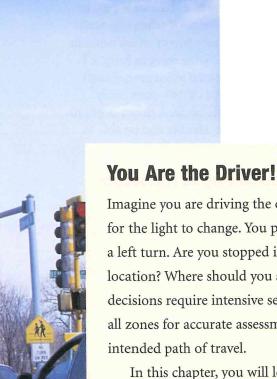
## Negotiating Intersections



7.2 **Controlled Intersections** 

7.3 **Uncontrolled Intersections** 

7.4 Determining Right of Way and Judging Gaps



Imagine you are driving the car waiting for the light to change. You plan to make a left turn. Are you stopped in the proper location? Where should you search? Your decisions require intensive searching of all zones for accurate assessment of your intended path of travel.

In this chapter, you will learn how to identify and search controlled and uncontrolled intersections for a conflictfree path of travel. You also will learn how to interact safely with other roadway users at intersections.



## **Objectives**

- 1. Explain how to search an intersection after it has been identified.
- 2. Tell when you are at the point of no return.
- 3. Describe what you should do when you have a closed front zone at an intersection.

The chances of a collision are greater at intersections than at any other point on a roadway. Intersections are dangerous because many drivers' paths cross there, and many unexpected stops occur there. More than one-third of all collisions and one-fourth of all fatal collisions take place at intersections.

One reason for the large number of collisions at intersections is the driver's failure to identify a safe path of travel through the intersection. In order to identify a safe path of travel you first need to locate the intersection.

Look for these clues to identify an intersection ahead:

- · street signs and street lights
- roadway markings
- crossing traffic
- parked vehicles on cross streets
- turning traffic
- · rows of fences and mailboxes
- traffic stopping
- power lines



What clues identify this intersection?

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Intersections can be found in various designs. Most are simply two roadways crossing or a railroad crossing a roadway in a + or an X pattern. Others may form a Y when one roadway divides into two or when two join to form one. Some meet to form a T. A few are formed when several roadways meet at a circle—commonly called a traffic circle. A driver needs to know how to identify and be able to safely negotiate each design.

#### **Approaching an Intersection**

After identifying an intersection, you will need to determine if you have an open zone for your intended path of travel into and through the intersection. You will need to search the leftfront, front, and right-front zones to be certain that they are open. You also need to look for line-of-sight restrictions that will prevent you from seeing if your intended path of travel is going to be safe. You should search for changes in those zones that could make them closed for your travel as shown in the top picture on the next page.

Remember, line-of-sight restrictions can be caused by the environment or by other highway users. When your line of sight is restricted, your zone checks should become more frequent. You should still primarily be checking your front zone to make sure it is still open for your intended path of travel.

Your search will change when you have identified a closed zone caused



Search for changes in your zones to keep your intended path of travel safe.

by a line-of-sight restriction. That is also true when you make a left turn, make a right turn, or continue through an intersection.

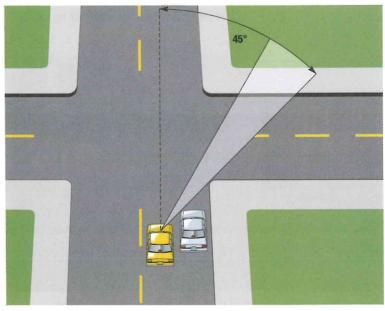
Once you are within 4–6 seconds of the intersection, your searching pattern should widen to include more information from the right and left of your path of travel. If your front zone is clear, you can keep moving. If it is not clear, you will need to prepare to stop or change your path of travel.

When you identify a line-of-sight restriction, you should perform a search of that area. Search for such things as a car stopped on the left, a parked vehicle on the right, or a double-parked delivery truck. Turn your head 45 degrees to the right or left in an attempt to see beyond the line-of-sight restriction as shown in the picture on the right. When searching, you need to briefly pause at each zone to detect objects in that location. Do not move your eyes in a constant scan. If you do not pause at each zone, you could miss objects as large as a car.

