MOVE SMART

GUIDE FOR EDUCATORS

WHAT IS MOVE SMART?

Move Smart is a pedestrian safety program for kids. Move Smart is designed as a less resource- and time-intensive counterpart to Local Motion's Bike Smart program. Like Bike Smart, Move Smart will be largely led by P.E. educators with technical support from Local Motion. We do not recommend the Walk Smart curriculum for kids younger than 2nd grade.

WHAT'S IN THIS GUIDE?

This Local Motion Move Smart Guide gives an overview of our new Move Smart curriculum with tips and resources for educators to use. In this guide, you will find different modules configured into basic, intermediate, and advanced difficulty levels.

Module 1: **Traffic Simulation Game**

If the built environment around a school is unsafe for walking or rolling, the Traffic Simulation Game gives students an impression of how to conduct themselves in tricky traffic situations.

Module 2: **Mobility Audit**

For schools located in areas where you can safely move as a group around the grounds, a mobility audit is an excellent way to help students consider the area around their school and its suitability for pedestrians.

WHAT IS THE LEVEL OF EFFORT INVOLVED?

Moderate: the Mobility Audit involves preparing printed materials, providing writing utensils and clipboards, and leading a walk. The Traffic Simulation Game involves creating an "intersection" out of tape, cones, or chalk.

WHY MOVE SMART?

Move Smart will increase kids' awareness of their environment will also be an important first step in developing solutions that improve safety and accessibility. We believe teaching kids to move smart is the first step towards getting kids moving to school and around their communities, which:

- Supports youth development by improving independence, spatial awareness, and confidence navigating their environment
- Helps students move through their communities more safely
- Improves student well-being and readiness to learn, including better mental and physical health and self-regulation
- Encourages lifelong healthy habits and a culture of walking

TRAFFIC SIMULATION GAME

This activity helps students understand the basic functioning of an intersection and safe crossing techniques while staying on school grounds, so it can be completed by schools that do not have access to safe areas to walk and roll as a group.

What is the Traffic Simulation Game?

The Traffic Simulation Game is a gamified model of an intersection that can be taped or coned off on school grounds. It is a safe way to explore the intricacies of a pinch point in the built environment. Within the game, there are three teams: two teams of "pedestrians" attempting to cross the intersection and one team of "cars". The pedestrians attempt to cross the intersection while avoiding oncoming "traffic".

Materials needed

- a way to mark off the boundaries of the intersection - could be either tape, chalk, or cones
- two flags
- a way to designate the teams

Accessibility and Safety

Location matters for this exercise; to keep it accessible for all students, it must be done on a level plane where all students can walk/run/roll safely. Basketball courts, indoor gyms, or school greens all will work well. Since the game does involve running, particularly younger students might be better served playing the game on grass versus a hard surface.

Do not play this game on a real intersection. There is tension in this game between modeling reality and gamification. You will want to emphasize throughout that this is only a simulation, and real drivers might behave differently from students pretending to be cars. The intent is to impart the learnings that one could potentially get by going to a real intersection within this simulation, while still engaging students with a game that is perceived as fun.

PRE-MODULE QUESTIONS

It is helpful before you start explaining either one of the modules to warm up the group with some opening questions. They allow students to be mindful of their own role within the traffic system, and it is important to teach them the inclusive definition of a pedestrian. The first three questions cover the primary topics regarding safety and awareness, while the bonus questions on the next page cover the "why" behind walking and rolling.

Question 1. Who is a pedestrian? What are some examples of pedestrians?

Answer: Everyone who is moving by means other than a motor vehicle, or any person moving through the environment on foot or using an assistive device. Wheelchair users, dog walkers, people going to work or school, runners, etc.

Discussion: The key point will be to ensure the students are **inclusive** in their understanding of pedestrians. If they do not include users of assistive devices, provide them with examples such as wheelchairs or strollers. Once you have an inclusive definition of a pedestrian, move on to the next question to create the "why" behind walking or rolling.

Question 2. What are some other things or people we might see on the road?

Answer: Cars, trucks, buses, farm equipment, other pedestrians, dog walkers, animals

Discussion: Emphasize that the main other road users are motor vehicles, but that the specific configuration of trucks/buses/farm equipment will depend on their location. Big cities have more pedestrians, bikers, and buses, while rural areas have more farm equipment and trucks.

