

Grade Level **4-12**

Class Periods **1-2**

### Goals/Objectives/Student Outcomes:

Students will:

- **Recognize the impact the automobile had on Iowans and their ways of life.**
- **Be able to describe how Iowans promoted "Good Roads," and the reasons for paving roads.**
- **Recognize the need for traffic laws and understand their development and enforcement.**
- **Be able to list the ways in which the automobile was useful to people in rural areas.**
- **Recognize the various ways in which the automobile has affected our culture.**

### Materials:

1. Look for examples of these artifacts or images that can be used to study this topic:
2. Driving gloves
3. Goggles and duster
4. Calendar with print of car stuck in mud
5. "Ding" Darling cartoon satirizing road conditions
6. Good Roads promotion ribbons
7. Highway signs, Lincoln Highway marker
8. Road map of Iowa
9. Ads relating to highways and improvements, muddy roads, road construction crews
10. Picnic equipment
11. Postcards
12. Oil cans
13. Gas pump
14. Gas company signs
15. Burma Shave signs
16. Toy cars

### Background:

In the early 20th century Iowans struggled to transform roads designed for horse-drawn vehicles into a paved highway system for automobiles. Rural Iowans quickly discovered the practical advantages of the automobile, which ended rural isolation, enabled better medical care, and increased school attendance.

The same soil that made Iowa's farmland so productive also caused Iowa's dirt roads to be treacherously muddy after rain or very dusty in dry weather. From the turn of the century to the 1930s Iowa had a national reputation for poor roads. While surrounding states developed extensive paved road systems, Iowa had only a few miles of paved roads, plus some "improved" gravel ones. And because local residents often maintained the roads, the quality varied.

Many prominent individuals who were dissatisfied with the state's efforts to improve the roads joined the Good Roads Movement. Everyone wanted better roads, but disagreements arose about how to administer and pay for improvements. Some opposed a central state system, fearing it would wrest too much control away from local governments. Farmers were unwilling to pay the entire cost of paving roads on their land for public use. Finally, in the late 1920s federal money became available, and counties passed bond issues to match that money. By 1931 Iowa had established a network of hard-surfaced roads linking all county seats.

Before the standardized highway numbering system was imposed in 1925, residents gave their local highways distinctive names such as Memorial Highway and the River to River Road, festooning them with colorful markers. The prominent Lincoln Highway, named in 1914 for Abraham Lincoln, stretched from New York to San Francisco, passing through Iowa near what is now Highway 30.

While automobiles were first registered in 1904, it later became apparent that Iowa needed to enforce traffic laws to reduce accidents. The secretary of state was given the power to enforce rules and administer licensing. In 1935 Secretary of State Ola Miller created the Highway Safety Patrol to increase traffic safety and help motorists in trouble. Licenses, first required for chauffeurs in 1919, became mandatory for the general public in 1931. License fees helped provide funds to enforce traffic laws and maintain roads.

The automobile quickly became indispensable to farm families who wanted to socialize, receive medical care, and transport goods to market. Easier transportation led rural schools to consolidate. Rural people shifted their focus to the city.

In the early part of the century many farmers bought Model T Fords. Mass-produced on the assembly line, Model Ts were inexpensive to make and inexpensive to buy. The black cars could be repaired with common tools and parts were readily available. It was so popular in Iowa that Henry Ford opened a parts and body production plant in Des Moines. The plant operated from 1918 to 1932. This building is now Des Moines Central High School.

Country doctors saved much time and many lives by switching to the auto. Farmers with autos could quickly reach a city doctor or hospital during an emergency. Ambulance service increased during the 1930s. Rural babies now were more likely to be born in hospitals than in homes.

In addition, the movement to consolidate rural schools gained more support with the arrival of the auto. Supporters argued that larger schools would improve the quality of rural education by offering more subjects and activities than were possible with one-room schools. True or not, consolidation via school bus and improved roads did increase school attendance. Rural residents with automobiles also had greater access to town libraries.

