

You Are the Driver!

You are just about to arrive at your campsite to enjoy your family vacation. You have planned your trip thoroughly. You now know that safe, smooth, stress-free travel does not happen by chance. The better your planning and attention to detail, the better the trip.

In this chapter, you will learn how to plan local travel. You'll discover how to make long trips manageable—even though the planning can be complicated. Finally, you will have a chance to learn about special vehicles and trailers and how to drive them safely.

18.1

Local Travel

18.2

Long-Distance Travel

18.3

Special Vehicles and Trailers



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Objectives

1. State two questions you should ask yourself before making a short trip.
2. Name three things you can do to simplify a short trip.

Most of your driving will be short, local trips. Therefore, it is important to plan carefully for local travel. If you do, you will save yourself time, money, and fuel.

Short Trips

A short trip can be as simple as driving to a neighborhood store. Or it can mean driving to the other side of a large city. In any event, you want to arrive safely and on time. Before you start this kind of trip, ask yourself the following two questions.

Is This Trip Needed?

Since driving can be costly, you need to ask yourself if the trip is needed. If you can answer “yes,” then ask yourself if there is a less expensive,

more efficient way to make the trip. Could you use public transportation or share a ride with others? Simply driving around wastes money and fuel!

Another way to save yourself time, money, and fuel is to combine several small trips into one. You will also help yourself by extending the life of your vehicle. Short trips mean you will be driving a vehicle with a cold engine. Driving with a cold engine increases the wear on your vehicle and dramatically increases its fuel use.

Do I Have Enough Time?

If a trip is needed, will you have enough time for it? To be sure you do, make these smart decisions:

- **Allow Time** No matter how well you plan, if you don't leave on or

How to Save Fuel

Use good driving habits.

Turn off engine. If you are waiting in line for more than one minute, shut off the engine.

Carry less weight. Clean out your trunk and interior. Overloaded cars use more fuel.

Keep engine cool. Keep radiator filled with coolant. Excess heat increases engine wear and reduces gas mileage.



**SPEED
LIMIT
50**

Slow down. You use less fuel if you drive at 50 mph instead of 60 mph.

Close windows. At high speeds, use air conditioner. At lower speeds, turn off air conditioner and open windows.

ahead of time, you will not reach your destination on time. It is very difficult and often dangerous to try to make up time as you drive. Allow extra time for delays caused by bad weather or heavy traffic.

- **Listen to Weather and Traffic Reports** Local weather and traffic reports are very useful for planning local travel.
- **Choose the Best Travel Time** In many cities, normal rush-hour traffic will test your patience and waste time and fuel. When possible, travel when traffic is light.

Planning Ahead

Have you ever watched skilled drivers? The reason they make driving look so smooth is that they think ahead. Following are three key ways you can make your travel smooth and stress free.

Vehicle Preparation Running out of windshield-washer fluid, driving on an underinflated tire, or having a turn-signal light fail might not sound like a big problem. However, each of these small problems could trigger a collision.

Be alert when you approach your vehicle. Before you drive, check your vehicle's tires, lights, and controls. If you detect the slightest problem, fix it before it becomes a bigger problem.

Each time you fill your vehicle's fuel tank, make a routine check of your oil, water, and windshield fluid levels. By following the points in the picture to the left, you can save fuel on every trip.



You can help plan the route as a passenger.

Route Selection Consider the travel time and the possible hazards when you select a route. In many cities, it is easier to drive a few more miles to take interstate expressways than it is to take local roads. You can save time and eliminate potential hazards by avoiding uncontrolled intersections and heavy traffic.

Know Your Route and Addresses

Have you ever really been lost? It can be frightening, perhaps even dangerous. You can usually avoid this by planning your route ahead of time. Write down directions and have a map. If you have a passenger, let that person help to identify street names, directions, and addresses.

Review It

1. What two questions should you answer before starting a short trip?
2. What three things can you do to simplify a short trip?