Question 3. What should pedestrians watch out for?

Answer: Cars, trucks (mostly the same list as last question), but also debris, potholes, unsafe crossings

Discussion: Emphasize that the vehicles on the road are the main source of danger, because they might be piloted by people who are distracted or impaired. The students should never assume that the driver is aware of them. Cars aren't dangerous sometimes; they are always dangerous. After the list of hazards is long enough, emphasize that the safety of the students is in their own hands. They can stay safe by behaving in the right way, staying aware, and moving smart.

BONUS QUESTIONS

Question 1. Why would you want to be a pedestrian? Where do people normally walk or roll?

Answer: Parks, sidewalks, playgrounds, trails, town centers, etc. Everyone (including the students in the classroom) is a pedestrian sometimes, which is an important conclusion for the group to come to. Try to push the students to come up with more examples until this realization is clear.

Question 2. What are some key differences between traffic in the city and the countryside?

Answer: lack of sidewalks, different road configuration and materials (gravel vs paved), blind turns, higher vehicle speeds, frequency of traffic, types of vehicles, wildlife,

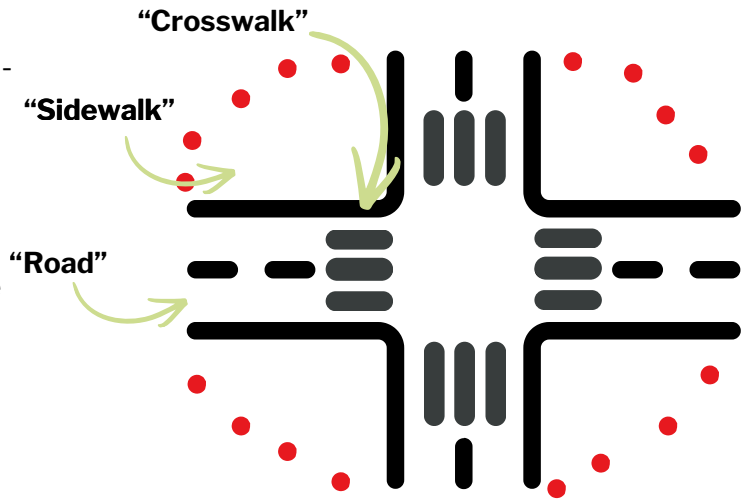
Question 3. Do these differences matter for how different forms of transportation share the road? If so, how?

Answer: Yes, the less frequent but faster-moving traffic in rural areas interacts with pedestrians in different ways. They often have a wider and further field of view, but also have more natural obstructions in the landscape, like trees, hills, and sharp turns. In urban environments, people are more used to starting and stopping, but also have less space.

HOW TO PLAY

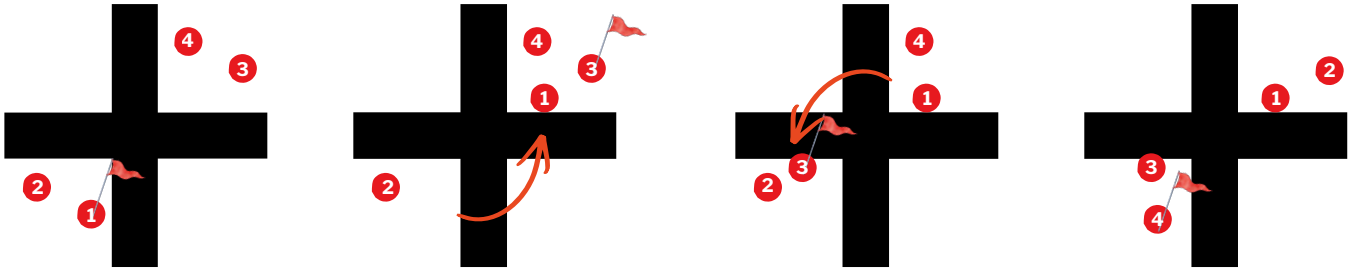
Setup

Use the materials (tape/cones/chalk) to create a 4-way intersection. In the image on the right side of the page, you see a mixed configuration between tape (black lines) and cones (red dots). Each lane approaching the intersection should have a crosswalk and a center line. There should be a line of cones or tape surrounding the intersection, marking off the “sidewalk” which are areas where the “pedestrians” can stay away from the ”cars”.

