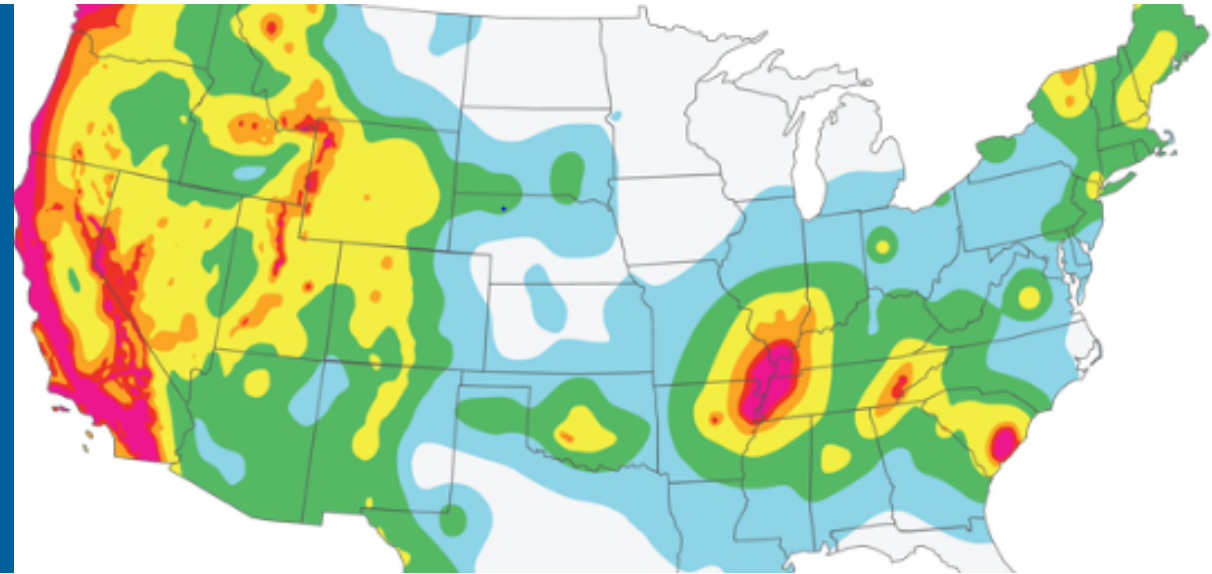


# HOW GIS CAN INFORM YOUR PUBLIC MESSAGING

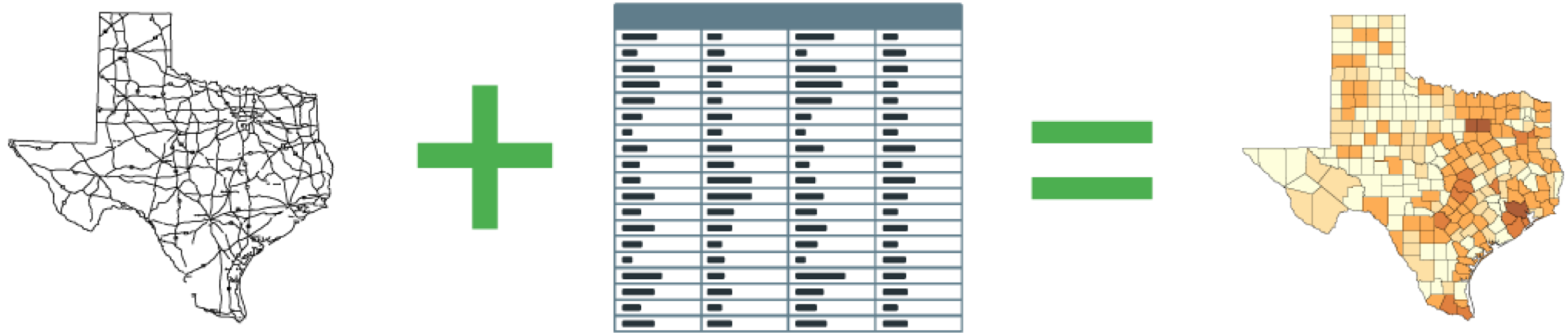
**CARMELLA BURDI**  
Sr. GIS Analyst

October 28, 2020



A geographic information system is a system designed to capture, store, manipulate, analyze, manage, and present spatial or 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