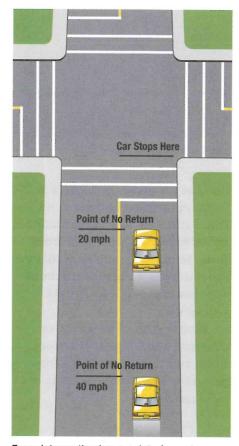
#### **Continue Moving Ahead**

You may continue ahead if the traffic light is green, or if the intersection has no signals or signs, and the front, right-front, and left-front zones are open. At an intersection a driver needs to locate open front zones to move ahead safely. Many times it takes numerous checks of a zone because of a line-of-sight restriction.

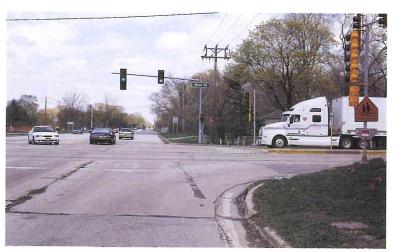
If your path of travel is clear, continue searching the left-front, front, and right-front zones for a path-of-travel change or a line-of-sight restriction.



Move your head to see beyond line-of-sight restrictions.



Every intersection has a point of no return.



Change lane position and speed if you have a line-of-sight restriction.

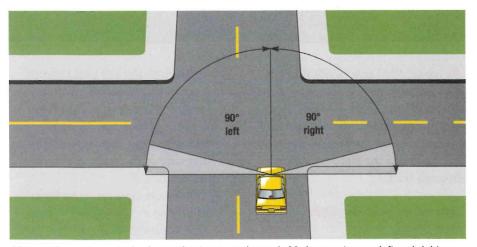
Once you have passed the pointof-no-return, you should continue through the intersection. The pointof-no-return is the point beyond which you can no longer stop safely without entering the intersection. Under normal conditions, that point is two seconds from the intersection as shown in the picture on the left.

If you do have a line-of-sight restriction, you may want to change your lane position and reduce your speed. This will give you more time to see what is hidden. If the restriction is on the right and you have an open left-front zone, move to the left side of your lane into lane position 2 and reduce your speed. If the restriction is on the left and you have an open right-front zone, move to lane position 3 and reduce speed. When your left-front and right-front zones are closed, stay in lane position 1 and further reduce speed. By improving your position and reducing your speed, you will have more time to see as well as be seen by others.

When your path of travel is closed and there is a line-of-sight restriction, a lane change may be needed. Remember, you are not allowed to make lane changes within an intersection. Therefore, you should select the best path of travel before entering an intersection. You must check your new path of travel before you change your lane position or change lanes.

#### **Deciding to Stop**

You may have to stop at an intersection when you identify or predict a closed zone or a line-of-sight restric-



After you have stopped, check your front zone and search 90 degrees to your left and right.

tion ahead. By reducing your speed you can more easily check the zone having a line-of-sight restriction.

A closed front zone is identified by the presence of a yellow or red traffic light, a YIELD sign, or something moving into your intended path of travel. All of these situations would give you less than 10 seconds of an available path of travel and make it a closed zone.

If you have identified a closed zone at an intersection, you will need to prepare to reduce speed or stop. As soon as you identify a closed zone, check your rear zone. If it is open, begin to brake. If the rear zone is closed, tap your brake pedal a few times so that your brake lights communicate to the driver to the rear that you are stopping.

#### **Moving After a Stop**

After you have stopped and your front zone is clear, search at 90-degree angles to the right and left before you begin moving. Pause briefly at each target area to get a clear view of possible conflicts.

When turning, your last check should be in the direction of your intended path of travel. You need to know if your intended path of travel is open before you enter an intersection.

If you are stopped behind another vehicle, wait one second after it begins to move before you move. This gives you room to respond to any sudden stop made by the vehicle ahead.

- 1. Which zones should you search when approaching an intersection?
- 2. Where is your point of no return?
- 3. What should you do when you identify a closed front zone at the next intersection?

## **Objectives**

- 1. Explain how to approach a controlled intersection.
- 2. Tell how to move from a STOP sign when your view is blocked.
- 3. Describe how to make right turns and left turns at controlled intersections.

controlled intersection is one at which traffic signals or signs determine the right of way. Obey all signs and traffic signals when you approach a controlled intersection. Yield the right of way to through traffic.

