# Community Change

**Topic(s):**
Population growth and decline, migration, economics

**Grade Level:**
9-12

**Approx. Time Required:**
45 minutes

**Learning Objectives:**
Students will be able to:

- Explore changes in neighborhoods, using U.S. Census Bureau data.
- Analyze trends and shifts in neighborhood populations over time.
- Practice qualitative and quantitative analysis.
- Compare and contrast how a topic is addressed in a variety of primary and secondary sources.
- Understand the data tool being used and why it's important that this information is tracked.

## Introduction

The 2020 Census Statistics in Schools (SIS) program is designed to educate students about the decennial census and to teach them educational concepts and skills, such as data literacy, through use of census data in the classroom. Responding to the census helps your community get its fair share of funding. Census data guides how more than $675 billion in federal funding is distributed to states and communities each year. These funds support vital community programs that help children, such as schools, hospitals, housing, and food assistance. By educating students about the 2020 Census, you can help encourage a complete count.

The 2020 Census SIS program can be used with educational standards across the United States. You can use the topics and learning objectives above to determine which subject and unit plan or theme this activity will best fit into.

## About the 2020 Census

In addition to the information that is built into instructions for this activity, the following points provide an easy, grade-appropriate way to explain the decennial census to your students.

- The decennial census is a count of every person living in the United States that occurs every 10 years.
- It is important that every person be counted so that the government can properly distribute $675 billion to communities.
- The population of every state as counted in the census also determines how many representatives each state is given in the U.S. House of Representatives.
- You can do your part by making sure an adult in your home counts you—and every person living in your home—in the 2020 Census.

## Materials Required

- Printed student worksheets
- A projector or an interactive whiteboard with internet access
- Student laptops or tablets to access the *Census Flows Mapper* data tool (https://flowsmapper.geo.census.gov/map.html)
  - Students will work together in pairs or small groups; therefore, it is not necessary to have a laptop or a tablet for every student.
  - If technology is not available in your classroom, you may print out the maps and the corresponding data for your county and nearby counties for students to review.

## Worksheet Description

This worksheet focuses on how communities or parts of a state change—or do not change—over time and introduces students to the concept of "community morphology." Students will use U.S. Census Bureau data to analyze trends and shifts in community populations over the past 10 years in their county. These trends include population growth or decline, and migration patterns.

## Before the Activity—5 Minutes

1. Review key vocabulary with students:
   - **Apportionment:** The process of dividing the 435 seats in the U.S. House of Representatives among the 50 states according to each state's population, which is determined by the decennial census; at the conclusion of each census, the results are used to calculate the number of House seats to which each state is entitled.
   - **Flows:** The origin and destination combination of two counties for either migration or commuting.
   - **Mover:** A person who reported a different residence one year ago on the U.S. Census Bureau's American Community Survey.
   - **Inbound:** A flow into the selected county from another county.
   - **Outbound:** A flow out of the selected county into another county.
2. Ask students how parts of their community or state have changed over time. Use your current city or region to illustrate changes in population. For example, what are some areas with new construction or what areas in your part of the state do people seem to be moving to?

3. Ask students where they might go to research such data about their city, county, or state. Explain to students that today they will be looking at population changes within their part of the country, based on data collected by the Census Bureau. Then provide the following details:

   - The data the class will be looking at was collected through the decennial census, which is a constitutionally mandated count of everyone living in the United States. The decennial census is completed once every 10 years.
   - Data from the census affects how over $675 billion is spent on federal programs each year.
   - This data also affect the reapportionment of seats in the U.S. House of Representatives.

## During the Activity—30 Minutes

1. Hand out the student worksheets. Then assign students to work together in pairs or small groups, depending on the needs of your class and the technology available.

2. Guide students to open the *Census Flows Mapper* data tool (https://flowsmapper.geo.census.gov/map.html) on their laptop or tablet by modeling this for them, using the projector or interactive whiteboard.

