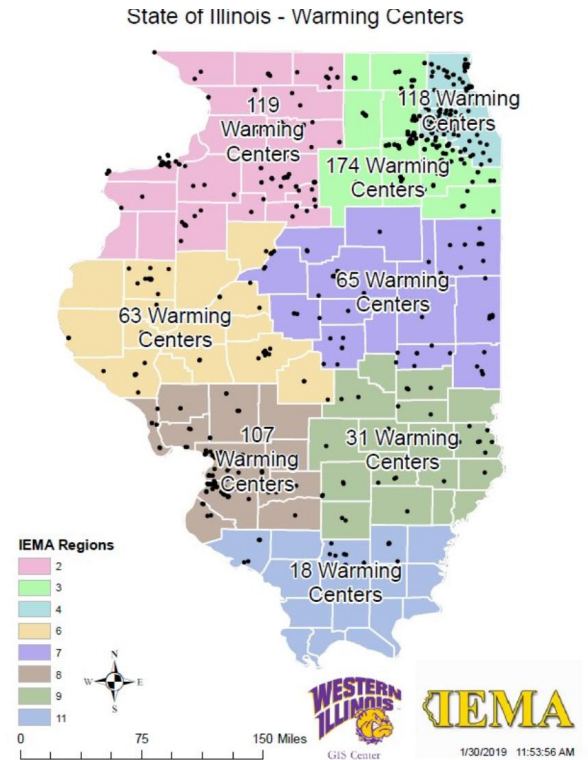


Recent Work Done with the WIU GIS Center

Ian Stearns

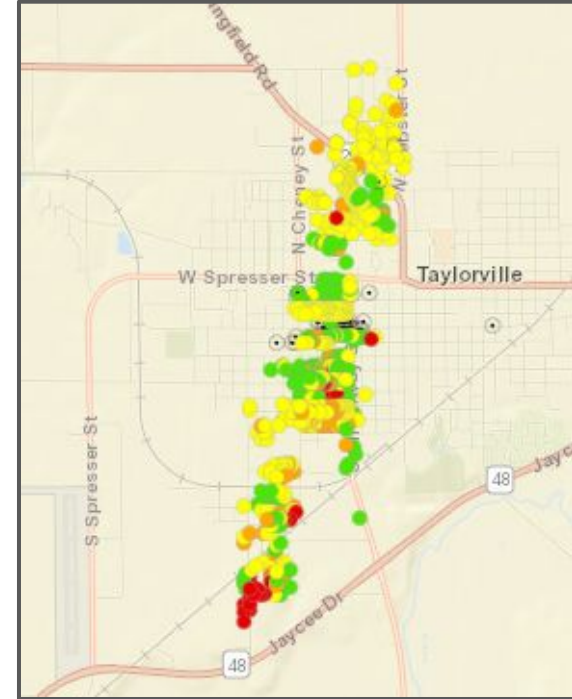
What is GIS?

- **Geographic Information Systems**
- Extremely Versatile Tool
 - Useful for visualizing geospatial data, analyzing data, and conveying it to the public
- As such, GIS has a heavy hand in many fields
 - Emergency Management, Law Enforcement, Biology, Meteorology, etc.



Our Involvement with the Taylorville Tornado

- December 1, 2018 Outbreak
- We created a dashboard displaying lots of important data
 - Drone imagery, damage path, damage severity
- We also completely transformed how IEMA does damage assessment
 - They were originally on pen and paper
 - They now use online tools that integrate with GIS



Spring 2019 Flood Event

- This flood was historic; literally rivaled 1993
- GIS Center spent close to a month focused on aiding IEMA with flood relief efforts
- I was one of four students to go on-site
- Spent the first day in Springfield at the SEOC - LOTS of organizations there
 - IEMA, USACE, ING, IDOT, NWS
- Spent the remaining 3 days at the Winchester SUAC
 - Made dozens of map products for many different people



Weather

- Obviously, the weather was a concern with regards to river levels.
 - USACE briefed us on weather forecasts 3 times a day
 - At one point, Chad was asked to do river height analysis using LIDAR data
- Many other dangers associated with storms
 - Flash Flooding
 - Severe Weather



Things GIS Helped With During the Event

- Managing levee status
- Tracking National Guard deployments
- Analyzing potential effects of weather on river condition
- Assisting disaster response units with navigation
- Dozens of other things

Student Society of Geography

- Geo-mentoring
- Other forms of community outreach
- Looking for more involvement with SWC
- Meets every other **Wednesday** at **5:30pm** in **Tillman 307**