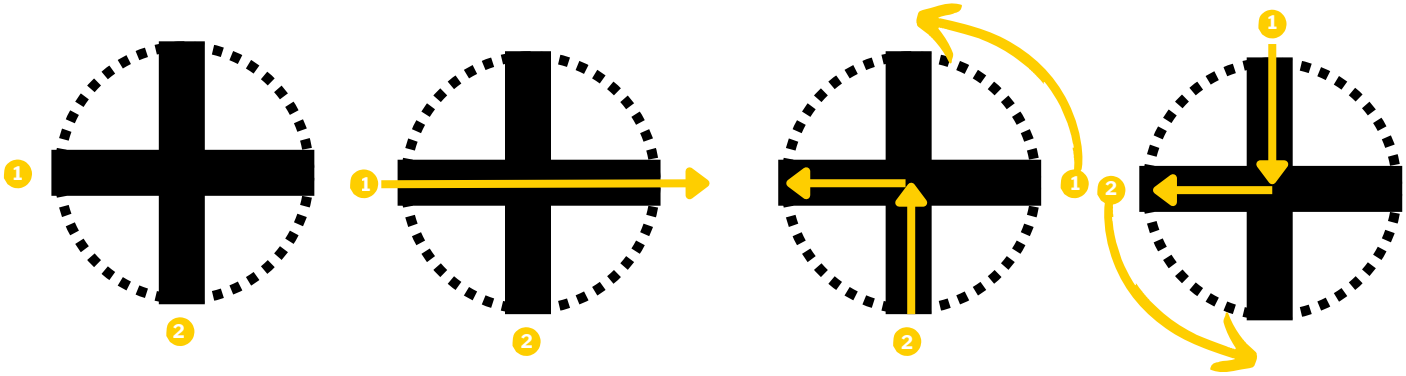


The Rules

The class is split into three teams, each will take turns playing each other in the game. Two of the teams will be “pedestrians” while one team is the “cars”. The educator acts as the “Traffic Controller”, and stands in the middle of the intersection. The example below lays out the flow of the game for a single team of 4 players.

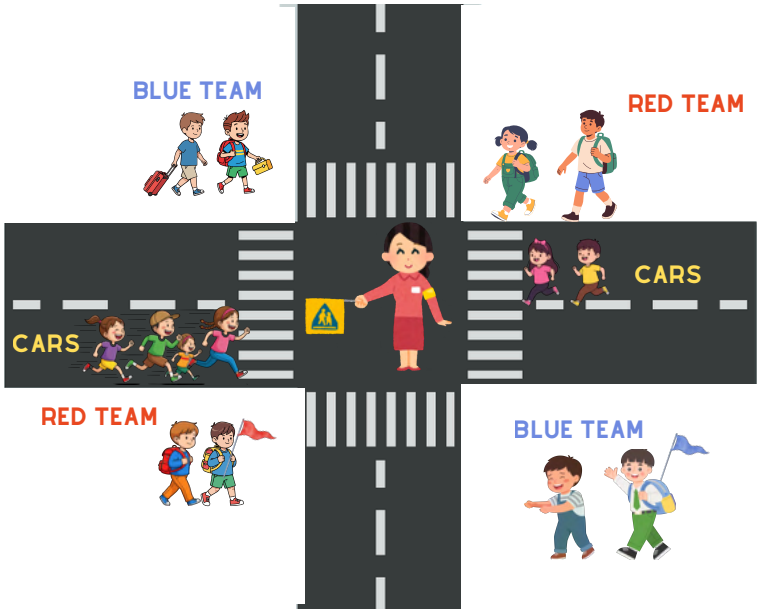


As you can see, a team of 4 pedestrians is split in two and begins the game on opposite sides of the intersection. Each team has 1 flag, and whoever holds the flag is allowed to cross the intersection. The “Pedestrians” goal is to cross to the opposite corner, give the flag to a teammate, and so on until the “Pedestrian” team has fully swapped places. The next example lays out the movement of the “cars”.



