MAY 15, 2024

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USING GIS TO INFORM YOUR PUBLIC MESSAGING

CARMELLA BURDI
Manager, GIS & Data Analytics
National Preparedness Analytics Center
Decision & Infrastructure Sciences Division
Argonne National Laboratory

AGENDA

- Overview of GIS
- Public messaging considerations
- How do we bring these together?

GIS OVERVIEW

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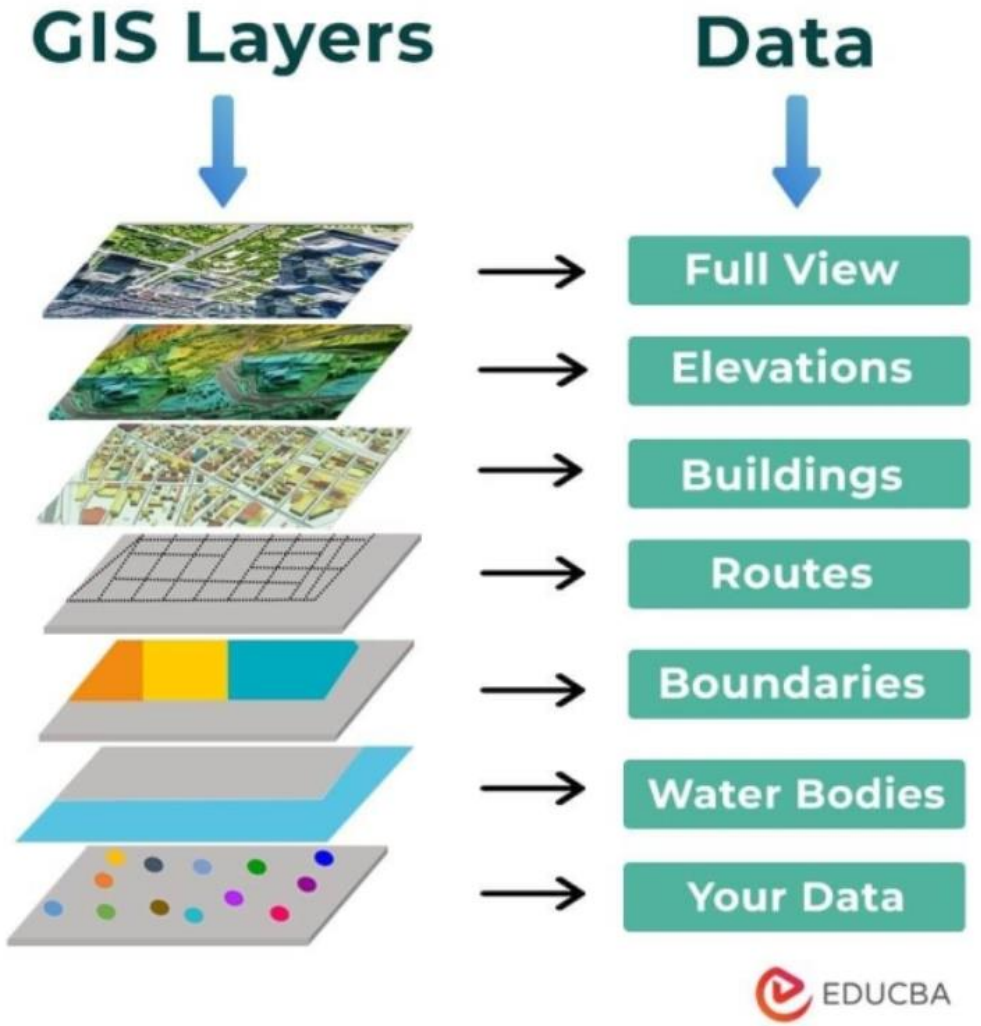
WHAT IS A GIS?

- A geographic information system (GIS) is a spatial database management system designed to capture, store, manipulate, analyze, manage, and present geographic data.
- GIS applications are tools that allow users to create interactive queries, analyze spatial information, edit data in maps, and present the results of all these operations.