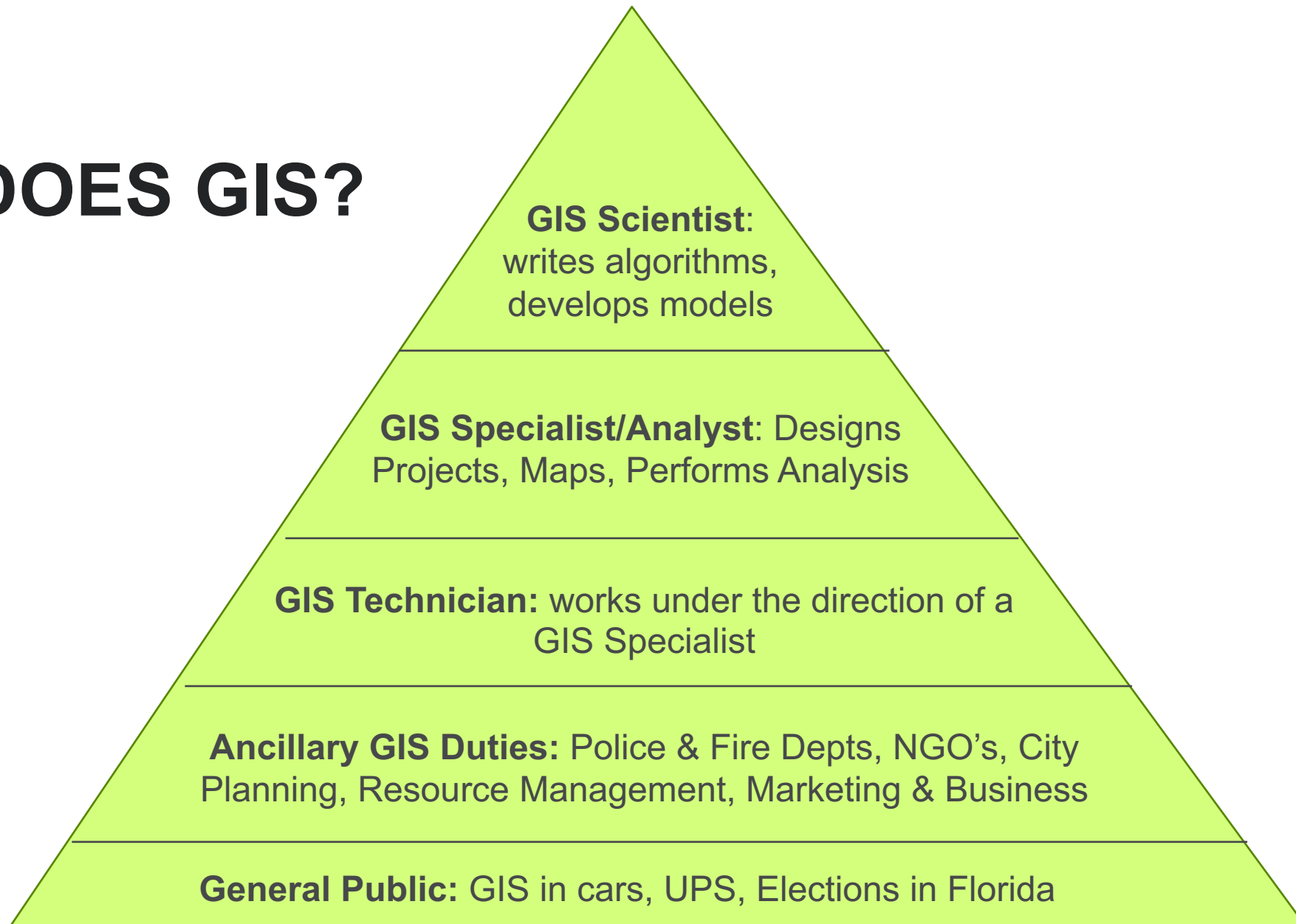
# What is a GIS?



# WHAT DOES A GIS DO?

A GIS allows you to visualize your data as a map.

# WHO DOES GIS?



# **GIS BOILS DOWN TO - FOUR SIMPLE IDEAS**

**01**

Create  
geographic  
data

**02**

Manage it

**03**

Analyze it  
and...

