These lab exercises introduce you to U.S. census data. Follow the instructions provided to get to the appropriate websites.

This should work with any of the popular internet browsers - but you may want to use netscape. The tables may be written but all other answers have to be typed with double spaces. Tables have to clearly designed, labeled and titled. Answers have to clearly numbered and organized.

#### 1). American Factfinder

We will use American Factfinder (an online data extraction tool) to obtain census 2000 data on the blocks we live in. We are first going to look at the summary files (SF-1) containing data from the short form. Since the short form collects information about everyone in the United States, it can provide us detailed data down to the block level. Follow the instructions below to get to the American Factfinder. Go to the census bureau's home page at http://www.census.gov/ and click on the "Your Gateway to Census 2000" hyperlink, click on the "street address" hyperlink. Choose selection method "address" and select year and program "census 2000". Enter your street address, city and state or your street address and zip code and click on "Go". Move the cursor down to the box containing a list of geographies and select "block" and then scroll to the right and click "Map" to get a map of your block. Then go back to the list of geographies, select block once more and then click "Go" on the side of the box. Scroll down to see the list of files. Click on the "CENSUS 2000 SUMMARY FILE 1 (SF 1) 100-Percent Data". Click OK if prompted. Click on "CHANGE SELECTIONS/TABLES". This brings up 286 tables for your block. Remove "P1 - Total Population" from the list of selections by clicking on it and selecting "REMOVE". Then pick the tables listed below and click ADD (You may select groups of tables by holding down the CTRL key as you select). P4. HISPANIC OR LATINO, AND NOT HISPANIC OR LATINO BY RACE; P13 to P13 I -MEDIAN AGE BY SEX: P17 to P17I - AVERAGE HOUSEHOLD SIZE: P27 to P27I RELATIONSHIP BY HOUSEHOLD TYPE; H15 to H15I - TENURE BY HOUSEHOLD SIZE

Check to be sure all your table selections have been made. Then select "SHOW TABLES". Wait for the tables to appear and click "DOWNLOAD". When the "DETAILED TABLES - DOWNLOAD" page comes up, make sure "RICH TEXT FORMAT" is checked and "ONLY THE TABLES AND GEOGRAPHIES ON THE SCREEN" is unchecked. Click OK. This should put your tables into a Rich Text Format readable by most word processors - including WordPerfect and Microsoft Word. You can then save the file to your diskette to be printed at a later time. (I think you have at least 33 pages of tables so you may want to wait till later to print). Use your detailed tables to build a single table for your census block. The table will have to show the total population, the population distribution, median age (total, male, female), average household size, household types and housing tenure of householders - all by race and ethnic categories (Note that those variables showing raw counts are best represented as percentages). Using the data in your clearly labeled and titled table and your map describe in less than a age the location and demographic characteristics of your neighborhood. DO NOT TURN IN TABLES PRINTED FROM THE INTERNET.

## 2). YOU ARE WHERE YOU LIVE -Claritas, Inc

Claritas is a business organization that uses census data to help businesses develop better marketing strategies. It provides organizations with a consumer database built by matching census data to consumer. Find out about the consumer profiles that exist in your neighborhood by following the instructions below. Go to the Claritas, Inc website at http://www.claritas.com/index.html . Read the page to get a sense of the logic behind the system. Click on the link for "SEE YOU ARE WHERE YOU LIVE IN ACTION". Choose either the PRIZM or MICROVISION segmentation system and enter your zip code. Read through the most common customer profiles said to exist in your neighborhood and select the one that fits you best. Summarize the profile - noting where it fits you and where it does not. Also how accurate are all the customer profiles in describing the other people who live near you? Do the people who live near you fit into any of the groups? Do the profiles reflect what you know about your neighborhood? (Not more than a page)

# 3). The State of the States Worksheet

The 2000 Census revealed some important facts and trends. No state lost population. (The District of Columbia lost population, but is not considered a state.) The U.S. population has been shifting to the west

and south since the early 1800's. This trend also continued between 1990 and 2000. To learn more about how the United States changed during the last decade, answer the following questions using the attached Table T1, "Resident Population of the United States."

- 1a. Name the five states that increased by the largest percentages (grew the fastest) between 1990 and 2000. Rank them in order (1 = state with largest percent change) and give the percentage by which they grew.

  1b. Looking at the map of the United States, what do you notice about these states in terms of their location?
- 2a. Name the five states that added the greatest number of people during the 1990's. Rank them in order (1 = state with largest numeric change) and give the number of people added.
- 2b. Looking at the map of the United States, what do you notice about these states in terms of their location?
- 3a. Name the five states that increased by the smallest percentages (grew the least) between 1990 and 2000. Rank them in order (1 = state with smallest percent change) and give the percentages by which they grew.
- 3b. Looking at the map of the United States, what do you notice about these states in terms of their location?
- 4a. Name the five most populous states in 2000 and 1990. Rank them in order (1 = state with largest population).
- 4b. How did the ranking of the states change between 2000 and 1990?
- 5a. Name the five least populous states in 2000 and 1990. Rank them in order (1 = state with smallest population).
- 5b. How did the ranking of the states change between 2000 and 1990?
- 6. Based on the information gathered above, which region\* (see regions listed below) do you think increased by the largest percentage between 1990 and 2000? Include facts to support your answer.
- 7. Based on the information gathered above, which region\* (see regions listed below) do you think increased by the largest numeric value between 1990 and 2000? Include facts to support your answer.
- \*Census Bureau Regions

Northeast CT, MA, ME, NH, NJ, NY, PA, RI, VT

South AL, AR, DC, DE, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV

Midwest IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI

West AK, AZ, CA, CO, HI, ID, MT, NM, NV, OR, UT, WA, WY

PLEASE BE VERY BRIEF IN ALL ANSWERS. TYPE, DOUBLE SPACE AND LABEL ALL WRITING. ATTACH CHARTS AND TABLES TO ASSOCIATED WRITING IN AN UNAMBIGUOUS FASHION. REMEMBER TO INCLUDE YOUR NAME OR INITIALS IN THE CHART TITLES. ALL QUESTIONS WEIGHTED EQUALLY. DUE March 26-27.