Objectives

1. Demonstrate three ways you can use a road map to find the distance between two cities.
2. Describe how to prepare for a long-distance trip.
3. Tell what techniques you can use to stay alert while driving.
4. Describe four things you need to be alert for when driving a rental vehicle.

A well-planned trip can be a satisfying, memorable experience. To make a trip work, you need to plan many details in advance.

Map Reading

Your first and most valuable trip planning tool is a current map. Maps are available from state and city offices of promotion and tourism, motor clubs, bookstores, and on the Internet.

Good maps include a **legend** that explains the markings and symbols used on the map, such as this one. Comprehensive maps also include a mileage chart to show distances between important points of interest, an index to locate cities, and enlarged detail maps of major cities.

How to Find a Town

Most maps have an index listing the coordinates of places on the

map. To find a city, locate the letter and number that follows it in the index. Next, find the same letter and number on the edge of the map and draw imaginary lines horizontally and vertically.

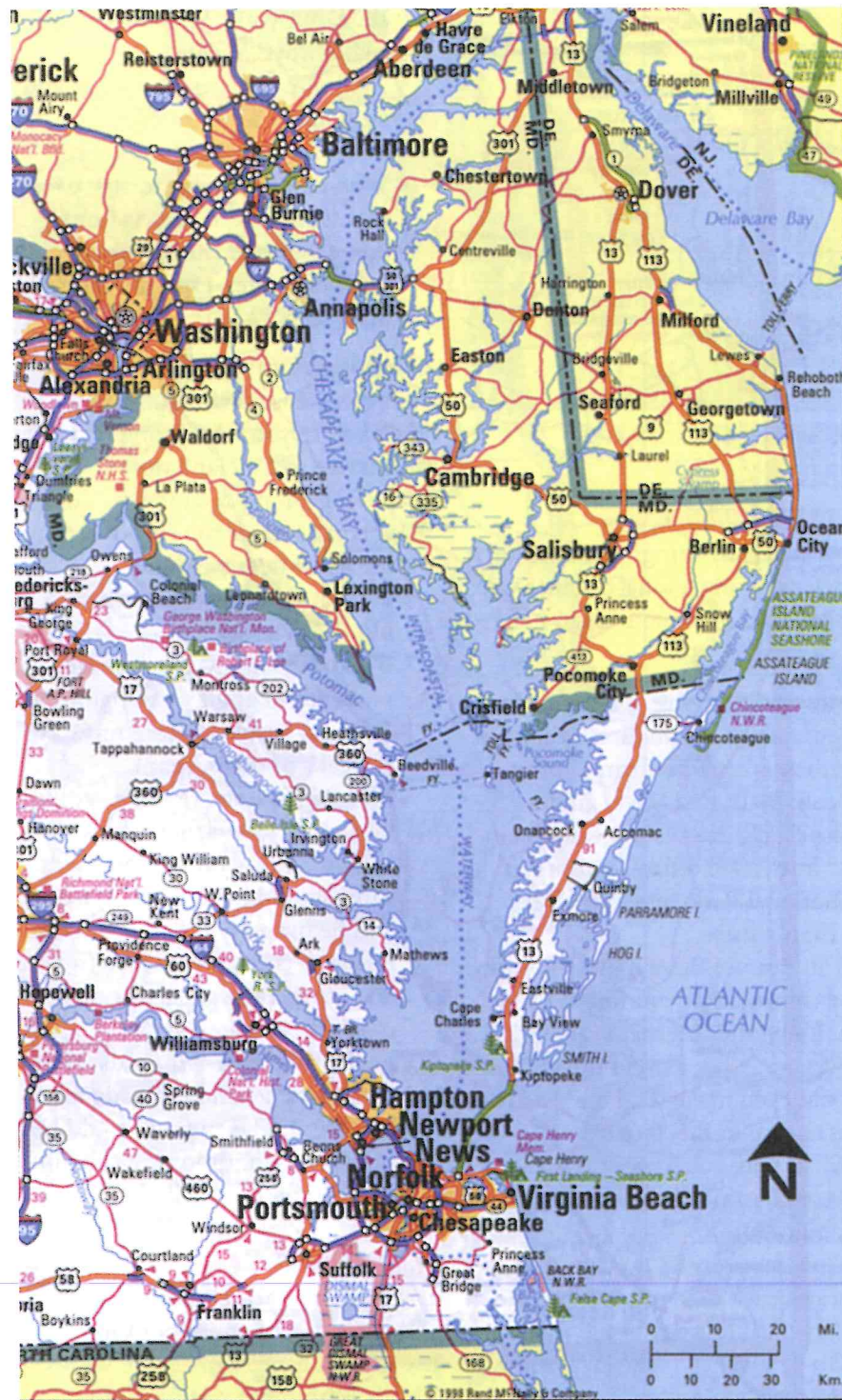
Calculating Distances

There are three ways you can use a map to estimate distances. Use the map scale to estimate distance between towns and cities. On this map, one inch equals about 30 miles. You can use a mileage chart, which lists the distances between cities.

Colored numbers on a map indicate distances between cities, towns, or points of interest marked with like colored symbols. Black numbers indicate the distance between major intersections. You can add numbers to determine the mileage between two locations.

Map Legend	
Roads and Related Symbols	
	Free Limited Access Highways
	Under Construction
	Toll Limited-Access Highways
	Under Construction
	Other Four-Lane Divided Highways