# **Controlled Intersections** with Signs

Two kinds of signs control intersections: STOP and YIELD. You must come to a full stop for a STOP sign, crosswalk, or stop line. At a YIELD sign, slow and yield the right of way to vehicles on the through street.

#### **Blocked View at Stop Sign**

Sometimes parked vehicles or other objects cause a line-of-sight restriction. Follow these steps to cross intersections safely and merge with traffic after stopping.

**Crossing Traffic** Follow this procedure when you need to cross traffic through an intersection:

- 1. Look around and search at a 45-degree angle at location 1 in the picture on the top right. Continue to search left, front, and right as you creep forward. Check your rear zone.
- 2. Check your path of travel for pedestrians and prepare to make the legal stop before you move beyond location 2. Look for vehicles making turns into your path.
- 3. Stop with your front bumper even with the curb. Search 90

- degrees to the left and right of your target area. When there are parked vehicles, your ideal searching location is when your front bumper is even with the left side of the parked cars, as in location 3.
- 4. When you have an open front zone and a clear gap of at least seven seconds from the left and right, proceed by accelerating to the proper speed. Once through the intersection, check your rear zone.

Joining Traffic—Right Turn Take these steps when turning right to join traffic:

- 1. At location 1 in the picture in the middle on the right, search your front zones for pedestrians and vehicles turning onto your street. Check your rear zone, and stop.
- 2. Stop at location 2 where your front bumper is even with the curb. Search 90-degrees to the left and right. Evaluate the target path and your left-front, front, and right-front zones. When clear of any line-of-sight restrictions and with a gap of at least seven seconds, begin your turn. Turn your head toward your target, begin to accelerate, and turn the steering wheel. When you have a line-of-sight restriction to your left that prevents you from clearly seeing at a 90-degree angle, creep forward slightly to improve your view to

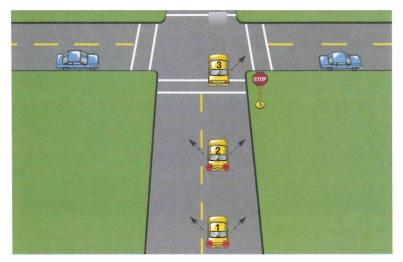
- the left. Turn your head toward your target path as you accelerate and turn.
- 3. At location 3, turn so that you end up no farther than three to four feet away from the curb. Accelerate to adjust to traffic and check the rear zone.

# Joining Traffic—Left Turn Follow these steps when turning left:

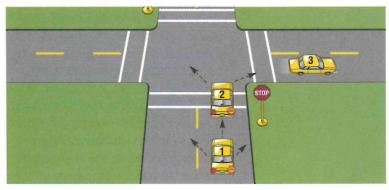
- 1. Before moving beyond location 1 in the picture on the bottom right, your vehicle should be in lane position 2. Search front zones for pedestrians and vehicles turning onto your street. Check your rear zone and stop.
- 2. Stop when your front bumper is even with the curb. Evaluate your left-front, front, and right-front zones. When you are clear of any line-of-sight restrictions and have a gap of at least seven seconds, begin your turn. Move forward slightly to where your body is even with the curbline. Check your front zones; turn your head toward your target area; accelerate; and turn the steering wheel.
- 3. At location 3, turn so that you end up in lane position 2. Accelerate to adjust to traffic and check the rear zone.

# **Controlled Intersections** with Signals

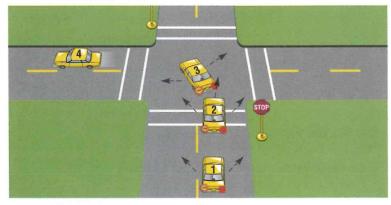
Traffic signals usually have three lights to each cycle—red, yellow, and green. Signals also can have a fourth or fifth light, such as a yellow arrow and a green arrow. Imagine you are



Crossing traffic



Joining Traffic—Right Turn



Joining Traffic-Left Turn



The green arrow permits you to make a protected left turn.

stopped at the red light in the picture above. Think of what is about to take place. Proceed with caution when your light turns green.

As you drive toward a signal-controlled intersection, consider if the signal is about to change. Treat each intersection as a separate problem.