WHAT DOES A GIS DO?

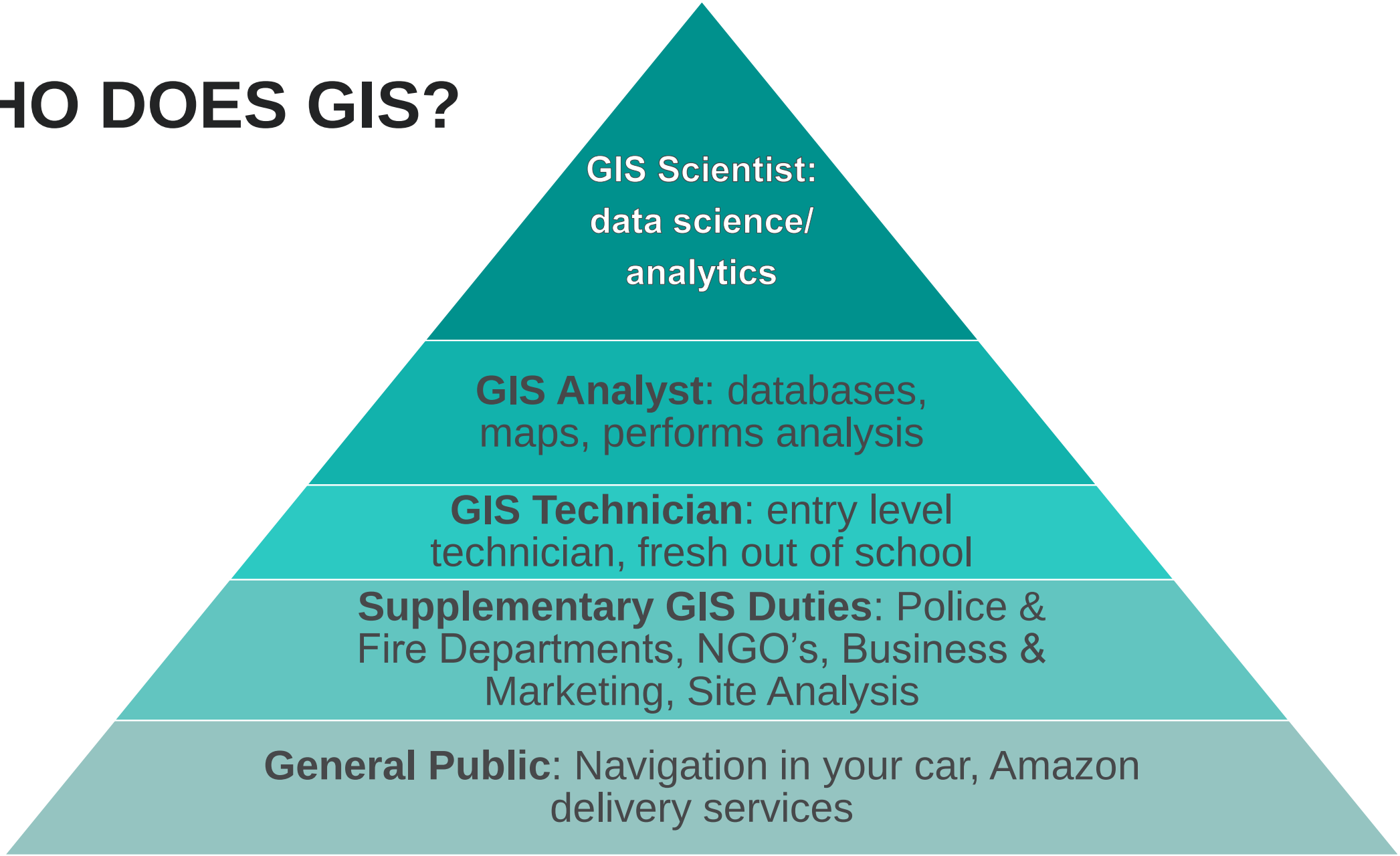
MAPS

DATA

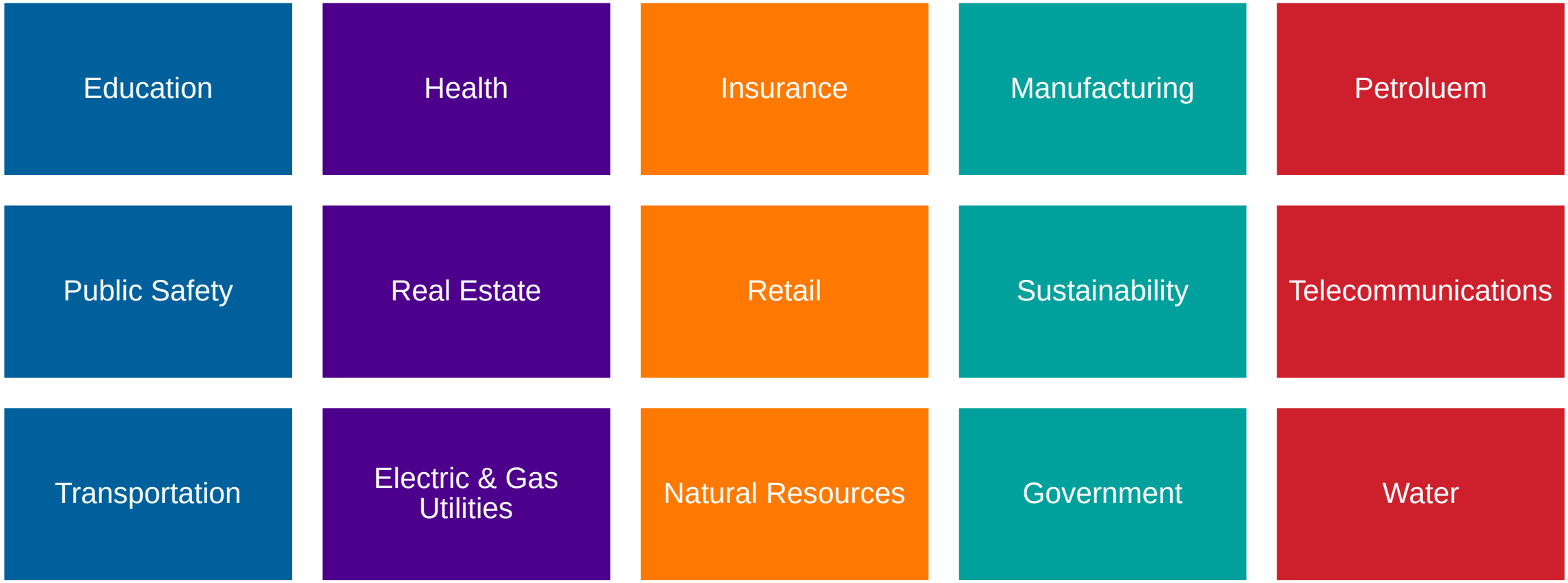
ANALYSIS

APPLICATIONS

WHO DOES GIS?


GIS Scientist: data science/ analytics
GIS Analyst: databases, maps, performs analysis
GIS Technician: entry level technician, fresh out of school
Supplementary GIS Duties: Police & Fire Departments, NGO's, Business & Marketing, Site Analysis
General Public: Navigation in your car, Amazon delivery services

THE GEOSPATIAL SCIENCES

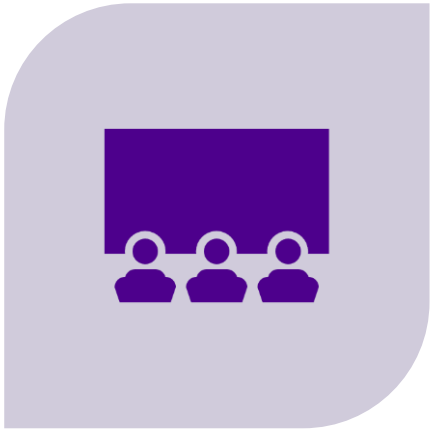


Source: https://www.esri.com/en-us/what-is-gis/overview

PUBLIC SAFETY

UNDERSTAND

PLAN



ACT

PUBLIC MESSAGING

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PUBLIC MESSAGING OBJECTIVES

- Save lives & reduce injury
- Protect property and the environment
- Calm fears and manage expectations
- Instill public confidence

