Introduction to the Demography of American Indians and Alaska Natives Kimberly R. Huyser, University of New Mexico

## Summary

American Indians and Alaska Natives (AI/ANs) are among the first inhabitants of North America and thus have experienced a number of population changes over the past couple hundred years. A few examples of the changes are due to the arrival of new immigrants, the establishment of new governments, and growing rates of interracial marriage. In this module, you will begin to describe the $\mathrm{AI} / \mathrm{AN}$ population in the United States at national, state, and county level. As you do the following exercises, you will conduct analysis and write a brief paragraph about what you observe and report changes.

Learning Goals
Skill

- Using software to access and analyze Census and ACS data
- Learning how to construct, read, and interpret bivariate tables displaying frequencies and percentages
- Using real world data to enhance and support key course concepts

Substance

- To understand AI/ANs population shifts


## Activity 1 - State versus National trends

Census reporter - New Mexico vs US trends
You will use the Census Reporter (http://censusreporter.org/) to compare the characteristics of the state of New Mexico to the overall US characteristics.

1. Go to Census Reporter (http://censusreporter.org/) and type in "New Mexico" on the Profile line. What do the demographic and economic characteristics tell you about the state?
2. Go back to the homepage and type "United States" into the Profile line. Comparing the New Mexico characteristics to the US characteristics, how does the state of New Mexico compare? Any commonalities? Any differences?

Activity 2 - Changing Racial Identities
You will explore where AI/ANs dominantly live in the United States. To begin to understand AI/AN geographic distribution, you will use the Social Explorer (http://www.socialexplorer.com/) to compare AI/ANs in the 1980 Census to AI/ANs in the 2013 ACS.

Follow the instructions and answer the questions below:

Instructions:

- Go to http://library.unm.edu/applications/dam/plink.php?db id=737. You can also access it by going to the library home page http://library.unm.edu/ and under the section labeled "Databases," in the "by Title" box, click on the letter " S ". A list of all our database subscriptions with titles that start with the letter "S" will display. Scroll down until you see "Social Explorer."
- Click "Log in with Institutional Username/Password" or "sign up"
- It is free but you must use your unm.edu email
- Click on Maps and choose the US Demography map (Start now)
- You may click skip tour, if you wish
- In the left hand corner under "change data"
- For question \#1:
- Under "Survey Year" move scroll bar to 1980 (and click)
- Under Total Population: Click on "Race"
- Click on "American Indian, Eskimo, and Aleut"
- You should now have a map of the US with shaded states
- In the middle of the page underneath "show data by", turn OFF the automatic button and change it to by "census tract".
- You show now see a map of the US but smaller shaded areas
- See the key in the upper right hand corner for shading key
- Answer Question \#1 while looking at this map
- Zoom into the map to see the contiguous map more closely
- Tip: Take a screenshot of the maps so you can compare maps
- Question \#2
- In the left hand corner under "change data"
- Under "Survey Year" move scroll bar to 2013 (and click)
- Click on "American Indian and Alaska Native Alone"
- You should now have a map of the US with Census tracts
- Tip: Take a screenshot of the maps so you can compare maps
- Answer Question \#2 while looking at this map

Questions to answer:

1. Examine the contiguous United States map of AI/ANs in the 1980 Census and briefly write up what you observe (e.g. what states have the highest concentration of AI/ANs, which have the lowest, describe any "surprises" you may have found). Worth 5 points.
Tip: To earn full points, you should present at least two observations.
2. Examine the contiguous United States map of AI/ANs in the 2013 ACS and briefly write up what you observer (e.g. what states have the highest concentration of AI/ANs, which have the lowest, describe any "surprises" you may have found). Worth 5 points.
Tip: To earn full points, you should present at least two observations.
3. Comparing the 1980 map to the 2013 map, briefly describe any changes or shifts that you observe (e.g. what states have similar composition across years, what states have seen a growth in number of AI/ANs, describe any "surprises" you may have found). Worth 10 points.
Tip: To earn full points, you should present between 2-4 observations.
4. Based on our course thus far, how would you explain the population distribution and its changes? Worth 10 points.
Tip: To earn full points, you must include citations of readings and class dates in APA formatting to support your explanation and claims.