The cars flow freely throughout the intersection as the game progresses, but need to follow the rules when it comes to where they can and cannot run. Like real cars, students playing the “cars” are allowed to approach the intersection and go straight, left, or right. Once they have passed through the intersection, they can circle around the outside of the circle and re-enter via one of the roads of their choosing. This mechanism allows them to mimic the flow of traffic.

The educator in charge stands in the middle of the “intersection” as the traffic controller, who directs the flow of the cars. They can tell the cars in different lanes to stop and go. If a student on one of the “pedestrian” teams gets tapped by one of the “cars”, the game stops and that team has to start over in their original configuration. Whichever team has all of their team members sucessfully swap sides of the intersection first, wins. That team stays on, while the losing team swaps with the “cars” and becomes traffic for the next round.



TRAFFIC SIMULATION GAME

LEVELS OF DIFFICULTY

There are three ways to play this game, each simulating a different type of intersection. Educators can chose ways to play based on difficulty or resemblance to the built environment in their town.

Basic - Traffic Light

The Basic way to play the game has a lot of involvement from the educator, and mimics a signalized intersection with crosswalks. The educator has a lot of control over the flow of traffic, and is constantly telling the “cars” when they can stop and go through the intersection. Only the cars that have been told to “go” by the educator can go, the rest has to wait at the crosswalk until given permission to cross the intersection. The “pedestrians” have an easy time crossing the road as the cars stop and start on a routine basis.

Intermediate - Four Way Stop

The Intermediate version simulates a four-way stop, so the “cars” need to stop at the crosswalk before they enter the intersection. This is easier for the cars to understand, but it makes things harder for the pedestrians. The educator does not have to position themselves in the center of the intersection as they do not actively intervene; they only need to ensure that the cars are actually stopping at the crosswalk when needed.

Advanced - Unsignalized Intersection

The Advanced version of the game simulates an intersection with no signage whatsoever. The “cars” can flow freely through the intersection, as long as they keep moving forward when they travel through it. Nothing disrupts their driving, so pedestrians have to time their crossings of the road exactly right to avoid getting tapped by the “cars”. The educator, similar to the intermediate version, only intervenes when the rules are broken.

MOBILITY AUDIT

This activity helps students build awareness, learn about safe infrastructure, and think about interactions between cars and pedestrians. It also encourages consideration of different mobility needs. **Not all schools will be able to safely leave school grounds - if off-site travel isn't possible, educators should use only the traffic simulator game and not attempt the mobility audit.**

What is a Mobility Audit?

A mobility audit is an interactive pedestrian trip around town where students observe and evaluate how people move through their environment: on foot, by bike, in cars, or using mobility assistive devices. It is adapted from a walk audit, a structured method used by communities to assess safety, accessibility, and comfort for pedestrians that organizations like AARP and Local Motion organize in communities across Vermont. This mobility audit uses bingo sheets adapted for different age groups.

Bingo

There are 4 versions of the bingo sheet. It is up to you which version you use. Version 1 will be easier for the students with pictures and literal descriptions, while 4 requires them to have a decent grasp of infrastructure, signage, and their respective functions. Students fill out their sheets based on things they see during the walk, and can be scored at the end.

Materials needed

- Printed Mobility Audit Bingo Sheets
- Clipboards for each student
- Writing utensils

Planning the journey

- The educator leads the class as a single group
- Ask the provided "pre-module questions" to prompt a deeper understanding of the activity and it's educational purpose.
- Ensure appropriate supervision, permissions, and safety protocols
- Choose a pre-determined route (planned in advance by the educator)
- If possible, include:
  - A mix of infrastructure types (sidewalks, crossings, bike lanes, etc.)
  - The school arrival/departure area for relevance to students' daily lives

Accessibility and Inclusivity

- It is essential that this activity is accessible to all students, including those who use wheelchairs or other assistive devices - make sure to select a route that is accessible by rolling as well as walking
- Use inclusive language (e.g., "walking and rolling," "moving on foot, on wheels, or in a car")
- Encourage students to think about how infrastructure limits different ways of moving

Opportunities for learning

Using the W*hat to look for list,* the educator should prompt students to consider various elements in the built environment. This can include pointing out objects that tick boxes on their bingo sheets, but also teasing out insights on why and for whom the traffic infrastructure at hand has been built. Does this street feel safe for walking and rolling? Would a car be able to see you if you crossed the street here? etc.

