What can you do with geospatial technology?

What can you do with geospatial technology? Let's start with the types of maps you might want to make or use outside of your job. We will look at StoryMaps, a product from ESRI, the main GIS software company.

As you go through this page, I recommend taking brief notes to use in your assignment. Be sure to write down answers to the questions included here. Answer two of the questions below (or answer all three if you're feeling motivated).

One of my favorite applications of geospatial technology is Story Maps. Story Maps that use GIS are a way to tell a story that involves locations, places, or other geographical components. A popular use of story maps is to create a record of your travels or your family's journey through time. You can see many different examples of story maps here: **https://doc.arcgis.com/en/arcgis-storymaps/gallery/ (https://doc.arcgis.com/en/arcgis-storymaps/gallery/)** . Just like website layouts, there are several types and designs of story maps.

Story maps are websites that allow creators to share information of all types including GIS and static maps, text, photos, video, etc.

Check out one or two of my favorite StoryMaps from the previous version of the software:

The Two Koreas (https://storymaps.esri.com/stories/2017/two-koreas/index.html) and **An Atlas of Electricity** (http://storymaps.esri.com/stories/2016/electricity/index.html) .

Questions: As you view the different types of story maps:

- Can you imagine making a map with one of these formats?
- What kind of map would you make?

Continuing with other maps that might be of use to anyone, have you seen real estate sites lately? Let's take a look at Zillow: **https://www.zillow.com** (https://www.zillow.com) .

- With the "Buy" tab highlighted, search for a city that is of interest to you.
- Under "Listing Type" you can decide whether to display homes that are for sale (red dots), potential listings (blue dots - mostly foreclosures), homes for rent (purple dots), and homes that were recently sold (yellow dots).
- You can narrow your search within a price range, by the number of bedrooms, and even search for keywords such as *garage* or *pool* under "More".

Question: Without a lot of criteria selected, what do you notice about the listings? If you narrowed your search, you may need to reset it to answer this question. Consider any of the following, but you don't have to comment on all of these:

- What does the market look like?
- Are there lots of houses for sale?
- Are there any clusters of houses for sale?
- How do the listing prices compare to their estimated value?
- Look for this info and comment on anything that stands out.
- A lot of information can be communicated through the use of GIS. How different would our search for real estate be if we had to rely on lists of addresses rather than maps?

Next, head over to NASA's Global Climate Change website: **https://climate.nasa.gov** (https://climate.nasa.gov) . Have you seen the news lately? Global temperatures have risen steadily in the last two decades. We now expect Earth to warm by about 1.5 degrees Celsius (2.7 degrees Fahrenheit) by 2040. **Scroll down** on NASA's Climate Change website and check out some of the resources available there, paying close attention to the data sources for various maps, models, and simulations. Look for acronyms like "MODIS", "AIRS", "GISS", "GRACE", and others. Also look for sources like research centers, academic journal articles, and reports. The Climate Time Machine is one visualization tool that I recommend viewing: **https://climate.nasa.gov/interactives/climate-time-machine** (https://climate.nasa.gov/interactives/climate-time-machine) .

Questions: After viewing a few of the resources on **https://climate.nasa.gov** (https://climate.nasa.gov) ,

- **Copy and paste links** to one or two resources that list the data source used
- **Make a note of the data source(s)**

- Make a note of **what type of instrument gathered the data and what data was collected?**
  - For example, is it a satellite? Did it take photographs, capture thermal infrared energy (heat) escaping to space, monitor carbon dioxide (CO2) levels, or something else? What type of geospatial technology was used in collecting this data?
- **Describe how the data was displayed or communicated and briefly comment: Was it effective? Would you change anything?**

Click "next" to submit your assignment.