	Principal Highways
	Other Through Highways
	Interstate Highways
	U.S. Highways
	State and Provincial Highways
	Miles (red) between arrows One mile or less not shown
	Interchanges and Numbers (For most states, mileages between interchanges may be determined by subtracting one number from the other)
Cities and Towns	
	Urbanized Areas
	Separate cities within metro area
	National Capital; State Capital
	Cities, Towns and Recognized Places; County Seats; Neighborhoods (Size of type indicates relative population)

A map's legend explains its markings, symbols, and distance scale.



Virginia

Population: 6,216,568 (1990 Census)

Land Area: 39,598 sq. mi.

Capital: Richmond

Cities and Towns

Abingdon	1-4
Accomac	G-13
Alexandria	D-11
Altavista	H-8
Amherst	G-8
Appalachia	H-2
Appomattox	G-8
Arlington	D-11
Ashland	G-10
Bassett	1-7
Bedford	H-7
Berryville	D-10
Big Stone Gap	H-2
Blacksburg	H-6
Blackstone	H-10
Bluefield	H-5
Bowling Green	F-11
Boydton	I-9
Bristol	1-3
Broadway	E-8
Brookneal	H-8
Buchanan	G-7
Buckingham	G-9
Buena Vista	G-8
Cape Charles	H-13
Cedar Bluff	H-4
Centerville	D-10
Charlotte Court House	H-9
Charlottesville	F-9
Chase City	I-9
Chatham	I-8
Chesapeake	H-12
Chincoteague	F-14
Christiansburg	H-6
Clarksville	I-9
Clifton Forge	G-7
Clintwood	H-3
Coeburn	H-3
Colonial Beach	F-11
Colonial Heights	H-11
Covington	G-7
Crewe	H-9
Culpeper	E-10
Cumberland	G-9
Danville	I-8
Dublin	H-6
Elkton	E-9
Emporia	I-10
Exmore	G-13
Fairfax	D-11
Falls Church	D-11
Falmouth	E-10
Farmville	H-9
Floyd	H-6
Franklin	I-11
Fredericksburg	F-10
Front Royal	D-9
Galax	1-5
Gate City	I-3
Gloucester	G-12
Goochland	G-10
Gordonsville	F-9
Gretna	H-8
Grotoes	F-8
Grundy	H-3
Halifax	I-8
Hampton	H-12
Harrisonburg	E-8
Hillsville	I-6
Hopewell	H-11
Jarratt	1-5
Jarratt	1-11
Kenbridge	H-9
Lawrenceville	1-10
Lebanon	H-3
Leesburg	D-10
Lexington	G-7
Louisa	F-10
Lovington	G-8



Using the Internet to help plan a trip can save you time and money.



