

When a Whole Town Disappears

Clark County Indiana

March 2, 2012

TORNADO

“When a Whole Town Disappears”

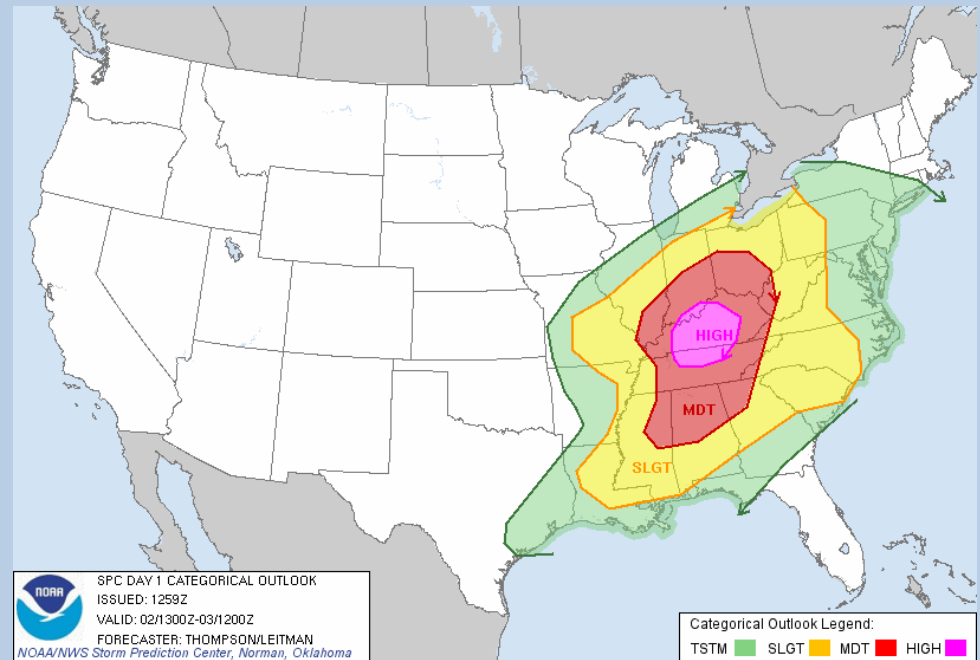
LTC. Amir Mousavi, Ph.D (ABD), MPA, MS, CEM, CFO, FF/NREMT-P

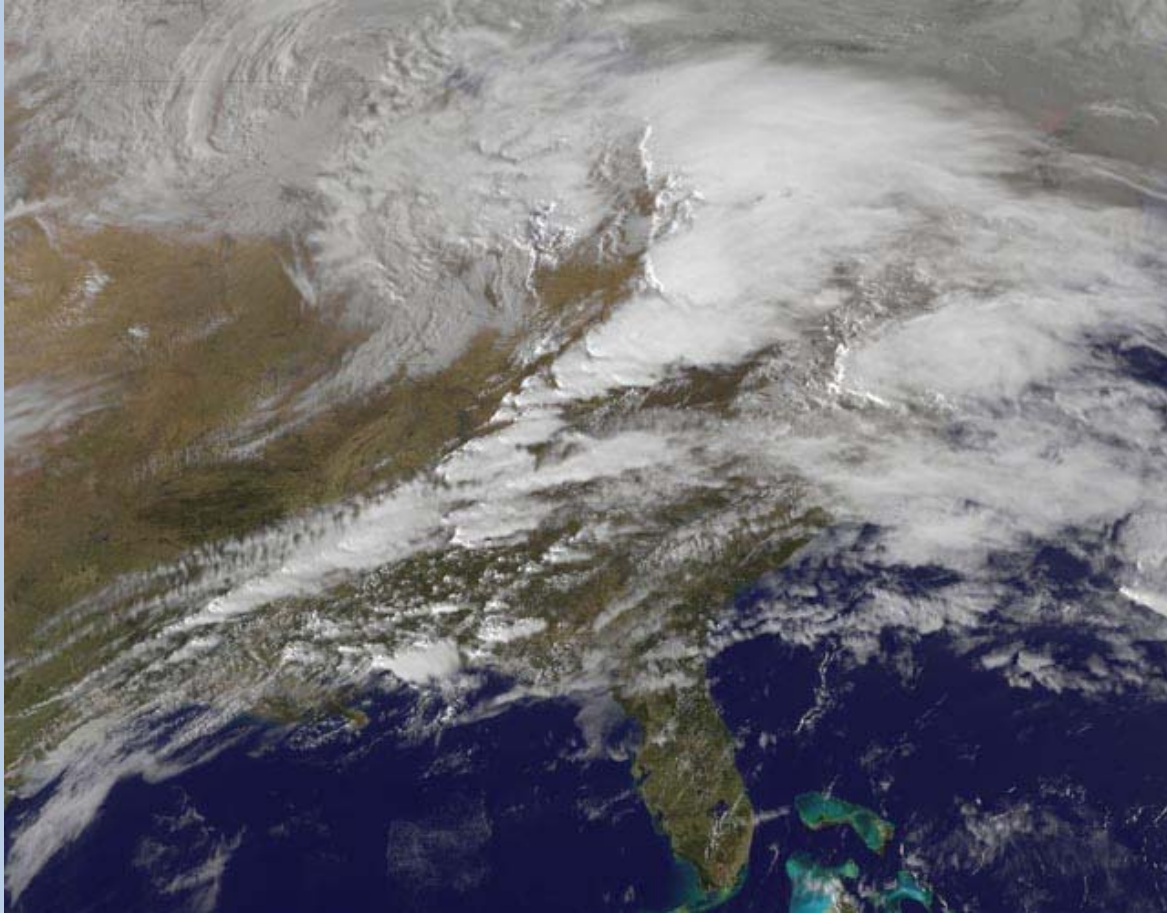
Assistant Fire Chief, Utica/New Chapel Fire & EMS