Image Source: https://publichealth.tulane.edu/blog/what-is-disaster-management/

EMERGENCY COMMUNICATION

Differs from routine communications:

CONSIDERATIONS

- Barriers
- Timeliness
- Required Response

CHALLENGES

- Individual characteristics
- Perceptions
- Message source
- The message itself

THE MEDIUM AND THE MESSAGE

How you get the message to the audience is influenced by:

- The audience itself
- Urgency of the message
- Reliability of the medium
- Appropriateness of the medium
- Resources

EFFECTIVE COMMUNICATIONS

- Present the information in sequence.
- Present the reason for the message, the supporting information, and the conclusion.
- Word the message precisely, making every word count.
- Avoid jargon, codes, and acronyms.
- Use common terminology for all personnel and facilities.
- Omit unnecessary details.
- Speak in sync with other related authorities.
- Keep messages consistent across various media.

EFFECTIVE COMMUNICATION TOOLS

GOALS

- Reaches the target audience.
- Gets information to the audience when they need it, for as long as they need it.
- Can be expected to deliver the message reliably.
- Enhances comprehension of the message content.
- Can be accessed within resource limitations.

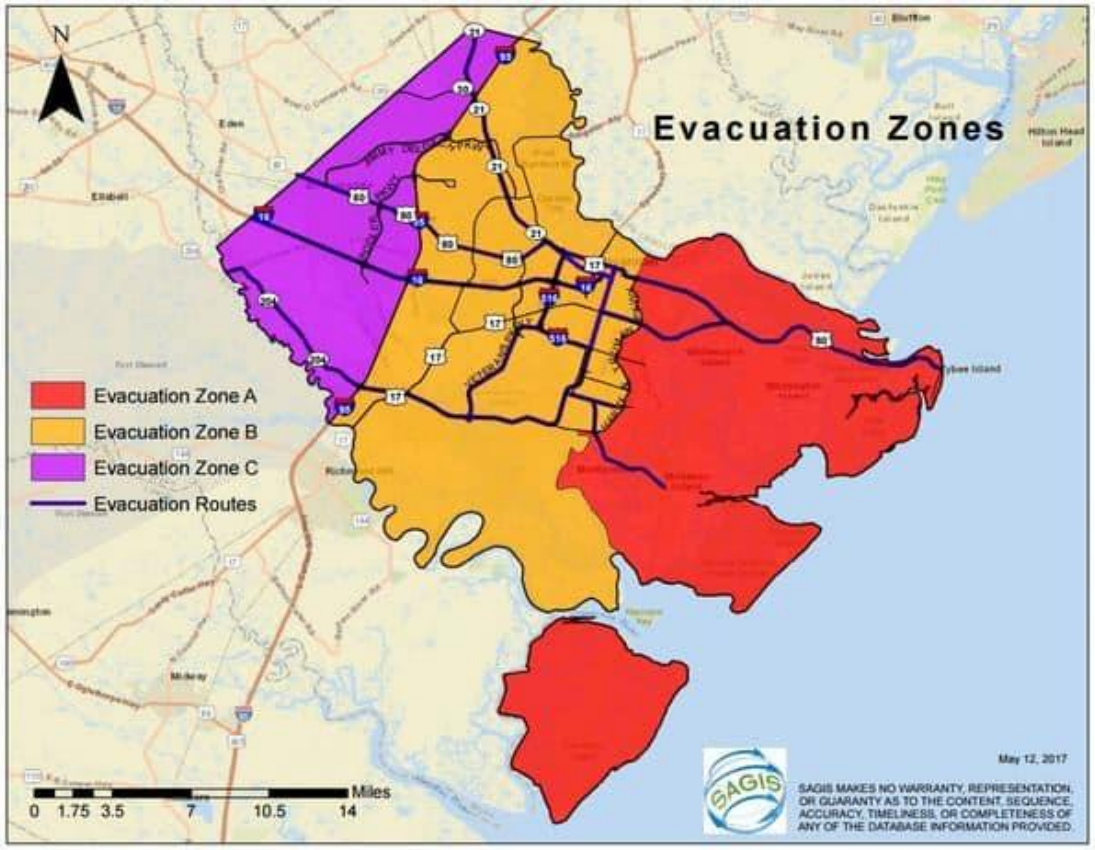
METHODS

- In-person events—briefings and public meetings.
- Print media—newspapers and magazines.
- Broadcast media—television and radio.
- Internet and social media.

PUBLIC MESSAGING CONSIDERATIONS

Print Media & Social Media/Internet

- Clear and concise messaging is key – but so is a clear and easy-to-read map or graphic
- Web maps can be linked to by reporting agencies to provide the public with an interactive way to see the issued protective actions
- A combination of images and iconography (pictures, icons, or maps) has proven to increase comprehension over only one or the other.



BRIEFINGS & PUBLIC MEETINGS

- Prepare decision makers in advance
- Prepare a statement and handout materials
  - Fact Sheet
  - Web Product
  - Newsletter Article
  - PSA
  - Brochure, flier, other handout

Image Source: https://www.health.state.mn.us/about/org/epr/news/index.html

WHEN DESIGNING GRAPHICS

- Text and Audio Explanations: Ample text and audio should be provided to explain images or maps, so that message recipients can understand the meaning of what is being conveyed graphically.
- Consider Templates: Use pre-approved language, map scales and symbologies, and deploy quicker
- KISS: Sometimes GIS folks make overly complicated maps. Your GIS staff should be exposed to public messaging training