You can start your on-line search for planning your trip by going to established search engines on the Internet. Search for a national park, state, city, or attraction you wish to visit. You can even find the best route and weather conditions on-line.

Advance Preparation

There are many things you need to do before taking a long-distance trip. You can find many sources to help you prepare.

Routes and Lodging Once you have picked a travel destination, you need to gather as much information as you can. Maps and travel guides are especially useful. You can obtain these from state offices of tourism, the National Park Service, motels, and motor clubs.

You can use these materials with other information you find on your own. Using the Internet is an exciting way to gather travel information. You can even make it a family activity as shown in this picture.

Make sure you know the answers to these questions before you start your planning:

- How many miles do you want to travel each day? A good average for an 8-hour day is 400 miles.
- Do you want to take local roads or interstate routes? You can make better time on the inter-

state, but you might miss some sights worth seeing.

- Are there construction areas and rush hours to be avoided?
- What will the weather be like?
- Where do you want to stay overnight? Advanced reservations are recommended on heavily traveled routes, especially during peak seasons.

Checking Your Vehicle Make sure your vehicle is serviced at least a week before you take a long trip. Let the service technician know you will be driving a long distance. By doing so, you can reduce the risk of service problems while traveling.

Here are the basic systems you should have checked:

- **Brake System** Make sure all parts are in good working order.
- **Exhaust System** There must be no leaks in this system.
- **Steering System** Wheels should be aligned. Shock absorbers should be ready for heavy loads. Tires should have ample tread and be properly inflated. Do not forget to check your spare tire and carry a tire gauge for on-road checks.
- **Engine Systems** All fluids, belts, and hoses need to be ready for heavy use. The engine should be tuned. Air-conditioning coolant also should be checked.

Special Equipment

Long-distance travel requires that you pack special equipment for use in emergencies or severe weather. This is equipment you may not normally carry.

Emergency Equipment

For emergency situations, you should consider packing the following items:

- cellular phone or CB radio to call for help (if available)
- containers of the right oil for your vehicle, antifreeze, and windshield-washer fluid
- A-B-C type fire extinguisher
- first-aid kit
- flashlight
- jumper cables
- spare fuses
- basic tools like an adjustable wrench, screwdriver, and pliers
- flares or reflectors

Winter Gear

If traveling in remote or mountain areas in winter weather, you will want to pack these additional items:

- blankets and additional warm clothing including gloves
- sleeping bags
- tire chains and/or snow tires
- high-energy food such as granola bars, nuts, and dried fruit
- window scraper and snow brush
- shovel
- tow line
- sand for extra traction

Personal Preparation

To complete your planning for the trip, make sure you have packed the following items:

- a variety of coins for tolls
- all maps and travel guides
- a spare set of vehicle keys
- all necessary medications
- telephone numbers for motor club, road emergencies, and anticipated stops

- traveler's checks, credit cards, and phone calling cards

Finally, set lights in your home on timers and stop regular deliveries. It is also a good idea to let a neighbor know when you are leaving, where you plan to be, and when you will return.

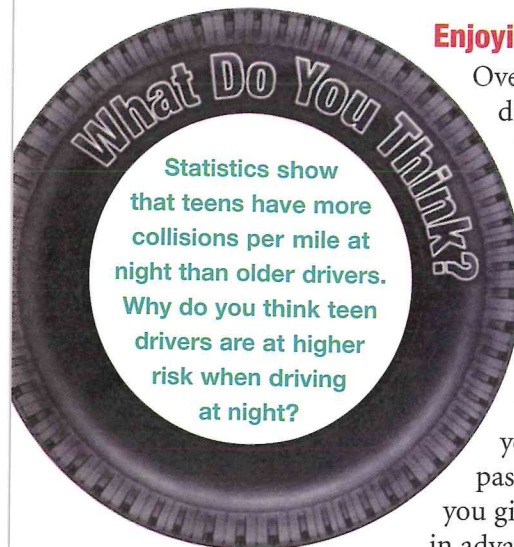
Vehicle Load

The best rule to keep in mind when traveling is to travel light. Added weight will increase your fuel consumption and affect the way your vehicle handles. If you do travel with a full load, follow these steps:

