

General services administration assignment

[History](#), [American History](#)



In particular you should practice zooming in and out, “ panning,” displaying the map layer legends, turning map layers off and on, “ identifying” particular map elements (the most important for this assignment are the “ institutions of higher education”), and measuring distances (this works much like the toolbar used earlier in the course on the topographic map . PDF). The key data layers are recorded for “ census tracts,” which are geographical areas smaller than a township, city or borough, used by the US Census Bureau to report detailed geographical results (they publish data for smaller subdivisions of the census tracts, too).

Answer the following questions: 1. Which institution of higher education is closest to Mom’s main campus? How far away is it in miles? (Note: do not eliminate any of the candidates for any reason other than distance.)

Millimeters University downtown campus – 3. 787 miles To answer questions 2 – 4, use the census tracts layer depicting Population Density; it has a yellow-to-red color scheme (sparse to dense population, in people per square mile). To see it clearly, turn off the other two census tracts layers (Median Household Income and Median Age) and the SUB-VBG layer. . List the names and annual tuition for the institutions located in the census tracts with a population density greater than 10, 000 people per square mile. Stevens College of technology- 6800\$ Millimeters Downtown – 8400\$ Lancaster Theological seminary – 12600\$ Franklin and marshal 42600\$ 3. Describe the general characteristics (all, not just tuition) of the institutions from question 2. Are there any similarities common to all or most (over half) of them? More than half of the school are private have high tuition and low school enrolment 4.

Provide at least one reason why the similarities you identified in question 3 seem appropriate for their highest-population-density locations. The schools do better in high density areas so they have more recognition and more draw to their campus To answer questions 5 – 9, use the census tracts layers evicting Median Age and Median Household Income. The Median Age map layer has a brown-to-white color scheme (representing youngest to oldest). The median age is the age (in years) of the middle person in the population if everyone in that census tract was lined up from youngest to oldest.

The Median Household Income layer has a light-to-dark green color scheme (poorer to wealthier). The median household income is the income (in dollars) of the middle household if every household in that census tract was lined up from the lowest income to the highest income. 5. Choose a set of seven randomly-located institutions, including the UM main campus, and create a data table with their names (as separate table rows), and the population density, median age and median household income of their respective census tracts. Note: collect the latter values using the Map Identify tool, not the map legend.

Institution	Pop Density (per square mile)	Median Age	Median household income
HACK	1637	8659	36.9 years
Pennsylvania college of Art and Design	14796	6557	34.2
Eastern Mennonite university of Lancaster	588	3977	41.2
Franklin and Marshall	14167	9478	22.4
Lancaster bible	2010	7962	46
Millimeters main	3575	1278	21.3
Stevens college biotechnology	12041	6698	27.9

What other institutional characteristics are common to the three institutions in your table (for question 5) with the lowest median ages?

These institutions are Millimeters Franklin and marshal and Stevens College. These intuitions' have no religious affiliation, have large amounts of enrollment, and are located with a large number of students with low median ages. 7. What other institutional characteristics are common to the three institutions in your table (for question 5) with the highest median household incomes? Three institutions with the highest median households income are HACK, Lancaster bible college, and eastern Mennonite college.

They are high in median age, they have large number of people with careers and high income. 8. What effect is the presence of an institution of higher education likely to have on the median age of its census tract's population? If there are any exceptions to that effect that you can see among the institutions in your sample, what explanation can you offer? HACK and some of the smaller schools are located in areas with high density. So the low enrollment does not have a strong skew on the median age. Plus a lot of older people settled down in the suburbs. . What effect is the presence of an institution of higher education likely to have on the median income of its census tract's households? If there are any exceptions to that effect that you can see among the institutions in your sample, what explanation can you offer? Institutions of higher education likely decrease the median income as students begging to live off campus with small amounts of income. The exception to this effect may occur in areas where professors live with large salaries, also wealthy people tend to live in the suburbs.

To answer questions 10 – 11, use the layer called SUB-VBG (which stands for “ Urban Growth Boundaries and Village Growth Boundaries”) representing the current built-up areas plus those areas planners would like to see developed in the future. The UN-shaded areas are the areas they prefer to see remain agricultural or natural. 10. Describe the locations of Elizabethan College, Franklin and Marshall College, and Millimeters University (the three campuses with the largest on-campus and off-campus student populations) relative to the areas recommended for non-development.

All three locations are in areas intended for development. Elizabeth town and Millimeters university (the three campuses with the largest on campus and off campus student population) relative to the areas recommended for non development. 11. Describe one advantage, and one disadvantage, that UM is likely to experience, compared to F&M and E-town, based on its SUB-VBG location. Franklin and marshal and Elizabeth town are located in areas surrounded by developed land. Millimeters may be at a disadvantage when attracting students since the school is not directly in the city.

Although, Millimeters has more natural areas better for teaching and recreation. 12. There is little information available for the Major Roads layer of this map, and it is shown at the nominal level of measurement. Suggest a data variable that should be added to the data table for this layer, and describe the type of thematic representation for this layer that would be helpful to the overall analysis being undertaken in these questions. It may be helpful to know which roads are busiest.

Using a thematic flow map with vary thickness of road lines would be useful. The data could show an ordinal system which roads are busiest or a quantitative interval of traffic. 13. (10 points) What have the apparent tragedies of Harrisburg Area Community College, Penn State University and Millimeters University been in establishing their satellite (or branch) campus locations in Lancaster County? Your paragraph should include several of the above factors represented by institutional information, census tract data, plus the JIB-VBG areas and road access.

HACK, Penn State, and Millimeters have all placed their satellite locations in developed regions of Lancaster County. All three campuses are very close to the center of Lancaster. Not only does this allows the institution to gain publicity, but also is convenient for those living in the city. Transportation to the campuses is readily available via the bus routes and road systems. This correlates with the fact that the campuses are in the PUB-VBG areas of development.

Also advertisement for the schools will be more effective in the areas of development and higher pop density. Part B: Thematic Maps (30 points) In the second part of the linked Website is a series of thematic maps presenting information about Pennsylvania. Your objective in this part of the assignment is to identify, and describe the data behind, several different types of thematic maps. To answer these questions, follow each link to a separate map. Fill in the following table with information about the maps shown (2 points per table grid cell).