GEO 2313: Environmental Justice and Sustainability
Data Science Project (Due on 12/3)

You are supposed to consult the attached Forsyth County census tract data set and apply your MS excel skills to find the answer of the following questions. Along with each answer you need to detail the process that you followed to get the answer. For example, if you apply a formula, you need to provide the formula along with the answer. If you apply the pivot table, give the details of your application.

EAST = 1, WEST =0, PERCENTAGES 50% = .50, 75% = .75

1. How many census tracts are in the east Forsyth? How many are in the west Forsyth?
2. How many census tracts contains 50% or more minority population and 50% or more population that has less than high school education. Which part of the city are they located?
3. Which census tract does contain most minority population? Which one does contain least minority population?
4. Which census tract does contain the greatest number of old houses?
5. What is the total population for East Forsyth? What is for West Forsyth?
6. Compare the average RMP proximity for the tracts that have more than 50% minority population vs. the tracts that has less than 50% minority population.
7. Compare the average waste water discharge indicator value for the tracts that have more than 50% low income population vs. the tracts that has less than 50% low income population.
8. What is the average particle matter (PM) concentration for the East vs. West Forsyth?
9. What is the average cancer risk for the East vs. West Forsyth?
10. What is the average respiratory hazard index for the older part of the city (more than 50% houses are built before 1960)? How does the value compare with the newer part of the city?
11. Show the column chart representing 10 most populated census tracts along with their populations.
12. Show the average RMP proximity for the tracts that have more than 50% minority population vs. the tracts that has less than 50% minority population in a pie chart.
13. Show the average particle matter (PM) concentration for the East vs. West Forsyth in a pie chart?
14. Is there any relationship between lower income group and their education level, create a scatter plot to show that.
15. You need to come up with two more questions of your own and find the answers for them. Please specify the questions along with the answers.

Based on your data analysis, provide five conclusions showing some insights that you have gained about environmental and or social justice of different parts of the Forsyth county.