



Environmental Policy

Geo-Inquiry Voting Trends

Leveled Assessment ____/4

Name:

Section:

Score: ____/5

Directions: Working with a partner, or on your own you will be working to determine the voting habits of different areas across the country using the case studies of Minnesota and Nebraska. You will also be getting familiar with ArcGIS and esri's Community Analyst to figure out geographic differences.

Section 1: Voting Trends

Directions: Answer the following series of questions using the maps linked on the class website

1. Use the Choropleth Map (The one that is displayed upon opening) to answer the following series of questions.

A. Make a prediction of who won each state based on the available information

B. What are the similarities and differences between the Minnesota and Nebraska choropleth maps?

2. In the Content Section of the Side Bar you can toggle different layers on and off - Turn off the Choropleth Layers and check the boxes to turn on the "2016 Trump interpolation" layers

A. Based on the interpolation which state appeared to have stronger support for Trump?

B. Re-examine your prediction from 1.A. to see if anything has changed - Again make a prediction based on the interpolation

C. B. Explain your reasoning from part B

3. Back in the Contents bar turn the Trump Interpolation layers off, and turn the "2016 Clinton Interpolated" Layers on

A. Attempt to explain the differences in areas that voted heavily for Clinton, vs. the areas that voted heavily for Trump.

B. Turn on the "Nebraska and Minnesota Cities" Layer that shows the 30 largest cities in both states - explain the trend you see on the location of cities and how they voted in the election. You may need to increase the transparency of the states to see the cities through them, you can do this by clicking on the ellipses (...) next to the layer and then moving the transparency slider back and forth.

4. Final Prediction - Using information from all the maps answer the following questions

A. Make your final prediction of who won each state based on the available maps.

B. Explain your reasoning - include which map(s) was most helpful to you in making your decision.

Section 2: Community Analyst

Directions: Log on to esri's Community Analyst (<https://communityanalyst.arcgis.com/esriCA/login/>) using the username: Workshop1OPS and the password: Workshop14! - Click Maps along the top bar and select Create Project to make a new map of your own - name it after the names of the group members

1. Create an Analysis Area – Trump

Directions: In the top green bar select that you would like to Define Area for Reports and then Draw Polygon - You can either freehand, or polygon (polygon is easier since you can just click out the areas) and draw out the areas that are heavily supportive of Trump in either Minnesota or Nebraska. Once your polygon is drawn select Reports in the pop-up box to run a report of the selected area, and run the 2010 Census Profile - answer the following questions based on the report

A. Explain the general characteristics of voters from areas that heavily supported Trump (Include race, age, and household characteristics)

2. Create an Analysis Area – Clinton

Directions: Use the same methods to create an analysis area for areas that heavily supported Clinton in either Minnesota or Nebraska. Answer the following questions below.

A. Explain the general characteristics of voters from areas that heavily supported Clinton (Include race, age, and household characteristics)

3. Make a General Statement

A. Based on the information from this activity make a general statement about which areas, and what type of people voted for Trump, and what areas, and what type of people voted for Clinton.