Transportation: From Here to There, by Land, Water, or Air

Grade Level: 1-3

Learning Objectives:

Students will be able to:

- 1. Explore modes of transportation used in communities throughout Connecticut's history and evaluate how these various means of travel correlate to our state's diverse geography. (Connecticut Social Studies Frameworks HIST 1.8, HIST 2.10)
- 2. Compare and contrast different methods of transit employed during our state's history, across land, on water, and through the air, and employ visual thinking strategies to note key details and infer relevant information from historic images.

 (Connecticut Social Studies Frameworks HIST 1.1, 2.2, 3.2; GEO 1.3)

Program Framework:

- 1. Introductory Video
- 2. Close-Looking Activity
- 3. Independent Practice

Materials: Introductory video, images for close-looking

Teacher Background:

Innovation in transportation is an important part of our state's heritage. Over the past 400 years, from the first Native American walking trails that crossed our state's varied landscapes, to the canoes, steamboats, and submarines built to navigate waterways, to the helicopters and jet engines that launch air travel worldwide today, Connecticans have led the way in helping people reach their destinations. The diverse geography of Connecticut's rural, urban, and suburban communities demanded creativity and perseverance to achieve these challenging accomplishments.

In this intriguing program, students will "time travel" together on a journey to discover different modes of transportation used in CT over the past four centuries, comparing and contrasting these multiple means of travel, and engaging in hands-on activities that bring to life the challenges of traveling from place to place.

1. <u>Introductory Video</u> - seven-minute video that includes information and images related to the three major transportation categories: land, water, and air.

Images Shown:

1. Physical Map of Connecticut, courtesy of FreeWorldMaps.net.



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- School Children on Parade, Hartford, Memorial Day, 1909, Connecticut Historical Society, 2000.209.3.
- 3. Gustafson's Bakery wagon, Portland, Connecticut Historical Society, 2000.198.23.
- 4. Vegetable cart, Hartford, 1912, Connecticut Historical Society, 1982.61.1246.
- 5. <u>Main Street-Wethersfield Avenue trolley, Wethersfield</u>, photographed by Elmer M. White, after 1888, Connecticut Historical Society, 1965.1.2.
- 6. <u>Color Postcard of the Valley Railroad, Essex, Conn.</u>, Connecticut Historical Society, 2014.136.28.
- 7. <u>Cheney family children in automobile, Manchester, CT</u>, photographed by Horace Bushnell Cheney, Sr., 1909, Connecticut Historical Society, 1988.133.76.
- 8. <u>Antique automobile</u>, photographed by Richard Welling, before 2009, Connecticut Historical Society, 2012.284.1837-.1846.
- 9. Pope Hartford Model S Touring Car, 1909, Connecticut Historical Society, 1950.8.7.
- 10. Electric Fire Engine, Hartford, about 1915, Connecticut Historical Society, 1954.18.6.
- 11. <u>Auto Fire Truck No. 1, Winsted, Connecticut</u>, photographed by F.H. DeMars, about 1915, Connecticut Historical Society, 2015.87.2608-.2609.
- 12. <u>Two Young Men with Bicycles</u>, photographed by Charles F. Lovine, about 1900, Connecticut Historical Society, 2012.233.226.
- 13. <u>The First Lesson</u>, from the collection of F.H. DeMars, about 1915, Connecticut Historical Society, 2015.87.3842.
- 14. <u>Unidentified young man with a high wheel bicycle</u>, <u>Hartford</u>, photographed by H.J. Rodgers and Charles A. Clough (Rodgers & Clough), about 1885, Connecticut Historical Society, 1991.118.18.
- 15. <u>Columbia Chainless Bicycle color-lithographed poster</u>, Pope Manufacturing Company, 1897, Connecticut Historical Society, Identifier: chs_cd16_bdse_painting_rack_4.jpg.
- 16. <u>Columbia Bicycle Model 105</u>, photographed by Johnstone Studio, 1903, Connecticut Historical Society, 1953.75.10.
- 17. SS Savannah, painting by Hunter Wood, 1819.
- 18. Middletown Ferry, Portland, about 1900, Connecticut Historical Society, 2000.196.54.
- 19. Photo of the *Onrust*, a re-creation of the vessel Adriaen Block built in 1614, courtesy of the Connecticut River Museum.
- 20. <u>Becky Thatcher Riverboat</u>, photo by Kim Tyler, courtesy of the *Day* Publishing Company.
- 21. <u>Freedom Schooner *Amistad*</u>, built by Mystic Seaport museum, photographed by Jérémy Pierot, CC BY-SA.