- Use the highest tire pressure listed in your owner's manual. However, do not overinflate the tires.
- Load the heaviest items on the bottom forward part of your trunk, if you are traveling in a car.
- Keep loose items in the trunk of your car.



Tire chains can make the difference in bad weather.



Enjoying Your Travel

Over the years, experienced long-distance travelers have learned the subtle secrets that make traveling long distances enjoyable. Here are some tips that will help you enjoy your travel more.

Share Navigation Following a route by reading a map is called **navigating**. When you share driving, have your passenger navigate. Make sure you give each other directions well in advance. If you are alone, pull over to read maps, make calls, or ask directions at a service station.

Stay Alert Drowsy drivers are the cause of a great many collisions and near-misses. To stay alert, use a regular routine that includes the following:

- Drive only during the hours you are normally awake. Do not try to drive through the night. Avoid night driving when possible.
- Take regular breaks every two hours or so. Rotate drivers and get out of the vehicle to stretch.
- Keep fresh air circulating in the vehicle at all times.
- Drive with headlights on at all times, as shown here. This assures that you will always “see and be seen.”
- Eat light.
- Maintain your focus on driving. Concentrate in heavy traffic or confusing situations.
- If your eyes are heavy and your concentration is not good, it is time to stop and rest.

Rental Vehicles

Many of your trips will be a combination of flying and driving. You will fly to your destination, and then rent a vehicle for transportation as shown on the opposite page. Use the same rules you would when shopping for any service as you look for a rental vehicle.

Decide these points before you rent a vehicle:

- What size and type of vehicle do you want? Compare prices.
- How long do you need it? A weekly rental may be cheaper than a daily rental.
- Will it be a round-trip or one-way rental? One-way rentals usually cost more.



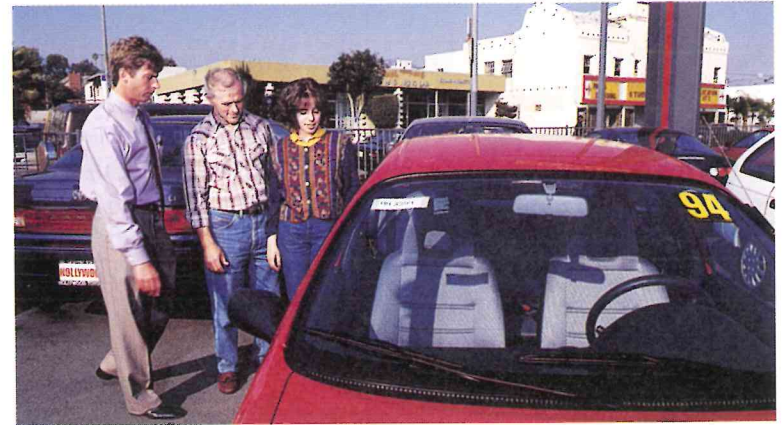
Daytime headlight use makes for safer driving, especially with other drowsy drivers.

- How will you handle insurance? Your regular home, vehicle, or credit card insurance policy may provide part of the needed coverage.
- Will you fill the gas tank on return, or will you buy a full tank of gas with your rental agreement?
- Don't forget to bring a child seat if needed.

Also be aware that most companies will not rent a vehicle to individuals under age 21, and sometimes 25. But young drivers usually can become part of a rental plan for an added daily fee.