Searching 12–15 seconds ahead, evaluate the next intersection to see what color that light is. Look for any traffic moving on the cross street. Before you reach the point where you must brake to stop at an intersection, quickly check your front zones. If you predict the light is going to be red, or if cross traffic has closed your front

zone, check your rear zone, reduce speed, and be prepared to stop.

#### **Signals**

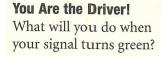
Use the IPDE Process to handle traffic signals properly. Identify the color of a signal as soon as you see it.

Predict that the color might change as you approach the intersection.

Stale Green Light A stale green light is a light that has been green for a long time. If a light remains green after you first identify it, be prepared to slow. Predict that it will turn yellow soon.

Fresh Green Light A fresh green light is a light that has just turned green. A fresh green light does not guarantee that you will have a safe path of travel. Be sure that no driver on the cross street is running the red light. Check for an open zone before you proceed.

Yellow Light When you approach an intersection as the light turns yellow, you must decide whether to stop or proceed. If the light turns yellow before you reach the point of no return, check in the rear zone.





If it is safe to stop, do so. Otherwise, go through the intersection.

Be very careful before making a left turn on a yellow light. Wait for all oncoming traffic to stop before you start your turn.

**Red Light** When the light is red, you must stop. Check your rear zone as you begin to slow.

If you have a vehicle ahead of you, stop at a point where you can see its rear wheels touching the roadway. If you have no vehicles behind you, continue checking your rear zone often.

#### **Unprotected Left Turns**

An unprotected left turn is made at a signal-controlled intersection that does not have a special left-turn light. When you turn left, you must yield to oncoming traffic.

#### **Protected Left Turns**

You can make a protected left turn when a special left-turn light, green arrow, or delayed green light lets you turn left while oncoming traffic is stopped. Left turns might be prohibited when the protected left-turn signal ends by a sign or a red arrow. If the turn is allowed, respond to it as you would to an unprotected left turn.

**Left-Turn Light** A left-turn light provides a protected left turn. Some left-turn lights are located over the turn lane without using signs.

**Green Arrow** A green arrow can appear with the normal red, yellow, and green signals. In many places the green arrow simply turns off to indicate the protected turn has ended. Others

are followed with a yellow arrow as a warning. Watch for oncoming drivers who might proceed, thinking your green arrow is their green light.

Delayed Green Light A delayed green light indicates that one side of an intersection has a green light while the light for the oncoming traffic remains red. This light allows traffic from one side to turn or go straight before the light for oncoming traffic turns green. Obey your signal only. Do not assume that you can proceed when oncoming traffic proceeds.

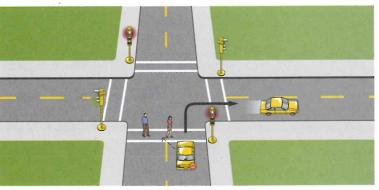
#### **Turns on Red**

All states and the District of Columbia now permit turns on red. A few local governments may not. Watch for signs posted that prohibit turning on red.

Right on Red Before turning right on a red light, come to a full stop as you would at a STOP sign. Move to a position where you can see clearly. Search the front zones for openings. You must yield the right of way to any vehicle or pedestrian in, or approach-



When a light turns yellow as you approach an intersection, prepare to stop. Do not speed up to try to get through the intersection.



Where should you search for vehicles and pedestrians when turning right on red?



TRAFFIC SIGNALS In the early 1920s, Garret Morgan noticed that the traffic signals at a busy intersection did not help traffic move smoothly enough through the streets of Cleveland, Ohio. The signals did not have a caution position to alert drivers that they would soon have to stop. Morgan made a three-position signal. He then sold his idea to a large electric company that developed the red-yellow-green traffic lights still prevalent today.

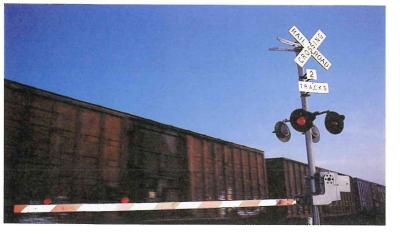
ing, the intersection. Complete your turn into the nearest right lane.

