Lesson 6
“All Progress is Precarious…”
The Growth of Georgia: 1790-1840

**Enduring Understanding**
The growth and development of a region are influenced by social, economic, and political factors.

**Lesson Essential Question**
*To what extent can all technological “progress” be seen as good?*

**Introduction**
In history books, “progress” is usually portrayed as a positive event. More often than not textbooks treat concepts such as “Westward Expansion,” “Manifest Destiny,” and “Industrialization” as inherently beneficial while minimizing the costs or negative aspects of the very same concepts. The *Economic Way of Thinking* explains that people must make choices about what they are going to do and they should understand there is always a cost involved with every choice. This lesson examines both the costs and benefits of progress by focusing on how the railroad caused Georgia, and more specifically Atlanta, to develop.

**GPS Standards –**
SS8E3 The student will evaluate the influence of Georgia economic growth and development

SS8H5 The student will explain the significant factors that affected the development of Georgia as part of the growth of the United States from 1790 to 1840.
c. Explain how technological developments including the cotton gin and railroads, had an impact on Georgia’s growth

**Economic Concepts**
economic growth, opportunity cost, government revenue

**Knowledge**
*The student will know that:*
- railroads contributed to the growth of Georgia
- there are advantages and disadvantages to “progress”
- every economic decision has an opportunity cost.

**Core Skills**
*The student will be able to:*
- read for information
- draw conclusions
- interpret a chart
- distinguish fact from opinion
- identify and use primary sources
### Materials Needed

<table>
<thead>
<tr>
<th>1 copy/student:</th>
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<tbody>
<tr>
<td>- Railroad Expansion Worksheet</td>
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<tr>
<td>- The Railroads: Economic Boom Worksheet</td>
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<td>- Georgia Stories video The Railroads: Economic Boom</td>
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<td>- DVD player</td>
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<table>
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<tr>
<th>One copy to display on overhead:</th>
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<tbody>
<tr>
<td>- Economic Way of Thinking Transparency</td>
</tr>
<tr>
<td>- Railroad Expansion Transparency</td>
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<tr>
<td>- Lackawanna Valley Transparency</td>
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<td>- American Progress Transparency</td>
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### Time Required

1-2 class periods

### Procedures

1. Display the *Economic Way of Thinking* Transparency. Discuss each point with students. Make sure all students understand the term opportunity cost.

2. Distribute the *Railroad Expansion* Worksheet. Ask students to answer questions 1 and 2 only on their worksheets. Have students discuss their answers for question 1 and then have a few students come to the board and write down their answers for question 2. Ask them if their examples are evidence of progress. Next, ask students “Is progress always good?” and have them explain why or why not.

3. Explain to students that railroad expansion is an example of historical and economic “progress.” Tell students that the introduction of the railroad caused much controversy and its supporters and critics spent many years debating the positive and negative impacts it had on the United States. Explain to students that you are going to illustrate this debate by using two famous paintings. Display the image, *Lackawanna Valley*, (point out the pollution shown) and tell students to answer questions 3 and 4. Then display, *American Progress*, and tell students to answer questions 5 and 6. Ask students to answer question 7 in pairs. *(For more information about the painting American Progress see [http://www.johnhorse.com/highlights/keyimgs/08.htm](http://www.johnhorse.com/highlights/keyimgs/08.htm))*

4. Next display the *Railroad Expansion Notes* for questions 1 and 7 and as a class, discuss the answers.

5. Explain to students that you are going to focus on the economic impact that the railroad had on the state of Georgia. Show *Georgia Stories II: “The*
“Railroads: Economic Boom” and ask students to answer the corresponding Georgia Stories II: The Railroads: Economic Boom Worksheet.

6. Display the Railroad Expansion Notes Transparency for questions 8 and 9 and have students complete their Railroad Expansion Worksheet. Close the lesson by making sure students understand the concept of opportunity cost and that every economic choice has a 2nd best option that is not selected. Review student knowledge of the railroad as an example of the concept.