## Activity 3 - AIAN Growth Exercise

Built from module for ssdan.net
(http://serc.carleton.edu/sp/ssdan/examples/31612.html)
Description of Activity: The American Indian population in the U.S., New Mexico, and many other states has shown significant growth in recent decades. It is also a comparatively young population. In this activity, you will look at these growth patterns, compare the size and age distribution of the American Indian population in the U.S., New Mexico, \& several reservation counties. Then you will think about and briefly write a paragraph or two on what you see as implications of the data that you have examined.

## Activity Instructions:

- You will need to go to the following web site http://www.censusscope.org
- Click on "Charts \& Trends" at the top of the page.
- Then click on "Population by Race" on the left side of the page (under Census Trend Charts).
- Look at the table at the bottom of this page.
- Answer question 1, while examining the table at the bottom of the table, "Hispanic Population and Race Distribution for Non-Hispanic Population."
- Now click on "State" and New Mexico (under Change Location on left side of the page) and click on "View Chart."
- Look at the table at the bottom of this page.
- Answer question 2, while examining the table at the bottom of the table, "Hispanic Population and Race Distribution for Non-Hispanic Population."
- Now click on one of the reservation counties in New Mexico, such as San Juan or Sandoval county (also under Change Location), then click "View Chart."
- Answer question 3, while examining the table at the bottom of the table, "Hispanic Population and Race Distribution for Non-Hispanic Population."
- Finally, click on "Age Distribution" (under Census Trend Charts). You may need to zoom out to change locations.
- Look at the age distribution for the U.S. \& New Mexico
- Then look at the age distribution for some New Mexico counties, such as San Juan or Sandoval County. You can also look at your home county if you are from New Mexico (If you are not from NM, you will need to click on your home state first, then your home county in that state.)
- You may want to take screenshots of each age distribution to answer question 4.


## Activity Questions:

1. Compare the growth rates shown for the "White" population with the growth rates shown for the American Indian population, 1980-2000. How do these growth rates compare? Worth 5 points.
2. Compare the growth rates for the "White" population in the state with the growth rate for the American Indian population in the state, 1980-2000. How do these growth rates compare? How does the growth rate of the American Indian population in the state compare with the growth rate for American Indians in the U.S.? Worth 5 points.
3. Compare the proportion of population here that is "White" with that which is "American Indian." How have those proportions changed, 1980-2000? How do the growth rates of these populations compare? Worth 5 points.
4. How do these age distributions compare? Worth 5 points.
5. Describe each of the identities described in Real Indians by Garroutte and answer the following questions: Based the Garroutte reading and other materials from the course thus far, how would you explain the growth rates seen at each geographic level? Using the age distributions, what are some of the implications to the population growth? Worth 10 points.
Tip: To earn full points, it must be in coherent essay prose and you must include citations of readings and class dates in APA formatting to support your explanation and claims.

## Activity 4 - American Indian earnings

## Description of Activity:

In this activity, you will explore income differences in the US. You will use the American Community Survey (ACS) 2006-2008 to compare yearly earnings across race and ethnic groups. The ACS sample is of full-time, year-round workers who are 16 years and older. The race and ethnic groups are single-race respondents. Each question is worth 6 points.