Left on Red Most states also permit a left turn on red if the turn is from a one-way street onto another one-way street. A few states also permit turning left on red from a left-turn lane on a two-way street onto a one-way street. Follow the same procedure as in a right turn on red, but look for traffic in your front and right-front zones. Then turn into the nearest left lane.

#### **Controlled Railroad Crossings**

A controlled railroad crossing usually has red lights along with crossing gates. Make a complete stop when the lights are flashing and/or the gates are down. Remain stopped until the lights stop flashing and the gates have raised. It is illegal, unsafe, and costly to drive around the gates. When the crossing is clear, proceed cautiously.

Stop when the gate is down.



- 1. How should you approach a controlled intersection?
- 2. When your view is blocked at a STOP sign, what should you do?
- 3. How would you make a right turn or a left turn at a controlled intersection?

### **Uncontrolled Intersections**

In uncontrolled intersection has no signs or signals to regulate traffic. These intersections usually are found in areas of light traffic, such as residential areas. Although these streets usually are quiet, they can be dangerous because drivers might not be expecting cross traffic or pedestrians.

Sometimes a driver fails to identify an intersection as uncontrolled. The driver assumes the other driver will stop or, on a quiet street, assumes that no one is there. If you do not see a traffic sign or signal, assume that the intersection is uncontrolled. Predict that other traffic will not stop. Reduce speed, search aggressively, and always be prepared to stop.

# **Approaching Uncontrolled Intersections**

Once an intersection has been identified, check your rear zone for following traffic. Then, you will need to determine if you have an open path of travel into and through the intersection. You will need to search the

left-front, front, and right-front zones to be certain that they are open for your use. You need to continue to look for line-of-sight restrictions that could prevent you from seeing if your path of travel is going to be safe.

Be certain that you can clearly see open space in your left-front, front, and right-front zones before entering the intersection. You must search for zone changes that could make them closed.

Your search pattern will change when you have identified a closed zone caused by a line-of-sight restriction. If you identify a closed zone in your path of travel, check your rear zone again. Remove your foot from the accelerator and cover or apply the brake.

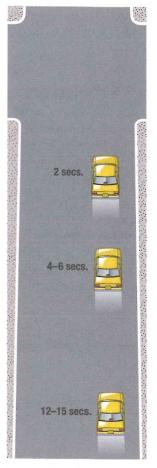
If a vehicle is coming from the left or right, the driver on the left must yield to the driver on the right. However, predict the worst in each case. *Never assume that the other driver will yield.* The only safe action is to slow and be prepared to stop.

### **Objectives**

- 1. Tell how to identify an uncontrolled intersection.
- 2. Explain the procedures to follow at an uncontrolled intersection.
- Describe the proper procedures for crossing uncontrolled railroad tracks.



**You Are the Driver!**Where are the signs and signals at this intersection?



You should perform a series of steps at each of these three locations near uncontrolled intersections.

Treat an uncontrolled intersection as you would a YIELD sign and always be prepared to stop.

At a traffic circle you must yield to vehicles already in the circle. Vehicles in the traffic circle will be coming from your left. When you are in the circle, be alert for vehicles entering in your right-front zone.

Always let pedestrians go first no matter where the pedestrian is crossing. As a driver, you must yield to pedestrians even if they are breaking a traffic law.

## Procedures at Uncontrolled Intersections

When you search your target area and identify an uncontrolled intersection, there are three critical locations at which you must use the IPDE Process. Each location corresponds to a time period measured in seconds. When you approach an uncontrolled intersection, you must perform a series of steps at each of these locations.

## IPDE Process at 12–15 Seconds from Intersection

- 1. Check roadway conditions as you approach the intersection. Check for closed zones to the left front, front, and right front.
- 2. Identify whether or not the intersection is controlled.
- **3.** Identify other roadway users in or near the intersection.
- 4. Search the view to each side.

  Look for line-of-sight restrictions. Check 45 degrees to each side. When you identify closed zones, solve the problems before you enter those spaces.

- 5. Locate your point of no return. You cannot stop after passing that point.
- 6. Check the rearview mirror for following traffic, and slow your vehicle. The more line-of-sight restrictions, the more time you need to use the IPDE Process.

