# The Investigation of Austin, Minnesota

## A Prediction for Austin, MN and Its Future

### OVERVIEW & OBJECTIVES

Students will investigate their hometown through analyzing primary sources, investigating questions, and engaging in a field study over a semester's series of lessons.

The lessons occur throughout the semester with the Field Study Analysis Project their final project of the year. Students work in groups to develop conclusions regarding one of five questions to make predictions about their city's future.

These lesson focuses on Austin, but the activities and resources can apply to any Minnesota city.

**Students will be able to...**

- analyze their hometown through a field research study and academic research.
- investigate one of five specific research questions regarding their hometown and its future.
- synthesize, analyze and evaluate research in order to develop predictions for their hometown and its future.
- share their predictions with classmates and provide them with information to share with the city council and mayor.

### GRADES

11 and 12

### TIME

4-6 days

Information will be presented to students throughout the semester, but the final product will involve 2-3 days of field study as well as 2-3 days of research analysis and reflection, most of which will be done outside of class.

### REQUIRED MATERIALS

- Maps of the city showing a variety of demographic information such as population density, housing distribution, commercial building distribution, etc. from FactFinder [http://factfinder.census.gov/home/saff/main.html?_lang=en](http://factfinder.census.gov/home/saff/main.html?_lang=en)
- Maps and statistics of city, county, and state populations from the Census Bureau
- Computer Internet access for students
- Poster paper and markers
- Maps from the Planning Commission of the city, county, or metropolitan area
- Historical photographs and documents of the city's development
- Power Point of the city's historical development made by instructor to include maps, pictures and other visuals gathered from city hall, county committees, historical society, planning commission
- Field Study of the city designed by instructor
- History of Austin Quiz designed by instructor
- History of Austin Article by local official
- Handouts: “Population Distribution Patterns”; “Five Research Questions on the City's Future”; “Field Study Analysis Project”; “Things to Observe During the Field Study”; “Questions to Consider During Your Analysis”
Standard 1. People use geographic representations and geospatial technologies to acquire, process and report information within a spatial context.

9.3.1.2. Apply geographic information from a variety of print and electronic sources to interpret the past and present and plan for the future; provide rationale for using specific technologies for each application.

For example: Technologies—aerial photographs, satellite-produced imagery, and geographic information systems (GIS). Applications—determine obstacles that needed to be overcome in building the Suez and Panama Canals; gauge the extent of water pollution in a harbor complex in South Africa.

Standard 2. Geographic inquiry is a process in which people ask geographic questions and gather, organize and analyze information to solve problems and plan for the future.

9.3.1.2.2. Use geospatial technologies to develop plans for analyzing and solving local and regional problems that have spatial dimensions.

For example: Geospatial technology—Geographic Information Systems (GIS), online atlases and databases, Google Earth or similar programs. Regional problems that have spatial dimensions might relate to urban development, environmental concerns, transportation issues, flood control.

Standard 3. Places have physical characteristics (such as climate, topography and vegetation) and human characteristics (such as culture, population, political and economic systems).

9.3.2.3.1. Make inferences and draw conclusions about the physical and human characteristics of places based on a comparison of maps and other geographic representations and geospatial technologies.

For example: Physical characteristics—landforms (Rocky Mountains), ecosystems (forest), bodies of water (Mississippi River, Hudson Bay), vegetation, weather and climate. Human characteristics—bridges (Golden Gate Bridge), Erie Canal, cities, political boundaries, population distribution, settlement patterns, language, ethnicity, nationality, religious beliefs.

Standard 5. The characteristics, distribution and migration of human populations on the earth’s surface influence human systems (cultural, economic and political systems).

9.3.3.5.3. Compare the population characteristics of places at a range of scales using population pyramids, birth and death rates, and other key demographic variables.

9.3.3.5.8 Describe the factors (transportation, government policies, economic development, and changing cultural values) that shape and change urban and suburban areas in the United States.


9.3.3.6.1. Use generally accepted models to explain the internal spatial structure of cities in regions of the United States and other regions in the world.