Part A. Population Structure - Cohort Sizes and Potential Economic Repercussions The years between the ages 25 and 34 are often the prime years for entering the housing market. Use the census data set popstruc.dat in centrend to create a line graph showing the number of persons ages 25-34 for each census year between 1950 and 2000. In WebCHIP make age the row variable and period the column variable.

#### Creating Line Charts in Microsoft Excel

- 1. Copy and paste the WebCHIP table in EXCEL. Delete all rows of data except the row containing years and the one with percentage data for the age group 25-34. Delete the columns for 1930 and 1940 and totals and leave only data for age group 25-34 for 1950 through 2000.
- 2. Select by highlighting the age category labels as well as the percentage data. Do not highlight any blank cells. Do not highlight the years. Under Insert, select Chart to move to step 1 of the chart wizard.
- 3. Step 1 of Chart Wizard From the chart type, select the line chart and the subtype "line chart" (first graph type in second row)". Click NEXT to move to step 2 of the chart wizard.
- 4. Step 2 of Chart Wizard Click on the Series tab. Then click on the red arrow in the "category (X) labels". When the chart wizard is minimized highlight the row containing the years 1950 through 2000 for your data (DO NOT HIGHLIGHT BLANK SPACES). Then click on the red arrow of the chart wizard to maximize it. Then click NEXT to move to step 3.
- 5. Step 3 of the Chart Wizard Click on the Titles tab. Provide a short meaningful chart title eg. U.S. Population Aged 25-34 between 1950 and 2000 (Remember to include your name or initials). Provide a name for the category X-axis (eg. Years); and for the value Y axis (eg. Population Aged 25-34). Click on the Gridlines tab and make sure nothing is checked. Make sure none is checked in tabs for data labels and data tables. Click NEXT to move to step 4 of the wizard.
- 6. Step 4 of Chart Wizard check as new sheet and click FINISH.
- 7. Beautifying Double click on the horizontal axis. From the Patterns tab, set major and minor tick marks to ``outside" and set the tick mark labels option to ``low."

8.. Print

Use the line graph to answer the following questions.

- 1. What does the graph say about the way the number of first-time homebuyers has changed over time?
- 2. What impact did the early Baby boom cohorts have on this population?
- 3. What impact did the late Baby Boom cohorts have on this population?
- 4. What impact did the gen X cohort have on this population?
- 5. Which of the cohorts depicted in the graph would you expect to have the hardest time finding housing?

# Part B. Describing distributions by immigrant status

Use the census data set POPUSA2K.dat (in cen2000) to look at the percentage of each racial or ethnic group who are immigrants in 2000. In WebCHIP, make IMMIG the row variable and RACELAT the column variable. Use the resulting table to create a stacked bar chart in EXCEL. Give your stacked bar chart the title "Immigration Status of U.S. Population by Race-Ethnicity, 2000". The x-axis should be labeled "Race/Ethnic Group" and the y-axis "% of Population."

# **Creating Stacked Bar Charts**

- 1. Locate and start EXCEL. Copy and paste the WebCHIP table in EXCEL. Edit the table to leave only the percentages of each raceethnic group in the different immigrant statuses.
- 2. Select by highlighting your data. Include the row labels but exclude the column labels. Also do NOT include blank rows or columns. Under Insert in the EXCEL toolbar menu, select Chart to get to Step 1 of the Chart Wizard.
- 3. Step 1 of Chart Wizard From the chart type, select column chart and the subtype "100% stacked column (third graph in first row)" and click NEXT to get to step two of the chart wizard.
- 4. Step 2 of Chart Wizard Make sure "rows" is checked (Not Columns). Click on the Series tab. Then click on the red arrow in the "category (X) labels". When the chart wizard is minimized, highlight the row containing the column labels for your data (DO NOT HIGHLIGHT BLANK SPACES). Then click on the red arrow of the chart wizard to maximize it. Click NEXT to move to step 3.
- 5. Step 3 of Chart Wizard Click on the Titles tab and provide a title (include initials); names for the category x-axis and for the value Y axis (see the question for names). Click on the Gridlines tab and make sure nothing is checked. Make sure none is checked in the tabs for data labels and data tables.
- 6. Step 4 of Chart Wizard click NEXT to get to step four and make sure the "as new sheet option" is checked. Click FINISH.
- 4. Print chart.

Answer the following questions using your bar chart.

- 1. Which race-ethnic group(s) have the highest percentages of immigrants?
- 2. Which group(s) have the lowest percentages?
- 3. Which group(s) have the highest concentration of recent immigrants?
- 4. Referring to the chart above, describe changes in the composition of immigrant flows to the U.S. occurring in recent decades.
- 5. What is one historical event that has affected these shifts in immigration?

