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# Asking Spatial Questions

GEOG 215 - February 19, 2020



# Kate Brandt - GRC



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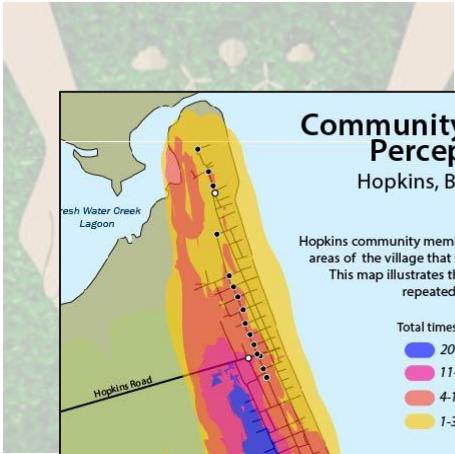


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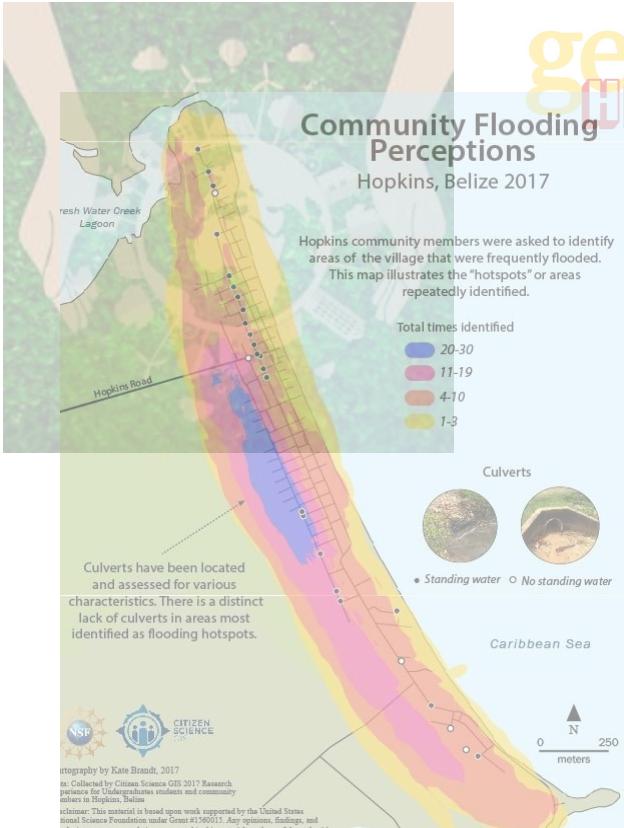