PRE-MODULE QUESTIONS

For the Mobility Audit, it can be helpful for students to be reminded of the basic rules of the road so they stay safe during the module. These questions are designed to highlight the key parts of pedestrian safety awareness that students might encounter. If you are only running the Mobility Audit and not the traffic simulation game, consider asking the questions on page 3 as well.

Question 1. Where should pedestrians cross the street?
Answer: Crosswalks. If there are no crosswalks, look for a spot to cross where you can see very far in either direction, away from curves on the road or hills. A safe place to cross is where you can see clearly in both directions.

Question 2. Before crossing the street, what should a pedestrian do first to make sure it's safe?
Answer: Look Left-Right-Left, only cross when there are no cars in sight.

Question 3. If the road is busy and there are cars zooming by, when is it safe to cross?
Answer: When all the cars have stopped or if there are none. Never cross try to cross the street when cars are approaching, they are going much faster than you think.

Question 4. If you look left and don't see a car, then right and there is a car coming, what do you do?
Answer: Wait for the car to pass, then start over by checking if a car is coming from the left.

Question 5. If there is a sidewalk, that is where the pedestrian should be traveling. If there isn't a sidewalk, where should the pedestrian go?
Answer: On the left side of the road, facing traffic. Always try to make eye contact with the drivers and to stay as close to the left as is safe.

Question 6. Should you be extra careful moving across a driveway? If so, why?
Answer: Yes, driveways can be dangerous. Cars can be leaving the driveway, and the driver might not be paying attention.

MAPPING

Mapping is a helpful planning tool for educators, allowing you to establish a clear route in advance so you know exactly where the group will go. By preparing your map ahead of time, you can focus on guiding students, supporting their observations, and becoming familiar with the infrastructure and potential discussion points along the route.

Instructions for creating a Walk Audit map, using Google Maps:

- Log into Google Maps with a free Google account.
- Go to “My Maps” and click “Create Map.”
- Search for your school and zoom in to your area.
- Use the line tool to draw your planned walking/rolling route.
- (Optional) Add a few pins for key spots like the school, intersections, or areas you want to point out.
- Save your map and click “Share” to send the route to other staff if needed.

Your map does not need to be detailed - it just needs to show where you and your students will go in a way that is clear to you so you can focus on guiding observations during the activity.

When planning your route, aim for a loop of a moderate length for an hour-long class so students stay engaged and you have time for discussion. This can be between .5-1 mile, depending on the age/ability of the class.

Use satellite view and street view to preview the area and look for:

- Continuous sidewalks on at least one side of the street, wide enough for a group to walk safely
- Safe Crossings
  - Marked crosswalks
  - Stop signs or traffic lights
- A route that includes different environments, such as:
  - Residential streets
  - Busier roads
  - Green spaces or parks
- Places that can spark discussion:
  - Intersections
  - Bike lanes or lack of them
  - Public transit stops
  - Parking lots or driveways
  - Accessibility features (ramps, curb cuts)
- Traffic Conditions
  - Avoid high-speed roads if possible
- Simplicity
  - Start and end at the school
  - Avoid retracing steps if possible
  - Keep navigation simple for students

WHAT TO LOOK FOR LIST

In addition to what's on your students bingo sheets, you can use this list to point out things that are typically observed during a mobility audit.