Deputy Commander, Indiana Taskforce 9

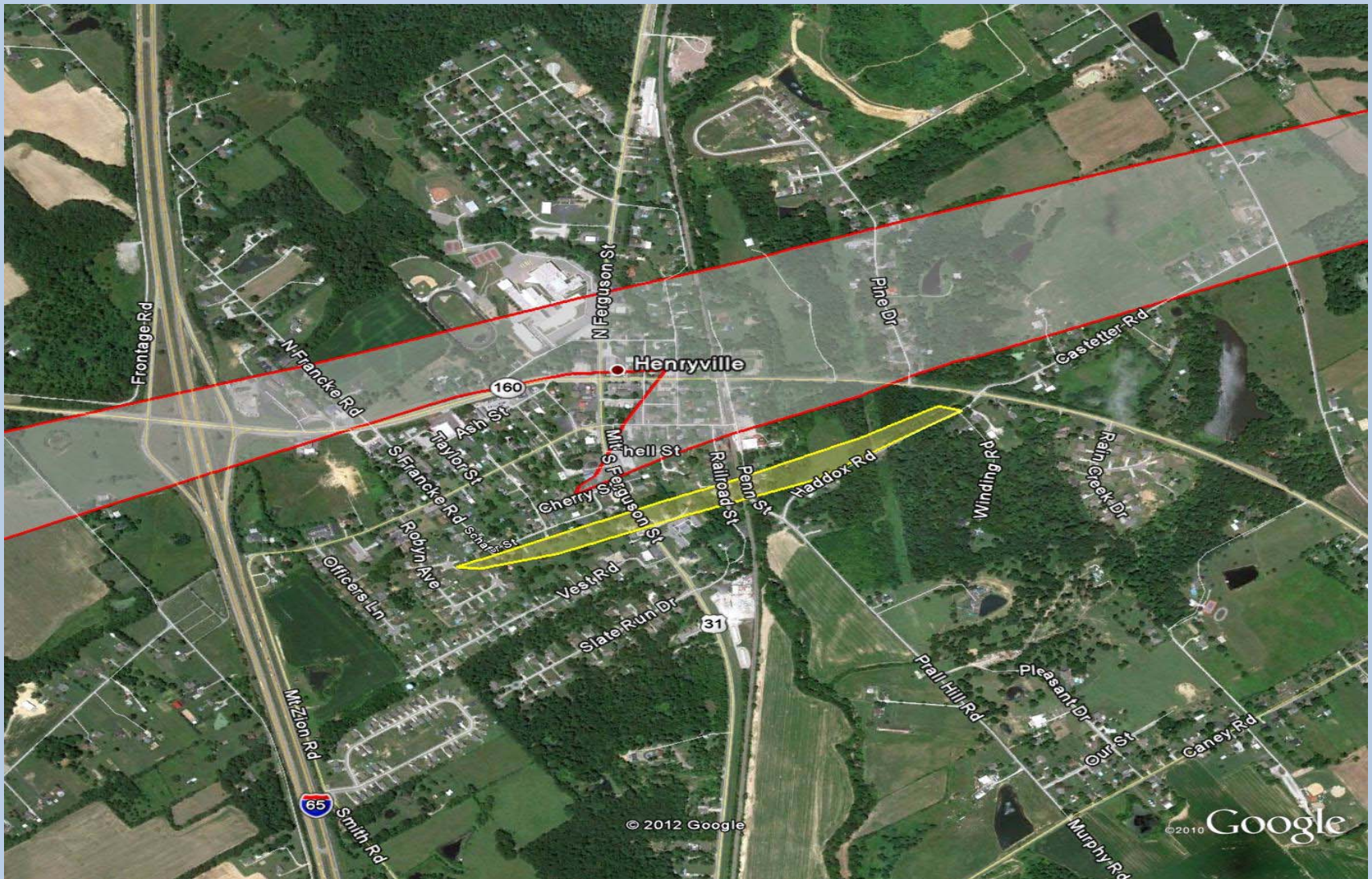
The Gathering Storm

March 2nd – The Storm Prediction Center issued the following map