## Part C. Immigrant settlement patterns

Because immigrants are not distributed evenly across all geographic areas of the country, immigration tends to have an especially large impact on certain geographic areas. We know, for example, that immigrants have historically settled in large metropolitan areas, especially in areas with established networks of earlier immigrants from similar regions of the world. Investigate the impact of these settlement patterns on the population of selected states by using the dataset IMMUSA2k.dat in cen2000 folder to look at the immigrant status distribution in selected states in 2000. For your crosstab, make "IMM" the row variable, and "StateUSA" the column variable. Use your results to create a stacked bar chart with the title "Immigration Status of Selected State Populations, 2000" The x axis should be labeled "States". The y axis should be labeled "% of Population". Apply the EXCEL instructions for Part B with appropriate modifications (DO NOT include the ALL column in your data when you highlight in EXCEL). Also make sure "row" is checked (not column) in step 2 of the chart wizard.

Answer the following questions using your bar chart:

- 1. Which states' populations comprise the largest percentages of immigrants?
- 2. Which states' populations comprise the smallest percentages of immigrants?
- 3. What factors might help to explain the disproportionate concentration of immigrants in certain states?
- 4. Based on the distribution of early and later immigrants revealed in this chart, does there appear to be a shift in where immigrants settled prior to 1980 versus where they settled after 1980?
- 5. What might account for this shift in the settlement patterns of immigrants after 1980?

Part D: Immigrant earnings and the assimilation perspective In this problem you will explore the extent to which immigrants have been able to reach economic parity with native-born populations. You will also test hypotheses drawn from the assimilation perspective. In a nutshell, the assimilation perspective assumes that immigrants earn less, occupy less prestigious jobs, and live in poorer neighborhoods than native-born residents because they enter the U.S. without the language skills, education, and cultural awareness needed to compete effectively for these resources. According to this perspective, immigrants gain these skills as they spend more time in the U.S. and, as a result, tend to become more similar to native-born residents in terms of earnings, occupation, and residential outcomes.

1. One of the central hypotheses drawn from the assimilation perspective is that immigrants' earnings will increase towards that of the native-born residents as they spend more time in the U.S. Use the dataset WKIM2-35.dat located in cen2000 to compare the earnings of native-born residents and immigrants entering the U.S. at different times. Make EARN the row variable and IMM the column variable. Use your results to complete the table below, filling in the percentage of each status group that falls into each earnings category.

Table 1.	Earnings	bv	<b>Immigration</b>	Status.	2000
		~,		otatao,	

Immigrant Status							
Earnings(\$)	Native	Arrrived before 1980	Arrived 80-89	Arrived 90-00			
<25K							
25-35K							
35-50K							
50-70K							
70-100K							
100K+							
All							

# Questions:

- 1. What is the independent variable implicated in the hypothesis you are testing?
- 2. What is the dependent variable?
- 3. Note that for this test we are using a dataset that contains only those age 35-44 who work full-time. Why is this important for our test?
- 4. Which immigrant status group has the largest percentage in the lowest income category?
- 5. Which immigrant status group has the lowest percentage in this bottom category?
- 6. In general, which group seems to have highest overall earnings, native-born residents or immigrants who entered the country before 1980?
- 7. Is the difference in 6 consistent with the assimilation perspective? If no, how would you explain the difference?

Part E: Immigrant language skills and the assimilation perspective The assimilation perspective assumes that the lack of English language ability contributes to the relatively low earnings of recent immigrants. Use the dataset ENGLAT2k.dat to look at English language ability by immigrant status among Latino residents of the U.S. To create the WebCHIP table, make ENGSPKG the row variable and IMM the column variable. Use the WebCHIP results to create a stacked bar chart titled: "English language ability by Immigration Status of Latinos, 2000." The x axis should be labeled "Immigrant status" and the y axis labeled "% of population". Apply the instructions for Part B with appropriate modifications. (make sure "row" is checked (not column) in step 2 of the chart wizard).

Answer the following questions using your bar chart:

- 1. Which immigrant status group has the highest English language proficiency?
- 2. The assimilation perspective assumes that the longer an immigrant is in the country, the more proficient their English skills become.

Is the pattern revealed in the charts consistent with this assumption?

3. If your answer to 2 is NO, provide some explanations for why the assumption might break down.

# Soc 251 LAB 4 Race and Ethnic Inequality.

TYPE, DOUBLE SPACE AND LABEL VERY CLEARLY ALL WRITING. **BE VERY BRIEF**. ATTACH CHARTS AND TABLES TO ASSOCIATED WRITING IN AN UNAMBIGUOUS FASHION. MAJOR CREDIT WILL BE LOST FOR DIS-ORGANIZATION. ALL PARTS WEIGHTED EQUALLY. DUE APRIL 23-24

#### PART A. Education and Race/Ethnicity

- Exercise 1 Using data (centrend/educ502k.dat) from 1950 to 2000, draw a line graph showing changes in the percentage of blacks and non-blacks, ages 25-34, with no high school diploma. As the WebCHIP analysis involves the use of a control variable it requires two steps:
  - A). In the first one, make "Educ" the row variable and "Year" the column variable then click CROSSTAB. Clear your window.
- B). In the second step highlight "race" and "age" in the CONTROL BY box and then click on CONTROL BY and then on CROSSTAB. This will give you a WebCHIP table of trends in educational attainment for blacks and non-blacks for age groups 25-34, 35-44, 45-54, 55-64, 65+. Copy and paste the WebCHIP table in EXCEL. Please note that this is a large table so take care to copy everything.