For example: Models—Concentric Zone, Sector, Multiple Nuclei, Western European city, Latin

SUGGESTED PROCEDURE

**Lesson 1: Population Map Analysis for Austin, Minnesota with Reading from U.S. Census Bureau, “Population Change and Distribution: 1990 – 2000.” (1–2 periods of 50 minutes)**

Overview: Students will analyze population distribution maps of Austin, Minnesota and compare these maps to maps of Mower County and the State of Minnesota. This lesson will also include a discussion of a reading from the U.S. Census Bureau, “Population Change and Distribution”, as well as reading selections from the textbook.

*Introduction to Population Distribution*

1. Begin class with a discussion of the article from the U.S. Census Bureau, “Population Change and Distribution.” Students will utilize the HUG reading strategy while reading the article for homework.
   a. H – Students highlight the main ideas of the reading to identify key concepts.
   b. U – Students underline important details such as key words, steps in a process, definitions, and names/dates that were important to understand population change and distribution.
   c. G – Students summarize in their own words what they read. This could be done by listing important points, creating a cause-effect chart or starring important dates.
2. As a class, students construct a web-map of the important information from the article regarding population change and distribution. Listed below are topics they should include on their web-map, but students may identify more details.
   a. The 2000-2010 decade had the smallest increase in population since the 1950s
   b. The South and West grew faster than the Midwest and Northeast
   c. Nevada has been the fastest growing state for five decades
   d. Michigan was the only state whose population declined in the 2000-2010 decade
   e. Identify the top ten most populous states
   f. The fastest growing cities were Houston, Atlanta, and Dallas-Fort Worth
   g. Identify those counties that are losing population
3. Students will discuss their web-map in terms of what it says for the U.S. and its growing population. Ask: Are there concerns regarding our fast-growing population? How did this article and its information compare to our textbook and its information?

*Introduction to Local Setting*

4. The teacher explains the transition to a local scale in which students will study their city’s population distribution and patterns to see how their city compares with information from the article and textbook.
5. Students will make three predictions regarding the population distribution patterns they expect to see on maps of their city: distribution of ethnic groups, residential dwellings, and commercial establishments. Place students in heterogeneous small groups with a large sheet of paper and marker to record their predictions on the three topics. Students will share their predictions by discussing them with the class. As students share, each group will circle those predictions that are common among various groups.
**Power Point of City's Historical Development**

6. Power point presentation created by the instructor that incorporates population maps of the city from the U.S. Census Bureau: Fact Finder. The power point of the city’s historical development also includes maps, pictures and other visuals gathered from city hall, county committees, historical society, and the planning commission.

**Population Distribution Patterns in a Local Setting**

7. Students will analyze population distribution maps of their city from the Census Bureau. The teacher will provide the handout, "Population Distribution Patterns". Using map analysis, students work in small groups to discuss the maps and identify patterns. Students develop explanations for the patterns based on map analysis and prior knowledge of their city to complete the first column of the handout.

8. Ask: What changes might we see in terms of population density and distribution in Austin from 2000 to 2010? Students will compare the population density and distribution maps of Austin for 2000 and 2010 using data available at Fact Finder. Students will complete the second column of the handout identifying patterns that have remained the same or changed.

9. Students will then look at the 2010 Census Bureau population density maps for their county and state. Ask: What similarities and/or differences do they see between the maps of Austin versus the maps of Mower County and the State of Minnesota? Which maps give you a more accurate view of the population of Austin? Which would you use if you were making decisions regarding the future development of Austin? What regional characteristics might you need to consider predicting Austin’s future?

**Lesson 2: Urban Geography Field Study of Austin, Minnesota**  
*(1-2 periods of 50 minutes for the field study—unless you can convince students to come Saturday morning to do the field study.)*  
Students will need to complete their field sketch map and field journal as homework. The Field Study will occur after the students have completed their unit on Urban Geography.

Overview: Urban Geography Field Study of Austin, Minnesota developed by the instructor to analyze the city’s urban development. The field study will provide students with historic and contemporary information and data. Students use the field study and subsequent research to begin their predictions. In Lesson Three students analyze and synthesize field research and data collected during the field study in order to develop their predictions of one of five research questions, which form the core of their final assignment.

**Preparation**

1. Prior to their field study, students will take a quiz on the history of Austin as a pre-assessment. The instructor will use this data to design the field study.