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- 22. <u>Bushnell's American Turtle</u>, engraving by Henry L. Abbot, 1881, courtesy of the Library of Congress, Illus. in UG1 .U47 no. 3.
- 23. USS Nautilus SSN571, photographed by Victor-ny, 2008, CC BY-SA 3.0.
- 24. Fourth of July!: the committee of citizens of Hartford have made arrangements with Messrs. Paulin and Brooks to make a grand ascension from the land of Col. Sam Colt and Mr. Woodbridge White, by William Paulin and Samuel Brooks, Hartford, 1854, Large Broadsides 1854 F781f.
- 25. <u>Image of "Mystical Flyer" hot air balloon</u>, 2008, courtesy of Connecticut Lighter Than Air Society (Mark Sand, President).
- 26. <u>U.S. Army dirigible</u>, photographed by E.W. Hazard, about 1915, Connecticut Historical Society, 1992.93.39.
- 27.<u>C.F. Ritchel in his dirigible</u>, as seen on the July 15, 1878 cover of *Harper's Weekly*, <u>PD-US-expired</u>.
- 28. <u>Vought-Sikorsky VS-300 helicopter</u>, Stratford Connecticut, 1940, Connecticut Historical Society, 1977.92.338.
- 29. <u>Gov. Malloy Welcomes a Sikorsky Helicopter to the Capitol</u>, 2013, Courtesy of the Connecticut State Library, Identifier: RG005-041Press2013_Books, accession 2019-015.
- 30. <u>Chance Vought F4U-1 Corsair</u>, photgraphed by Warwick Annear, 2009, <u>CC BY-NC-ND</u> 2.0.
- 31. Image of Airbus A220-300, courtesy of Pratt & Whitney, Inc.
- 32. <u>Image of hot-air balloons over Connecticut River</u>, photo by Eric Macfarlane, 2014, courtesy of Connecticut Lighter Than Air Society (Mark Sand, President).

2. Close-Looking Activity Options

- 1. This activity can be done with students in real time, either in the classroom or virtually, with the teacher guiding students using <u>Visual Thinking Strategies</u> to connect the four images listed below to what students learned in the introductory video.
 - a. What's going on in this picture?
 - b. What makes you say that?
 - c. What more can we find?
- 2. Alternatively, students can explore the images listed below on their own, using the guiding questions provided for each image.
- 3. Close-looking Images
 - a. <u>View of Higganum, Connecticut</u>, O.H. Bailey & Co., 1881, Connecticut Historical Society, 1979.71.2. [Background information: an illustration of Higganum, an industrial section of Haddam, CT. The Connecticut River is in the foreground with



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steamboats and sailing vessels. The Hartford and Connecticut Valley Railroad runs parallel to the river.]

- i. What natural landforms can you see in this image?
- ii. Looking very closely, what forms of transportation do you notice in use?
- iii. Why might a museum like the Connecticut Historical Society save this image?
- b. <u>Theodore Roosevelt in an electric carriage, Hartford</u>, photographed by Warner Photo Co., 1902, Connecticut Historical Society, 1982.80.398. [Background information: This photograph shows President Theodore Roosevelt riding in a parade in an electric carriage made in CT, escorted by bicycles also made in CT. This parade marked the first time a president rode in an automobile.]
 - i. What different modes of transportation are visible in this photograph?
 - ii. What kind of event appears to be taking place?
 - iii. Which type(s) of transportation in this photograph do people still use today?
- c. <u>Connecticut Skipper Pilots First Steamship from Savannah to Liverpool, 1819</u>, drawn by H.H. Art Studios Inc., 1947, Connecticut Historical Society, 1980.93.35. [Background information: The SS Savannah was the first steamship ever to cross the Atlantic Ocean. This illustration was created as part of a series for G. Fox. & Company's 100th anniversary.]
 - i. Why do you think that an illustration rather than a photograph was used to show this historic event?
 - ii. What two sources of energy appear to be employed in the use of this ocean vessel?
 - iii. What do you think the people on shore are doing? Why?
- d. Grumman Hellcat (F6F) Powered by Pratt & Whitney Double Wasps (R-2800), printed by Calvin Picone Studio, 1943-1945, Connecticut Historical Society, 2010.65.13. [Background information: The Grumman Hellcat F6F was a carrier-based fighter aircraft developed to replace earlier fighters which had proved less maneuverable. They were used successfully until the end of World War II. Although Grumman ceased production of the Hellcat after the end of the war, some planes remained in use by other nations until the 1960s.]
 - i. What forms of transportation do you see in this painting?
 - ii. This scene depicts U.S. military action during World War II. What skills were needed by the servicemen and women stationed in this location?
 - iii. How might you feel if you were enlisted to serve during this historic global event?



