

Tools and Resources to Improve Pedestrian Safety

Montana Department of Transportation

in cooperation with the U.S. Department of Transportation Federal Highway Administration





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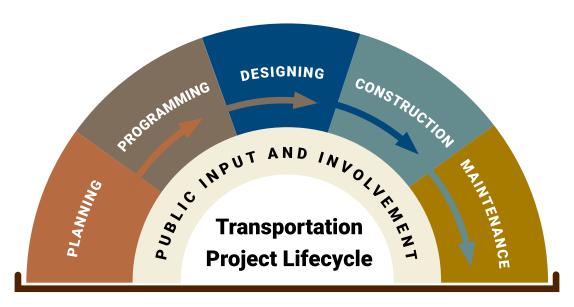
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Introduction

Fatal and serious injury crashes involving pedestrians have consistently increased. In the United States, in 2022, 7,522 pedestrians were killed and more than 67,000 pedestrians were injured.¹ Since 2011, pedestrian fatalities have increased by 68 percent.² Most people are pedestrians at some point, and we rely on safe pedestrian travel.³ As cities expand and plan ways to accommodate population growth and access to resources, strategies and countermeasures to protect our most vulnerable road users, pedestrians, are becoming increasingly important.

Pedestrian safety is influenced by traffic safety culture – the shared values and beliefs of a group of people. Aligned with our nation's goal of zero deaths and serious injuries in our transportation system, we have made progress toward the meaningful adoption of <u>Vision Zero</u> and the <u>Safe System Approach</u>. Further, transportation safety stakeholders across the country are embracing <u>Complete Streets</u> approaches that prioritize safety for all users.⁴ Shared beliefs that support the safety and mobility of everyone including drivers, pedestrians, and bicyclists are helping us shift our beliefs from a mindset that prioritizes roads for vehicles to a mindset that supports and prioritizes roads for all road users.

A culture that prioritizes pedestrian safety, and the safety of all road users means that throughout the lifecycle of a project, strategic decisions and considerations are made to enhance the safety of everyone using the road. Strategic decisions to prioritize safety for all road users start in the planning and designing phases of a project and continue throughout the project lifecycle and these decisions include public input and involvement. Public input and involvement are recognized as an integral and iterative part of all transportation projects.



National Center for Statistics and Analysis, National Highway Traffic Safety Administration (NHTSA). (2024, April). Overview of motor vehicle traffic crashes in 2022 (Traffic Safety Facts Research Note. Report No. DOT HS 813 560). U.S. Department of Transportation. https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813560
Smart Growth America. (2024, April). Pedestrian fatalities at historic high. https://smartgrowthamerica.org/pedestrian-fatalities-at-historic-high/
National Highway Traffic Safety Administration (NHTSA). (n.d.). Pedestrian safety. U.S. Department of Transportation. https://www.nhtsa.gov/road-safety/pedestrian-safety/pedestrian-safety
McCann, B., Boutros, A, & Biton, A. (2023). Complete Streets: Prioritizing safety for all road users. (Report No. FHWA-HRT-23-002). Federal Highway Administration, U.S. Department of Transportation. https://highways.dot.gov/public-roads/winter-2023/complete-streets-prioritizing-safety-all-road-users

Further, a culture that prioritizes pedestrian safety and the safety of all road users includes the collaboration of various stakeholders and agencies. Collaboration amongst various stakeholders and agencies can foster engagement within the community to elevate pedestrian safety and support pedestrian safety best practices. The collaboration graphic is used throughout the toolkit to highlight opportunities for collaboration among various stakeholders and agencies.



The tools and resources within this toolkit are designed to help leaders and stakeholders across many disciplines improve pedestrian safety by prioritizing the safety of all road users throughout a project's lifecycle and elevating collaboration. Leaders and stakeholders include:

- State Departments of Transportation (DOT) employees and Highway Safety Office (HSO) employees,
- City and county public works employees (engineers and planners),
- Employees from planning organizations like Metropolitan Planning Organizations (MPOs), Regional Planning Organizations (RPOs), and Regional Transportation Planning Organizations (RTPOs),
- Public health professionals working on traffic safety, injury prevention, or active transportation, and
- Pedestrian advocates.

This toolkit includes five tools and one resource. Leaders and stakeholders can use these tools independent of one another and in any order depending on what is needed for their organizations.