2. Students will read an article on the History of Austin written by the City of Austin. After reading the article, students will discuss the results of their quiz in comparison to the article. Ask: Do they know a lot about their town? If so, how did they acquire this knowledge? If not, why do they not know more about their hometown? Should they know more about the history of Austin? Students will need to explain their answers. Following this discussion, introduce the field study and analysis project based on the premise that students need to know more about the city they live in and the events taking place, as these events impact their lives.
Field Study

3. Students will be placed in five groups to answer one of the research questions, “Five Research Questions on the City’s Future”, with field and academic research. The research conducted by the students is necessary to construct predictions for the future of Austin based on their research question. The five research questions refer to the investigation and prediction of the Main Street Project, development of a Wal-Mart store, housing developments near the Hormel Nature Center, expansion of housing developments to the southwest part of Austin, and expansion of the Hormel Institute.

4. In order to answer their research question, students will begin their research with a field study led by their instructor, which will provide them with current and historical information regarding the development of the city. Areas in the field study include, but are not limited to, the following:
   a. Main Street - the Historic Hormel House and Historic Paramount Theatre
   b. Hormel, QPP, the Spam Museum and the Mill Pond region
   c. Northeast part of town – residential neighborhoods, business district near the railroad tracks (former railroad station), industrial center, Todd Park, the J.C. Nature Center, the new housing development west of the Nature Center, the airport, etc.
   d. Southeast part of town - flood plain, residential neighborhoods, businesses, parks, etc.
   e. Southwest part of town – flood plain, Marcusen Park, the Band Shell, cemetery, old and new residential neighborhoods, commercial businesses, etc.
   f. Northwest part of town – commercial buildings, residential neighborhoods, cemetery, schools, hospital, etc.

5. Students will be given the handouts, “Field Study Analysis Project” and “Things to Observe during the Field Study”, to prepare for the Field Study. The teacher will review the tasks of making a Sketch Map and preparing a Field Journal, which students will individually complete following the field study. Each student records their observations and thoughts about the neighborhoods and regions of Austin that they are analyzing. The teacher explains that while participating in the field study, they should identify the patterns they see in terms of housing, commercial centers, road construction, etc.

6. The handout, “Things to Observe during the Field Study”, includes statements that students need to investigate if their research question is applicable. These observations should also be included in students’ Sketch Map and Field Journal.

7. The teacher explains that upon completion of the field study, the groups will conduct further field and academic research in order to make predictions of the city’s future. Students use information from city and county resources listed in the Website Resources as homework to complete their research.

* Note that when you set up your field study, you will need to identify the various regions of your city to study as well as important places to observe. When I was determining what to include in my field study, I used the four regions that our town is divided into based on the location of two major roads: Main Street and Oakland Avenue. These two streets divided Austin into four very distinct regions, which the students are able to recognize because they are used locally when identifying the relative location of houses or businesses in our town. The four regions our town is divided into are the Northeast, Southeast, Southwest and Northwest. When it came to identifying the important historical places and current places to visit and discuss, I based my decisions on the historical background of my town. You will need to investigate the history of your town so that you can identify the original location of the city and its major features as well as the new features
that were added to the city as it developed. If your city was developed along a waterway or railroad, you will need to discuss the importance of that feature in the development of your city. Regarding current housing developments and commercial developments, you may find it helpful to contact your city development and planning commission, as well as your historical society to gain historical knowledge of the development of your city. It would be wise to practice your field study prior to taking your students on their field study of the city. This will provide you with the opportunity to determine the best route for your tour and give you an idea on the time frame needed to complete the trip.

Lesson 3: Predictions for the future of Austin, Minnesota based on field and academic research analysis conducted by students in groups. (2 periods of 50 minutes; students will need to meet outside of class to complete this as homework.)

Overview: Students will use their individual field and research analysis of Austin and, as a group, synthesize, analyze, and evaluate their data. Each group will develop predictions of the future of Austin in reference to the research question they selected to answer.

