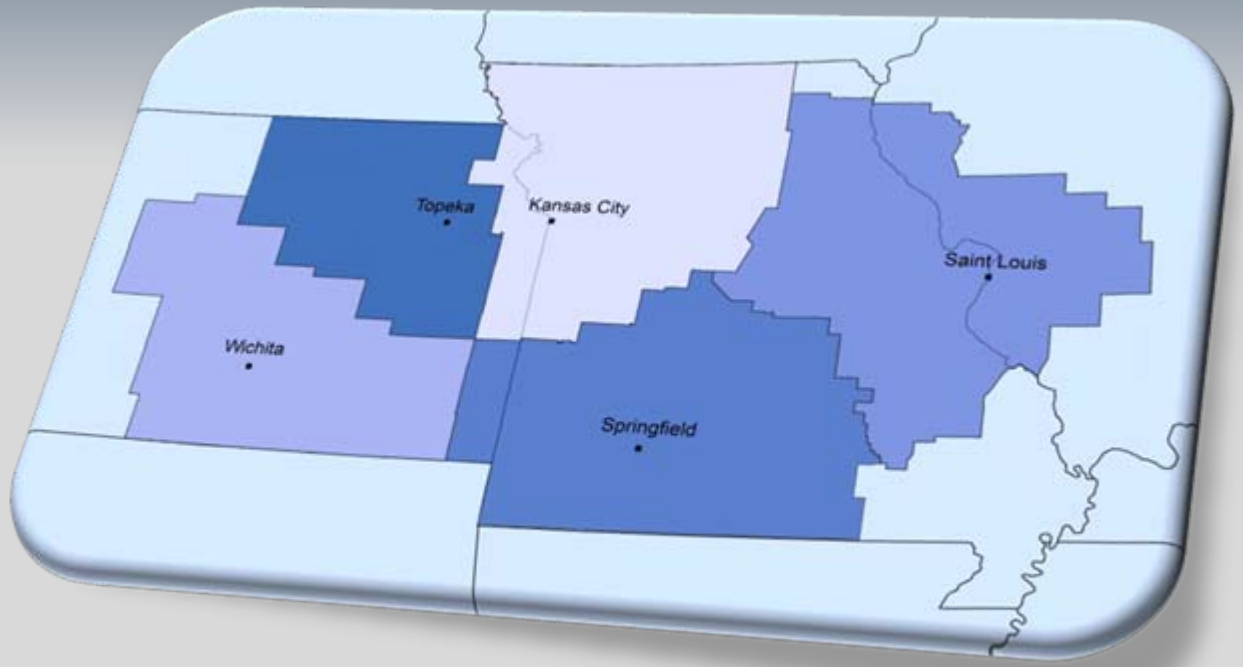
Impact Based Warning
Experimental Product

Weather-Ready Nation:
Saving Lives and Livelihoods



NWS Central Region

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Key findings of 2011 service assessments:

- Majority of people sought confirmation from additional sources before seeking shelter.
- Credible, extraordinary risk signals prompt people to take protective actions.
- Perceptions exist amongst the public that “sirens go off all the time and nothing happens”.
- Existing weather enterprise dissemination system is not fully compatible with storm-based warning polygons.
- Majority of people identified local siren systems as first source of warning.
- Lack of enhanced wording in warnings during known significant events.
- There was inconsistent use of the “Tornado Emergency” products

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- **5 Weather Forecast Offices**
  - Wichita, KS
  - Topeka, KS
  - Kansas City/Pleasant Hill, MO
  - Springfield, MO
  - Saint Louis, MO
- **Begins April 2, 2012**

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What is this demonstration all about?

- Improved communication of risk
- Clearly identifying potential impacts
- Use of “tags” to make important information easier to find
- “Tags” also enhance Common Alerting Protocol (CAP) messages

Message Partnering

Emergency Management

ESF #15: Public Affairs

Public

Media Partners

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Goal:

To provide more information to the media and Emergency Managers, to facilitate improved public response and decision making; and to better meet societal needs in the most life-threatening weather events.

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Intended Outcomes:

- Optimize the convective warning system within the existing structure
- Motivate proper response by better distinguishing situational urgency
- Realign the warning message in terms of societal impacts
- Effectively communicate recommended actions/precautions
- Evaluate ability to distinguish between low impact and high impact events

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THE NATIONAL WEATHER SERVICE IN SPRINGFIELD HAS ISSUED A
* TORNADO WARNING FOR...
  NORTHWESTERN NEWTON COUNTY IN SOUTHWEST MISSOURI...
  SOUTHEASTERN CHEROKEEE COUNTY IN SOUTHEAST KANSAS...
  SOUTHWESTERN JASPER COUNTY IN SOUTHWEST MISSOURI...
  THIS INCLUDES THE CITY OF JOPLIN...
* UNTIL 600 PM CDT.

* AT 514 PM CDT...A TORNADO EMERGENCY FOR THE CITY OF JOPLIN.
  A CONFIRMED LARGE AND DESTRUCTIVE TORNADO WAS LOCATED NEAR
  BAXTER SPRINGS MOVING NORTHEAST AT 40 MPH.

  THIS IS A PARTICULARLY DANGEROUS SITUATION.
  HAZARD...DEADLY TORNADO AND BASEBALL SIZE HAIL
  SOURCE...SPOTTERS AND LAW ENFORCEMENT CONFIRMED TORNADO.
          SIGNIFICANT DAMAGE TO HOMES REPORTED IN THE OAKS
          SUBDIVISION.