noting a high risk for damaging storms.

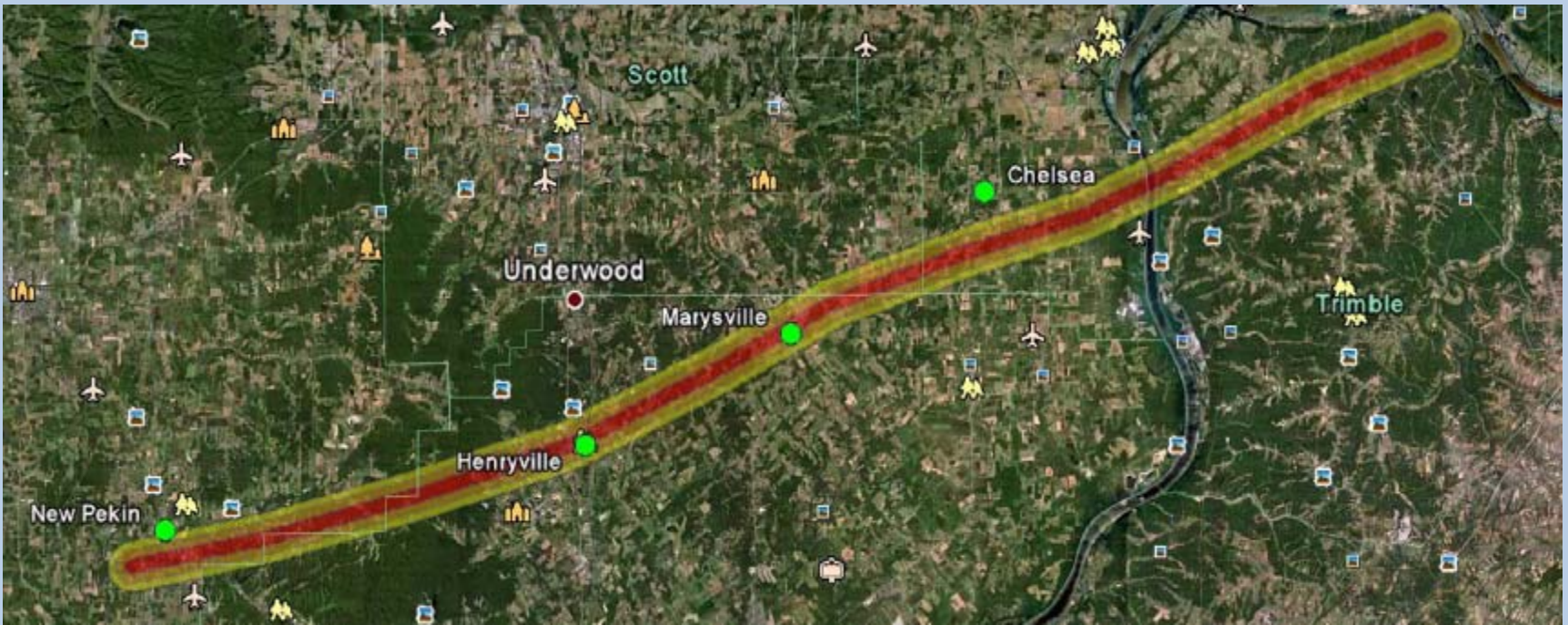




Satellite imagery of the massive storm that caused the tornado outbreak – NASA/GSFC