Analysis Paper
1. Students will individually write their analysis paper as homework to answer the selected research question using the following guidelines:
   a. Answer the research question their group was given using data collected during the field investigation, examination of maps, class discussions, and their own research.
   b. Make predictions of Austin’s future in 15 years. (Students may use historic data to support the trends they see emerging. Students will also need to identify the urban land use model currently being utilized by the city and the model used in the past, if it has changed.)
   c. Students may support their data through their own experiences, choosing to discuss how Austin has changed in their lifetime or how it has changed while they lived in Austin.
2. Students will gather in their five groups to discuss individual findings by sharing their Sketch Maps, Field Journals and Analysis Papers with other group members. During this discussion, each group member presents their individual findings and the group analyzes the results to develop their group prediction based on the data collected. Students will collaboratively use data and other academic research they have conducted to generate their 15 years prediction for Austin’s future in respect to their research question.

Round Table Discussions
3. The class will hold Round Table Discussions to hear each group’s analysis of their research question. During the five Round Table Discussions (one per question) each group will present their findings and conclusions of their research question to the class. These discussions will be limited to 5 minutes. Their peers will listen to the discussion and have the opportunity to ask questions or propose ideas to the group for another 5 minutes.

Predictions
4. Based upon the Round Table discussions, each group will analyze the individual results and peer questions to develop a collective 15 years prediction for their research question. Students will use the handout, “Questions to Consider During Your Analysis”, to develop their predictions.
5. As a group, students will write a collective letter to the mayor, city council or coordinator of the Austin Main Street Project. The letter predicts Austin’s future and the impact of current decisions on Austin’s future (e.g., Main Street Project, development of Wal-Mart, housing
developments near the Hormel Nature Center, expansion of the Hormel Institute, and/or expansion of housing developments to the southwest part of Austin).

Extensions
1. Students explore the physical geography of their community and region, including topography and climate, to determine why the city is located where it is, how it has expanded, and how it could expand in the future.

2. Students investigate the historical transportation networks of the city and connections with its outlying region to understand the patterns and processes of urbanization. Students compare the historical networks with current networks and propose changes to meet the needs of all citizens in the future.

3. Students investigate their city’s past by researching documents and interviewing citizens. Students describe the town 15 years ago based on historical data and interviews with citizens.

Assessments
- Web-Map of Population Change and Distribution Article
- Class Discussions
- Population Distribution Patterns Chart
- Pre- and Post-Assessment of Austin
- Sketch Map
- Field Journal
- Analysis Paper
- Round Table Discussion
- Letter to Mayor, City Council member(s) and/or Coordinator of Austin Main Street Project

Website Resources
Article, “Population Distribution and Change: 2000 to 2010” from U.S. Census Bureau
Population Distribution Maps for States, Metropolitan Areas and Counties from U.S. Census Bureau
http://www.census.gov/popest/data/maps/11maps.html
FactFinder from U.S. Census Bureau
http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml
Thematic Maps of U.S. Economy, Population, Housing and Natural Disaster from Census Bureau
http://www.census.gov/geo/maps-data/maps/thematic.html
Interactive Population Map from U.S. Census Bureau
http://www.census.gov/2010census/popmap/
Census 2000 Demographic Profiles from U.S. Census Bureau
http://censtats.census.gov/cgi-bin/pct/pctProfile.pl

Resources to Investigate Austin, Minnesota
1. Mower County Historical Society. 700 12th Street SW. Austin, MN 55912 (507) 437–6082
   http://www2.smig.net/mhistory
2. Austin Main Street Project. Housing and Redevelopment Authority. 308 2nd Avenue NE.
   Austin, MN 55912 (507) 433–1866 http://www.austinmainstreetproject.com
3. Austin Daily Herald. 301 2nd Street NE. Austin, MN 55912 (507) 433-8851
   http://www.austindailyherald.com
4. Austin Post Bulletin. 201 Main Street S. Austin, MN 55912 (507) 434–7340
5. Austin Chamber of Commerce. 329 North Main Street. Austin, MN 55912 (507) 437–4561
   www.austincoc.com
6. Austin Convention and Visitors Bureau. 104 11th Avenue NW, Suite D. Austin, MN 55912
   (507) 437–4563 http://www.austincvb.com
7. Austin Public Library. 323 4th Avenue NE. Austin, MN 55912 (507) 433–2391
   http://www.austinpubliclibrary.org
8. Hormel Institute. 801 16th Avenue NE. Austin, MN 55912 (507) 433–8804
   http://www.hi.umn.edu
9. SPAM Museum. 1937 SPAM Boulevard. Austin, MN 55912 (507) 437–5100
   http://www.spam.com
10. Mower County On-Line. 201 1st Street NE. Austin, MN 55912 http://www.co.mower.mn.us/
17. Douty, Sarah. Coordinator for Austin Main Street Project. Housing and Redevelopment Authority. 308 2nd Avenue NE. Austin, MN 55912. (507) 433 – 1866. sarah.douty@austinmainstreetproject.com
18. Hoium, Craig. Austin Community Development Director. City of Austin. 500 4th Avenue NE. Austin, MN 55912. (507) 437 – 9950. Choium@austin-mn.com
Population Distribution Patterns

