URP 290 Assignment 1 – Economic Base Analysis

Objective: Apply techniques for determining regional basic economy.
Due: In class by 8 Sept 2015
Weight: 10 percent

Part A: Simple Economic Impact Calculation

A while ago, Gateway Computer in North Sioux City, South Dakota, reduced employment by 1,350 jobs. At the time, that company had a location quotient of 17.5, and that county economy had 4,200 basic jobs out of 7,800 total jobs before these reductions.

Calculate these impact results (show your work in the spaces or on another sheet). Every number that you need to answer the following six questions has already been given you:

1. The economic base multiplier

2. The number of export jobs at Gateway

   The number of non basic jobs at Gateway

3. The total economic impact from the Gateway job losses

4. The new total county employment

5. The new basic employment level in the county

6. The new economic base multiplier for the county
Part B. Location Quotient and Export Jobs Analysis

Nearly all of the know-how needed for the rest of this assignment is contained in the readings on base economic analysis and the classroom work. In addition, the handout should help you get through this.

1. Access the Assignment 1 spreadsheet link from my web site. Right click on the target and save the file to your computer. You will go to the “assignment” worksheet and begin filling in the data needed to answer the questions below.
2. You will compute location quotients using a variety of approaches: The blank boxes will all need to be filled in.
3. You can use the “Class Example” sheet for guidance, but I’ve erased all of the formulas so it will mostly only help you for format and structure.
4. You will also need to go to www.bea.gov and access Annual State Personal Income and Employment data (to find U.S. data) and then to the Local Area Personal Income and Employment link (go to the interactive tables for County Personal Income and Employment) to get the needed population and income data for Winnebago County. Use the SA05N (U.S.) CA05N (county) table for the year 2011 to get population and total personal income data for the county and for the U.S.
5. Once you collect all of the missing data, then you need to answer the following questions:

Task 1. What are numbers of total basic jobs and the basic multipliers using the following bases of determination?

- **LQ: Jobs Basis**  
  Basic jobs: _______  Multiplier: _______

- **LQ: Population Basis**  
  Basic jobs: _______  Multiplier: _______

- **LQ: TPI Basis**  
  Basic jobs: _______  Multiplier: _______

- **LQ: Hybrid Jobs/Earnings**  
  Basic jobs: _______  Multiplier: _______

Task 2. As you look at all of these possible base economy multipliers, in just a paragraph, explain whether the type of multiplier matters, and if so why?

Please hand in this sheet, the Task 2 paragraph, and attach the spreadsheet so that I can see how you did this. I formatted the assignment spreadsheet to print as one page, so once you are done with it just hit print and it will come out looking the way I want it.
Task 3. Scenario: Horrors! The Winnebago Company is going to close down and move from Forest City, Iowa, to Jasper, Alabama, because it says it cannot find skilled workers in rural Iowa anymore. This will thus eliminate 585 local jobs. Use the export (basic) jobs multiplier determined from the Jobs/Earnings Hybrid method for the Winnebago County economy and calculate the following:

- The regional total jobs economic impact
- The new regional basic jobs total
- The new regional basic jobs multiplier

Make sure that you show me your work for these three items like in the example that I handed out in class. Just staple it to this sheet.

Question/Task 4. Evaluation. You are the Forest City city planner. You have done the impact calculations above, and you need to convey them to your city council. In no more than two pages of writing in memo form summarize:

1. What you are measuring including the pertinent terms that you are using
2. How you measured what you measured and why (as a method, not formula by formula)
3. The anticipated total regional job economic impacts of a loss of the Winnebago factory (a simple table might be in order)
4. The strengths and weaknesses of your analytic approach

Make sure that the strengths and weaknesses portion is well thought out and summarizes your knowledge of this dimension of economic analysis and regional planning. You want to convey to the city council your confidence in your analysis. You also want to convey the limits to this kind of analysis.