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3. Options for Independent Practice

1. Fueling Progress

Invite students to research one or more of the historic modes of transportation shown in the video and report on what fuel source(s) were needed to power the selected vehicle(s) and how those energy sources were obtained.

2. Contemporary Connections

Invite students to select, research, and report on a method of travel *not* shown in the video, such as:

- a. <u>Via land</u> in-line skates, skateboards, wheelchairs, mopeds, motorcycles, skis, bobsleds, ski-mobiles, race cars, subway trains, bullet trains, emergency vehicles, ATVs, RVs
- b. <u>Via water</u> surfboards, paddleboards, kayaks, river rafts, jet skis, hovercrafts, cruise ships
- c. <u>Via air</u> cable cars, gliders, jet packs, biplanes, triplanes, seaplanes, rocket ships, space shuttles

3. Creation Station

Invite students to engage in one or more of the following hands-on activities that bring to life the challenges of traveling via land, water, or air, such as:

- a. "Slow Roller Machine" Using a ping-pong or golf ball, wooden blocks, and an inclined flat surface, create a hands-free device to roll the ball, without stopping, as slowly as possible from the top edge to the bottom edge of the surface. Experiment with different block-position pathways to achieve the longest ball-running time possible.
- b. "Sink or Float" Using a single square of aluminum foil, design a flotation creation that can hold the largest amount possible of a dry item, such as cereal, pasta, paperclips, cap erasers, etc. Experiment with boat design to increase the amount of dry cargo as much as possible.
- c. "Aviation Station" Using a small strip of paper and a half-straw with a notched top, create your own "whirlybird." Experiment by using different types and lengths of paper and dropping this aviation invention from various heights to increase air time as much as possible.



History in a Nutshell Transportation: From Here to There, by Land, Water, or Air



<u>View of Higganum, Connecticut</u>, O.H. Bailey & Co., 1881, Connecticut Historical Society, 1979.71.2.



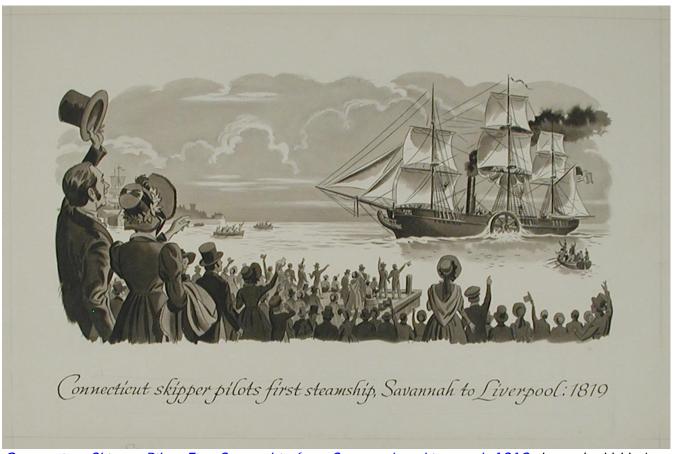
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<u>Theodore Roosevelt in an electric carriage, Hartford</u>, photographed by Warner Photo Co., 1902, Connecticut Historical Society, 1982.80.398.



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Connecticut Skipper Pilots First Steamship from Savannah to Liverpool, 1819, drawn by H.H. Art Studios Inc., 1947, Connecticut Historical Society, 1980.93.35.



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<u>Grumman Hellcat (F6F) Powered by Pratt & Whitney Double Wasps (R-2800)</u>, printed by Calvin Picone Studio, 1943-1945, Connecticut Historical Society, 2010.65.13.



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