7. For more detailed information and pictures about the impact of the railroads on Georgia and the naming of Atlanta, visit the following websites found on the New Georgia Encyclopedia:
   - Railroads: http://www.georgiaencyclopedia.org/nge/Article.jsp?id=h-1281&hl=y
   - Atlanta: http://www.georgiaencyclopedia.org/nge/Article.jsp?id=h-2207&hl=y

The New Georgia Encyclopedia
*For more background information to support this lesson, read these entries:

   Antebellum Industrialization

   Railroads

EconEdLink Online Lessons
*For more student activities on economic history in a U.S. context, use these lessons:

   ✓ No additional activities for this lesson

Assessment

1. Having several similar companies in a particular industry is an example of which economic concept?
   A. competition.*
   B. productivity.
   C. mercantilism.
   D. specialization.

2. Atlanta began as a small frontier town at the end of the Western and Atlantic Railroad but today is the largest and wealthiest city in Georgia due to major transportation and industrial development. This is an example of
   A. competition.
   B. productivity.
   C. specialization.
   D. economic growth.*
3. By funding the Western and Atlantic Railroad Company the government of Georgia incurred a/an
   A. scarcity.
   B. free trade.
   C. price incentive.
   D. opportunity cost.*
Railroad Expansion Worksheet

1. What is your definition of the word progress?

2. List three modes of transportation prior to the railroad.


4. What do you think George Innes’ was trying to say with this painting?

5. Give a brief description of John Gast’s painting, American Progress.

6. What does John Gast’s painting, American Progress, say about railroads?

7. What were some potential “costs” of building railroads in the United States?

8. What incentives convinced people to build railroads in the United States?
9. Which company controlled most railroads in GA in the 1830s? Did they have competition?

10. Do you think competition between railroads helped or hurt most Americans? Explain.

Adapted from a lesson plan by William A. Schoen under the supervision of Scott L. Roberts
Railroad Expansion

1. What is your definition of the word progress? *Answers will vary*

2. List three modes of transportation prior to the railroad. *Answers will vary*

3. Give a brief description of George Innes’ painting, *Lackawanna Valley*. *Answers will vary, but students should mention smoke, chopped down trees, pollution.*

4. What do you think George Innes’ was trying to say with this painting? *Answers will vary.*

5. Give a brief description of John Gast’s painting, *American Progress*. *Answers will vary, but should mention the train is bringing light into darkness, an angel is leading farmers west, Native Americans appear primitive.*


7. What were some potential “costs” of building railroads in the United States? *Answers will vary, but should include loss of trees, pollution, could not use resources to make other things.*

8. What incentives convinced people to build railroads in the United States? *Opportunity to earn large amounts of money.*

9. Which company controlled most railroads in GA in the 1830s? Did they have competition? *The Western and Atlantic Railroad. Yes, it did have companies competing against it.*

10. Do you think competition between railroads helped or hurt most Americans? Explain. *Helped. Americans had more options, lower prices, more routes.*

Adapted from a lesson plan by William A. Schoen under the supervision of Scott L. Roberts
1. People make *choices* about what they are going to do.

2. There is a *cost* for every choice.

3. People make choices based on the rewards they will get.

4. People create *rules* that affect their choices and how they act.

5. People gain when they agree to *trade* with each other.

6. There are *costs and benefits* that will affect the future.
1. People choose.
   Most situations involve making choices. People evaluate the costs and benefits of different alternatives and choose the alternative that seems best to them.

2. People’s choices involve costs.
   Costs do not necessarily involve money. The most important type of cost is opportunity cost: the next best alternative that people give up when they make a choice.

3. People respond to incentives in predictable ways.
   Incentives are actions or rewards that encourage people to act in a certain way. Incentives can be either positive or negative. When incentives change, people’s behavior changes in predictable ways.

4. People create economic systems that influence individual choices and incentives.
   How people cooperate is government by written and unwritten rules. As the rules change, incentives – and consequently people’s behaviors – change.

5. People gain when they trade voluntarily.
   People can produce goods and services at lower opportunity costs when they specialize in what they do best. Then they can trade what they produce for goods or services that would be more costly for them to produce. In this way, both sides gain.