### Creating Line Charts for Population without High School Diplomas

- 1. In Excel, create two tables with percentage data showing the educational attainment for non-blacks 25-34 and blacks 25-34. Delete all data except those for non-blacks 25-34 and blacks 25-34. Delete the columns with data on the total percentages. Leave only data showing the percentage of 25-34 years olds at each level of educational attainment for 1950 through 2000 for blacks and non-blacks.
- 2. Create a chart from nonadjacent selections:
  - A). Select the row containing the LTHS percentage data for Non-blacks. Only select the percentage data.

Do not select the row label. Do not include blank cells or spaces.

- B). While holding down the CTRL key, select the LTHS percentage data for Blacks. Only select the percentage data. Do not select the row label. The nonadjacent selections must form a rectangle.
- C). Under Insert, select Chart to move to step 1 of the chart wizard.
- 3. Step 1 of Chart Wizard From the chart type, select the line chart and the subtype "line chart" (first graph type in second row)". Click NEXT to move to step 2 of the chart wizard.
- 4. Step 2 of Chart Wizard Click on the SERIES tab:
  - A) Give your legend names click on "Series1" in the SERIES box and then click in the NAME box and then click on cell the containing "Race = NonBlack" in your EXCEL table. This will change "Series1" to "Race = NonBlack". Repeat the same for "Series2" in the SERIES box to change "Series2" to "Race = Black".
  - B). Now label your x-axis Click in the CATEGORY (X) LABELS box. Then highlight the row in your EXCEL table containing the years 1950 through 2000 for your data (DO NOT HIGHLIGHT BLANK SPACES). This will change your x-axis labels to years. Then click NEXT to move to step 3.
- 5. Step 3 of the Chart Wizard Click on the TITLES tab. Provide a short meaningful chart title eg. "Population 25-34 Without High School Diplomas by Racial Groups" (Remember to include your name or initials). Provide a name for the CATEGORY X AXIS eg. "% of population" and for the VALUE Y AXIS eg. "Years". Click NEXT to move to step 4 of the wizard.
- 6. Step 4 of Chart Wizard check "AS NEW SHEET" and click FINISH.
- 7. Print

# Briefly Answer Questions:

- 1. Describe the overall trends in the proportion of 25-34 with no high school diploma.
- 2. How have differences between the two racial groups changed over time?
- 3. Is it is useful to focus on the 25-34 year old group for this trend? Why or Why not?

Exercise 2. Using data (centrend/educ502k.dat) from 1950 to 2000, draw a line graph showing changes in the percentage of blacks and non-blacks, ages 25-34, who have graduated from college. Follow the instructions for Exercise 1 but makes changes where appropriate. For instance, select the rows containing college graduates (CollGrad) for your table and make the chart title "Population 25-34 with College Degrees by Racial Groups."

#### **Briefly Answer Questions**

- 1. How do the overall trends for college graduation compare with the trends for high school?
- 2. How do the trends in racial differences in college graduation compare with similar findings for high school?
- 3. Give one explanation for the racial gaps in college graduation.

Exercise 3. Focusing on 2000 data (cen2000/educimm2k.dat), use stacked column charts to examine the educational attainment of people ages 25-34 in each racial-ethnic group. In WebCHIP, make "educ" the row variable, "age" the column variable and "racelat" the control variable. Copy and paste the WebCHIP table in EXCEL.

#### Creating Stacked Column Charts

- 1. Create a table with data on the percentage educational attainment of people ages 25-34 for each of the major race-ethnic groups. For this assignment use data only for NLWhite, Black, Asian, Latino, AmIndian. Do not use data for Nlother and Nlmulti. Delete all other irrelevant stuff. The row labels of your table should contain levels of educational attainment <9yrs, 10-12yrs, HSGrad, SomeColl, CollGrad, Masters, PhD-Prof. The column labels should be names of race-ethnic groups.
- 2. Select by highlighting your data. Do not include the row labels or column labels. (ALSO DO NOT INCLUDE ANY BLANK ROWS OR COLUMNS). Under Insert in the EXCEL toolbar menu, select Chart to get to Step 1 of the Chart Wizard.
- 3. Step 1 of Chart Wizard From the chart type, select column chart and the subtype "100% stacked column (third graph in first row)" and click NEXT to get to step two of the chart wizard.
- 4. Step 2 of Chart Wizard Make sure "rows" is checked (Not Columns). Click on the Series tab.
  - A). Give your legend names click on "Series1" inside the SERIES box and then click inside the NAME box and then click on the <9yrs row label in your EXCEL table. This will change "Series1" to <9yrs. Repeat the same to change "Series2" to 10-12yrs. Repeat the same for Series3 to change it to HSGrad. Keep going until you have changed all the items in the SERIES box to row labels.
  - B) Label your x-axis Click inside the CATEGORY (X) LABELS box. Then highlight the row in your EXCEL table containing the race-ethnic group names for your data (DO NOT HIGHLIGHT BLANK CELLS OR SPACES). This will change your x-axis labels to race-ethnic group names. Then click NEXT to move to step 3.
- 5. Step 3 of Chart Wizard Click on the TITLES tab and provide a title say "Educational Attainment of 25-35-year-olds by Race-ethnic Group 2000" (include initials); names for the CATEGORY X AXIS "Race-ethnic Group" and for the VALUE Y AXIS "% of Population".
- 6. Step 4 of Chart Wizard click NEXT to get to step 4 and make sure the "AS NEW SHEET OPTION" is checked. Click FINISH.
- 7. Print chart.