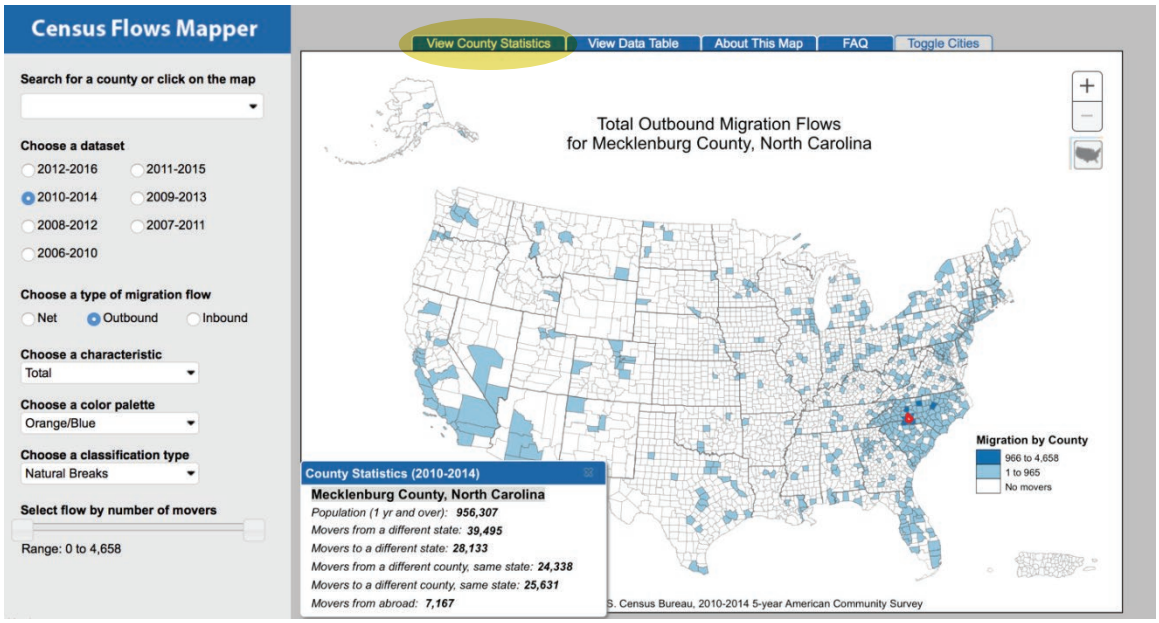
   **Note:** If students do not have access to technology in the classroom, this activity can be done as a class.

3. Explain to students that the Census Flows Mapper can be used to show migration patterns, telling us where people are moving **to** and **from** based on where we live. Then instruct them to follow these steps:

   1. Select your county from the drop-down menu on the left of the data tool by typing in your county name.
   2. Select the years 2011-2015.
   3. Keep the migration type as Net.
   4. Keep the characteristic category as Total and keep the color scheme as Orange/Blue.

   The map will populate with various counties highlighted in blue or orange. **Blue** counties show counties with more outbound migration and **orange** counties show sources of more inbound migration.

5. To learn specific information about your county's flows, click on the box at the top that says View County Statistics (see image below).



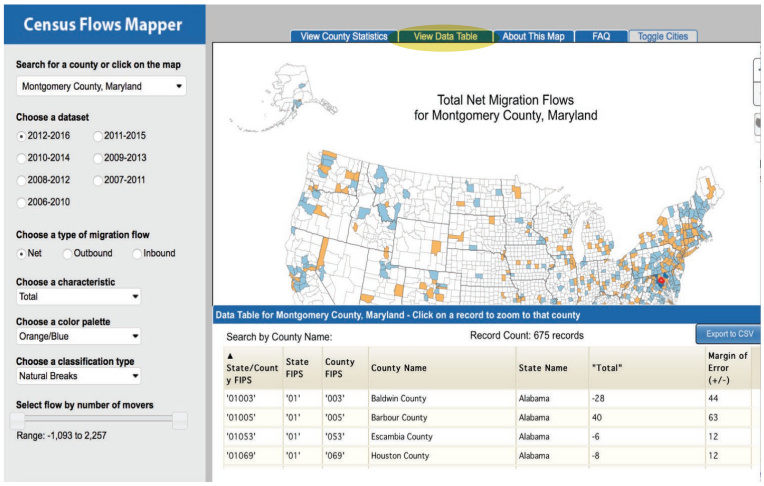

6. To see how the flows have changed over time, click on the year ranges. For some of the questions on the worksheet, students will need to toggle between the different year ranges on the left side of the screen.

4. Make sure students understand the difference between "outbound" and "inbound," noting that the outbound setting highlights people who are **leaving** your county and the inbound setting highlights people who are **moving to** your county. Then have students answer the questions on their student worksheet. Sample answers for Montgomery County, Maryland, are included below.

Question #1: What patterns do you notice? Does anything surprise you?

*Answers will vary. It may be of interest to a student studying our example—Montgomery County, Maryland — that there is more outbound movement to other counties, but more inbound movement from other states. They should consider reasons why this may happen. Due to Montgomery County's proximity to Washington, D.C., it may be that people moving from other states to work in Washington, D.C., may actually be living in Montgomery County, Maryland, instead.*