TOOL

Grow Supportive Beliefs to Improve Pedestrian Safety

This tool is designed to increase beliefs supportive of improving pedestrian safety among stakeholders involved in the planning, design, construction, maintenance, and use of the roadway system and identify immediate opportunities for improvement.

TOOL

Ways to Prioritize Pedestrian Safety and Bolster Current Approaches

This tool provides examples of ways to prioritize pedestrian safety and enhance current approaches to pedestrian safety and links to additional resources.

TOOL

Telling Your Pedestrian Safety Story

This tool is designed to help leaders and stakeholders tell their pedestrian safety success stories. This tool guides how to tell a compelling pedestrian success story and provides an editable template to help leaders and stakeholders design and construct their own pedestrian safety success stories in a format that can be easily shared with their communities and other traffic safety stakeholders.

TOOL

Engaging in Meaningful Conversations About Pedestrian Safety

This tool is designed to help leaders and stakeholders engage in meaningful conversations about the importance of pedestrian safety and the safety of all users of our roadway system with a variety of audiences. This tool guides connecting pedestrian safety to shared values and raising both concern and hope. It also provides a planning worksheet to support the development of tailored conversations on this important issue.

RESOURCE

Growing Public Participation

This resource provides a curated list of resources and case studies that highlight best practices, strategies, and examples of meaningful public engagement in pedestrian safety projects.

TOOL

Promoting Pedestrian Safety Across the Social Environment

This tool is designed to help leaders and stakeholders think about actions that can be promoted at various layers of the social environment (those surrounding pedestrians, like families and peers, schools and workplaces, and the broader community) to support pedestrian safety. This tool provides examples of actions and a table that can be used to help leaders and stakeholders organize current activities, see where gaps exist, and identify collaborators to help fill gaps.

Growing Supportive Beliefs to Improve Pedestrian Safety

This tool empowers leaders and stakeholders to increase beliefs supportive of improving pedestrian safety among stakeholders involved in the planning, design, construction, maintenance, and use of the roadway system. It aims to identify immediate opportunities for improvement.

This tool includes:

- instructions for leaders and stakeholders to convene a dialogue,
 - o planning guidance to prepare for a dialogue and support follow-up,
 - o discussion guidance to prompt meaningful engagement, and
- questions for guided dialogue about pedestrian safety that can be printed for participants.

Growing supportive beliefs is likely to result in growing better practices thus leading to improved safety outcomes for pedestrians. Supportive beliefs include the prioritization of pedestrian safety, a sense of responsibility for pedestrian safety, and the familiarity of support for, and use of best practices.

This tool uses questions for guided dialogue to help leaders and stakeholders foster conversations among participants to reveal opportunities for improvement. The questions are not meant to be a "survey" but rather can be used to reveal how participants understand current practices and identify specific actions they can take within the context of their organizations.

Table 1 lists various stakeholders and how they can use this tool. It is important to recognize that stakeholders other than those responsible for building and maintaining the transportation infrastructure can have an important role in improving pedestrian safety and can act as a "convener" for using this tool.

STAKEHOLDER

WAYS TO USE THIS TOOL

State Departments of Transportation (planners, engineers, construction, maintenance), Highway Safety Offices HSOs or others could convene stakeholders within the DOT to use the tool to identify opportunities to improve pedestrian safety. This could occur within a district/regional office, at headquarters, or across the DOT. Engaging stakeholders representing planning, engineering, construction, and maintenance can help identify where pedestrian safety efforts may "get lost" during the lifecycle of a project.

Local Departments of Transportation/ Public Works (safety, planners, engineers, construction, maintenance) **Local DOTs** could convene stakeholders within their organization and those outside their organization (like MPOs/RPOs, law enforcement, public health, etc.) as well as members of the public to identify opportunities to improve pedestrian safety.

Planning Organizations (Metropolitan Planning Organizations, Regional Planning Organizations, and Regional Transportation Planning Organizations Planning organizations may develop plans that improve pedestrian safety; however, there is a risk that, at some point in the lifecycle of the project, these ideas are changed or removed. A planning organization is an ideal entity to recruit a variety of stakeholders to use this tool and identify opportunities to improve pedestrian safety. By involving engineers, construction, and maintenance, actions to improve pedestrian safety are more likely to be sustained across the lifecycle.

