

GEOGRAPHER INTERVIEW

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Read the interview of the real person who uses geography in his or her career. Answer the questions on your Geographer Interview Analysis sheet. Be ready to share your answers and ideas!

1) What is your job title?

GIS Specialist

2) How would you describe what you do?

I take information that has some sort of geographic component like an address or coordinates and analyze it to answer questions and then put the results on a map.

3) How do you work with Geography?

Geography is a way to study patterns on our Earth. We have data sets that represent features located in King County. They range from things we can see like manholes, sign posts, roads, sewer lines, and building foot prints to things we can't see like parcel boundaries, sewer district boundaries, and school district boundaries. These data sets have location information that allows us to pin them to the Earth in a known place with a dimension. They also have attributes detailing size, length, name, and anything else we are interested in collecting about those features. Once these data sets are complete, I can start asking questions and analyze the resulting patterns.

4) Why is Geography important to you?

I majored in Geography because it was so interesting. While I did learn how to make a good map, the focus of the program was learning about the patterns that exist on our planet. *Physical Geography*: why do deserts and rain forests occur where they do? *Cultural Geography*: why do humans utilize land and resources in one part of the world differently than those in another part of the world. And how does that affect the planet? *Economic Geography*: Where's the best place for a certain business? How are we using resources to meet our needs? Is growth good? I like what wikianswers.com has to say about geography and why. It is important: it helps us to know things around us and how to utilize them. It helps us to know places on earth. It helps us to choose a career for living. It helps us to understand the way of life of other people.

5) What kinds of Geographic questions do you try to answer?

Some examples are: Where do the people who speak Korean live? Where are all the 5 year olds? Where do the people using the park and ride lots live? What is the percentage of rural population in the school districts in King County. Where is the best place to put a wastewater treatment plant? Which areas in King County don't have access to healthy food? Who needs to be alerted to an upcoming construction project. Which roads meet the criteria for evacuation routes? Which properties are vulnerable to a flood? Which sewer lines are letting storm water in to the system and what is the best way to fix that? Where are the vulnerable people and what is the best way to get them out in case of a flood? What's the best place for a coffee shop?

6) What kinds of Geographic maps or tools do you use in your work?

I use a specialized software program called ArcGIS that lets me collect and manipulate data; query and analyze the data to answer questions; and it has a pretty good mapping component so I can display the results of my analysis on a map. This program also has an online version that I'm starting to learn. Also I utilize Microsoft Office tools like Excel and Access. Finally I do some programming using a language called Python.

7) How do you decide which tools to use?

It depends on what I'm doing. Generally, I use ArcGIS for all my work. However, if I'm doing a lot of tabular analysis I'll use Access. If I have a repetitive task I'll build a model in ArcGIS and then transfer it to Python to make it possible to run in the background. People like spreadsheets and often I have to transfer data to and from Excel, depending on what is needed.

8) How would your skills help you in the event of a zombie apocalypse?

Since my work requires a computer, my skills would be most useful in a planning phase. A few years ago King County planned for a possible imminent disaster. The Howard Hansen Dam was compromised and the event of a major flood on the Green River was a reality. We spent several months helping folks around King County identify what resources and people were at risk and how to mitigate that risk. We identified where people with disabilities were and figured out evacuation routes for them. We identified properties at risk and installed sand bags to protect them. We made maps identifying areas of greatest risk and evacuation routes so folks would have paper copies available when needed. The State Department of Transportation brought in small platforms so they could raise their equipment above flood level without having to move it.

For the zombie apocalypse I'd want to know where the zombies are and how fast they are moving; what areas are defensible and will provide the resources I need to survive (food, water, shelter); how I would get to those areas; who has the supplies I need like weapons, food, maps, compasses, fuel, etc while I travel to those areas. I'd also like to know who offers survival classes including weapons training, wilderness survival, and how to keep a vehicle running on chewing gum and wife.