SIDEWALKS

- Missing sidewalk
- Narrow sidewalk
- Wide driveways
- Blocked/cluttered sidewalks (shrubs overgrown, car parked over it, etc.)
- Poorly maintained sidewalks (broken/cracked, ice/snow, puddles, trash/broken glass)
- Missing streetlights

CROSSWALKS

- Missing or faded crosswalk
- Blocked view of oncoming traffic (note the obstruction: trees, building, parked cars, etc.)
- Inadequate or missing curb ramps (need repair or widening, etc.)
- Missing streetlights

SCHOOL ZONE

- No signs indicating crosswalks
- No signs indicating school zone speed limit
- Discolored, faded, damaged/vandalized signs
- Posted speed limit is too fast for school zone (above 25 mph)

OTHER BARRIERS

- Speeding vehicles
- High traffic volumes
- Wide roads
- Driver's sightline is limited/small children walking/biking/rolling are blocked from view
- Abandoned/boarded up building(s)
- Loose dog(s)
- Dark corners, hiding places, or lack of pedestrian activity

ARRIVAL AND DISMISSAL (IF APPLICABLE)

- Double parking
- Conflicts between vehicles and pedestrians
- Missing sidewalks
- Missing crosswalks
- Idling vehicles Backed-up queue of vehicles

WHAT TO LOOK FOR LIST

Sharrows - shared lane marking, looks like a bike with arrows above. Shows that bikes are allowed and expected in the travelled lane.
Curb cut - ramp graded down from a sidewalk to the street, designed to make it possible for those rolling to use the sidewalks.
Shared use path - designed to accommodate the movement of both bicyclists and pedestrians
Streetscape - the visual, physical, and aesthetic appearance of a street, encompassing the design of sidewalks, buildings, landscaping, and street furniture, such as benches and lighting.
Wayfinding - helps people navigate the physical environment, utilizing signs, architecture, lighting, and digital tools.

Not all crosswalks are created equal...



Crosswalk

- Generally used at stop-sign intersections, but can also be used mid-block with no additional infrastructure to stop cars.
- Can be very dangerous if there are no visible signs, crosswalk is on a high-speed road, and/or if the paint is fading.
- Pedestrians must be alert, make eye contact with drivers, and be as visible as possible.



Signalized Crosswalk

- Generally used at traffic-light intersections.
- Pedestrians must be alert to cars turning right on red or running red lights.



RRFB (rectangular rapid flashing beacon) Crosswalk

- May be used mid-block on high-speed roads or where crosswalks are otherwise not visible.
- RRFBs have the highest impact at night, where flashing lights are more visible to drivers.

POST-MODULE QUESTIONS

Once you have completed either or both of the modules, it is worthwhile to debrief and ask the students about their experience with the program. These questions are included to elevate this post-program discourse.

Question 1. Did you feel safe while being a pedestrian around the school? If so, why/why not?

Question 2. If all cars suddenly disappeared, how would you get to school?

Question 3. What types of people don't have access to cars? Is a traffic system built for cars fair for everyone?

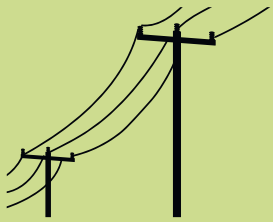
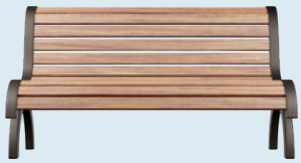
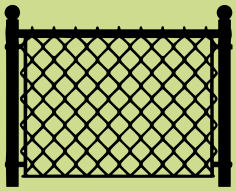
Question 4. What are some side effects of using cars for transportation instead of walking or rolling?

Question 5. If you could redesign one mile of a Vermont road to reduce conflicts between all users, what would you change? How would those changes affect drivers, pedestrians, and other road users?

Mobility Audit

BINGO

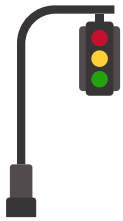
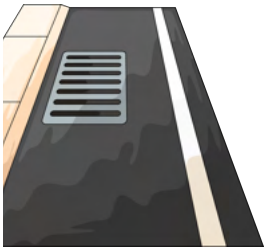
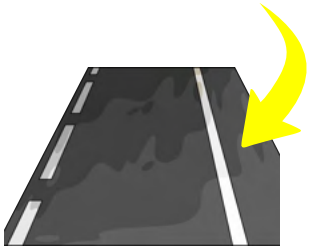
Version 1

 TELEPHONE POLE	 YELLOW STREET SIGN	 SIDEWALK	 FLOWERS
 BENCH	 CROSSWALK	 BIRD	 FENCE
 STOP SIGN	 GUARDRAILS	 DRAIN	 INTERSECTION
 SPEEDING CAR	 SHOULDER	 STREET LIGHT	 POT HOLE