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## **themes**

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public health

climate change

energy

demography

sustainability

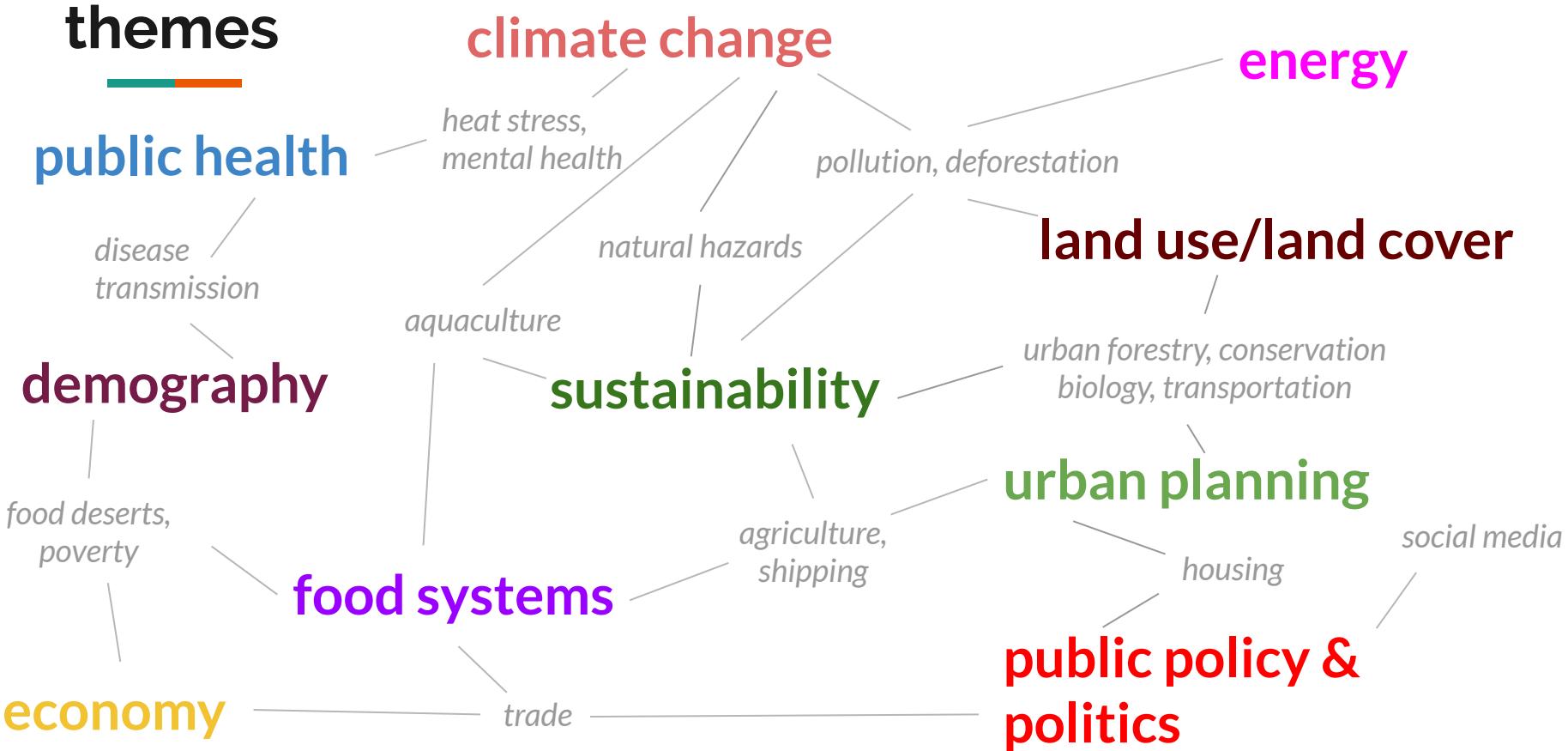
land use/land cover

economy

food systems

urban planning

public policy & politics



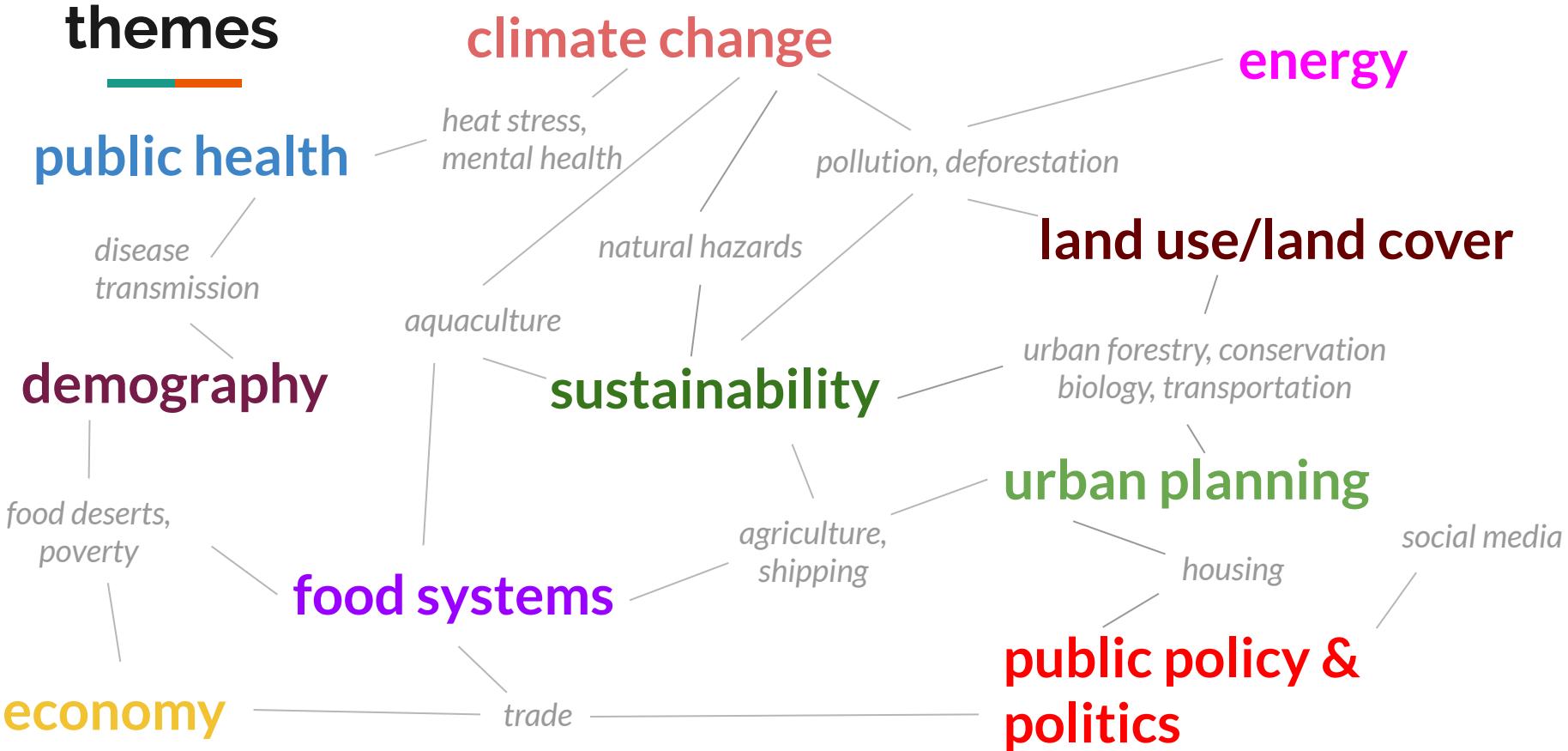
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# Question generating activity