Town of Henryville was the most severely impacted in Clark County, IN



Although much damage occurred in Henryville, other communities were also severely impacted:

- *New Pekin*
- *Daisy Hill*
- *Mt. Moriah*
- *Marysville*
- *Chelsea*
- *Borden*
- *Memphis*

Immediate Response

- Local responders from affected jurisdictions responded with what was left.
- Neighboring jurisdictions self deployed once they realized all communication was cut off.
- Forward elements of IDHS responded to the area.
- Forward elements of DHS/FEMA TF1-USAR responded as requested by County EOC.

First Response Agencies in the Affected Area

- Henryville Fire Department (volunteer)
- New Washington Fire Department (volunteer)
- Borden Fire Department (volunteer)
- Rural Metro Ambulance (paid contract)

Some of the Responding Agencies From Outside of the Affected Area

- Utica Fire & EMS
- New Chapel Fire & EMS
- Indiana State Police
- Indiana University Incident Management Team
- City of New Albany Fire & Police
- City of Clarksville Fire & Police
- Clark County Sheriffs Department
- Floyd County Sheriffs Department
- Louisville Metro Police & EMS (KY)

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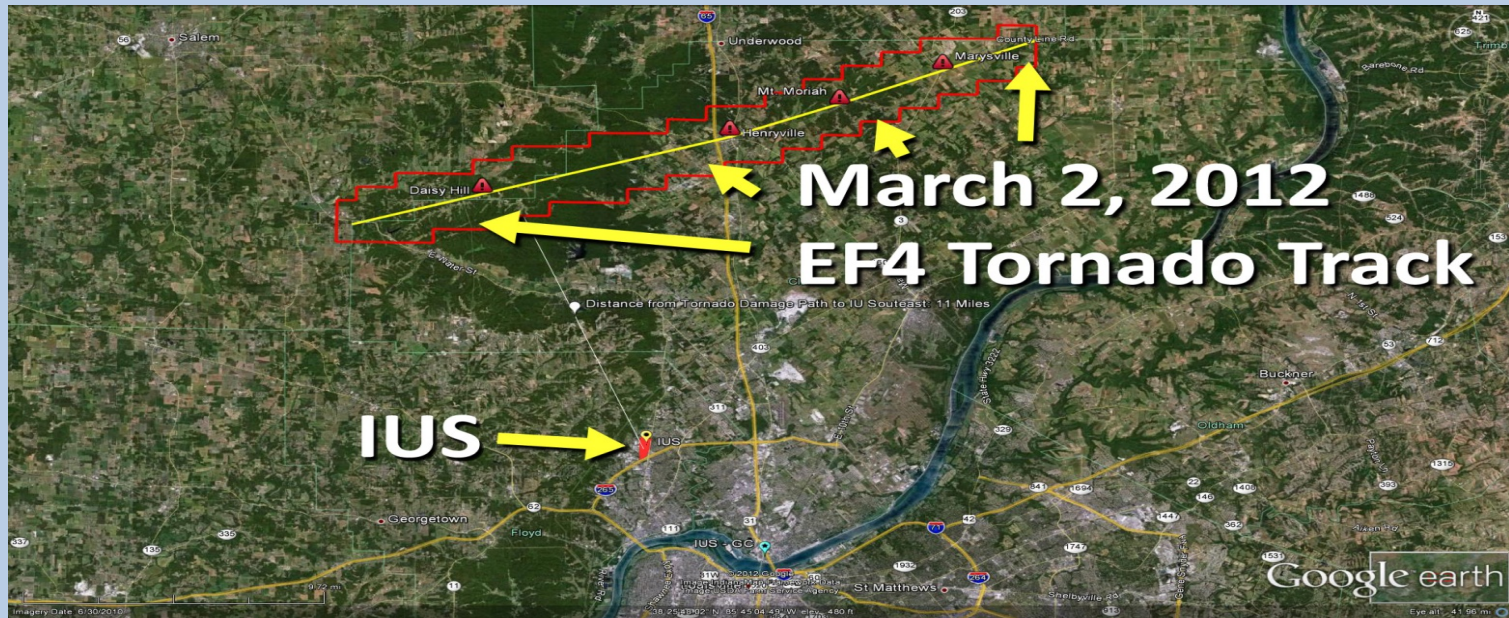
- Lafayette Fire Department
- Greenville Fire Department
- Yellow EMS
- Georgetown Fire Department
- Harrods Creek Fire Department (KY-Collapse Team)
- Jefferson County Search Dog Association (KY)
- Harrison County Indiana Fire Departments

