MICHIGAN

Giant Traveling Map Lesson

TITLE / AUTHOR: Michiganders on the Move / Allison Hoff and Gabrielle Likavec

Michigan ACADEMIC STANDARDS / SUITABLE DISCIPLINES: Under revision

OBJECTIVES:
Participants will:
- Learn about major cities in Michigan during three different historical periods
- Practice using grids and cardinal directions to locate cities in the state
- Practice using latitude and longitude lines (if appropriate for grade level)
- Analyze change over time
- Discuss topics such as the census (source of data), distribution of resources in the state, physical features associated with settlements, and implications of changes in population for political representation at various levels of government

RECOMMENDED GRADES: Fourth through adult

TIME NEEDED: 20 to 25 minutes, depending on whether discussion is held as part of the map visit or at a later time

MATERIALS:
- Compass rose
- 15 flat markers
- 15 tall cones
- 15 shorter, flexible cones
- 3 to 4 plastic chains for dividing the state
- List of Michigan cities by population for 1880/1930/2010

PREPARATION:
- Discuss reasons why people choose to live in different places
- Review historical settlement patterns in Michigan
  Review Michigan era info *Population Growth And Distribution In Michigan*
  http://geo.msu.edu/extra/geogmich/pop_thru_time.html
  Michigan Population Density (by county) 1790-2010
  https://www.socialexplorer.com/34f2f544a1/explore (these layers will be available as a time aware story map with a QR code this Fall)
- Develop predictions by participants about where they think people might live
- Consider push and pull factors in migration

RULES:
- Shoes are not allowed on the map. Please have participants remove shoes before walking on the map.
- No writing utensils on the map.
- No sliding on the map.

DIRECTIONS:
Using the list of cities and colored cones, participants will locate the fifteen most populous cities in Michigan for the years 1880, 1930, and 2010. They will then look for trends based on the east/west axis and north/south axis, waterways adjacent to and within Michigan, and defensive settlements from the 18th century. Encourage speculation about the factors that contributed to population development among the various regions of the state.

On the map:
1. Provide participants with an overview about exploring the top fifteen populated places in Michigan in 1880, 1930, and 2010 using U.S. Census data as a source of information.
2. Ask participants about the kinds of jobs they imagine people were doing in Michigan in 1880. Ask them to predict where people might be living. (If needed, ask the participants to consider where they live and why? What does a location need for people to live there?)
3. Take the 15 round makers. Pass them out to 15 of the participants (usually just ask them to take one and pass the remainder along).
4. Read the 15 largest cities one at a time, going down the row of participants and asking the participants to place the marker on the dot identifying the town (star in the case of Lansing).
5. Remind the participants that they can provide assistance to their classmates or colleagues about the location of a city based on cardinal directions or the grid. They should avoid shouting "over there", "this way", "left/right", etc. From the beginning of the lesson, model the use of cardinal directions or the grid. Participants may use the compass. Place NSEW labels on the walls or around the map.
6. After the flat, round markers are all on the map, ask the participants to interpret the new information that has been added to the map. Remind them that this is similar to adding a layer to a geographic information systems map.
7. Move on to the 1930 census and ask participants what jobs people were doing then. Ask them to predict where people might be living.
8. Pass out the 15 larger cones. Assign individual participants to place their cones on the 15 cities. For cities in the top 15 list by population in both 1880 and 1930, have participants pick up the flat marker and place it on top of the cone.
9. After the larger cones are all on the map, repeat Item 6 above, asking participants to think about what has changed and why.
10. Repeat process with 2010 census data and smaller or flexible cones. Have participants put the smaller cone on top of the flat, round marker creating a pyramid, or on top of the large cone if the city was previously in the top 15 only in 1930.
11. Discuss where most of the people live and why. What areas of the state have no large settlements? Why? This is also an opportunity to review the concentration of people in the state in terms of electoral districts.

NOTES:
Review the Major Eras in Michigan History for contextual information for the time periods highlighted in this lesson.

GUIDING QUESTIONS:
Q. What factors influence where people settle(d)?
A. Water, safety, transportation routes, physical geography

Q. How many of the fifteen largest cities are located along a river or lake in 1880 1930 2010?
A.

1880	1930	2010
15	15	15

Q. How many of the cities were in the various regions? Are they spread evenly or grouped together?
A.

1880	1930	2010
All 15 in Lower Peninsula , 2 in north, 3 central and 10 in the south (with 2 of them in the southeast)	All 15 in Lower Peninsula, 3 central and 12 in the south (with 5 of them in the southeast)	All 15 in Lower Peninsula, 15 in the south (with 10 of them in the southeast)

Q. For what reasons did this pattern exist?
A. Transportation opportunities, employment opportunities

Q. How did Michigan compare with the rest of the United States?
A. In 1880, the population of all of Michigan was **1,636,937** with the population of the United States at 50,189,209.