6. People’s choices have consequences that lie in the future.
   The important costs and benefits in economic decision making are those that will appear in the future. The study of economics stresses the importance of making decisions about the future because we can influence only the future; we cannot influence things that happened in the past.
What is Progress?
- Take a moment to define the term “progress”
- Webster’s Dictionary defines progress as “gradual betterment; especially the progressive development of humankind”
- List three modes of transportation prior to the railroad

The Railroad
- How long did it take to get from Philadelphia to New York by horse?
  - A: 90 miles = 1 week
  - Railroads reduced travel time from days to hours (1829 – trains could travel 30 mph)

George Innes- Lackawanna Valley
- Asked to document the progress of a railroad company’s growth in early industrial America
- Though not about Georgia specifically, the devastation to the environment was similar

John Gast-American Progress
- Painting on his beliefs about Manifest Destiny and progress
- His feelings about progress and especially Native Americans were similar to that of industrialists in Georgia. (Remember the Trail of Tears happened only 5 years before the founding of Atlanta. In fact, Atlanta was founded in territory previously owned by the Cherokee.)

Railroads in Georgia
- Major railroad company in Georgia = Western and Atlantic Railroad (but not the only railroad company in Georgia)
  - Terminus – name for Atlanta in 1837
  - Originally called Terminus because it was the end of the railroad line (later became known as Marthasville and then Atlanta).

Adapted from a lesson plan by William A. Schoen under the supervision of Scott L. Roberts
1. When did railroads arrive in Georgia?

2. Why were modes of transportation at the turn of the 19th century unreliable?

3. What was Georgia’s best mode of transportation before the invention of the railroads?

4. Name three important Georgia cities built on rivers and other waterways.

5. Where was the railroad invented?

6. In what state did the railroad make its first U.S. appearance?

7. Why did the Georgia businessmen who wanted to build a cotton mill in Athens decide to also build a railroad from Athens to Augusta?

8. Who chartered the first two railroads in Georgia?

9. Why did Atlanta become such an important city?

10. What was the incentive for settlers to create Georgia’s first cities on waterways?
11. What were the disadvantages of river travel? What innovation changed this?

12. Why was Savannah upset about the railroad being used in Charleston, South Carolina? What is this economic concept called?

13. What economic goal did the railroad bring to Georgia?

14. What were some of the economic advantages of the railroad?

15. What were some of the costs of the railroad?

16. Why do you think railroads helped in the creations of new towns?

17. Name one possible opportunity cost (the second best option) that the Georgia legislature chose to give up in order to support the development of the railroads.

18. Georgia’s railroads were funded with government revenue (consisting of taxpayer money) and private investors (people who are seeking to earn a profit). Do you feel that it is justifiable for the government to work with private businesses? Why or why not?
1. When did railroads arrive in Georgia? 1835

2. Why were modes of transportation at the turn of the 19th century unreliable? Bad roads

3. What was Georgia’s best mode of transportation before the invention of the railroads? Ships and waterways

4. Name three important Georgia cities built on rivers and other waterways. Savannah, Augusta, Rome, Columbus

5. Where was the railroad invented? England

6. In what state did the railroad make its first U.S. appearance? South Carolina

7. Why did the Georgia businessmen who wanted to build a cotton mill in Athens decide to also build a railroad from Athens to Augusta? Their equipment became bogged down on a muddy road.

8. Who chartered the first two railroads in Georgia? The Georgia Legislature

9. Why did Atlanta become such an important city? It was the largest railroad hub in the South

10. What was the incentive for settlers to create Georgia’s first cities on waterways? So they could make trade and travel easier by being able to make their way to the ocean easily

11. What were the disadvantages of river travel? What innovation changed this? Going upstream, against the current was difficult. This problem was solved by the invention of the steam engine.

12. Why was Savannah upset about the railroad being used in Charleston, South Carolina? What is this economic concept called? They were afraid they would lose freight traffic to the railroad. This economic concept is called competition.

13. What economic goal did the railroad bring to Georgia? Economic growth

14. What were some of the economic advantages of the railroad? It was a dependable and affordable mode of transportation.
The Railroad Economic Boom

Georgia Stories

15. What were some costs of the railroad? *Unsafe, noisy, caused pollution, set houses on fire*

16. Why do you think railroads helped in the creation of new towns? *Answers will vary*

17. Name one possible opportunity cost (the second best option) that the Georgia legislature chose to give up in order to support the development of the railroads. *Answers will vary.*

18. Georgia’s railroads were funded with government revenue (consisting of taxpayer money) and private investors (people who are seeking to make a profit). Do you feel that it is justifiable for the government to work with private businesses? Why or why not? *Answers will vary.*