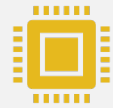
**04**

Display it on a  
map

# THE GEOSPATIAL SCIENCES



Any field which uses location-based information



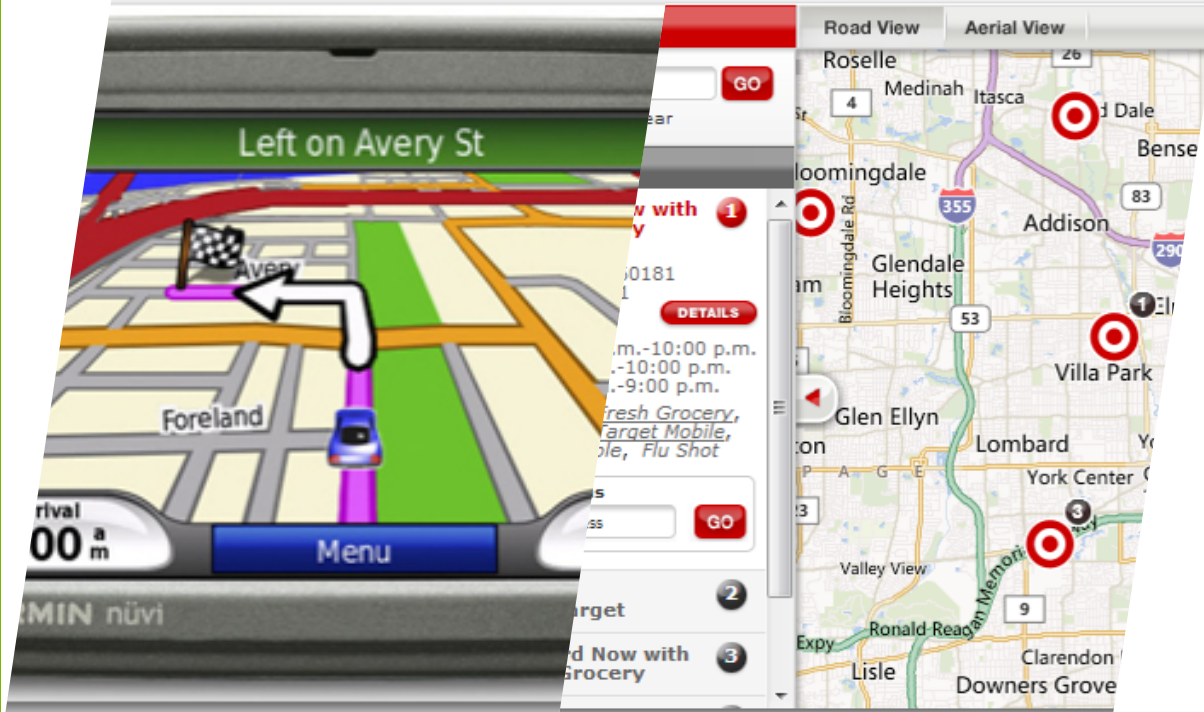
A field which uses *computers* to analyze spatial data



Think of some fields which use geospatial information

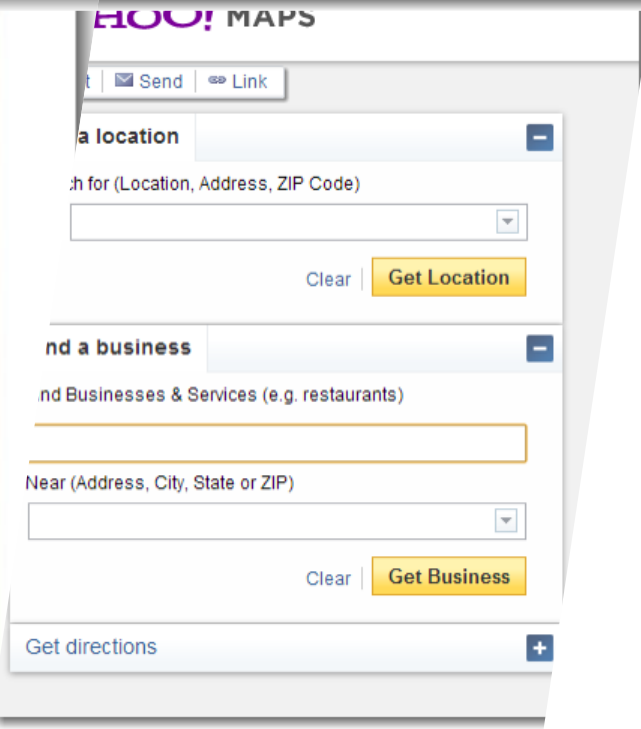


Consider the alternate term “Location Services” to explain what GIS is



# HOW DO YOU USE GIS?

We use it everyday!  
Sometimes without even realizing!



