

TO: Students in 0853/0060 Fall 07 “Doing Justice”

FROM: R. B. Taylor

DATE: 9/27/07

RE: Map of 39th District Exercise

NOTE: accompanying PPT file = 0060_fa07_ex_map_39th_district.ppt

PURPOSE

The purposes of this exercise are to learn how to more precisely interpret choropleth maps of local social science data, and to then apply that information to the conceptual model being used to understand the behavior in question. This exercise concentrates solely on the first portion: interpreting the maps.

BACKGROUND

You have read several newspaper articles about the corruption probe in the 39th Philadelphia Police District in the early 1990s. Officers from that district, and a smaller number of officers from other districts, were indicted and later convicted of a variety of abuses including illegally detaining and/or searching suspects, planting drugs on suspects, and taking payoffs from dealers and others.

QUESTION

The question you can ask is: why was this more likely to take place in the 39th District as compared to other police districts? Was there something about the residents there that made them more vulnerable than residents in other locations to these abusive police practices?

Clearly, there would need to be substantial volumes of drug dealing and drug use in this locale. You do not have that information. Let’s just assume that this is the case.

APPROACH

We can view demographic census data for the census tracts within the 39th District, to see how they compare to census tracts in the rest of the city. That will suggest differences that may have created differential vulnerability to these police practices. Ideally, we would like to examine 1990 census data, since these abuses were documented in the early 1990s. Those data are not readily available.

More readily available, however, are 2000 Census data. We will use a Temple Library database called **SimplyMap** to collect and view these data. A detailed guide on using this database will be forthcoming. Right now you are not going to generate the maps; that comes later. The purpose now is to interpret maps that have been generated for you.

MAP1

The variable shown is percent unemployment, in 2000, among adult males.

QUESTION 1:

When you look at it, can you see differences between Philadelphia and the surrounding jurisdictions? Describe those differences.

QUESTION 2

Do you see any surrounding jurisdictions that look somewhat similar to Philadelphia on this variable? If so, what jurisdiction?

LEGEND

Look closely at the legend. Tracts in Philadelphia are shaded, based on their percent unemployed male population. There are five groups of tracts, and thus five different shades on this variable.

The groupings shown are **quintiles**. This term already has been discussed in reference to the SES variable. Because quintiles are used you have a lot of information about where each tract “stands” on this variable relative to other tracts.

QUESTION 3

Write in a definition of a quintile

Quintiles match up with percentiles – the proportion or percentage or fraction of tracts at or below a certain score or range of scores, or at or above a certain score or range of scores, as shown in the next slide. This allows you to answer a number of questions.

Warning: don't get confused between the score on the variable (unemployment) itself, which is expressed in percent terms, and the score of the tract relative to other tracts, which is expressed in percentile terms.

QUESTION 4

What percentage of census tracts have unemployment rates of 15.15 or higher?

QUESTION 5

What percentage of tracts have unemployment rates of 8% or higher?

QUESTION 6

What percentage of tracts have unemployment rates below 8%?

QUESTION 7

If your tract had an unemployment rate of 7%, what quintile is your tract in?

LET'S REVIEW WHAT THE GROUPS SAID

In class last time your work group made some statements about the unemployment levels of tracts in the 39th Police district. You saw a map of Philadelphia Police districts in central north Philadelphia, and then more detail for the 39th District. (This map of all Philadelphia police districts is available on the Blackboard site under a folder labeled "maps.")

The easiest way to orient to the district boundary is to start at the intersection of North Broad Street (PA state route 13) and Lehigh Avenue, and look northwestward from there. Let's ignore the upper section of the 39th District, near the creek, and concentrate on the lower section.

Here are some statements from the different work groups. For each, let's decide if it is true or not.

GROUP A

1. "The residents of the 39th district have much higher unemployment rates than the rest of Philadelphia."
2. "The majority of the highlighted area is made up by the poorest Philly quintile."

GROUP B

3. The 39th district compared to the rest of Philadelphia has very low unemployment."
4. "They are within the 20th % of unemployment."

GROUP C – This group tells us a lot conceptually, but let’s just focus on their descriptions about the map.

5. [There is] “high unemployment in the area.”

GROUP D

6. “Unemployment rate is much higher.”
7. “There are few business[es]”

GROUP E

8. “20% of Philadelphia’s males ranked in the 15.1%-100% quintile in unemployment, and many were in the 39th district area.”

GROUP G

9. “Almost the whole district has 15%-100% unemployment rate”
10. “Only small area has 8%-15% unemployment rates.”

GROUP H

11. “Although it seems most males in this area are unemployed...”

GROUP I

12. “The majority of the 39th falls within the upper two quintiles of unemployment.”

GROUP J

13. “Has mixed unemployment within has concentrated areas of extremely high unemployment and extremely low unemployment”

GROUP K

14. “The 39th district falls into the highest quintile for unemployment rates.”

GROUP L

15. “It looks to have some of the highest unemployment rates in Philadelphia.”

MAP 2

Go back into the same work groups you were in last class, even if there are only two people in your group. Write your names on a card. Look at the new map. The 39th District section of Philadelphia is shown. Tracts are split into quintiles. The variable shown in 2000 median (typical) rent for the tracts. Your group wants to write your answer to this on the card:

How do 2000 rents in portion of 39th district tracts (in red) compare to rents in other Philadelphia census tracts?