## **Briefly Answer Questions**

- 1. Describe the major differences in educational attainment between the groups.
- 2. Can you think of any factors that have reduced certain race/ethnic groups' educational opportunities?
- 3. Can you think of any factors that have increased certain race/ethnic groups' educational opportunities?

# PART B. Occupation and Race/Ethnicity

Exercise 1 -- Using data from 1950 to 2000 (centrend/edoc502k.dat), construct two stacked column charts, one for men and one for women, showing trends in the percentages of the labor force in each occupational category. In each chart, for each year, stack by occupational categories. In WebCHIP, make "Occ" the row variable and "year" the column variable. And "Gender" the control variable. Copy and paste the WebCHIP table in EXCEL.

## Creating Stacked Column Charts

1.Create two tables (one for men and one for women) with the percentages of each sex in the different occupational categories. The rows of the table should have the occupational labels - TopWC, OtrWC, Service, BC. The columns should contain the years.

- 2. Select by highlighting data for men. Do not include the row labels or the column labels. Also do NOT include blank rows or columns. Under Insert in the EXCEL toolbar menu, select Chart to get to Step 1 of the Chart Wizard.
- 3. Step 1 of Chart Wizard From the chart type, select column chart and the subtype "100% stacked column (third graph in first row)" and click NEXT to get to step two of the chart wizard.
- 4. Step 2 of Chart Wizard Make sure "rows" is checked (Not Columns). Click on the Series tab.
  - A). Give your legend names click on "Series1" inside the SERIES box and then click inside the NAME box and then click on the cell containing TopWC row label in your EXCEL table. This will change the label "Series1" to TopWC in your graph. Repeat the same for "Series2" in the SERIES box to change "Series2" to OtrWC. Repeat the same for Series3 to change it to Service. Keep going until you have changed all the items in the SERIES box to row labels.

    B) Give your x-axis labels Click inside the CATEGORY (X) LABELS box. Then highlight the
  - B) Give your x-axis labels Click inside the CATEGORY (X) LABELS box. Then highlight the row in your EXCEL table containing the years for your data (DO NOT HIGHLIGHT BLANK CELLS OR SPACES). This will change your x-axis labels to years. Then click NEXT to move to step 3.
- 5. Step 3 of Chart Wizard Click on the TITLES tab and provide a title eg. "Trends in Men's Occupations 1950-2000" (include initials); names for the CATEGORY X AXIS eg. "Years" and for the VALUE Y AXIS eg. "% of Population." Click NEXT to get to step four.
- 6. Step 4 of Chart Wizard and make sure the "AS NEW SHEET OPTION" is checked. Click FINISH.
- 7. Print chart.
- 8. Follow the same steps to create the chart for women.

Briefly Answer Questions.

- 1. What kind of trends do you see in the occupational positions held by men?
- 2. How are the trends in the positions held by men different from those held by women?
- 3. Can you explain the sex differences in the trends in men and women's occupations?

Exercise 2 -- Using data from 1950 to 2000(centrend/edoc502k.dat), create four line graphs, one for each occupational category. Draw two lines in each chart, one for black men and one for non-black men between the ages of 35 and 44. The graph should indicate the percentage of each racial group employed in the specific occupational category for years 1950 through 2000. In WebCHIP, make "Occ" the row variable, "year" the column variable and "race" the control variable. Copy and paste the WebCHIP table in EXCEL.

#### Creating Line Charts

- 1. Copy and paste the WebCHIP table in EXCEL. Create two tables with the percentages of each racial group in the different occupational categories in each year. The rows of each table should have the occupational labels TopWC, OtrWC, Service, BC. The columns should contain the years.
- 2.. Create a chart from nonadjacent selections
  - A). Select the row containing the TopWC percentage data for Non-blacks. Only select the percentage data. Do not select the row label. Do not include blank cells or spaces.
  - B). While holding down the CTRL key, select the TopWC percentage data for Blacks. Only select the percentage data. Do not select the row label. Note that the nonadjacent selections must form a rectangle. Under Insert, select Chart to move to step 1 of the chart wizard.
- 3. Step 1 of Chart Wizard From the chart type, select the line chart and the subtype "line chart" (first graph type in second row)". Click NEXT to move to step 2 of the chart wizard.
- 4. Step 2 of Chart Wizard Make sure rows (NOT COLUMNS) is checked. Click on the Series tab. Convert the SERIES names to "Non-Black" and "Black" using the techniques you have learnt. Convert the CATEGORY (X) LABELS to "years". (BE SURE NOT TO HIGHLIGHT BLANK SPACES). Then click NEXT to move to step 3.
- 5. Step 3 of the Chart Wizard Click on the TITLES tab. Provide a short meaningful chart title eg. "% of Men in TopWC Occupations By Race 1950-2000" (Remember to include your name or initials). Provide a name for the CATEGORY X AXIS eg. "Years"; and for the VALUE Y AXIS eg. "% of population". Click NEXT to move to step 4 of the wizard.
- 6. Step 4 of Chart Wizard check as new sheet and click FINISH.
- 7. Print.
- 8. Repeat steps to create line charts for OtrWC, Service, BC. Remember to change the titles for each Chart.'

# **Briefly Answer Questions:**

- 1. How do the occupational distributions of the two racial groups compare with each other?
- 2. How do the occupational distributions of the two racial groups compare with the overall trends in occupational trends found in the previous exercise?
- 3. What is the connection between a person's educational attainment and occupation? Do you think that race/ethnicity affects the relationship between education and occupation? In other words, is the relationship different for different race and ethnic groups. Explain briefly.
- 4.. How do you think the historical events of this century have affected the overall occupational distribution? Think about changes in the percentage of people in blue collar jobs between 1950 and 1990. What trend do you see in this category? Why do you think that there have been changes in the types of jobs people have?