## Activity Instructions:

- You will need to go to the following web site -
http://www.ssdan.net
- Click on "DataCounts!"
- Click on "Datasets"
- In dropdown menu, under "Choose a Collection or Dataset" choose "acs2008" and click submit
- In dropdown menu, under "Choose a Collection or Dataset" choose "Earn.dat" and click submit
- Click on WebCHIP 3.0
- If you have problems, ensure the most recent Java has been installed
- You should have a menu at the top of your webpage with "File" "Edit" etc. You will now begin to do data analysis
- First, you will describe the data: Click on "Command " and select "Marginals"
- Answer Question \#1
- Second, you will look at the association between income and race: Click on "Command" and select "Crosstab" - a dialogue box will pop open
- Row variable: Select "Earn"
- Column variable: Select "Race/Eth"
- Click on "Table" and select "Percent Down"
- This table tells you what percentage of each race and ethnic group exists in each earnings category
- Answer Question \#2
- Click on "Table" and select "Bar chart"
- A window with a colored bar chart will open.
- Right-click on bar chart and "Save as"
- Save the bar chart and insert into the activity
- Answer Question \#3
- Click on "Table" and select "Control" - a dialogue box will pop open
- Select "Gender" and okay
- Click on "Table" and select "Percent Down"
- Click on "Table" and select "Bar chart"
- A window with a colored bar chart will open.
- Click next graph
- Right-click on each bar chart and "Save as"
- Save each bar chart and insert into the activity
- Answer Question \#4


## Activity Questions:

1. After you have run the initial marginals command, four boxes will be produced. Look at the first table labeled "RaceEth". Fill in the following table (be sure to insert it into your assignment) and answer the following questions.

| Race/Ethnic <br> Group | NHWhite <br> (non- <br> Hispanic <br> White) | Black | Asian | Hispanic | AmIndian <br> (American <br> Indian or <br> Alaska <br> Native) | NHOther <br> (non- <br> Hispanic <br> Other <br> Race) | NHMulti <br> (non- <br> Hispanic <br> Multi- <br> Race) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Percent of <br> Population |  |  |  |  |  |  |  |
| Total <br> Number in <br> Population |  |  |  |  |  |  |  |

1a. What percent of the population is AIAN?
1 b . What percent of the population is non-Hispanic white?
2. Look at the table labeled "Crosstab: Earn/RaceEthn" and answer the following questions:
2a. Look down the column of AmIndian and report which income category is least and most frequent (has the smallest and largest percent)
2b. Look down the column of NHWhite and report which income category is least and most frequent
2c. Look down the column of a race or ethnicity of your choose and report which race/ethnicity you are examining and the income category is least and most frequent

3a. Insert bar chart here:
3b. What strikes you about the differences of income across race and ethnic groups?
Hint: you may want to examine answers to 2a through 2c to see the percentages
4a. Insert Male bar chart here
4b. Insert Female bar chart here
4c. Compare AIAN men to AIAN women, what strikes you about the differences of income across gender?
5. Based on our course thus far, how would you explain the income of AIANs relative to whites?
Tip: To earn full points, it must be in coherent essay prose and you must include citations of readings and class dates in APA formatting to support your explanation and claims.

## Activity 5 - American Indian Poverty

Description of Activity:
In this Activity, you will explore income differences in the US. You will use the American Community Survey (ACS) 2006-2008 to compare poverty levels across race and ethnic groups. The ACS sample is of individuals who are 28 years and older.

The race and ethnic groups are single-race respondents. Each question is worth 6 points.

Within this exercise, the poverty definitions are based on poverty thresholds published by Census Bureau each year and are determined by age, number of people in the household, and total household income. To give you an idea, I've included the general amounts for elderly living alone.