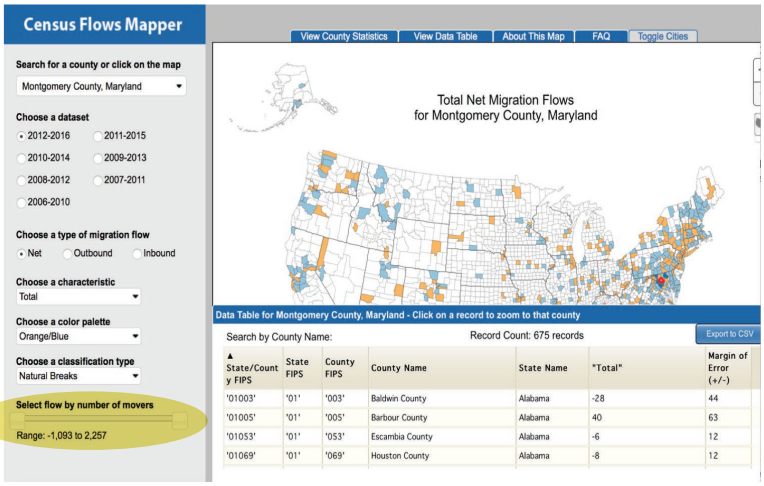
**Note:** If students are interested in comparing the raw data in order to answer this question (or any other questions), direct them to click View Data Table at the top of the Census Flows Mapper tool, where they can then download a CSV file of all the data to analyze.




Question #2: Based on the map, where are some places that people leaving your county are moving to? Any surprises?

> *Answers will vary, but for Montgomery County, Maryland, students may note that people are moving to other locations along the East Coast.*

**Note:** If students want to filter the data to see where the most people are moving to, they can use the "Select flow by number of movers" feature to filter down the data.



Question #3: Based on the map, where are some places that people moving to your county are moving from? Any surprises?

*Answers will vary, but for Montgomery County, Maryland, students may note that people are moving from other locations along the East Coast. They may be surprised to see some people moving from California on the map.*

Question #4: Since 2006, which four-year period saw the greatest number of people move into your county?

**Note:** Guide students in adding the number of movers from a different state and the number of movers from a different county, same state, to get the total number moving into their county in each four-year period.

| | Movers **from** a different state | Movers **from** a different county, same state | Total number of people who moved **into** my county |
|---|---|---|---|
| 2006-2010 | 35,220 | 15,211 | 50,431 |
| 2007-2011 | 34,920 | 14,652 | 49,572 |
| 2008-2012 | 35,311 | 14,122 | 49,433 |
| 2009-2013 | 36,151 | 13,457 | 49,608 |
| 2010-2014 | 35,023 | 13,335 | 48,358 |
| 2011-2015 | 34,891 | 14,097 | 48,988 |
| 2012-2016 | 34,734 | 16,513 | 51,247 |

Question #5: Since 2006, which four-year period saw the greatest number of people move out of your county or the county closest to where you live?

**Note:** Guide students in adding the number of movers moving to a different state and the number of movers moving to a different county, same state, to get the total number of people who moved out of their county in each four-year period.

| | Movers **to** a different state | Movers **to** a different county, same state | Total number of people who moved **out of** my county |
|---|---|---|---|
| 2006–2010 | 39,876 | 20,584 | 60,460 |
| 2007-2011 | 37,129 | 17,699 | 54,828 |
| 2008-2012 | 34,195 | 17,290 | 51,485 |
| 2009-2013 | 35,510 | 16,899 | 52,409 |
| 2010-2014 | 34,664 | 17,339 | 52,003 |
| 2011-2015 | 36,099 | 18,100 | 54,199 |
| 2012-2016 | 38,028 | 18,409 | 56,437 |

Question #6: Compare 2006-2010 to 2012-2016. How have your county's census flows changed? Which statistic surprises you the most?

*Answers may vary, such as: While the number of people who moved out of state (Maryland) decreased, the number of people who moved to a different county increased.*

Question #7: What do you think are the push-pull factors (factors that drive people away from a place and draw people to a new location) affecting your part of the state?

*Answers may vary. There may be factors such as jobs available, housing available, or income levels that contributed to this move.*

Question #8: Why do you think government officials care about the population changes of your county or part of your state?

*Answers may vary but could include: It can give them an overview of how people view the county. If people move from out of state into their county, there may be something about the state that is drawing people in that politicians should consider continuing to improve. If people are moving into or out of a specific county more, it may inform politicians about what is and isn't working in certain counties.*

5. Lead a class discussion about the observations that students made from the data. Ask students, "What surprised you about the data?" "What impact have these changes in population had throughout our county?"

*Answers will vary but may include businesses opening and closing, parts of a city or state being renovated or modernized, increased housing or new construction in certain areas, and increased or decreased public transportation.*

## After the Activity—10 Minutes

Tell students to imagine they are the mayor of your town. What changes in population are occurring? (Changes may include decreases or increases in certain racial, gender, or age characteristics.) What challenges could these changes create and how could you address them? Ask a few students to share their answers out loud with the class.

## Home Extension

Teachers, please read the instructions for the students' homework assignment out loud to the class:

*Take your student worksheet home and share it with an adult in your home. Explain to them how your part of the state has changed since 2006, based on the Census Bureau data you found in class. Ask them who will take the census in your household in March 2020.*