# WHAT IS SPATIAL DATA

Critical  
Infrastructure

Parcels

Transportation

Elevation  
Contours

Flood Plains

Taxing  
Districts

Damage  
Assessments

Planimetric  
Data

Aerial Imagery

Historical  
Imagery



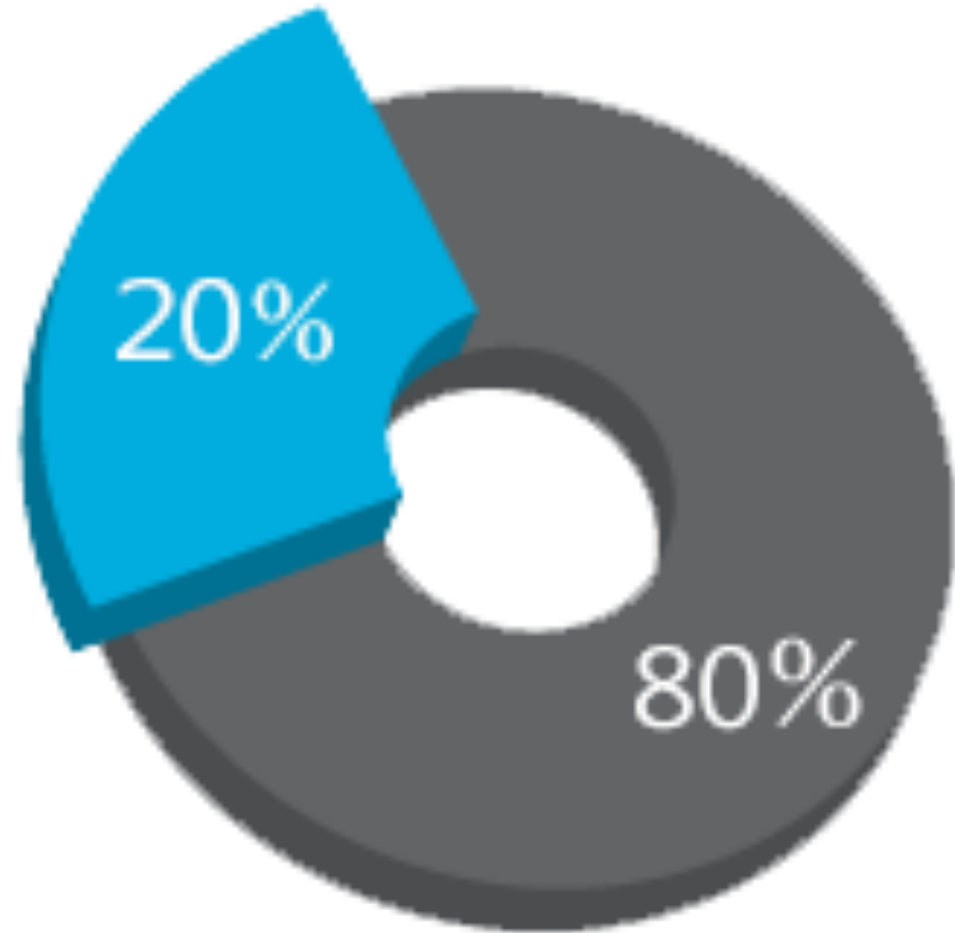
# 80% OF DATA IS GEOGRAPHIC

## Spatial Data

- The location of a water-fountain
- How large a parcel is
- The length of a segment of roadway

## Non-Spatial Data

- The owner of a parcel
- The number of blue cars registered in a county
- The value of your home



# EMERGENCY MANAGEMENT AND GIS



HAZARD  
MAPPING



SOCIAL MEDIA  
MESSAGING –  
MAPPING TWEETS  
AND FACEBOOK  
MESSAGES



DEVELOPING PRODUCTS  
FOR PUBLIC  
CONSUMPTION TO AID IN  
PUBLIC MESSAGING



SITUATIONAL  
AWARENESS



DESIGNING DATABASES FOR  
POPULATIONS, BUSINESSES,  
STRUCTURES, SCHOOLS AND  
MORE, WHICH CAN BE  
CONSULTED IN THE CASE OF AN  
EMERGENCY.

# HOW CAN YOU ENGAGE YOUR GIS SUPPORT STAFF?

## Engage

Capitalize on your GIS Staff

## Create

Create Emergency Management Specific Web Maps

- If you don't already have a log-in and username, ask your GIS staff for one

## Consider

Consider what your data is telling you

## Anticipate

Think about what's missing

# EMERGENCY OPERATIONS GIS CONSIDERATIONS

Do you know where  
your critical  
infrastructure is?

In the case of turnover  
– can you quickly and  
easily train a new  
person on the unique  
characteristics of your  
jurisdiction?

How engaged with the  
community is your  
jurisdiction

# PUBLIC MESSAGING CONSIDERATI ONS



Clear and concise messaging is key!



Could you provide your residents with better information if you were able to send out maps of affected areas or shelter location information?



Imagine providing URLs of web maps to news agencies or other reporting agencies to help them better inform the population in an emergency

Hands-on! Let's Demo  
some Mapping Options!



## DISCUSSION QUESTIONS

- Would something like this be helpful to you?
- What visualizations do you feel are missing?
- Could you currently create maps like these?
- Would it be helpful to understand what protective action decisions neighboring jurisdictions were issuing to the public and how they're issuing them?