## IPDE Process at 4–6 Seconds from Intersection

- 1. Recheck your immediate path of travel.
- 2. Search left front and right front again for an open zone.
- 3. If a vehicle is coming from the left or right, prepare to stop.
- 4. Recheck traffic to the rear.

#### IPDE Process at 2 Seconds from Intersection

- 1. Pause your search briefly as you continue evaluating zones for potential conflicts. This is your last chance to stop safely—your point of no return.
- 2. Brake to a stop if your front zone in the intersection closes.
- 3. Search again to the left and right.
- **4.** Proceed through the intersection when your path of travel is clear.

#### **Uncontrolled Railroad Crossings**

Trains warn others of their approach, but it is primarily up to the vehicle driver to avoid a collision. Stopping distances of trains will vary. You can be sure that a train's stopping distance will always be longer than that of a car.

An uncontrolled railroad crossing does not have flashing red lights or crossing gates. However, nearly

all are marked with a sign as you approach them. In towns and cities, a round, yellow railroad-crossing sign is posted about 250 feet from the actual crossing. In rural areas this warning sign is about 750 feet from the crossing. A crossbuck, a large white X-shaped sign, is located beside the crossing. Many times a large white X is painted on the roadway near the crossing.

Treat uncontrolled crossings the same as an intersection with a YIELD sign. Slow and be prepared to stop.

#### **Crossing Railroad Tracks**

Take these actions when you approach an uncontrolled railroad crossing:

- 1. Slow down. Check tracks to both sides and traffic to the rear as you approach the crossing sign.
- 2. Turn off the radio, air conditioner, or heater fan to listen for train sounds. Open the window if the area is noisy.
- 3. Reduce speed to handle a possible rough-road crossing or if there is a line-of-sight restriction. Note the number of track sets.
- 4. If a train is approaching, stop at a safe distance before the tracks.
- 5. Wait for the train to clear. Then carefully check the crossing. Be sure another train is not approaching on another set of tracks.
- 6. If it is safe to cross, increase your speed up to at least 20 mph.

  Then your vehicle can roll across the tracks should its engine stall.
- 7. If you have a stickshift vehicle, shift to a lower gear before crossing to prevent stalling on the tracks.

  Never shift while crossing tracks.



Slow and be prepared to stop at uncontrolled railroad crossings.

- 8. Drive onto the tracks only after you have enough space and speed to clear the tracks. Make sure any vehicles ahead clear the tracks before you start to cross. Never stop on railroad tracks while waiting for traffic ahead to move.
- When you follow buses or trucks hauling flammable contents, be prepared to stop. Many states require such vehicles to stop before crossing railroad tracks.

- 1. How can you identify an uncontrolled intersection?
- 2. What should you do at an uncontrolled intersection?
- 3. What are the procedures to use when going through an uncontrolled railroad crossing?

#### 7.4

## **Determining Right of Way and Judging Gaps**

### **Objectives**

- 1. Define right of way.
- 2. Describe situations in which you, the driver, must yield the right of way.
- 3. Identify how long it takes to cross and join traffic.

A safe driver knows that conflicts often occur at intersections and is prepared to handle these conflicts. To be a safe driver, you need to know when to yield the right of way.

#### **What Is Right of Way?**

The term **right of way** describes the privilege of having immediate use of a certain part of a roadway. You have the right of way only when other drivers give it to you. It is not something you can take.

You will often have to **yield**, by letting others go first, to be safe.
Letting others go first is called "yielding the right of way." Sometimes you must yield to prevent a collision. At other times, yielding is an act of courtesy. Most of the time, laws determine who should yield the right of way.

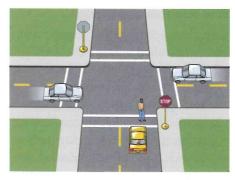
#### **Situations When You Must Yield**

Remember these points in yield situations:

- Your action should not cause those to whom you should yield the right of way to slow, stop, or change their intended path of travel.
- Traffic signs and signals only show who should yield the right of way.
   They do not stop traffic for you.
- Others can give you the right of way. Do not assume others will always yield to you.
- Many times it is better to yield the right of way even when the law requires the other driver to yield.

