

LESSON 8: THE WALKING AUDIT

BEFORE YOU BEGIN....

This lesson gives students the opportunity to look critically at their environment in terms of safety hazards and assets for pedestrians and bicyclists. Students will learn how to identify infrastructure features outside by taking a walking field trip around the school neighborhood. They will look for sightline issues (from lesson #3), practice rules from the Captain Barclay game (lesson #2), and use their accumulated knowledge to assess the safest places to cross streets.

Since this lesson brings students off campus, teachers will need to follow their school policy for parental permission, and will want to recruit extra adults and/or parent volunteers for the time outside.

WHY THIS LESSON IS IMPORTANT:

This lesson opens up the idea of the “built environment.” In contrast to the natural environment, the built environment is any aspect of our surroundings that is designed and built by people. Buildings, streets, sidewalks, and signs are all parts of our built environment. Several standard features in the built environment are designed to help pedestrians. For example, in this photo, the following features are part of the built environment infrastructure:



- A painted crosswalk
- Neon crosswalk signs
- A bicycle lane
- A stop line for cars 30 feet from the crosswalk (behind the car)
- No parking signs near the crosswalk
- “Bulb outs,” in the sidewalk, making the crossing distance shorter and improving sightlines by bringing pedestrians past parked cars.

The following photos show common problems for pedestrians when the built environment falls short of accommodating the needs of pedestrians.



This narrow sidewalk does not accommodate the pedestrians that use it, especially before and after the adjacent middle school hours. The sidewalk does not have a planter strip to buffer the pedestrians from traffic. In this photo, a pedestrian chooses to walk in the street to avoid other pedestrians



In the next photo, you can see an ample planter strip between the sidewalk and street. However, with no curb present, the boundary between street and sidewalk is blurred. In this situation, people have taken to parking their cars up off of the street, seriously limiting options for pedestrians.



When utility poles are installed directly in the walkway, it can make wheel chair access a challenge, and further diminish the space allocated to pedestrians. Here, the worn area to the right of the sidewalk shows that pedestrians use this space in larger numbers than the sidewalk accommodates. Worn areas like this, or 'goat paths' across grass, are sometimes referred to as desire lines, showing the route that pedestrians desire to travel despite shortcomings in the built environment.



We regulate the use of our built environment by making rules and posting signs for how to use shared space. School zone speed limits are imposed because collisions are so much more deadly at high speeds. In this photo, the presence of a family with a stroller surrounded by signs was not enough to slow the oncoming vehicle.



Maintenance of the built environment can be a serious issue for pedestrian safety. Faded crosswalks, broken sidewalks, and street light outages are problems that require routine maintenance. Often, shrubs and landscaping can impede the walking space and cause safety problems, like in this photo, a student needs to walk into the roadway to pass an overgrown bush.



Often, there are few or no accommodations made for pedestrians in the built environment. In areas with no sidewalks, pedestrians need to adapt to the safety needs by following pedestrian rules. In the two photos below, the group to the left is using this space correctly, walking on the left side of the street so that they would be facing oncoming traffic. The mother and child to the right are on the incorrect side of the street. Any oncoming traffic would approach the child before the mother would be able to see. Note that in each of these situations, parked cars further diminish the walking area and push pedestrians into the street.



Many of the dynamics reviewed in this chapter are things that students can find in the area surrounding their school. Middle school students often enjoy an opportunity to look critically at their surroundings. The value of doing it in the walking audit lesson is for students to grow an appreciation of the safety issues they face as pedestrians, and to build their skills for discerning the safest routes.

LESSON PLAN: THE WALKING AUDIT

GOAL: To provide students with tools to assess the pedestrian environment and determine the best place to cross

OBJECTIVES: STUDENTS WILL:

- Identify at least three factors in their environment that affect pedestrian safety.
- Gain practice looking for sightlines between drivers and pedestrians.
- Accurately assess the safety issues at 2 intersections and determine which is the preferable place to cross.

EQUIPMENT/MATERIALS:

- Built environment photos (set of 7)
- Intersection Assessment Worksheets
- 2 to 6 orange traffic cones
- Notebooks and pens, and a jacket if necessary for outdoor time
- Homework copies: “Map Your Way” worksheet and letter home
- 2 adult volunteers (more if larger class or you feel needed)

PREPARATION:

- Customize the “Map Your Way” letter home to your school. You can find a template on the thumb drive or at www.saferouteswa.org/schools/safety-education/.
- Prepare side 1 of the Intersection Assessment Worksheet by choosing the place you will examine in step 6 below. (The best place is usually the front door of the school near the parking lot and the pedestrian entry.) Draw a quick map of the area in the space indicated on side 1 of your master copy.
- Choose 2 to 6 crossing locations on your school campus that are appropriate for this activity. Ideal locations will show contrasting examples of safety amenities for pedestrians. Mark the locations with orange cones. These are the locations you will look at when filling out side 2 of the Intersection Assessment Worksheet.
- Make photocopies of the “Intersection Assessment Worksheet” so that every 3 students will have a copy. Make one photocopy per student of the “Map Your Way” worksheet and letter home for homework.