# PART C. Earnings Inequalities

Exercise 1. Using 2000 data (cen2000/doctors2k.dat), create a stacked column chart for doctors aged 25-34 showing the race-ethnic distribution of doctor's earnings. In WebCHIP make "earning" the row variable and "racelat" the column variable and age the control variable. Copy and paste the WebCHIP table in EXCEL.

#### Creating Stacked Column Charts

- 1. Create a table showing the % of each race-ethnic group in the 25-34 age group in the different earnings categories. Use data only for the major race-ethnic groups NLwhite, Black, Asian, Latino, AmIndian. Delete all other irrelevant material.
- 2. Select by highlighting your data. Do not include the row labels or the column labels. Also do NOT include blank rows or columns. Under Insert in the EXCEL toolbar menu, select Chart to get to Step 1 of the Chart Wizard.
- 3. Step 1 of Chart Wizard From the chart type, select column chart and the subtype "100% stacked column (third graph in first row)" and click NEXT to get to step two of the chart wizard.
- 4. Step 2 of Chart Wizard Make sure "rows" is checked (Not Columns). Click on the Series tab. Convert the series names to <40K, 40-55K, 55-70K etc using the techniques you have learnt. Convert the "category (X) labels" to race-ethnic group names. (BE SURE NOT TO HIGHLIGHT BLANK SPACES). Then click NEXT to move to step 3.
- 5. Step 3 of Chart Wizard Click on the Titles tab and provide a title "Earnings of 25-34 Year Old Doctor's Earnings in 2000 By Race-Ethnic Group" (include initials); names for the category x axis "Race-ethnic Group" and for the value Y axis % of Population".
- 6. Step 4 of Chart Wizard click NEXT to get to step four and make sure the "as new sheet option" is checked. Click FINISH.
- 7. Print chart.

# Briefly Answer Questions:

- 1. What percentage of 25-34 year old non-Latino whites doctors making \$200,000 or more?
- 2. What percentage of 25-34 year old blacks doctors making \$200, 000 or more?
- 3. What percentage of 25-34 year old Latino doctors making \$200,000 or more?
- 4. What percentage of 25-34 year old Asian doctors making \$200,000 or more?
- 5. What percentage of 25-34 year old American Indian doctors making \$200, 000 or more?
- 6. What is one explanation for the race-ethnic differences?

Exercise 2. Using 2000 data (cen2000/doctors2k.dat), create a stacked column chart for doctors aged 55-64 showing the race-ethnic distribution of doctor's earnings. In WebCHIP make "earning" the row variable and "racelat" the column variable and age the control variable. Copy and paste the WebCHIP table in EXCEL. Create a table showing the % of each race-ethnic group in the 55-64 age group in the different earnings categories. Use data only for the major race-ethnic groups - NLwhite, Black, Asian, Latino, AmIndian. Delete all other irrelevant material. Then follow the steps for constructing stacked column charts.

#### **Brief Answers to Questions**

1. What percentage of 55-64 Year old non-Latino whites doctors making \$200,000 or more?

- 2. What percentage of 55-64 Year old blacks doctors making \$200, 000 or more?
- 3. What percentage of 55-64 Year old Latino doctors making \$200,000 or more?
- 4. What percentage of 55-64 Year old Asian doctors making \$200,000 or more?
- 5. What percentage of 55-64 year old American Indian doctors making \$200, 000 or more?
- 6. What if any difference is there between the earnings of the 25-34 year olds and the 55-64 year olds?
- 7. What might account for the age differences in doctor's earnings?
- 8. Is there any difference between the race-ethnic differences in earnings among 55-64 year olds and the 25-34 year olds?

# Part D. Concluding Questions-Answer very briefly.

- 1. In order to better understand race-ethnicity and social inequality in the U.S., we have examined some of the relationships between education, occupation, and earnings. Has this module has expanded, supported, or changed your understanding of this relationship in any way.
- 2. Do the trends observed support the optimistic view that race is a factor of declining significance, or do your results indicate that further gains have to be made before such optimism is justified? Explain.
- 3. Based on your analyses would you say that affirmative action policies have outlived their usefulness?
- 4. What additional analyses would you be interested in doing to further expand your understanding of race-ethnic inequality in the U.S.?

#### SOC251 - APPLIED DEMOGRAPHY

# LAB FIVE- TOPIC FIVE: MARRIAGE, DIVORCE, COHABITATION AND CHILDBEARING ALL EXERCISES TO BE PERFORMED ON IBM COMPUTERS. BE <u>VERY</u>, VERY BRIEF IN YOUR ANSWERS. WRITE AND LABEL ANSWERS AND TABLES VERY CLEARLY.

#### TOPIC FIVE: SECTION A. MARITAL TRENDS

Exercise 1.

FILE, OPEN, (DIR)CENTREND, OPEN, MARR5090, OPEN. COMMAND, CROSSTAB, MARITAL, SELECT,YR, SELECT TABLE, PERCENT DOWN

Should produce a table with the marital distribution from 1950 to 1990. Copy the information and use it to answer the exercise 1.

Exercise 2.