Local Hospitals and Physicians

- Clark Memorial Hospital
- Medical Center of Southern Indiana
- Floyd Memorial Hospital
- University of Louisville Hospital
(Level 1 Trauma Center)
- 3 ER Doctors Responded to the Area (SWAT Physicians)

Activation of the State Incident Management Assistance Team (IMAT)

- At 3:04pm, all members of State IMAT were placed on Standby
- At 4:18pm, selected members of State IMAT were activated and instructed to go to the pre-designated rally point in Indianapolis.
- At 6:03pm, IMAT personnel assembled at Five Point Assembly Area to deploy to Henryville (Clark County)
- At 9:43, IMAT personnel begin work in Clark County



- A 50-mile path, missing Jeffersonville, Clarksville, and New Albany by less than 11 miles
- Wind speeds were in excess of 175 mph
- The EF-4 tornado was approximately one-third to one-half mile wide, encompassing approximately 71 square miles of damage path
- Six counties impacted; Clark County most heavily impacted (Henryville)
- Outbreak spawned nearly 50 other tornadoes across the Midwest, 19 of which were in Indiana, including an EF-2

Significant Issues on the Ground

- Water Service – Sewage and Potable Water didn't last through the first night
- Phone Service – None - Both landline and cellular service
- Electrical Service – None - Substation in town was completely destroyed; telephone poles were missing
- Gas Service – None – Service status (and therefore safety status) unclear first few days
- Massive amounts of woody and construction debris
- Roadways blocked or impassable
- Safety and health issues



***Henryville High School Complex – Received
brunt of EF-4 damage***



School bus pushed into a local diner in Henryville



View from inside the diner



Formerly Henryville Auto Body Shop



Not much left of Marysville. Note that the workers are sitting on a house foundation.

Marysville

Impacts

- Total Deaths: 13 (Indiana)
- Total Injuries: 97** (*Initial figure – not reflective of post incident injuries*)
- Structural Damages: 115 Affected; 217 Minor; 60 Major; and 119 Destroyed (Clark County)
- Debris Management: Estimated 1.2 million cubic yards of woody debris in the impacted area (Clark County); As of 3/16/2012, a confirmed over 908K cubic yards of debris collected/processed.

Impacts

- Individual Assistance Program: As of 3/22/2012, over \$1.2 million approved (for 164 applications)
- Public Assistance Program: Estimated \$46 million
- Disaster Mental Health personnel were on scene providing psychological “first aid” to the public and responders
- Thousands of volunteers from religious and other non-profits have inundated southern Indiana and continue relief efforts with physical activities, donations, and financial support

Problems Facing the Initial Response

- High winds, large hail and rain.
- Impassible roads.
- Total communication failure (radio and cell)
- Lack of situation awareness.
- Lack of robust and effective command and control.
- Lack of coordinated effort by responders.
- Force protection and other security issues.

Lessons Learned

- Mutual aid response in the initial hours was essential.
- NIMS and ICS absolutely WORK and must be implemented for successful operations.
- The Incident Management Team (IMT) concept WORKS and was the key to successful resolution to this disaster.
- Liaisons between organizations are essential, in both the response and subsequent recovery.

Lessons Learned

- Initial damage assessment, debris management, and donations/volunteer management are critical to the response.
- Public information must be immediate, constant, accurate and relies heavily on social media and all other communication platforms.
- 800 MHz radios, feet/sneakers and 4-wheelers were crucial to communications in the initial days

Questions?