**Directions:** In your small groups, examine the population distribution shown on the city maps and identify patterns. Be prepared to provide explanations for the patterns based on your examination of the maps and your prior knowledge of the city.

1. What distribution patterns, based on the 2010 Census data maps, can be identified in terms of people per square mile in the following categories:
   - Total people
   - White alone
   - Black or African-Americans alone
   - American Indian and Alaska Native alone
   - Asian alone
   - Native Hawaiian and Other Pacific Islander alone
   - Hispanic or Latino (of any race)
   - Some Other Race Alone

2. What distribution patterns, based on the 2010 Census data maps, can be identified in terms of residential land use in the following categories:
   - Total housing units
   - Owner-occupied housing units
   - Renter-occupied housing units
   - Median value of specified owner-occupied housing units
   - Median selected monthly owner costs of specified owner-occupied housing units with a mortgage

3. What distribution patterns, based on the 2010 Census data maps, can be identified regarding education in terms of:
   - Percentage of people 25 years and over with a high school diploma or more education
   - Percentage of people 25 years and over with a bachelor’s degree or higher

4. What distributions patterns, based on the 2010 Census data maps, can be identified regarding immigrants in terms of the following:
   - Percentage of people who are foreign born
   - Percentage of people 5 years and over who speak a language other than English at home

5. What distribution patterns, based on the 2010 Census data maps, can be identified based on the following income statistics:
   - Median household income in 2009
   - Percentage of families below the poverty level in 2009
   - Percentage of persons below the poverty level in 2009
**Directions:** Summarize the patterns you identify for each topic in the columns below. “Patterns for City 2010” refer to the 2010 map statistics and “Patterns for City 2000 - 2010” refer to comparison of 2000 and 2010 map statistics to note if they remained the same or changed.

<table>
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<tr>
<th>What distribution patterns, based on the 2010 Census data maps, can be identified in terms of people per square mile?</th>
<th>Patterns for City 2010</th>
<th>Patterns for City 2000 – 2010</th>
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<tr>
<td>What distribution patterns, based on the 2010 Census data maps, can be identified in terms of residential land use?</td>
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<td>What distribution patterns, based on the 2010 Census data maps, can be identified regarding education?</td>
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<td>What distribution patterns, based on the 2010 Census data maps, can be identified based on income statistics?</td>
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Five Research Questions on the City’s Future

1. Why did the city and local businesses want to revitalize the downtown/Main Street area? What impacted their decisions to revitalize this area? What impact has this process and project already had on the city? What impact will this process and project have on the city in the future?

2. What decisions were involved in the approval of the development of a Wal-Mart store in the community? What impacted the city council’s decision? What impact will this have on the revitalization of downtown? What impact do you predict it will have on the city’s economy in the near future? What impact do you predict it will have on the city’s economy in 10 years?

3. Analyze the current housing patterns in the city. Is there a need for a new housing development? What type of housing should be developed? Is there a need for this type of housing? What impact will this have on the city?

4. Analyze the current housing development in another part of the city. Compare this to the residential housing demographics for the city. Why is the city expanding its housing to this part of town? What are the demographics of this residential area compared to the other parts of town? What impact will this development of residential areas have on its future development as a city?