The auto's popularity triggered a boom of new businesses, including restaurants, tourist homes, filling stations, and motor cabin courts. In the 1920s camping with automobiles became popular as an easy and inexpensive recreation. Companies made specially designed equipment for highway camping and picnics. Towns advertised their attractions through postcards and souvenirs to attract tourists. Road and travel guides were published. To remember their trips, travelers took photographs and kept diaries.

Many Iowa companies manufactured automobiles. Some operated for only a year, others as long as 10 years. By 1940 four major companies dominated the United States market. The smaller companies withered in the hot competition.

Two businesses that flourished with the auto were filling stations and oil companies. They plied their products with catchy roadside signs and symbols. Toys and games geared to highway travel were among the products created for the traveling tourist.

## Vocabulary:

**Consolidate:** To combine, merge.

**Federal dollars:** Money from the federal government.

**Federal matching money:** Money from the federal government for a certain project; an equal amount must be raised by local project supporters to equal the federal grant.

**Highway commission:** The state organization that regulated highway traffic and supervised road improvements. Now called the Department of Transportation.

**Isolation:** Separated from others; remoteness; loneliness.

**Independent:** Not depending on or controlled by others.

**Mass production:** Manufacturing goods in large quantities, usually in an assembly line.

**Primary road:** A major route connecting roads that are less traveled.

**Quagmire:** Land with a soft, muddy surface that yields under the feet.

**Ration:** To give out in fixed amounts, limiting the use of something in short supply.

**Reputation:** Worth or quality of a person or thing as judged or reported by others.

**Revolution:** Any major change in habits of thoughts, methods of labor, or manner of life.

**Transcontinental:** Going across a continent.

## Procedure:

1. Students should know when the auto appeared and its importance as an invention. For a brief history of the auto, consult an encyclopedia.
2. Emphasize the dramatic effect the automobile had on people's lives. Have students write a paragraph describing how their lives would be different without cars or buses. Have them illustrate their paragraphs. Hang these on the bulletin board.
3. Try some of these discussion questions with your students. After each question are some possible responses or suggestions to prompt students to explore the question.

**Q.** Imagine you are one of the leaders of Iowa's Good Roads movement. You're in charge of deciding where paved roads ought to be built in your county. Where would you put them?

**A.** Encourage students to consider major routes, such as roads to link towns with their county seat, or important market routes, or previously established dirt roads.

**Q.** Many prominent people were involved in the Iowa Good Roads Movement. Below is a list of some of these people. Why were they interested in good roads?

Editor Harvey Ingham, *Des Moines Register*

Politician Henry C. Wallace

Cement contractor Charles McNider

Publisher E.T. Meredith

Iowa State University agriculture college dean

Charles Curtis Farm leaders

**A.** All were concerned about Iowa's image with people outside Iowa. The editor and the publisher hoped that better roads would increase their paper's circulation. The dean envisioned increased enrollment by attracting students from far away. The cement contractor could profit from the need for his services. Farmers could more easily get their crops to market, travel to town, and buy their supplies.

**Q.** Other people were not as supportive of the good roads movement. Why not?

**A.** Many hesitated to support the movement because they had too many questions without answers, such as: Who pays for building the road? Which roads get paved? How will the work be done and by whom?

**Q.** Not everyone was immediately thrilled by the invention of the automobile. Some said it would diminish family values, local culture, and community identity. How might that happen?

**A.** Increased mobility allows some—especially the young—to depart, while enabling others who might have different ideas and customs to arrive. People may prefer to go traveling instead of staying at home with their family. As people travel farther from home, their world enlarges, and thus they come to see their community as just one piece, rather than the whole puzzle. The way women were viewed was also challenged because many considered driving an "unlady-like" activity.

**Q.** The automobile fostered a new culture with new needs and wants that in turn created new businesses and industries. What were some of these new companies?

**A.** Car dealerships, repair and manufacturing businesses, oil companies, filling stations. The auto also brought changes in mail delivery, grocery stores became supermarkets with a wider variety of food, and diners and fast-food restaurants sprang up, as did new kinds of entertainment like drive-in movies.

**Q.** Some businesses were not as necessary after the auto became popular. Some evolved into related businesses that were geared toward autos. Other businesses suffered great decline. What businesses might have evolved or declined?