FILE, OPEN, (DIR)CENTREND, OPEN, MARR5090, OPEN. MODIFY, OMIT, AGE, SELECT, 25-34,35-44,45-54,55-64,65+,SELECT COMMAND, CROSSTAB, MARITAL, SELECT, YR, SELECT TABLE, CONTROL, AGE, SELECT. TABLE, PERCENT DOWN

Should produce a table with the marital distribution for people aged 15-24 from 1950 to 1990. Copy the information and use it to answer the exercise 2.

Exercise 3.

FILE, OPEN, (DIR)CEN1990, OPEN, MARITAL9, OPEN. COMMAND, CROSSTAB, AGE, SELECT, MARITAL, SELECT TABLE, PERCENT ACROSS

Should produce a table with the marital distribution of different age groups in 1990. Copy and use data to answer exercise 3.

Exercise 4.

FILE, OPEN, (DIR)CENTREND, OPEN, MARR5090, OPEN. COMMAND, CROSSTAB, MARITAL, SELECT, YR, SELECT TABLE, CONTROL, RACE, SELECT TABLE PERCENT DOWN

Should produce a table with the marital distribution from 1950 to 1990 for blacks and non-blacks. Use the data to answer exercise 4.

Exercise 5

FILE, OPEN, (DIR)CEN1990, OPEN, MARITAL9, OPEN. COMMAND, CROSSTAB, RACELAT, SELECT,MARITAL, SELECT TABLE, PERCENT ACROSS

Should produce a table with the 1990 marital distribution for all major race/ethnic groups in the U.S.. Use the data to answer the exercise 5.

Exercise 6.

FILE, OPEN, (DIR)CEN1990, OPEN, MRR9-YW, OPEN. COMMAND, CROSSTAB, YAGE, SELECT, MARSTUS, SELECT TABLE, PERCENT ACROSS

Should produce a table with the educational levels of never married women of ages 23 to 28 in 1990 U.S.. Use the data to answer the exercise 6.

#### Exercise 7.

Repeat exercise 6 using women of another race/ethnic group by constructing your own program commands. All commands should be the same as in exercise 6 except that you should use the

MODIFY,OMIT,RACELAT,SELECT,....,SELECT - to omit the race and ethnic groups that are not of interest to you.

Should produce a table with the educational levels of never married women of ages 23 to 28 in 1990 U.S. for a race/ethnic group of your choice Use the data to answer exercise 7.

Do the Two Discussion Questions: Provide very, very brief answers.

TOPIC FIVE. SECTION B. .MARRIAGE CHOICES

#### Exercise 8.

FILE, OPEN, (DIR)CEN1990, OPEN, MARITAL9, OPEN.

MODIFY, OMIT, MARITAL, SELECT, WIDOWED, DIVORCED, SEPRATED, NEVMRRD, SELECT.

COMMAND, CROSSTAB, GENDER, SELECT, AGE, SELECT

TABLE, CONTROL, MARITAL, SELECT

TABLE, PERCENT ACROSS

Should produce a table with the age distributions of married men and women in 1990 U.S. Use the data to answer the exercise 8.

#### Exercise 9.

FILE, OPEN, (DIR)CEN1990, OPEN, SPAGE9YM, OPEN.

MARGINALS.

(Copy distribution for wife's age - WAGE)

FILE, OPEN, (DIR)CEN1990, OPEN, SPAGE9YW, OPEN.

MARGINALS,

(Copy distribution for husband's age - HAGE)

Use the copied information to answer exercise 9.

#### Exercise 10.

FILE, OPEN, (DIR)CEN1990, OPEN, SPRAC9-M, OPEN.

MODIFY, OMIT, HRACELAT, SELECT, BLACK, LATINO, ASIAN, NLOTHER, SELECT.

COMMAND, CROSSTAB, HAGE, SELECT, WRACELAT, SELECT

TABLE, CONTROL, HRACELAT, SELECT

TABLE, PERCENT ACROSS

Should produce a table with the race/ethnicities of the spouses of white men in 1990 U.S by age group. Use the data to answer the exercise 10. Please note that the information in the ALL row tells you what proportion of white men choose to marry individuals of different race/ethnicity.

#### Exercise 11.

FILE, OPEN, (DIR)CEN1990, OPEN, SPRAC9-W, OPEN.

MODIFY, OMIT, WRACELAT, SELECT, NLOTHER, SELECT.

MODIFY, OMIT, WAGE, SELECT, 15-24, 35-44, 45-54, 55+, SELECT.

COMMAND, CROSSTAB, WRACELAT, SELECT, HRACELAT, SELECT

TABLE, CONTROL, WAGE, SELECT

TABLE, PERCENT ACROSS

Should produce a table with the race/ethnicities of the husbands of white, black Asian and Latina women ages 25-34 in 1990 U.S. Use the data to answer the exercise 11.

#### Exercise 12.

FILE, OPEN, (DIR)CEN1990, OPEN, SPED9-W, OPEN.

MODIFY, OMIT, WAGE, SELECT, 15-24, 35-44, 45-54, 55-64, 65+, SELECT.

COMMAND, CROSSTAB, WEDUC, SELECT, HEDUC, SELECT TABLE, CONTROL, WAGE, SELECT TABLE, PERCENT ACROSS

Should produce a table with the educational attainment of the husbands of women ages 25-34 in 1990 U.S. Use the data to answer the exercise 12.

Exercise 13.

A) FILE, OPEN, (DIR)CEN1990, OPEN, SPRAC9-W, OPEN.

MODIFY, OMIT, RACELAT, SELECT, NLWHITE, ASIAN, NLOTHER, SELECT.