 Failure to yield the right of way is one of the most frequent violations in fatal collisions.

You must yield the right of way in many situations. Knowing right-of-way laws will help you make safe decisions. These drawings show the most common situations regarding yielding the right of way. In each situation the yellow car is required to yield.



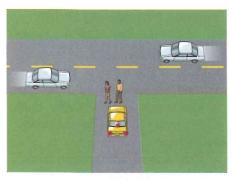
#### Yield at STOP signs to

- · pedestrians in or near the crosswalk
- · all traffic on the through street



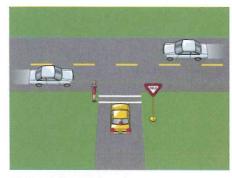
#### Yield at fresh green lights to

- · pedestrians still in the crosswalk
- vehicles still in the intersection



## Yield coming from an alley, driveway, or private roadway to

- pedestrians before reaching the sidewalk
- all vehicles on the street (Make two stops.)



#### Yield at all YIELD signs to

- all pedestrians in or near crosswalks
- · all vehicles on the cross street



#### Yield to emergency vehicles

 sounding a siren or using a flashing light (Stop clear of the intersection close to curb. Wait for emergency vehicle to pass.)



## Yield when turning left at any intersection to

- all pedestrians in your turn path
- all oncoming vehicles that are at all close



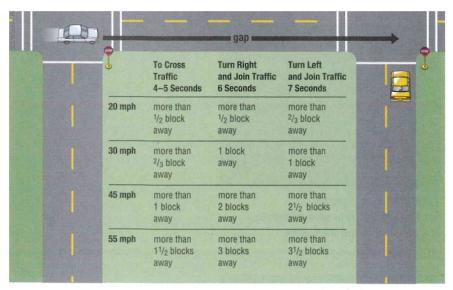
#### Yield at four-way stops to

- · all pedestrians in or near crosswalks
- · vehicles that arrive first
- a vehicle from the right if you arrive at the same time



#### Yield at uncontrolled intersections to

- · pedestrians in or near the crosswalk
- any vehicle that has entered the intersection
- a vehicle from the right if you both arrive at the same time



Gap selection for crossing or joining traffic

#### **Judging the Size of a Gap**

You must be able to judge the gaps between vehicles and how long it takes to pass through or enter intersecting traffic lanes.

A gap is the distance between vehicles. When you enter a through street after stopping, you must judge the size of the gaps in traffic.

You need different size gaps depending on the maneuver you plan to make and the speed of traffic. From the picture above you see that crossing a two-lane street takes about four to five seconds. Turning right and accelerating to 30 mph takes about six seconds. Turning left and accelerating to 30 mph takes about seven seconds. The same process to judge following distance is adapted to judge gap sizes.

#### **Crossing and Joining Traffic**

You must know how long it takes to turn right, to turn left, and to cross traffic at an intersection. Turning right or left into lanes of other vehicles is called *joining traffic*. Look at the picture to visualize situations that follow.

Crossing an intersection takes four to five seconds from a stop. If traffic on the through street is traveling 30 mph, you need a gap of about two-thirds of a block in each direction.

You need a larger gap to join traffic when turning right than when crossing. You need about six seconds to reach the speed of through-street traffic without interfering with the flow of traffic.

A left turn is more dangerous than a right turn. You cross the paths of traffic from the left before entering traffic from the right. The gap to the left should be greater than when you make a right turn. At 55 mph, you need a gap of more than three and one-half blocks.

- 1. What is meant by "yielding the right of way"?
- 2. Give six examples of when you should yield the right of way.
- 3. How many seconds does it take to cross traffic?