**A.** Evolved: blacksmithing into garages and machine shops. Declined: harness-making, livery stables, and other passenger transportation such as railroads and steamboats.

**Q.** When the Model T was introduced it quickly became popular. Why did both farmers and townspeople like it?

**A.** Because the Model T was affordable. It was an inexpensive car to make—stamped out in black on an assembly line—so Ford sold them at a low price. In fact the price of the car decreased in succeeding years. The Model T also was very adaptable and easily repaired.

**Q.** How was the automobile useful to the medical profession?

**A.** House calls were easier to make and a car was available for emergencies at any hour. Unlike a horse, a car didn't require constant care and could be left almost anywhere.

**Q.** Iowans drove for years before they were required to have licenses. Why did the state begin licensing drivers? Why did it start by requiring chauffeurs to be licensed?

**A.** Licensing provided the state a record of who drove as well as providing state revenue. The state wanted to ensure that all drivers obeyed the same rules and had the same information. Chauffeurs were hired as skilled drivers, thus they ought to be licensed like other professionals.

**Q.** Discuss some of the ways in which the auto has changed our lives.

**A.** Our perception of distance has changed thanks to the automobile. For example, we might say, "Iowa City is two hours from Des Moines." Saying that, we assume people know we mean two hours by car. Our homes also changed with the rise of automobile. Instead of needing a barn far away from the house for a horse, we now build a garage—built to match the size of a car—attached to the house.

**Q.** What activities do we take for granted today that are difficult to do without a car?

**A.** Many of us take for granted our daily commute to a job that is at a distance from home. Automobiles also make it easy to quickly run to the store for something we've forgotten. Visiting family and friends who live in other towns has become routine.

## Assessment of Outcomes:

Students can explore the themes by using the materials on the Resource List to provide written or oral reports. By using the local library and local historical society students will find information, images and artifacts. Reporting out of information can be accomplished through written or oral reports or construction of models or exhibits.

## Extensions and Adaptations:

The following topics can be used for panel discussions, classroom debates, written or oral reports, or construction of small scale exhibits/displays.

What are some safety features of cars today? Find out which of these were on early autos. When were they added? Do these features change how the car is marketed? Do ads try to sell the safety features?

As more people took to the roads the need for regulations increased. How was the public involved in developing these rules? What are some of our concerns about driving today? How does the public become involved? Has this changed?

Find out what conveniences were available to those who traveled by car in your area during the 1920s and 1930s. (Consider diners, motels, campgrounds, and service stations). Who started them? Do they still exist, and are they owned by the same family?

Did the automobile affect your school system? Are you in a consolidated district? When did it consolidate? What is its history of consolidation? When was a school bus system started? Where did early buses run? What are today's bus routes?

Like cars, telephones and radios eased rural isolation. Today we put radios and telephones in our cars to relieve the isolation of driving long distances. When were radios first put in cars? Were they put in for entertainment or for news and information? Find out when other conveniences were added to cars, such as glove boxes, cigarette lighters, and vanity mirrors. What does this tell you about how our attitudes toward transportation have changed?

"Ding" Darling was an editorial cartoonist for the Des Moines Register for many years. His cartoons poke fun at a variety of serious issues, including autos, roads, and motorists. Find back issues of the Register to see other Darling cartoons about the issues facing motorists. Write a report that sums up these issues. Do you think the cartoons changed people's views? Check your hometown newspaper for similar cartoons. Draw your own cartoon that tells how you feel about driving conditions today.

During the early days of the automobile many Iowa companies tried to enter the market. Have students research car manufacturers in or near their town, using the list of manufacturers following. City directories may contain useful information. Have students find out who worked for the company, what the working conditions were like, and whether there are any other manufacturers not on this list.

Plan an imaginary tour across Iowa or across the United States. Choose a place of particular interest to visit such as a town, a park, or a historic site. Plot the trip on a large map. Find the most direct route and mark it, noting interstates, highways, and other main roads. Figure mileage. Determine travel time, keeping in mind speed limits. What is the total mileage and travel time? Make a report (oral or written) about the place you want to visit. Include the site's significance and history, who settled there and why, what jobs are available, what products are produced there, what the land looks like, and what its climate is like.