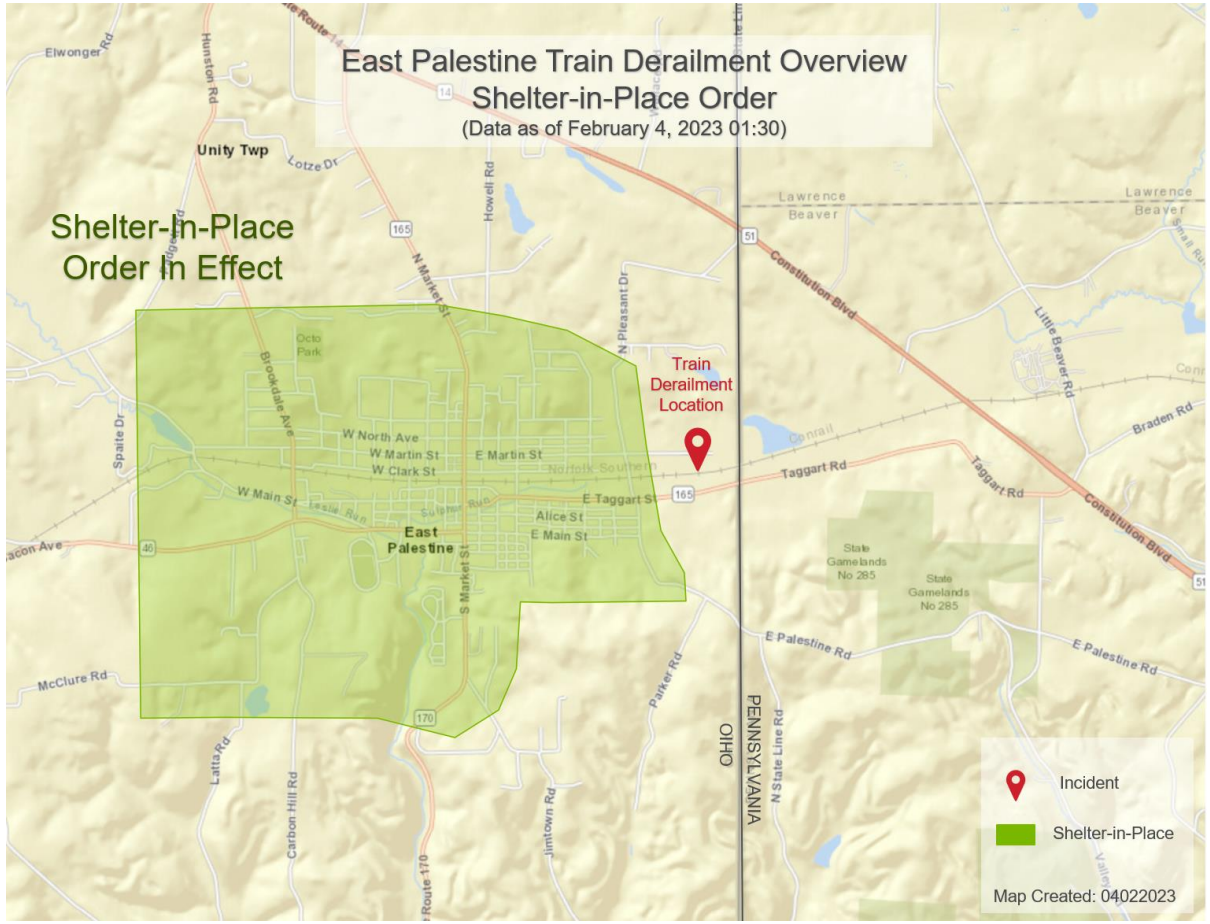
BRINGING IT ALL TOGETHER

LET’S WORK THROUGH AN EXERCISE

SAMPLE SCENARIO

A hazardous materials accident has just occurred, shutting a major roadway. Evacuations are being ordered for the homes within a 1-mile radius of Highway 1. A shelter at the high school is opening that allows pets

SAMPLE MAP GRAPHIC



- Incident Location
- Evacuation Zone
- Roads are labeled clearly
- Shelter Location
- Date & Time Stamped

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LASTLY, CONSIDER INTERACTIVE MAPS