Rental companies can provide a range of services for customers. They will advise you on local laws and requirements, provide maps and directions, and give you the channel numbers of local radio stations that carry traffic reports. In addition, you should stick to these basics:

- Orient yourself to your vehicle before you drive out. Know where controls and devices are ahead of time. Make sure the jack and spare tire are in good shape. When driving in a strange area, keep your windows up and your doors locked.
- If you are bumped by another vehicle or asked to stop for advice or assistance, *don't stop*. Instead, drive to the nearest well-lit service area and ask for police assistance. If necessary, use your hazard flashers to signal a need for help.



Get oriented to your rental vehicle before you begin driving.

- Know the rental company's toll-free service number in case you need help with the vehicle.
- Store all valuables out of sight in the trunk or glove compartment. At night, take valuables with you.
- Park only in well-lit, secure areas.

Review It

1. What three ways can you use a road map to find distances between cities?
2. How should you prepare in advance for a long-distance trip?
3. What steps can you take to stay alert while driving?
4. Name four things you should keep in mind when driving a rental vehicle.

Objectives

1. Describe some problems you might have while driving a large vehicle.
2. Explain some special steps you need to take when pulling a trailer.
3. Tell how to back a trailer.

Driving a recreational vehicle, using a rental truck, or pulling a trailer are three other ways you can travel. You will have to use additional precautions when driving these vehicles or pulling a trailer.

Large Vehicles

A vehicle used primarily for vacations and travel is called a *recreational vehicle*. A camper on a pickup truck or a large motor home are both examples of recreational vehicles.

Rental trucks are another type of large vehicle you might use. When renting one of these trucks, be aware that special insurance protection is needed.

As you drive large vehicles, you need to be alert to the following special performance aspects.

Seeing The minute you get behind the wheel of a large vehicle, you will see how difficult it is to get a full view of the driving scene. Your forward field of vision is open and easy to see. But your view to the sides and rear is severely limited. In short, your ability to use the IPDE Process to the front is better, but your ability to turn and back is restricted.

Look at the illustrations below. Notice how far ahead you can see over the tops of cars. Notice how hard it is to see to the rear left. It is just as difficult to see to the right and center rear. You can see how important it is for other drivers to give a large vehicle extra room to maneuver.

Backing Whenever possible, avoid backing. Instead, drive around the block or turn around in a large, open parking lot. When backing, get another person to stand beside and behind your vehicle to guide you.



Drivers of large vehicles can see more ahead but less to the rear.



You Are the Driver!

If you were driving this rental truck, how would you handle the situation?

Maneuvering Because your vehicle is large and heavy, it will not maneuver like a car. It will take longer to accelerate, brake, and turn.

Crosswinds The size of your vehicle will make it more difficult to control in high winds. If you encounter windy conditions of more than 30 mph, slow down or stop. Anticipate driving difficulty, and be ready to correct your steering. Under extremely windy conditions, some bridges or expressways may close temporarily.

Remember Your Size Hitting an overhead object like a roof at a drive-through restaurant is one of the most frequent collisions experienced. You must remember your large size when you project your path of travel, like the driver in the picture is doing.

Following Distance Because large vehicles are heavy, *your following distance must be four or more seconds*. This distance will allow more time for you to use the IPDE Process.

Fatigue It takes more effort to drive a large vehicle than a car. The ride can be rough and noisy. Plus, if driving a large vehicle is a new

experience, it will require more concentration over a longer period of time. Plan frequent rest stops and change drivers when possible.