- Poverty: living at $<100 \%$ of 2010 poverty threshold ( $<\$ 10,458$ for person 65 or above; living alone)
- Near Poor: living at 100-199\% of the poverty threshold (\$10,459-20, 915; 65+; living alone)
- Middle: living at 200-399\% of the poverty threshold (\$20,916-\$41,831; 65+; living alone)
- Comfortable: living at $400 \%$ or greater of the poverty threshold ( $>\$ 41,832$; 65+; living alone)
aInstructions:
- You will need to go to the following web site http://www.ssdan.net
- Click on "DataCounts!"
- Click on "Datasets"
- In dropdown menu, under "Choose a Collection or Dataset" choose "acs2008" and click submit
- In dropdown menu, under "Choose a Collection or Dataset" choose "PovEduc.dat" and click submit
- Click on WebCHIP 3.0
- If you have problems, ensure the most recent Java has been installed, use Safari or Firefox web browsers, and that your popup windows are not blocked.
- You should have a menu at the top of your webpage with "File" "Edit" etc. You will now begin to do data analysis
- First, you will describe the data: Click on "Command " and select "Marginals"
- Answer Question \#1
- Second, you will look at the association between income and race: Click on
"Command" and select "Crosstab" - a dialogue box will pop open
- Row variable: Select "PovLevl"
- Column variable: Select "Race/Eth"
- Click on "Table" and select "Percent Down"
- This table tells you what percentage of each race and ethnic group exists in each poverty category
- Answer Question \#2
- Click on "Table" and select "Control" - a dialogue box will pop open
- Select "Gender" and okay
- Click on "Table" and select "Percent Down"
- Answer Question \#3
- Click on "Table" and select "Release"
- Click on "Table" and select "Control" - a dialogue box will pop open
- Select "EducAll" and okay
- Click on "Table" and select "Percent Down"
- Pick two education levels that influence poverty
- Put your chosen education levels in Question \#4
- Click on "Table" and select "Bar chart"
- A window with a colored bar chart will open.
- You should have 7 windows-
- A pop-up window will appear. You will may need to click "next graph button" to open all windows
- To make the entire graph readable expand your window and all labels appear
- Pick two education levels
- Right-click on bar chart of your education level of choice and "Save as"
- Be sure to make the window larger to ensure all your data labels are present.
- Save the bar chart for each level of education and insert into the activity
- Answer Question \#5
- Click on "Table" and select "Percent Down"
- Click on "Table" and select "Bar chart"
- A window with a colored bar chart will open.
- Click next graph
- Right-click on each bar chart and "Save as"
- Save each bar chart and insert into the activity
- Answer Question \#4


## Activity Questions:

1. After you have run the initial marginals command, five boxes will be produced. Look at the fourth table labeled "PovLevel".
1a. What percent of the US population experiences poverty?
1 b . What percent of the US population experiences near poverty?
1 c. What percent of the US population is considered comfortable?
2. Look at the table labeled "Crosstab: PovLevel/RaceEthn" and answer the following questions:
2a. Look down the column of AmIndian and report which poverty category and percentage that is least and most frequent (has the smallest and largest percent) 2 b . Look down the column of NHWhite and report which poverty category and percentage that is least and most frequent
2c. Look down the column of a race or ethnicity of your choose and report which race/ethnicity you are examining and the poverty category and percentage that is least and most frequent
3. Look at the two tables under "Control = Gender" and answer the following questions:
3a. Looking at table labeled "Gender = Male" and look down the column of AmIndian and report which poverty category and percentage that is least and most frequent (has the smallest and largest percent)
3b. Looking at table labeled "Gender = Female" and look down the column of AmIndian and report which poverty category and percentage that is least and most frequent (has the smallest and largest percent)
$3 c$. Comparing your answers for poverty between AmIndian males and females, what strikes you about the difference?
4. Which two levels of education do you think probably has the most influence on poverty level (choose at least one that prevents poverty and one that may not prevent poverty)? Choose from categories: (0-9 years of schooling), (10-12 years of schooling), HSGrad, SomeColl, CollGrad, Masters, and PhD-Prof.
4a. Insert first bar chart
4b. Insert second bar chart
5. Based on our course thus far, how would you explain the connection between education and poverty level? What factors do you think are unique to the AIAN population?
Tip: To earn full points, it must be in coherent essay prose and you must include citations of readings and class dates in APA formatting to support your explanation and claims.

## Activity 6 - Marriage, Race and Wealth

Description of Activity:
In this Activity, you will explore income differences in the US. You will use the Census 2000 to compare poverty levels across race and ethnic groups. The Census sample is of individuals who are 1 years and older. The race and ethnic groups are single-race respondents. Questions 1 through 4 are worth 6 points each. Questions 5 through 7 are worth 2 points each.