Imagine you own a small oil company. You compete with Standard Oil and other local companies for customers. Design a sign, logo, and slogan that you think will spark people to buy your product. Where will you advertise your product, and who do you think will buy it?

Make postcards of your hometown. First, make a list of places and things that tourists might find interesting. Photograph these scenes,

using any available camera. Then mount the prints onto a blank index card. Include a caption for each postcard. Send your postcard to a friend or relative out of town. (To mail it you may have to put it inside an envelope).

The invention of the automobile inspired songs about the new machine. Find some of these songs and learn the words and music. What do the songs tell you about early motorists and their autos? Next, find more recent songs about autos, roads, and driving. What stories do they tell? How has the view of the automobile changed?

On your next trip keep a travel diary. Write down your impressions of the people you meet, and the places you go. Also describe the weather and the travel conditions.

One of the best and most interesting ways to learn about a historical event is to talk with people who lived through it. Conduct an oral history project about the early days of the auto with someone who worked on the roads or with one of your relatives, such as your parents or grandparents. Use a tape recorder so you don't miss anything as you interview them.

Ask them to describe their first car. Find out when they got it, what it looked like, what was its "latest" feature, and how it differed from the one they now own.

Also ask them to describe what the roads were like when they were your age and about family vacations they took by car. When and where did they go? What did they take with them? How long did the trip take? What did they take with them? Where did they stay? What were the popular vacation spots in the 1920s, 1930s, and on up through today?

Ask an older person to discuss the rationing of gasoline during World War II. How did it affect where they traveled? Did people travel together to save gas coupons? How did rationing affect schools, farmers, and public transportation?

Make a class book containing the oral histories. What general statements can be made from these findings?

## Resources:

These materials will help you find out more about the early years of the auto. (SHSI stands for State Historical Society of Iowa; AEA is Area Education Agency.)

### 4th-8th Grade

"The Automobile Age," *The Goldfinch*, Vol. 4, No. 2, Nov. 1982. (SHSI) Entire issue devoted to roads and early auto travel.

Weitzman, David, *My Backyard History Book*. Little and Brown Company, Boston, 1975. (Interlibrary loan through the publisher) Excellent book for children; emphasizes family and local history, how to do oral history.

*Iowa Country Schools*. (Video Recording), Iowa Public Broad-casting Network, 1979. 30 min. Teachers guide. (AEA 9, 10, 11)

*Traveling Highway 6*. (Video Recording) Iowa Public Broadcasting Network, 1975. 30 min. Teachers guide. (AEA 9, 10, 11)

### 9th Grade to Adult

Barrett, Paula Colby. "The Colby Motor Company." *The Palimpsest* 62 (July-August 1981): 118-128 (SHSI, public library) Story of an early auto manufacturer.

Beitz, Ruth S. "Whirlwinds on Wheels." *Iowan* 11 (Summer 1963): 12-16, 51 (SHSI, public library) Pioneer Iowa auto-makers, including Frederick and August Duesenberg.

Butts, A.P. "Boomer Hill." *Trail Tails* 5 (1971): 2-6, 15-19 (SHSI, public library) Joy riding in 1909 in Boone, Iowa.

Clements, Ralph H. "Seedling Mile." *Iowan* 17 (Fall 1968): 22-24 (SHSI, public library) First mile of concrete highway in Linn County in 1918.

Davis, Rodney O. "Iowa Farm Opinion and the Good Roads Movement 1903-04." *Annals of Iowa* 37 (1964): 321-38. (SHSI, public library) Looks at the good roads movement from the farmers' perspective.

Dodds, Naomi. "A Farmers Road." *Cedar County Historical Review* (1971): 13-15 (SHSI) The maintenance of a farm road.

Funk, A.B. *Fred Maytag, A Biography*. Torch Press, 1936. (public library, interlibrary loan) Maytag was the producer of the Maytag washer and car.