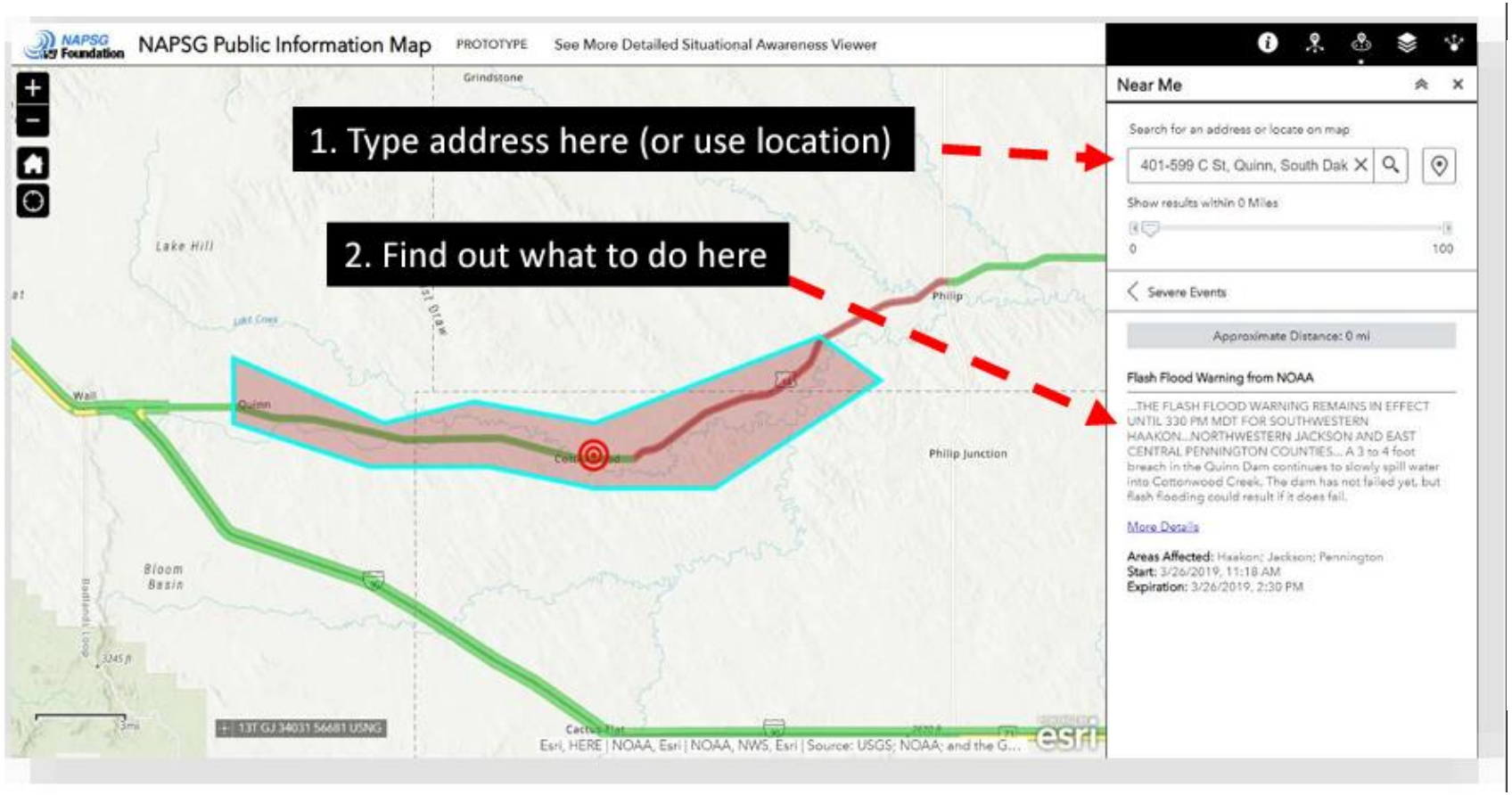
STATIC

- Once shared, it cannot be unshared
- Often a delay in the sharing of social media posts
- Some news agencies prefer static images/graphics

INTERACTIVE

- Update easily – even after sharing
- The URL does not change – but the content can
- Live status updates

SAMPLE INTERACTIVE MAP