Trailers

Pulling a trailer will put an additional strain on your car. When pulling a trailer, you can count on

- doubling the time and space you need to accelerate, slow, and turn
- cutting your fuel economy almost in half

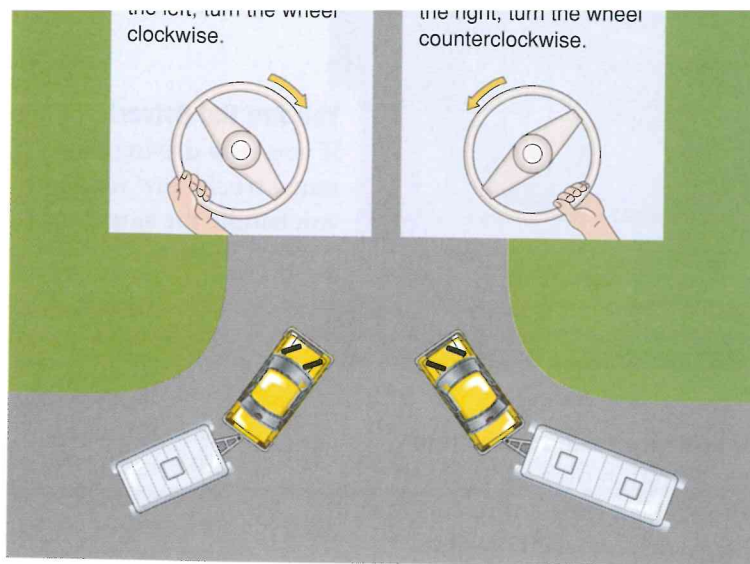
Making Sure You're Set Make these checks before pulling a trailer:

- Check your vehicle owner's manual to see how much weight you can tow.
- Check all fluids. Check your coolant level daily.
- Make sure all filters are clean.
- Inflate your rear tires to their maximum recommended level.
- Double-check all vehicle and trailer lights.
- Check your owner's manual to see if any special equipment is recommended.

Special Equipment To pull a trailer safely, you will need the appropriate size and strength trailer hitch, safety



Make sure safety chains are in place before moving.



Take it slow and easy while backing a trailer.

chains, and extended mirrors on both sides of your vehicle. **Safety chains**, as shown in the picture on page 387, provide a backup link to your vehicle in case the hitch fails.

Load Check these points when loading your trailer:

- Place heavy items low over the trailer's axle.
- If your load is more than 1,000 pounds, you should get a trailer equipped with special brakes.
- Make sure that about 10 percent of the trailer's loaded weight is on the trailer's hitch.
- Secure the load with ropes.

Towing Techniques

When towing a trailer, remember, it will take you about twice as long to pass, stop, accelerate, and turn. Follow these rules when towing a trailer:

- Use a following distance of four or more seconds.
- Travel at the posted speed limit.

- Make turns slow and wide.
- If your trailer starts to sway or "fishtail," steer straight down the center of your lane, and let off the accelerator. Once the trailer stops swaying, use all brakes carefully.
- Allow twice as much distance to pass or stop.
- Shift to a lower gear before going up or down a steep hill.
- Be ready to slow or correct steering for crosswinds created by other vehicles.
- *Never carry passengers in a trailer.*
- If your vehicle overheats, turn off your air conditioner and turn on your heater.

Backing Look at the picture above to get an idea of what it's like to back a trailer. To back left, turn the wheel clockwise with your left hand. Turn the wheel counterclockwise to start your trailer backing right. Back slowly and make small steering corrections. If you cannot see out the back window, use your right and left mirrors. Always have a person outside your vehicle to help guide you.

Review It

1. What are three potential problems you might have while driving a large vehicle?
2. What steps should you follow when towing a trailer?
3. What procedure should you use when backing a trailer?

Reviewing Chapter Objectives

1. Local Travel

1. What two questions should you ask yourself before making a short trip? (378)
2. What three things can you do to simplify a short trip? (379)

2. Long-Distance Travel

3. In what three ways can you use a road map to find the distance between two cities? (380)
4. What can you do to prepare for a long-distance trip? (380–382)
5. What techniques can you use to stay alert while driving? (384)
6. What four things should you be alert for when driving a rental vehicle? (384)

3. Special Vehicles

7. What potential problems might you have while driving a large vehicle? (386)
8. What special steps should you take when pulling a trailer? (387–388)
9. How do you back a trailer? (388)

Projects

Individuals

Observe Count the number of short vehicle trips all the drivers in your family make during a one-week period. Note which trips are necessary and which are optional. For the optional trips, list other ways in which the goal of the trip could have been accomplished.

