



# ILLINOIS TRANSPORTATION

## Grade Level

4-8

## Length of Lesson

30 minutes

## Objective

By the end of this lesson, students will have a better understanding of the importance of transportation in Illinois to agriculture and our daily lives.

## Materials Needed

- Copies of the Student Worksheet
- Access to the internet

## Standards

IL Social Studies

Standards:

SS.G.2.4-5

SS.G.3.4-5

SS.EC.2.4-5

SS.IS.3.6-8

SS.EC.2.6-8.LC

## Lesson Summary

This lesson is designed to help students think about the impact that transportation has on their lives on a daily basis. They will learn more about the history and types of transportation in Illinois for agricultural and other important products.

## Suggested Sequence of Events:

1. Read through the AITC Illinois History Ag Mag to learn about important moments in Illinois history. The AITC Water Ag Mag is an excellent resource to learn more about river transportation in Illinois. Online interactive versions of our Ag Mags are available on our website.
2. Complete the activity following the procedures:
  - Pass out the Student Worksheet.
  - If necessary, allow students to access the internet.
5. Whole class discussion and reflection of activity.
  - In what ways is our nation's transportation system an important part of our daily lives?
  - What careers are available in the transportation industry?
  - How is the transportation system linked to agriculture in Illinois? In the entire United States?

# TEACHER RESOURCES

## Background Information:

Our country's advanced transportation system is a vital part of our society. Students may already recognize the benefits of air travel, our rail system, and our interstate system, but many may not appreciate the importance of shipping on our inland waterways. An estimated 60% of U.S. grain exports are shipped down the Illinois and Mississippi Rivers on barges. A full barge tow can haul about 900,000 bushels, or the equivalent of over 1,000 semi trucks full of grain. Using river transportation also uses considerable less fuel. It is estimated that it takes one gallon of fuel to haul one ton of commodities 600 miles on the river. Illinois' lock and dam system, built in the 1930s, is a vital part of our ability to transport goods on the river. Recent upgrades have helped rebuild many of these locks so that they can be efficiently and safely used for many years to come.

## Online resources:

- Update on recent lock and dam construction. [https://www.farmweeknow.com/profitability/corps-completes-lock-and-dam-upgrades-on-illinois-river/article\\_db7e0998-19f8-11eb-a6da-77d30f7516bc.html](https://www.farmweeknow.com/profitability/corps-completes-lock-and-dam-upgrades-on-illinois-river/article_db7e0998-19f8-11eb-a6da-77d30f7516bc.html)
- Short Documentary on IL Locks and Dams (filmed prior to 2020 construction) <https://youtu.be/PUba3Tbn8yA>

## Extension Ideas:

- Have students conduct a STEM experiment to try to build and test out a lock and dam system.
- Research the costs of transporting goods using different parts of our transportation system (water, air, roads, rail system) and create a graph to compare the costs of each.
- Invite a farmer to speak to your students about the impact of transportation on his farm and his ability to sell his crops.
- Invite a grain hauler in to speak to your students about transporting goods and what their job entails.
- Contact your County Ag Literacy Coordinator to get copies of our Ag Mags, including our [Illinois History Ag Mag](http://agintheclassroom.org/AGLitCoord/contact_your_county_agricultural.shtml). Find your county coordinator here: [http://agintheclassroom.org/AGLitCoord/contact\\_your\\_county\\_agricultural.shtml](http://agintheclassroom.org/AGLitCoord/contact_your_county_agricultural.shtml)



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## STUDENT WORKSHEET

Transportation is a very important part of the agriculture industry in Illinois. Semi trucks, trains, and barges are used to transport goods throughout the state, across the nation, and to other parts of the world. While the United States does have an advanced transportation system, it hasn't always been that way. There are issues that farmers and those involved in the agriculture industry deal with every day.

Read the following scenarios. Using your own knowledge and any additional information you find on the internet, write effective paragraph responses to each. In your responses, try to think about how each scenario affects agriculture as well as the community in your area.

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1. The United States uses refrigerated rail cars and semi trailers to transport many goods across the nation. The first refrigerated car patent was issued in 1867. Describe how this invention has affected agriculture in your area and around the world. How did this invention change how things are shipped? Did it change what foods are available and when? What foods would we probably not have if we did not have refrigerated transport?



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## STUDENT WORKSHEET

2. The Illinois Waterway System consists of 336 miles of water from the mouth of the Chicago River to the mouth of the Illinois River at Grafton, IL. It is a system of rivers, lakes, and canals which provide a shipping connection from the Great Lakes to the Gulf of Mexico via the Mississippi River. There is a series of eight locks and dams that control water flow from Lake Michigan to the Mississippi River System. Use the internet to research the history of the locks and dams and how they work. You can start with this short video on YouTube: <https://youtu.be/BLg5EmPBmCI>. After you've learned more, answer these questions in your paragraph: Why are the maintenance, upkeep, and upgrades to the lock and dam system so important? If we didn't have the lock and dam system, how would our transportation needs change? What are the benefits to using our inland river system to ship goods?
3. Imagine the Illinois Legislature passed a law to reduce the speed limit for semi trucks from 55 miles per hour (mph) to 45 mph. How would this reduced speed affect agriculture in your area? How would it impact other transportation needs in your area?
4. Transportation costs continue to soar. How do transportation and shipping costs affect the prices of food and other consumer goods? In what ways is our transportation system important to our daily lives?