## Activity Instructions:

- You will need to go to the following web site -
http://www.ssdan.net
- Click on "DataCounts!"
- Click on "Datasets"
- In dropdown menu, under "Choose a Collection or Dataset" choose "custom" and click submit
- In dropdown menu, under "Choose a Collection or Dataset" choose "mobed2k.dat" and click submit
- Click on WebCHIP 3.0
- If you have problems, ensure the most recent Java has been installed, use Safari or Firefox web browsers, and that your popup windows are not blocked.
- You should have a menu at the top of your webpage with "File" "Edit" etc. You will now begin to do data analysis
- First, you will describe the data: Click on "Command " and select "Marginals"
- Answer Question \#1
- Second, you will look at the association between homeownership and race: Click on "Command" and select "Crosstab" - a dialogue box will pop open
- Row variable: Select "Homeownr"
- Column variable: Select "RaceLat"
- Click on "Table" and select "Percent Down"
- This table tells you what percentage of each race and ethnic group owns a home
- Answer Question \#2
- Third, you will look at the association between marital status and race: Click on "Command" and select "Crosstab" - a dialogue box will pop open
- Row variable: Select "Marital"
- Column variable: Select "RaceLat"
- Click on "Table" and select "Percent Down"
- This table tells you what percentage of each race and ethnic group exists in each marital status category
- Answer Question \#3
- Click on "Table" and select "Control" - a dialogue box will pop open
- Select "HomeOwnr" and okay
- Click on "Table" and select "Percent Down"
- Answer Question \#4
- The "HomeOwnr = Own" table, it tells you about the relationship between race/ethnicity and marital status among people who are homeowners.
- The "HomeOwnr = NotOwn" table, it tells you about the relationship between race/ethnicity and marital status among people who do NOT own a home (thus, are renters).


## Activity Questions:

1. After you have run the initial marginals command, six boxes will be produced. 1a. Examining the RaceLat box, what percent of the US population is AI/AN? And, what percent is another Race/Ethnicity of your choice (state the race)?
1b. Examining the Marital box, what percent of the US population is currently married (Curmrrd) and what percent is never married (Nevmrrd)?
1c. Examining the HomeOwnr box, what percent of the US population owns a home (own)?
2. Look at the table labeled "Crosstab: HomeOwnr/RaceLat" and answer the following questions:
2a. Look down the column of AmIndian and report the category and percent that is least and most frequent (has the smallest and largest percent)
2 b. Look down the column of NHWhite and report the category and percent that is least and most frequent
2 c. Look down the column of a race or ethnicity of your choosing and report which race/ethnicity you are examining and the category and percent that is least and most frequent
3. Look at the table labeled "Crosstab: Marital/RaceLat" and answer the following questions:
3a. Look down the column of AmIndian and report the category and percent that is least and most frequent (has the smallest and largest percent)
3b. Look down the column of NHWhite and report the category and percent that is least and most frequent
3c. Look down the column of a race or ethnicity of your choosing and report which race/ethnicity you are examining and the category and percent that is least and most frequent
4. Look at the two tables under "Control = HomeOwnr" and answer the following questions:
4a. Looking at table labeled "HomeOwnr = Own" and look down the column of AmIndian, NHWhite, and the racial/ethnic group that you picked from question \#3 and report with percentage which marital status category is least and most frequent (has the smallest and largest percent)
4b. Looking at table labeled "HomeOwnr = NotOwn" and look down the column of AmIndian, NHWhite, and the racial/ethnic group that you picked from question \#3 and report with percentage which marital status category is least and most frequent (has the smallest and largest percent)
5. Using the tables produced in the Activity, what trends do you see between race and homeownership (see table from question 2)?
6. Using the tables produced in the Activity, what trends do you see between race and marital status (see table from question 3)?
7. Using the tables produced in the Activity, what trends do you see between race and marital status once you consider the role of homeownership (see table from question 4)?