  IMPACT...LIFE THREATENING SITUATION. EXTENSIVE DAMAGE TO HOMES
          AND BUILDINGS...UPROOTED TREES AND DEBRIS WILL
          RESTRICT ACCESS INTO MANY AREAS.

* OTHER LOCATIONS IN THE WARNING...JOPLIN.
PRECAUTIONARY/PREPAREDNESS ACTIONS...
IF YOU ARE IN OR NEAR JOPLIN TAKE COVER IMMEDIATELY!
&&
LAT...LON 3716 9479 3707 9426 3697 9430 3701 9479
TIME...MOT...LOC 2216Z 247DEG 36KT 3708 9470

TORNADO...OBSERVED
TORNADO DAMAGE THREAT...CATASTROPHIC
HAIL...2.75IN
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Tornado Tag	
TORNADO...RADAR INDICATED	Evidence on radar and near storm environment is supportive, but no confirmation.
TORNADO...OBSERVED	Tornado is confirmed by spotters, law enforcement, etc.
Tornado Damage Threat Tag	
TORNADO DAMAGE THREAT...SIGNIFICANT	When there is credible evidence that a tornado, capable of producing significant damage, is imminent or ongoing.
TORNADO DAMAGE THREAT...CATASTROPHIC	When a severe threat to human life and catastrophic damage from a tornado is occurring, and will only be used when reliable sources confirm a violent tornado.
Tornado Tag In Severe Thunderstorm Warnings	
TORNADO...POSSIBLE	A severe thunderstorm has some potential for producing a tornado although forecaster confidence is not high enough to issue a Tornado Warning.

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Marketing Plan

- **Three tiered approach**
  - Emergency managers and media
  - Core Partners
  - Public
- **Marketing "tool-kit"**
  - IBW "one-pager"
  - Briefing slides for use in spotter talks, outreach
  - Video briefing resource
- **Kickoff press conference**

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Training

- **"Polygonology"**
  - Re-emphasize awareness of county boundaries
  - Understanding storm motion and propagation (keep storm in polygon)
  - Importance of editing the default polygon

- **Building confidence in using tags**
  - Understanding definition and when to use
  - Guidelines for TOR vs. SVR (2 out of 3)
  - Storm environments
  - QLCS Mesovortex conceptual model
  - Data/tools available for warning process

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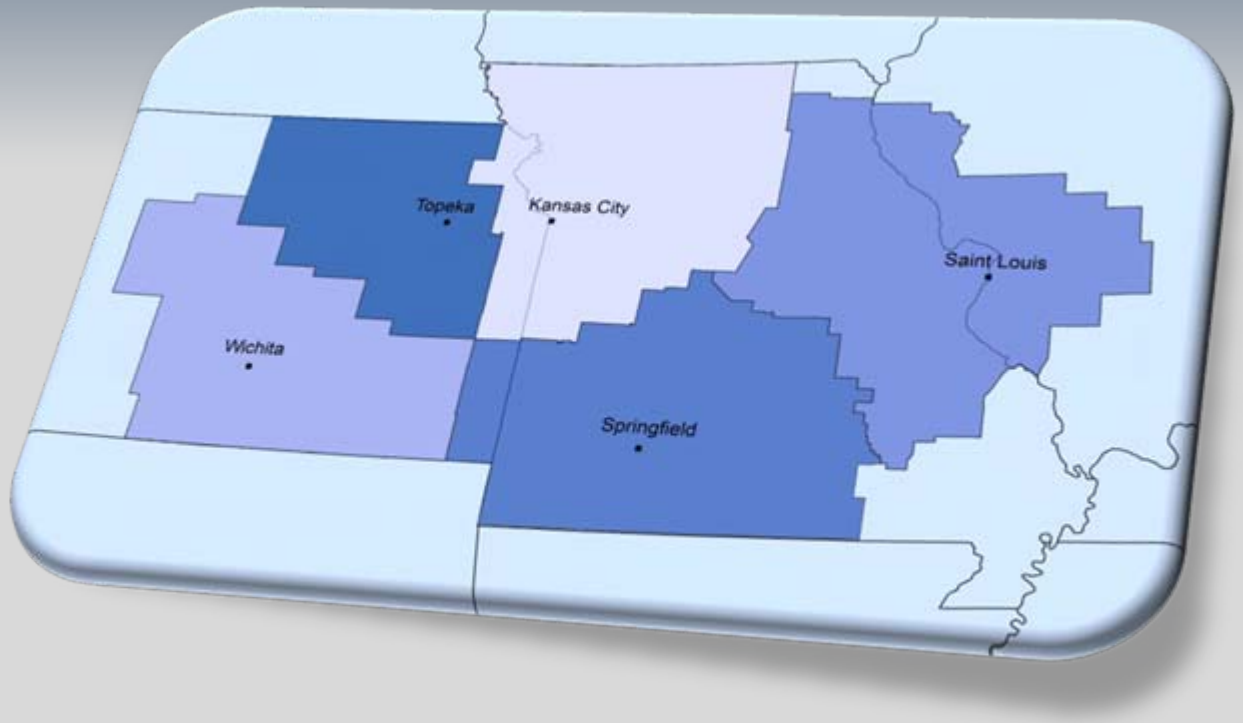

Questions?