## Review

### **Reviewing Chapter Objectives**

#### 1. Searching Intersections

- 1. How should you search an intersection once you have identified it? (130–131)
- 2. How can you tell when you are at the point of no return? (132)
- **3.** What should you do when you have a closed front zone at an intersection? (132–133)

#### 2. Controlled Intersections

- **4.** How should you approach a controlled intersection? (134)
- **5.** How should you move from a STOP sign when your view is blocked? (134)
- **6.** How would you make a right turn or a left turn at a controlled intersection? (136–138)

#### 3. Uncontrolled Intersections

- 7. How would you identify an uncontrolled intersection? (139)
- **8.** What procedures should you follow at an uncontrolled intersection? (140)
- **9.** What procedures should you follow at an uncontrolled railroad crossing? (141)

# 4. Determining Right of Way and Judging Gaps

- 10. What does the term "right of way" mean? (142)
- 11. In what situations must a driver yield the right of way? (142–143)
- 12. How would you judge a gap in traffic? (144)
- **13.** How would you cross and join traffic properly? (144)

### **Projects**

#### Individuals

Observe Traffic Keep a record for a week of all the railroad tracks you cross as a passenger in a car. Note whether (1) the crossing was controlled or uncontrolled, (2) a train was approaching or proceeding down the track, and (3) the driver took the appropriate actions when approaching the tracks. Discuss your findings with the class.

**Investigate** Clip two articles reporting intersection collisions from your local newspaper. Analyze each report to determine which vehicle should have yielded the right of way. Write a summary of your findings and compare your opinions with classmates who analyzed the same collisions.

#### Groups

Observe Traffic As a group, observe traffic at an intersection controlled by a STOP sign. Use a stopwatch to measure the gaps between vehicles proceeding through the intersection. Record your measurements, organizing them in a spreadsheet format. Measure gaps for vehicles (1) crossing traffic, (2) joining traffic—right turn, and (3) joining traffic—left turn.

Use Technology Make a video of cars progressing through an intersection controlled by traffic signals. In the narration, group members should identify the types of traffic signals and analyze the drivers' responses to the signals.

# Review

### **Chapter Test**

#### **Check Your Knowledge**

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

- 1. As you approach a yellow or red traffic light, your front zone
  - (a) widens.
- (c) opens up.
- (b) closes.
- (d) narrows.
- 2. What is the term for a light that has just turned from red?
  - (a) yellow light
- (c) fresh green light
- (b) stale green light
- (d) stale red light
- **3.** With which of the following does one side of an intersection have a green light?
  - (a) fresh green light
- (c) controlled
- (b) stale green light
- green light (d) delayed green light
- **4.** Which of the following terms means to allow others to go first?
  - (a) stop

- (c) yield
- (b) proceed
- (d) cycle
- **5.** Which of the following signs identifies an uncontrolled railroad crossing?
  - (a) STOP sign
- (c) crossbuck
- (b) YIELD sign
- (d) red flashing lights

**Completion** Copy the number of each sentence below on a sheet of paper. After each number, write the word or words that completes the sentence correctly.

- **6.** Your chances of collision are greater at a/an than at any other point on a roadway.
- 7. When turning after a stop, your last check should be in the direction of your \_\_\_\_\_.
- **8.** As a driver, you must always \_\_\_\_\_ to pedestrians.

#### **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.** intersection at which traffic signals or signs determine the right of way
- **10.** complete stop as required at a stop sign or red light
- 11. privilege of having immediate use of a certain part of a roadway
- 12. distance between vehicles
- **13.** intersection that has no signs or signals to regulate traffic
- 14. light that has been green for a long time

#### List B

- a. right of way
- b. full stop
- c. stale green light
- d. controlled intersection
- e. uncontrolled intersection
- f. gap

#### **Think Critically**

Write a paragraph to answer each question.

- 1. Imagine you are driving a car that is approaching an intersection controlled by a STOP sign. You wish to make a left turn. Describe in detail the steps you would take before, during, and after your turn.
- 2. What is the difference between a protected left turn and an unprotected left turn? Why do you suppose some left turns are protected at signal-controlled intersections, while others are not?

## **Decision Making**



1. You are driving the yellow car and are approaching an uncontrolled intersection. You and the other car are the same distance from the intersection. What do you predict about the other car? What should you do?



2. You have just stopped at a red light. You wish to turn left. Is a left turn at this intersection legal on a red light? Where should you search before turning?



3. You are driving the red car. The light turns yellow just after the car in front of you crosses the railroad tracks. Where should you stop? What could happen in this situation?



4. You are driving this car that is stopped at the STOP sign.

At what speed would you assume the cars on the through roadway would be traveling? How far away would the cars have to be for you to make a safe left turn?