Rules:

- (1) As many questions as possible
- (2) “Yes, and...”
- (3) No “NO”
- (4) Type everything up!
- (5) Email all questions to prof ccing your groupmates



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# Types of questions

**Descriptive:** what is/where is, location, distribution

*Where are the busiest airports in the US?*

**Exploratory:** patterns, generate possible hypotheses/explanations

*Is there a significant difference in the spatial distribution of democrat and republican voters?*

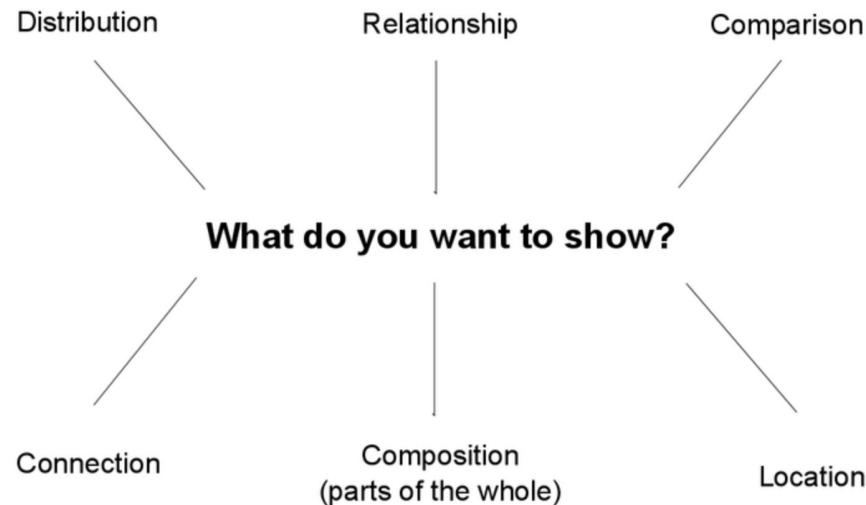
**Explanatory:** cause-and-effect

*Does increasing access to metro lines increase population density?*

**Predictive:** using information to infer what could or will happen

*Based on the past, Which areas of the US are most susceptible to future floods?*

# Descriptive and Exploratory



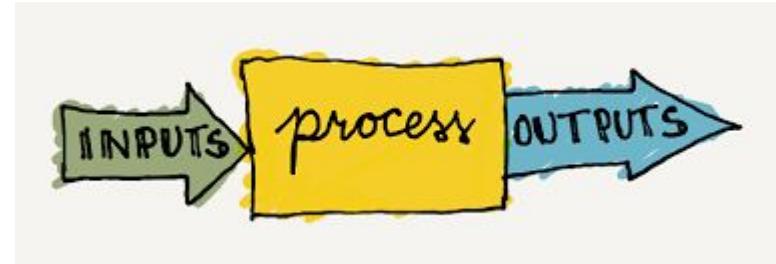
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# Incorporating spatial elements

Inputs: data sets, attributes

Outputs:

- data sets
- statistical outputs
- maps
- summary tables with spatial attribute



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# Incorporating spatial elements

Process & operations: what we do  
with inputs to produce outputs

- Location & extent
- Distributions and patterns
- Spatial relations and associations
- Change over time
- Movement through space