5. What impacts will the expansion of the Hormel Institute have on Austin—economically, socially, culturally, financially, and globally? You might find it useful to analyze current demographic statistics in the areas of housing, education, commercial needs, etc.
Field Study Analysis Project

In the process of investigating urban development, you will analyze your hometown through field study and academic research to answer one of five research questions regarding your hometown and its future. The field study will provide you with contemporary and historical background information and data on the development of the city in order to make predictions of the city's future. You may need to meet with your group outside of class to complete your field study and research. Your group will synthesize, analyze, and evaluate the gathered data in order to develop predictions regarding the city's future in reference to the group’s selected research question.

Record your group’s research question:

Sketch Map
Each person will complete a Sketch Map of areas you investigate showing points of interest, distribution of residential dwellings, distribution of commercial dwellings, etc., to answer your research question. You will also want to include a diagram of the urban land model you see your city utilizing.

Field Journal
Each person will also complete a Field Journal of observations and thoughts to explain patterns about the neighborhoods and regions that you are analyzing. You will also identify the urban land model you see being used in the development of the city. Discuss the type of urban land use model currently being utilized and the model used in the past, if it has changed.

Use the handout, “Things to Observe during the Field Study”, to consider patterns of housing, commercial centers, road construction, etc. while on the field study. The handout includes the types of items to include on your Sketch Map and in your Field Journal that may pertain to your research question.

Upon completion of this field study, your group will probably decide to conduct further field and academic research to make predictions of your city's future. Your group will also need to analyze the population data for Austin found on the U.S. Census Bureau’s website as well as data from local website resources and information discovered in your field investigation. You will need to analyze the patterns you see in terms of housing, commercial centers, road construction, etc. Use the handout, “Questions to Consider During Your Analysis” to guide your analysis.
Things to Observe During the Field Study

1. Describe the streets in consideration of the number of buildings involved, the ratio of parking space to shopping space and the overall size and design of the buildings

2. What is the physical condition of the street? Are the buildings and sidewalks well maintained?

3. Note the arrangement of space between and within buildings

4. Describe the patterns and number of shops, businesses and/or houses along the street—note the building modifications

5. Identify the types of homes (single family, duplex, apartments, assisted living facilities)

6. Note the aesthetics of the area surrounding the homes including the yard (grass, trees, other vegetation, gardens), driveways (used or unused, maintained and/or materials used), garage (size, location; types and location of vehicles), decorations, barriers, and maintenance of area

7. Note the neighborhood demographics (toys in yards, children playing, availability and use of parks, sporting equipment, activities people are engaged in, types of vehicles seen, etc.)

8. Describe the kind of functions that are the primary anchors for the city center

9. Describe the location and use of transportation networks, healthcare services, public facilities

10. Note the kinds of people using the stores and service establishments and their activities

11. Identify the types of restaurants and the foods they sell

12. Identify the types of churches and use of their facilities

13. Note the use of color, size, and arrangement of building signs and store displays

14. Do you hear or see languages other than English being used?

15. Note the arrangement of space around the center especially along the river, creek, and lake.

16. Describe the activities in the “public space”. Is public space valued? Is it used or empty? Who uses it and for what types of activities?

17. Identify the recreational and sporting facilities

18. Describe the educational facilities including the types and activities provided—playgrounds, sporting venues, etc.

19. Describe the natural and man-made sounds and smells you notice

20. Identify any and all other points you find interesting (streetlights, walking/bicycling path, etc.)
Questions to Consider During Your Analysis

1. Does the city have an ethnic population that is significantly larger than the county average? If so, what visible landscape clues reinforce this social geography? You may want to consider the following questions: How are the houses painted? What religious symbolism is apparent? Are there some characteristic land uses, such as gardens, plazas, or noticeable recreational sites? What vegetation do people plant and grow?

2. Does the city have a large population of children? If so, what can be observed about the uses of social space? Where do children play or hang out? What kinds of activities do they engage in?

3. Does the city contain high-income residents? What can you observe about vehicles parked in driveways, on the street, and in front of houses? Do many people ride the bus rather than drive?

4. How do your observations of housing compare to the statistical data from the census? What is the relationship between housing data and the physical condition and maintenance of houses or apartments? What types of housing prevail (i.e., apartments, row houses, duplexes, or single-family, detached houses)? Do people have large yards or common-use areas? Do people use backyards or front yards for socializing?

5. What other information did you gather about your area that you could not get from census data alone? Do you believe that field observation can help you to better understand the cultural environment?