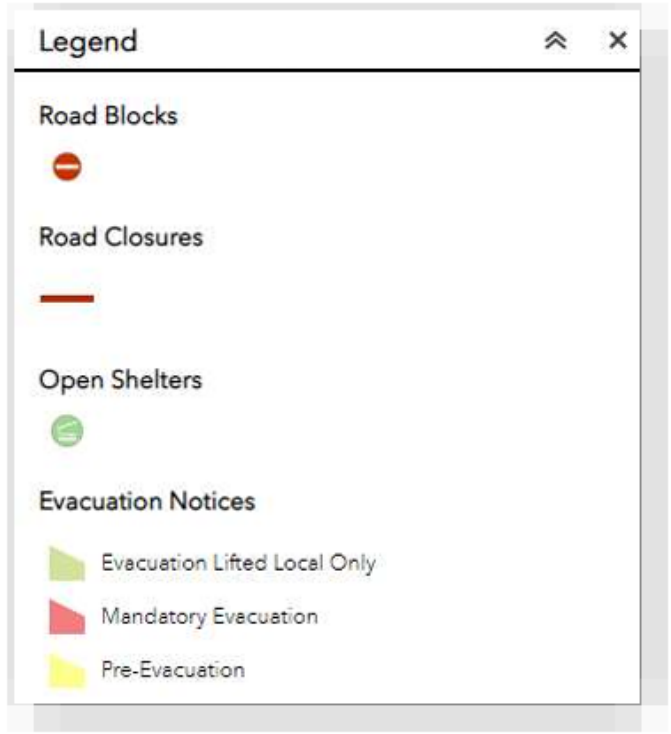


Image Source: NAPSG Foundation "PrepTech Talks" *The Innovative PIO: Tools & Best Practices for Technology-Enabling Public Information,* May 27, 2020

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QUESTIONS?

Carmella Burdi
cburdi@anl.gov

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