MODIFY, OMIT, WAGE, SELECT, 15-24, 35-44, 45-54, 55+, SELECT.

MODIFY, OMIT, WEDUC, SELECT, LTHS, HSGRAD, SOMECOLL, SELECT.

COMMAND, CROSSTAB, WRACELAT, SELECT, HRACELAT, SELECT

TABLE, CONTROL, WAGE, WEDUC, SELECT

TABLE, PERCENT ACROSS

Should produce a table with the race/ethnicity of the husbands of black and Latino women ages 25-34 with a college education in 1990 U.S. Use the data to answer the exercise 13.

B) FILE, OPEN, (DIR)CEN1990, OPEN, SPED9-W, OPEN

MODIFY, OMIT, RACELAT, SELECT, NLWHITE, ASIAN, NLOTHER, SELECT.

MODIFY, OMIT, WAGE, SELECT, 15-24, 35-44, 45-54, 55+, SELECT.

MODIFY, OMIT, WEDUC, SELECT, LTHS, HSGRAD, SOMECOLL, SELECT.

COMMAND, CROSSTAB, WRACELAT, SELECT, HEDUC, SELECT

TABLE, CONTROL, WAGE, WEDUC, SELECT

TABLE, PERCENT ACROSS

Should produce a table with the educational attainment of the husbands of black and Latino women ages 25-34 with a college education in 1990 U.S.. Use the data to answer the exercise 13.

Do the Four Discussion Questions: Provide very, very brief answers.

# SOC251 - APPLIED DEMOGRAPHY LAB FIVE POVERTY

# BE VERY, VERY BRIEF IN YOUR ANSWERS. WRITE AND LABEL ANSWERS VERY CLEARLY.

Exercise 1. Use centrend/FPOV702k.DAT to create a line graph indicating the percentage of black and non-black family households in poverty from 1970 to 2000. In WebCHIP, make POV the row variable, YEAR the column variable and RACE the control variable. In excel, use only data for the rows labeled POVERTY. In the chart wizard, series 1 in the legend should be labeled NON-BLACK. Series 2 should be labeled BLACK. The X-axis of the chart should be labeled with YEAR values. Be sure to provide a meaningful title and don't forget to include your name.

Very briefly describe your findings.

Exercise 2. Using the data set cen2000/FAMILY2k.DAT, create a stacked column chart (the second subtype in the first row of column charts) with bars for each race/ethnic group. For each group, the columns should indicate the percentage of families in poverty in 2000. In WebCHIP, make the POV the row variable and RACELAT the column variable. In excel, use only data for the row labeled POVERTY. Do not use the data for the NLOTHERS and the NLMULTI groups when constructing the chart. Do not label the series in the legend. The X-axis of the chart should be labeled with the names of the race-ethnic groups. Be sure to provide a meaningful title and don't forget to include your name.

Describe the differences between race/ethnic groups.

Exercise 3. Using data from 1970 to 2000 (centrend/FPOV702k.DAT), create a clustered column chart with side-by-side bars (the first subtype in the first row of column charts) for each family type in poverty. In each year, the bars should indicate the percentage of each family type living in poverty. In WebCHIP, make POV the row variable, FAMTYPE the column variable and YEAR and RACE the control variables. In excel, use only the data for the rows labeled POVERTY. In the chart wizard, series 1 should be labeled MrrdCpl, series 2 MaleFam and series 3 FemFam. Be sure to provide a meaningful title and don't forget to include your name.

- a) Which family types experience the highest poverty?
- b). Describe trends in the poverty of different types of families.
- c). Why do you think different family types experience varying levels of poverty?

# **SOC251 - APPLIED DEMOGRAPHY** LAB SIX: WOMEN'S EDUCATION

# BE VERY, VERY BRIEF IN YOUR ANSWERS. YOU MAY WRITE YOUR ANSWERS BUT BE SURE TO LABEL THEM ALONG WITH THEIR ACCOMPANYING CHARTS VERY CLEARLY. DUE AT THE END OF CLASS.

Exercise 1. Using census data from 1950 to 2000 in centrend/educ502k.dat, draw two clustered column charts with side by side bars (the first subtype in the first row of column charts), one for non-blacks and one for blacks which show the percentages of men and women ages 25-34 who are college graduates from 1950 to 2000. In WebCHIP, make EDUC the row variable, GENDER the column variable and YEAR, RACE and AGE the control variables. The charts should have years on x-axes and the percent of each group with a college degree on the y-axes. Series 1 will be male and series 2 female.

- a. How does gender influence educational attainment?
- b. How has the gender gap changed over time?
- c. Why has the gender gap changed over time?
- d. What differences, if any, are there in the evolution of the gender gap between blacks and non-blacks?
- e. What is one explanation for the race-ethnic differences in the gender gap?
- f. Why have we used the age group 25-34 rather than the age group 65+ for these analyses?

Exercise 2. Using the data in cen2000/educimm2k.dat, create a 100% stacked column bar (the third subtype in the first row of column charts) showing the percentages of each sex by level of educational attainment. In WebChip, make EDUC the row variable and GENDER the column variable. The chart should have the x-axis labeled male and female. The series will be labeled <9yrs, 10-12yrs, etc.

- a. Focusing on people those with at least a college degree, describe the gender gap among those with higher levels of educational attainment in 2000.
- b. Are the gender gaps in higher educational attainment shown in this exercise different from those in the previous exercise? How?
- c. How do you reconcile the gender gaps in higher educational attainment shown in the graphs for exercise 1 with those for exercise 2?