



Geographic Information Systems (GIS)

Pre-Planning Maps

Name:

Section:

Score: ____/5

Directions: Think about the following scenarios and work with a partner or alone to come up with possible solutions and data sets you would need to collect for each one.

Scenario 1: You are a business owner trying to make a decision on where to place a new clothing store.

- What type of data would you want to collect and why?
- What type of map could you create to help show the bank that you have chosen a good spot for your business to convince them to give you a loan?

Scenario 2: You and some friends are planning a trip to Paris, but you'll only have a couple days to explore the city.

- Explain a map (or maps) that you could make in order to maximize what you will be able to see while you are there.
- What type of data layers would you need to complete your map?
- What type of situation would a similar map be useful?

Scenario 3: You are a city safety official for a medium size coastal city and you are being asked to help prepare a city evacuation plan in the case of an incoming hurricane. What types of data layers would you want to examine to help you make the evacuation plan and why?

Scenario 4: As an environmental protection worker you are working to track the bear populations in Yellowstone National Park.

- What data would you want to collect to track the health of the bears from year to year?

- Your boss asks you to map out the impact that the bears are having on the farms surrounding Yellowstone (ex. incidents where bears attack farm animals). What type of data would you collect and how would you display it? Explain your reasoning. (Hint: Think raster and vector data)

Scenario 5: As the state's head of the Department of Transportation one of your jobs is to report to the governor on the condition the states bridges are in. He/she wants to know how soon each bridge will have to be replaced so he/she can start creating a budget plan.

- Explain the type of map you could create to show the governor the condition of each bridge in the state.

- What type of additional data might you be able to collect about the bridges to help the governor make a decision on when to replace each bridge?