Mobility Audit

BINGO

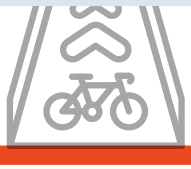
Version 2

 BENCH	 YELLOW STREET SIGN	 BUFFER/ GREENBELT	 SHARROW
 TRAFFIC LIGHT	 CROSSWALK	 WAYFINDING SIGN	 SIDEWALK
 STOP SIGN	 GUARDRAILS	 DRAIN	 INTERSECTION
 SPEEDING CAR	 SHOULDER	 CURB CUT	 POT HOLE

Mobility Audit

BINGO

Version 3

SOMEWHERE FOR PEDESTRIANS TO REST 	 A SIGN GIVING DIRECTIONS TO DRIVERS	 STREETSCAPE DESIGN	SOMEWHERE NOT DESIGNED FOR PEDESTRIANS TO MOVE SAFELY 
 SOMETHING THAT TELLS DRIVERS TO LOOK FOR PEDESTRIANS	SOMETHING YOU NOTICED FOR THE FIRST TIME 	 A SIGN FOR PEOPLE MOVING OUTSIDE A CAR	SOMEWHERE DESIGNED FOR PEOPLE BIKING TO MOVE SAFELY 
SOMETHING BEAUTIFUL 	 SOMETHING THAT KEEPS DRIVERS, PEDESTRIANS, AND BIKERS SAFE	 SOMETHING THAT COULD BE IMPROVED	 SOMETHING THAT TELLS DRIVERS TO STOP
SOMETHING THAT MAKES THE STREET MORE DANGEROUS 	 SOMEWHERE DESIGNED FOR PEDESTRIANS TO MOVE SAFELY	SOMETHING THAT MAKES THE STREET MORE ACCESSIBLE 	 INFRASTRUCTURE THAT IS BROKEN OR NOT MAINTAINED

Mobility Audit

BINGO



Version 4

SOMEWHERE FOR PEDESTRIANS TO REST	A SIGN GIVING DIRECTIONS TO DRIVERS	STREETSCAPE DESIGN	SOMEWHERE NOT DESIGNED FOR PEDESTRIANS TO MOVE SAFELY
SOMETHING THAT TELLS DRIVERS TO LOOK FOR PEDESTRIANS	SOMETHING YOU NOTICED FOR THE FIRST TIME	A SIGN FOR PEOPLE MOVING OUTSIDE A CAR	SOMEWHERE DESIGNED FOR PEOPLE BIKING TO MOVE SAFELY
SOMETHING BEAUTIFUL	SOMETHING THAT KEEPS DRIVERS, PEDESTRIANS, AND BIKERS SAFE	SOMETHING THAT COULD BE IMPROVED	SOMETHING THAT TELLS DRIVERS TO STOP
SOMETHING THAT MAKES THE STREET MORE DANGEROUS	SOMEWHERE DESIGNED FOR PEDESTRIANS TO MOVE SAFELY	SOMETHING THAT MAKES THE STREET MORE ACCESSIBLE	INFRASTRUCTURE THAT IS BROKEN OR NOT MAINTAINED

Mobility Audit
BINGO
Educator Cheat-Sheet for Versions 3 & 4

bench, park, bus shelter, cafe	try and provide an opportunity for students to ask or explain what the sign they saw means!	street trees, flowers, benches lighting, public art, street art	parking lot, intersection without crosswalk, street without sidewalk
crosswalk, pedestrian crossing sign, school zone sign, slow sign, drive like your kids live here sign		business' street signs, sidewalk chalk art, bike lane/route sign, bike or pedestrian symbols	bike lane, street with sharrow (bike with arrows), shared-use path
	crossing guard, signalized crosswalk, shared-use path, speed bumps, speed feedback sign	more crosswalks, flashing crosswalk, signalized crosswalk, more sidewalks	stop sign, red light
speeding cars, animals in the road, high speed limit, bad weather	sidewalk, shared use path, signalized crosswalk	curb cuts, wide sidewalks, clear sidewalks, wayfinding signs, good lighting	pot holes, cracked or sloped sidewalks, debris on sidewalks, faded crosswalks or shoulders

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