	1880	1930	2010
Michigan	1,636,937	4,842,325	9,883,640
United States	50,189,209	123,202,624	308,745,538

Q. How many cities in the new top fifteen in 1930- were also in the top fifteen in 1880? What percentage is that?
A. 11 , 73%

Q. How many cities in the new top fifteen in 2010 were also in the top fifteen in 1880? In 1930?
A. 6 out of 15 in 1880; 6 out of 15 in 1930

Q. Where are most of the large cities in Michigan located in 2010? Why?
A. SE Michigan because of the automobile industry

Q. Are major cities and suburbs significantly more concentrated than they were in 1930?
A. Depending on which suburbs are counted as being part of major cities, the concentration of population in major cities is similar to what it was in 1930.

Q. Generally speaking, how would you describe the majority of population movement and growth in Michigan over the past one hundred years?
A. 1910-1940: urban movement and growth into the southeastern region
   1970-90: out-migration due to recession and job loss.

Q. Why? What factors have encouraged people to move and live in cities?
A. Jobs.

MODIFICATIONS:
For younger participants, focus on the map key and compass rose. For older participants, invite them to have more autonomy in the lesson and incorporate additional mathematical concepts.

EXTENSIONS:
Consider using the census data in math lessons. How much larger is Detroit today than in 1880? How much larger is Detroit than the 15th largest city? How concentrated is the population in Detroit over time? How did the population of your city change?

For use with the GeoCivics activities (https://www.uccs.edu/geocivics/), invite participants to think about the current configuration of United States Congressional Districts in the state. Ask them to remember the key characteristics of how districts are drawn (equal population and contiguous). Invite them to pretend that their state has just two Congressional Districts; ask two people to pick up one of the chains and divide the state generally in half by population; invite two more people to divide the state into four districts (they may choose to move the original chain, or not). Discuss why some districts would likely be smaller in area than others. If appropriate, determine how to divide the state into state senate districts.

Consider when a giant floor map is a good tool for understanding geographic phenomena and when other tools (paper maps, online maps) might be more appropriate.

NOTE:
Thanks to National Geographic's Giant Traveling Maps team for the inspiration for this lesson, which is based on "People on the Move," a lesson for the North America Giant Map.

RESOURCES:
STATE WEBSITES
http://geo.msu.edu/extra/geogmich/pop_thru_time.html
https://www.census.gov/population/www/documentation/twps0027/twps0027.html#cities
https://www.census.gov/dmd/www/resapport/states/michigan.pdf
https://www.census.gov/history/www/through_the_decades/fast_facts/1880_fast_facts.html
https://www.census.gov/history/www/through_the_decades/fast_facts/1930_fast_facts.html
https://www.census.gov/library/publications/1885/dec/1880-compendium.html
https://www.census.gov/prod/www/decennial.html
https://www.census.gov/library/publications/1931/dec/1930a-vol-01-population.html
https://www.census.gov/population/www/censusdata/PopulationofStatesandCountiesoftheUnitedStates1790-1990.pdf
https://population.us/mi/

	City	1880	√		City	1930	√		City	2010	√
	City	**1880**	**√**		**City**	**1930**	**√**		**City**	**2010**	**√**
	State	**1,636,937**			**State**	**4,842,325**			**State**	**9,883,640**	
1	Detroit	116340		1	Detroit	1568662		1	Detroit	679,865	
2	Grand Rapids	32016		2	Grand Rapids	168592		2	Grand Rapids	195,355	
3	Bay City	20693		3	Flint	156492		3	Warren	135,147	
4	Jackson	16105		4	Saginaw	80715		4	Sterling Heights	131,996	
5	Kalamazoo	11937		5	Lansing	78397		5	Ann Arbor	119,303	
6	Muskegon	11262		6	Pontiac	64928		6	Lansing	115,222	
7	Saginaw	10525		7	Hamtramck	56268		7	Flint	97,810	
8	Port Huron	8883		8	Jackson	55187		8	Dearborn	95,295	
9	Flint	8409		9	Kalamazoo	54786		9	Livonia	94,708	
10	Lansing	8319		10	Highland Park	52959		10	Troy	83,336	
11	Ann Arbor	8061		11	Dearborn	50358		11	Westland	82,172	
12	Adrian	7849		12	Bay City	47355		12	Farmington Hills	81,235	
13	Battle Creek	7063		13	Battle Creek	43573		13	Kalamazoo	75,833	
14	Manistee	6930		14	Muskegon	41390		14	Wyoming	75,124	
15	Alpena	6153		15	Port Huron	31361		15	Rochester Hills	73,458	

1568662