<u>Data Analysis Assignment</u>
Putting Census Data to Work

WHAT WILL YOU LEARN BY DOING THIS ASSIGNMENT?

Skill
- You will gain some experience describing and analyzing simple descriptive statistical information.

Substance
- You will learn the US Census is a good source of information about the characteristics of the population living in different parts of the country.

- You will learn that you can get data on states and cities, as well as the United States as a whole, from the Census.

- You will learn that there are practical uses for the information about the characteristics of the population of a given region.

THE PROBLEM

Organizations often make decisions about where to locate their facilities by analyzing the characteristics of the population in a particular place. They try to locate facilities in areas where there large concentrations of the kinds of people they are trying to serve.

In this assignment, you will be asked to advise two organizations about whether it would make sense for them to locate a facility in Ohio; and, you will be asked whether they should locate in Cleveland. The two organizations are:

a. Grandiose Foods – an upscale organic grocery store specializing in fine meats, cheeses and prepared foods.

b. Down Markets – a discount store specializing in inexpensive imitations of brand name products.

For each store, you need to answer the following questions:

a. Would they be better off locating in Ohio or in another state (you may choose any state to compare with Ohio).

b. If they decide to locate in Ohio—should they locate in Cleveland or in another city (you may choose any major city in Ohio to compare with Cleveland).

WHAT DO YOU NEED TO KNOW TO ANSWER THE QUESTION?

Since each store has a particular set of customers in mind, it would make sense to locate the store near those kinds of customers. Grandiose Foods is looking for people with high incomes, while Down Markets is looking for people with low incomes. So, you need information about the income levels of people living in Ohio and you comparison state, Cleveland and your comparison city.

GETTING THE INFORMATION YOU NEED

You will be working with web-based data taken from the US Census. These are easier to work with than "raw" Census data, but the exercise will give you and idea that there is a lot of information to be found in the Census.

1. Access CensusScope by going to www.censusscope.org/)

2. At the top of the CensusScope page, you will see several tabs. Click on "Charts and Trends."

3. Find the link for information about Income (it is in the list of topics in the upper left hand part of the screen). Click on this link. What you will see is information about the distribution of income in the US in 2000. You will not be using these data for this assignment.

4. OHIO DATA: on the left side of the page, you will see a section called "change location." You can select a state or metropolitan area here. In the Choose a State menu, select Ohio. Click "View Chart." You will now see data on the distribution of income in Ohio in 2002 (The pie chart shows you the percentage of households in Ohio whose earnings fall into various income groups. Scroll down and you will see the same information presented as a table (the first table. Ignore the other two tables). You can print the data if you want. (At the top right, link to the "print-friendly" version of the data and print the page.)

5. COMPARISON STATE DATA: using the button on the left of the page, "zoom out" to the US page. Then, choose any other state from the "choose a state" menu. Click on "view chart." This will give you data on the state you chose. Print this page.

6. CLEVELAND DATA: "Zoom out" to the US page. Then, go back to the Ohio page. From the Ohio Page, go the "Choose a Metro" menu on the left side of the page and select Cleveland-Lorain-Ely. Click View Chart. This will give you data on the greater Cleveland area. Print these data.

7. COMPARISON CITY DATA: "Zoom out" to the Ohio page. Pick any other city from the "choose a metro" menu. Click "view chart." This will give you data on the city you chose. Print these data.

ANALYZING WHAT YOU FOUND

Remember that Grandiose Foods is targeting high income groups while Down Markets is targeting low income groups. You need to figure out if there are large concentrations of these groups in the places you're analyzing.

Define "high income" as households earning above $75,000.

Define "low income" as households earning below $25,000.

Should you locate in Ohio?

a. Compare the distribution of income in Ohio to the other state you chose? Does Ohio have a large concentration of upper income households compared to

that state? (note: you can think both about the actual NUMBER of high income households AND the PERCENTAGE of households that have high incomes).

b. Do the same thing for low income households. How does Ohio compare to the other state you chose?

Should you locate in Cleveland?

a. Assume that the two stores have decided to locate in Ohio (even if this isn't what you found makes sense in the first part of your analysis).

b. Does Cleveland have a large concentration of high-income households compared to the other city you chose? How about low-income households?

WRITING UP YOUR RECOMMENDATION

Write a recommendation based on what you found. Your recommendation should be about two pages in length, typed and double-spaced. Be sure to do the following:

a. Indicate whether you think Grandiose Foods would be better advised to locate a store in Ohio or the other state you analyzed. Indicate whether it should locate in Cleveland or the other city you analyzed.

b. Indicate whether you think Down Markets would be better advised to locate a store in Ohio or the other state you analyzed. Indicate whether it should locate in Cleveland or the other Ohio city you analyzed.

c. USING THE DATA you obtained from Census Scope, explain WHY you are making these recommendations. Using the data means making specific reference to the statistical information you think justifies your recommendation (HINT: you are not being asked whether Ohio or Cleveland is the absolutely best place to locate a store; just whether it would be a good place, compared to the other state and city you have been considering).