

High School - Infrastructure

What infrastructure is needed to support or bring businesses to Marion?		
Standards and Content	Human Geography Standard 2: Demonstrate an understanding of the conditions, interconnections, and levels of economic development across the Earth’s surface.	
Staging the Compelling Question	Vocabulary exercises to introduce terms students need to understand the interconnection of infrastructure and business.	
Supporting Question 1 [Understand]	Supporting Question 2 [Understand]	Supporting Question 3 [Assess]
What is infrastructure?	What is the current state of infrastructure in Marion?	How is Marion’s economy impacted by its infrastructure?
Formative Performance Task	Formative Performance Task	Formative Performance Task
Develop a definition of infrastructure.	Sort images and write a paragraph that describes different categories of infrastructure in Marion.	Develop a claim that explains how Marion’s economy is being helped or hurt by its infrastructure.
Featured Sources	Featured Sources	Featured Sources
Source A: list of categories of infrastructure Source B: images of infrastructure	Source A: photographs provided by students Source B: list of categories of infrastructure	Source A: photographs provided by students
Summative Performance Task	ARGUMENT: What infrastructure is needed to support or bring business to Marion? Write a three-paragraph essay about the infrastructure in Marion. The essay should explain the current state of infrastructure in Marion and how the infrastructure should be changed or improved to bring business to Marion.	
	EXTENSION. Annotate or digitally edit student photographs to illustrate suggested changes and their impacts.	
Taking Informed Action	ACT. Write a letter to the mayor and city council that explains the infrastructure in Marion and offers suggestions for what can be changed or improved.	

*Featured sources are suggested and links are provided. It may be that these links are broken and we apologize in advance for the inconvenience.

What infrastructure is needed to support or bring business to Marion?

Overview

Inquiry Description

The intent of the inquiry is for students in Marion, SC to understand how important infrastructure is to the development of their town. The inquiry is designed for a high school World Geography class. The students will learn about the importance of infrastructure and how infrastructure can affect every facet of their daily lives. This inquiry is appropriate when teaching Human Geography Standard 2, which requires students to demonstrate an understanding of the conditions, interconnections, and levels of economic development across the Earth surface. The standard will be addressed through the importance of infrastructure to the economy of any town, but especially a small town. Some students may understand the importance of infrastructure to economy but may not realize how infrastructure is the backbone of a place.

Structure of the Inquiry

In addressing the compelling question, *“What infrastructure is needed to support or bring business to Marion?”*, students work through supporting question, formative performance task, and featured source to construct an argument supported by evidence while also acknowledging competing perspectives. The supporting questions are: What is infrastructure? What is the current state of infrastructure in Marion? and How is Marion’s economy impacted by its infrastructure? The supporting questions build upon the foundation of the vocabulary to help students to understand infrastructure and why it is important. The formative performance tasks will help the students to understand not only infrastructure, but the infrastructure needed for their town to be economically sustainable. The sources are used to give examples of the different infrastructures and to compare the infrastructure that Marion has to the infrastructure it needs to be economically healthy.

Staging the Compelling Question

The staging exercise is the vocabulary project. The students will create a dictionary with the important terms to know. The students must write the definition for the word, write a sentence using the word, and find/draw a picture depicting the word. The staging exercise is to ensure the students have a firm foundation to build upon. The vocabulary helps the students to understand the terms that they need to understand how infrastructure and the economy go hand in hand.

Supporting Question 1

The inquiry begins with Supporting Question 1, “What is infrastructure?” Students consult various sources to develop a comprehensive definition of infrastructure that acknowledges different categories of infrastructure and its importance to a community.

Supporting Question 2

The inquiry continues with Supporting Question 2 “What is the current state of infrastructure in Marion?” Students provide the featured sources for this question by taking pictures of infrastructure in their community. Students will return to their definition from Supporting Question 1 to confirm which pictures depict infrastructure. Students will consult the infrastructure list as they write a paragraph that describes the different categories of infrastructure in Marion.

Supporting Question 3

The inquiry concludes with Supporting Question 3, “How is Marion’s economy impacted by its infrastructure?” Students return to their photographs, further assess the condition of Marion’s infrastructure, and discuss the relationship between infrastructure and Marion’s economy. As a formative performance task, students develop a claim that addresses how Marion’s economy is helped or hurt by its infrastructure. This claim will serve as the basis for the Summative Performance Task.

Summative Performance Task

At this point in the inquiry, students have examined how important infrastructure is to the development of their town. Students should be expected to demonstrate the breadth of their understandings and their abilities to use evidence from multiple sources to support their claims. In this task, students construct an evidence-based argument using sources to answer the compelling question, “What infrastructure is needed to support or bring business to Marion?” When answering the question, the student will decide what businesses should come to Marion, which will influence their recommendations. The student will also have to discuss how to pay for the new infrastructure. Students’ arguments will likely vary, as students may disagree on what infrastructure they believe Marion needs, what business they may want to bring to Marion, and how much they want to expand Marion’s economy.

For an extension task, students can annotate or digitally edit their photographs to illustrate how they would change Marion’s infrastructure and how these changes might benefit Marion’s economy. Informed action is embedded in this inquiry, as students develop an understanding of the interaction between infrastructure and economy and assess how changes to infrastructure may benefit Marion’s economy. Students can act by writing a letter to a government official in Marion (e.g., mayor or city council member) to encourage the recommendations they believe will make Marion more profitable.

Featured Sources

List of categories of infrastructure: <https://cds.sevenoaks.gov.uk/documents/s42658/07%20App%20A.pdf?l=1>
 Images of infrastructure: <https://pixabay.com/images/search/infrastructure/>