INSTRUCTIONS:

12 MINUTES

1. Post or circulate the photos and ask the group to name things that are positives for pedestrians, making the walking environment safer, more accessible, or more comfortable. Sample answers

include: sidewalks, curb ramps, crosswalks, signs, etc.

2. Ask the group to identify things that are negatives for pedestrians, because they contribute to a difficult walking environment or compromise safety in some way. Sample answers include: cars or trucks parked in the wrong place, overgrown bushes that block your view, hills or turns in the road that block sightlines, wide roads with no crosswalk, etc.
3. Remind students of the “Eyeballs” lesson plan in which they threw balls from “pedestrian” to “driver” to illustrate a clear sightline. Ask them to identify the photos that illustrate blocked sightlines. These are places where a pedestrian would not be able to catch the eye of a driver because of something in the built environment.
4. Assign students to groups of 3 to 6, with adult volunteers supervising as available and deemed necessary by you.

5 MINUTES

5. Distribute one Intersection Assessment Worksheet to each group and give instructions: “We will go outside with our small groups. First, we will survey the immediate school campus and fill out the first side of the worksheet. Then we will go to two different intersections and use the second side of the worksheet to determine which one would be safer to cross and why.”

8 MINUTES

6. Bring the group to the front of the school. Ask students to use the first side of their sheet (titled “Walking Audit”) list features in the built environment that are placed there for pedestrians. After a few minutes, ask for examples from the group.

15 MINUTES

7. Send students in their groups to predetermined locations and have them complete the second side of the worksheets as a team, switching between 2 assigned intersections to complete the worksheet.
8. Bring students inside after they complete the second intersection.

5 MINUTES

9. Debrief, asking comprehension questions related to learning objectives. Review the concept of sightlines.
10. Distribute “Map Your Way” worksheet and letter home with instructions and due date.

Independent Practice: The homework sheet provides an opportunity for students to map their preferred walk route from school to home, or a nearby location if home is too far away. Homework should be returned with parent/guardian initials for credit.

Possible Extension: At the teacher’s discretion (depending on supervision and traffic conditions), you may choose to have students practice crossing during the outdoor time, using the skills they reviewed the “Captain Barclay” lesson.

INTERSECTION ASSESSMENT WORKSHEET SIDE 1

THINGS TO LOOK FOR

Look around your school campus with the eyes of a town planner. What about your environment is helpful for students as they walk to and from school? What could be improved?

POSITIVE

What exists, is in good condition, is safe, or is positive for the neighborhood?

NEGATIVE

What are barriers, disrespected places, forgotten issues, or where help is needed?

IDEAS

New thoughts or good plans? Short term or long term; expensive or not expensive.

BUILT ENVIRONMENT

- | | |
|------------------|------------|
| Sidewalks | Crosswalks |
| Wide streets | Signs |
| Bike lanes/racks | Curb ramps |
| Bus stops | Gardens |

SOCIAL ENVIRONMENT

- | | |
|--------------------|------------|
| Personal safety | Businesses |
| People are present | Dogs |
| Trash/Graffiti | Bicyclists |

DRIVING BEHAVIOR

- | | |
|------------------|-----------------|
| Speeds | Cutting corners |
| Improper parking | Traffic |

DRAW A QUICK MAP HERE:

RECORD YOUR OBSERVATIONS HERE:

MAP YOUR WAY

In the space below, draw a map of the safest walking route from your home to school. If school is too far away to walk, choose a different destination within walking distance, like a library or friend's house. When you are done, review the map with your parent or guardian.



QUESTIONS TO ANSWER AND TALK ABOUT WITH YOUR PARENT OR GUARDIAN:

- 1) *Why did you select this route?*
- 2) *What areas or intersections feel less safe for walking, and why?*

STUDENT NAME

PARENT/GUARDIAN INITIALS:

MAP YOUR WAY LETTER HOME

DATE: _____

Dear Parents and Guardians:

The attached homework is related to our bike and pedestrian safety lessons at school. Please review and discuss it with your child, and initial the bottom before your child returns it to class.

Statistics show that pedestrian injury and death from traffic collisions is higher for children ages 12 to 14 than it is for other ages. The middle school years are a time of increased independence, and are an important time to strengthen the safety skills you taught your children when they were in elementary school.

How can you help your child be a safer pedestrian?

- 1) **MODEL SAFE BEHAVIOR.** Your actions are a powerful influence on your child's behavior. When you are walking with your child, use the crosswalks and follow the traffic signals.
- 2) **PLAN THE BEST WAY TO GO.** Studies show that children this age are less likely to be hurt in traffic when they walk on a planned route, instead of using shortcuts.
- 3) **PRACTICE.** Children are driven places more often nowadays and have fewer opportunities to practice pedestrian skills. Finding time to walk with your child will let you see how they behave as pedestrians, what their strengths are, and what they still need to learn.

If you have any questions about the bicycle and pedestrian safety activities at school, please feel free to contact me. Thank you for your help and support!

Sincerely,

TEACHER NAME

EMAIL OR PHONE NUMBER

STUDENT NAME: _____ PARENT/GUARDIAN INITIALS: _____