Demonstrate Choose an out-of-state attraction at least 500 miles away from your school (theme park, national park, museum, etc.) Using a map and other travel information, determine the best way to reach this destination. Make a presentation to your class about how you would arrive at the destination. Include facts such as how many miles away it is, how much time it would take, and where you would stay overnight.

Groups

Use Technology Choose a destination at least 500 miles from your school. Each group member should use a different Internet search engine to find information about this destination. Write a group report that combines all the information found.

Practice Choose a destination within 20 to 40 miles of your school. Each group member should individually plan a route to this destination. Compare the routes. Which routes are quickest, easiest, and safest? (These will not necessarily be the same.)

Chapter Test

Check Your Knowledge

Multiple Choice Copy the number of each sentence below on a sheet of paper. Choose the letter of the answer that best completes the statement or answers the question.

1. Driving with a cold engine
 - (a) occurs on short trips.
 - (b) increases the wear on your vehicle.
 - (c) increases fuel use.
 - (d) all of the above
2. For long-distance travel, you should plan to drive no longer than
 - (a) 6 hours per day.
 - (b) 8 hours per day.
 - (c) 10 hours per day.
 - (d) 12 hours per day.
3. For trips in winter weather, carry extra equipment, including
 - (a) a complete set of tools.
 - (b) flares or reflectors.
 - (c) sand for extra traction.
 - (d) a flashlight.
4. When driving a recreational vehicle, your blind spots are usually
 - (a) larger than with a car.
 - (b) only affected at night.
 - (c) the same as with a car.
 - (d) lower than with a car.

Completion Copy the number of each sentence below. After each number, write the word or words that complete the sentence correctly.

5. To avoid getting lost, plan your _____ ahead of time.
6. A _____ lists the distances between cities.
7. When towing a trailer, it will take about _____ as long to pass, stop, or turn.
8. A large vehicle used primarily for vacations and travel is called a _____.

Review Vocabulary

Copy the number of each definition in list A. Match the definition in list A with the term it defines in list B.

List A

9. backup link used in case a trailer hitch fails
10. chart that explains the markings and symbols on a map
11. following a route by reading a map

List B

- a. navigating
- b. safety chain
- c. legend

Think Critically

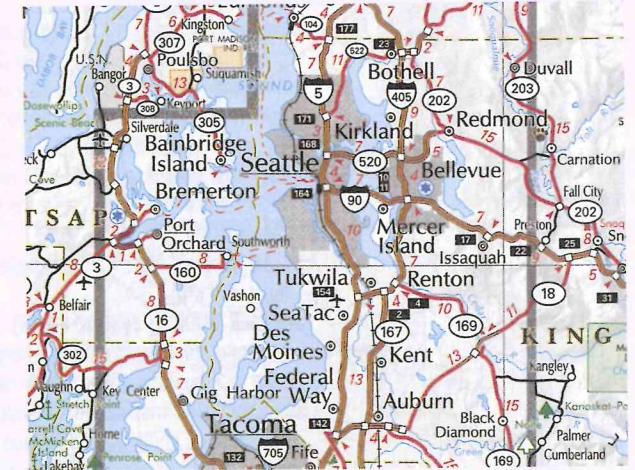
Write a paragraph to answer each question.

1. Why is it important to have a good reason for every short trip you make in your vehicle?
2. You are planning a ski trip in January with your friends. You will be driving your family's six-month-old sport utility vehicle. What should you do in advance to be prepared for the trip and for any emergencies that might occur?
3. Why is driving a large vehicle more difficult than driving a smaller vehicle?

Decision Making



1. What can you do to find out weather and traffic conditions before you begin a trip?



2. What main route would you take to go from Seattle to Redmond? What other routes are available?



3. What should you know about your rental car before driving it?



4. If you were pulling a trailer on this road and the trailer began to fishtail, what actions would you take?