ENVIRONMENT AND SOCIETY

Issue: Public Health

Lesson inquiry: How is public health addressed at lower socioeconomic levels?

Career connection: Carmen Leedham, Senior GIS Analyst for the County of San Diego, Health and Human Services Agency

GEOGRAPHIC QUESTIONS:

- *How can government officials better target their actions during a pandemic to help lower transmission in lower income communities?*
- *What are different ways that field data can be collected and integrated?*

RELATED GEOGRAPHY CAREERS:

- *Logistics Analysts*
- *Medical Records Specialist*
- *Cartographers and Photogrammetrists*
- *Geographic Information Systems Technologists and Technicians*
- *Urban and Regional Planners*

Photo: A model city in the midst of planning

APPLICATIONS:

- *Cultural geography*
- *Socioeconomic conditions*
- *Humanizing statistics*

INTERVIEW DIGEST: CARMEN LEEDHAM

"With geocomputation, and computation in general, we run the risk of turning people, plants, and places into numbers or into commodities and into binaries and, through geography, we can return people from numbers and binaries back into real life, things that have special life circumstances and have value to one another."

Photo: Carmen Leedham in front of green foliage

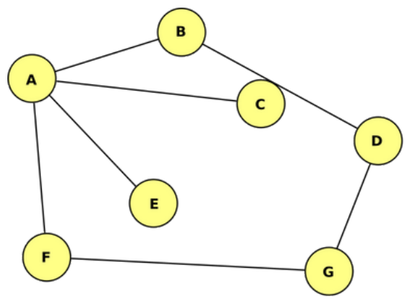
LESSON ACTIVITY EXAMPLE:

Using a map of your school, randomly assign 3-5 locations of the school to be represented as a point of interest (POI). These can be imagined as homeless shelters, food deserts, or something of that nature. Send students to collect location data of the identified points. Once these points are mapped, have a discussion on what a least-cost path is. Ask the students to hypothesize based on their location data, where the best location would be for a handwashing station or grocery store that is closest to an equal distance apart from every location. This activity can be repeated at larger scales and with more grocery stores or handwashing locations (>1).

GLOSSARY:

PUBLIC WEBMAPS

SOCIOECONOMIC STATUS



LEAST-COST PATH

GEOGRAPHIC INFO SYSTEMS

UTILITY LOCATORS

SKILLS:

- *ArcGIS, QGIS*
- *Excel functions*
- *Geocoding*
- *Remote Sensing*
- *Geographic information systems (GIS)*

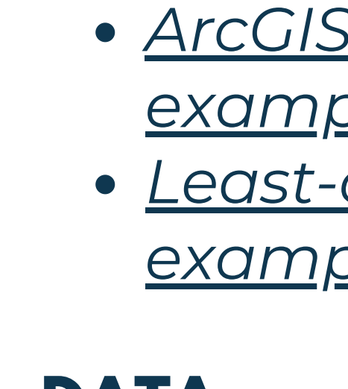
BACKGROUND RESOURCES:

- *ArcGIS collector background, examples, and tutorial*
- *Least-cost path background, examples, and tutorial*

DATA:

- *Field collected latitude and longitude coordinates*
- *Aerial imagery*
- *San Diego's Regional Planning Agency (SANDAG)*
- *211 San Diego*

Photo: A market full of ripe produce



{ RppforCS : ENCODING GEOGRAPHY }

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