Hokanson, Drake. "The Lincoln Highway: Forgotten Main Street through Iowa." *Iowan* 31 (Summer 1983): 4-21, 50, 53 (SHSI, public library)

*Iowa State Patrol, 1935-1980*. Walsworth Publishing Co., 1985. (public library, interlibrary loan, AEA 9, 7)

Knupp, Floyd M. "Motoring to a Wedding." *Palimpsest* 60 (March-April 1979): 62-64. (SHSI, public library) Tells the story of traveling Iowa roads on the way to a relative's wedding.

May, George S. "The Good Roads Movement in Iowa." *Palimpsest* 46 (1965): 65-122. (SHSI, public library)

McClellan, Keith. "The Morrison Electric: Iowa's First Automobile." *Annals of Iowa* 36 (1963): 531-68. (SHSI, public library) The Morrison was built in Des Moines in 1895.

Meusberger, Joanne. "Farm Girl."

*Palimpsest* 68-69 (Winter 1987, Spring 1988). (SHSI, public library) Two-part article on a young girl's memories of rural Iowa.

Olson, Helen Dean. "My First Auto Trip." *Kansas Quarterly* 8 (1976): 21-24. (Kansas Historical Society, interlibrary loan) Traveling from northwest Iowa to Janesville, Wisconsin.

Teape, Vera Marie. "The Road to Denver." *Palimpsest* 61 (Jan-Feb. 1980): 2-11. (SHSI) Early Iowans drive to Denver, Colorado.

Thompson, W. H. *Transportation in Iowa, 1846-1980*. 1982. (public library) A bibliography.

*The American Road*. 1953. Color film, 38 min. (State Library)

*Golden Age of the Automobile*. 1970. Color film, 30 min. (State Library)

*Roads to Grow On*. 1973. Color film, 22 min. Iowa Highway Commission (State Library)

## Detective Work

Here are suggested themes for student research. To explore the themes, use your local library, which, through its own collections and interlibrary loans, should prove helpful. The results might be presented in both a written and an oral report.

✓ What are some safety features of cars today? Find out which of these were on early autos. When were they added? Do these features change how the car is marketed? Do ads try to sell the safety features?

✓ As more people took to the roads the need for regulations increased. How was the public involved in developing these rules? What are some of our concerns about driving today? How does the public become involved? Has this changed?

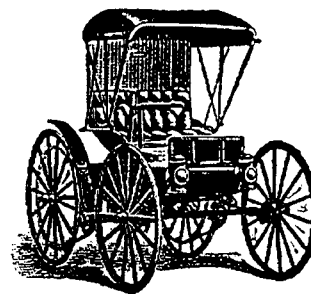
✓ Find out what conveniences were available to those who traveled by car in your area during the 1920s and 1930s. (Consider diners, motels, campgrounds, and service stations.) Who started them? Do they still exist, and are they owned by the same family?

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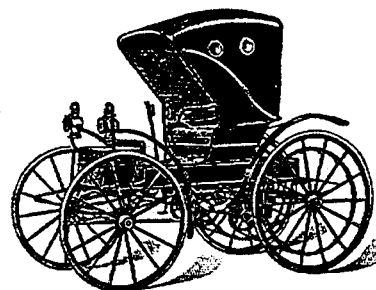
✓ Like cars, telephones and radios eased rural isolation. Today we put radios and telephones in our cars to relieve the isolation of driving long distances. When were radios first put in cars? Were they put in for entertainment, or for news and information? Find out when other conveniences were added to cars, such as glove boxes, cigarette lighters, and vanity mirrors. What does this tell you about how our attitudes toward transportation have changed?

✓ "Ding" Darling was an editorial cartoonist for the *Des Moines Register* for many years. His cartoons poke fun at a variety of serious issues, including autos, roads, and motorists. Find back issues of the *Register* to see other Darling cartoons about the issues facing motorists. Write a report that sums up these issues; do you think the cartoons changed people's views? Check your hometown newspaper for similar cartoons. Draw your own cartoon that tells how you feel about driving conditions today.

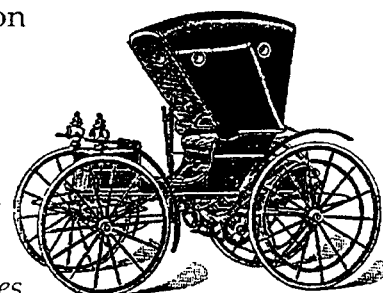
✓ During the early days of the automobile many Iowa companies tried to enter the market. Have students research car manufacturers in or near their town, using the list of manufacturers given on the next page. City directories may contain useful information. Have students find out: who worked for the company; what were their working conditions; are there any other manufacturers not on this list?



Model No. 3, \$650.00 without top



Model No. 9, \$700.00 without top



Model No. 10, \$750.00 without top

# IOWA AUTO MANUFACTURERS

PLACE OF MANUFACTURE	PRODUCT	DATE OF OPERATION
Bettendorf	Meteor	1908
Cedar Rapids	Beck truck	1912-1922
Charles City	Hart-Parr tractor	1908
Council Bluffs	Bertzchy	1909
Davenport	Davenport	1902
	Independent truck	1917-1927
Des Moines	Morrison	1895
	Des Moines	1902
	Mason	1906-1910
	Wells	1914
Dubuque	Adams-Farwell	1905-1913
Gladbrook	Mann	1895
Fort Madison	Deloura	1902-1903
Grinnell	Spaulding	1910-1916
Hampton	Hobbie	1908-1910
Henderson	G.W.W. truck	1916-1921
Keokuk	Gate City	1904
LuVerne	Leicher	1903
Marathon	Swanson	1910
Marshalltown	Marshalltown	1910
Mason City	Colby	1911-1914
Muscatine	Littlemac	1930-1932
Nevada	Nevada truck	1913-1916
Newton	Foster	1908
Osage	Frazee	1903
Oskaloosa	States	1911
Ottumwa	Bell truck	1919-1923
	Dain truck	1912-1913
Redfield	Nelson	1898
Sidney	Lybe	1895
Sioux City	Sioux City	1901
	Hawkeye truck	1916-1933
Waterloo	Arabian	1915-1917
	Asquith	1901
	Caldwell	1908
	Dart truck	1922
	Davis	1895
	Duryea	1900-1911
	Filshback	1912
	Galloway	1908-1911
	LCE	1914-1916
	Mason/Maytag	1906-1915
	Summit	1907-1909
	Waterloo	1908
Webster City	Smisor	1900

# VOCABULARY REVIEW

Here's a quiz to review the information in the vocabulary list.

- |   |       |
|---|-------|
| 1. To combine, merge  | ----- |
| 2. Fuel   | ----- |
| 3. Rocky road surface   | ----- |
| 4. Make in large quantities   | ----- |
| 5. Sleep outdoors   | ----- |
| 6. Permit to drive  | ----- |
| 7. Money from U.S. government<br>for which an equal amount<br>is raised | ----- |
| 8. Not controlled by others   | ----- |
| 9. Ford made these<br>inexpensive autos                                 | ----- |
| 10. Highway named for<br>a president                                    | ----- |
| 11. "Out of the _____"  | ----- |
| 12. A major route   | ----- |
| 13. Secretary of State<br>_____ Miller                                  | ----- |
| 14. Petroleum product   | ----- |
| 15. To limit amount   | ----- |
| 16. Going across a continent  | ----- |
| 17. The "Good _____ Movement"   | ----- |
| 18. Remoteness  | ----- |
| 19. State organization  | ----- |

*Answers:*

- |                           |                        |
|---------------------------|------------------------|
| 1. Consolidate            | 11. Mud                |
| 2. Gasoline               | 12. Primary Road       |
| 3. Gravel                 | 13. Ola                |
| 4. Mass production        | 14. Oil                |
| 5. Camp                   | 15. Ration             |
| 6. License                | 16. Transcontinental   |
| 7. Federal matching money | 17. Roads              |
| 8. Independent            | 18. Isolation          |
| 9. Model T                | 19. Highway Commission |
| 10. Lincoln               |                        |