Public Health

Public health can bring a unique perspective to pedestrian safety – considering it in the context of injury prevention as well as health promotion through active transportation. Sometimes, people outside of the immediate efforts to plan, design, and build the transportation system can shed new insights on issues and bring together new stakeholders.

Advocacy Organizations

Improving pedestrian safety may be a component of the mission of an **advocacy organization**. An advocacy organization could convene stakeholders at the local, regional, or state level to identify opportunities to improve pedestrian safety.

Instructions for Leaders and Stakeholders to Convene a Dialogue

You will need to: ☐ Print Questions for Guided Dialogue for each participant. ☐ Print Ways to Prioritize Pedestrian Safety and Bolster **Current Approaches** for each participant or enough for participants to share in their small groups. ☐ Have a shared screen available to display question prompts. ☐ Have a flip chart or large sticky poster-size paper. ☐ Have sticky dots or a marker for each participant. **Before the Dialogue** ☐ **Identify dates and a location to convene** a dialogue with stakeholders about pedestrian safety. You will also want to consider what will happen after the dialogue. For example, a working group could be assembled to carry identified actions forward; a "pedestrian safety champion" from each participating organization could take on the responsibility of advancing efforts within their organization; one entity could take responsibility for advancing efforts, etc. ☐ Recruit stakeholders to participate. Stakeholders could include individuals interested in pedestrian safety within organizations, decision-makers/leaders, policymakers, etc. Consider stakeholders across the lifecycle of projects (e.g., planners, design engineers, construction, maintenance) as well as road users. Having members of the public participate can add valuable insights. ☐ Plan seating in advance (or if conducting the dialogue virtually, break out rooms). Seating people in groups of four fosters more dialogue than larger groups. While people initially may be uncomfortable with assigned seating in small groups, they often appreciate it as they experience the benefits of more dialogue. ☐ Modify the Questions for Guided Dialogue (page 12) as needed to align with your focus. If you only want to focus on prioritizing pedestrian safety, you could just use questions 1 to 5. If you want to include the use of best practices, you could add questions 6 to 12. If stakeholders are familiar with Complete Streets (or participating organizations have Complete Streets policies), Include questions 13 to 15. Print one questionnaire for each participant so they can consider the questions individually and write down notes.

☐ Print the Tool: Ways to Prioritize Pedestrian Safety and Bolster Current Approaches (page 19) one for each participant or fewer as these can be shared by participants.



During the Dialogue

- Remember the purpose of the dialogue is to reveal shared beliefs supportive of pedestrian safety and opportunities for improvement. Therefore, participants must be encouraged to speak especially if they have different viewpoints. Different viewpoints can reveal important opportunities for improvement. Avoid having a small number of people dominate the conversation.
- Begin by discussing the purpose of the dialogue and having participants introduce themselves.
 Briefly discuss what will happen during the dialogue and what will happen afterward. This is a good time to indicate who will be taking the lead afterward to follow up on the actions identified throughout the conversation.
- Have each participant individually complete the first section of the questionnaire. When everyone at the table has completed the first section, they can then begin talking about their responses.

Dialogue Prompts:

- **1** In what ways do they agree with the responses of others at their table? Disagree? Why?
- What would it look like if responses were strong for each question (i.e., very supportive of pedestrian safety)?
- After each table group has completed its dialogue for the first section, have the table groups share out their reflections with the larger group.
- Repeat for the remaining sections (if they were used).

Tips to Navigate Different Viewpoints

- → Actively Listen: Pay close attention to what the other person is saying, even if you disagree. Try to understand their perspective.
- → Ask Clarifying Questions: This shows you're engaged and helps you identify potential areas of agreement.
- → Focus on Common
 Ground: Look for areas
 where you might agree,
 even if it's just on the
 importance of pedestrian
 safety. Build on those points
 when presenting your ideas.

Tips to Avoid a Small Number of People Dominating the Conversation

- → Gentle Interruptions:

 If they keep going, politely interrupt with something like, "Excuse me, but I believe [name] also had a point they wanted to make."
- → Redirect the
 Conversation: After their
 point, steer the conversation
 back to include others.
 "That's a good point, [name].
 [Another name], what do you
 think about...?"

During the Dialogue (continued)

 Next, have each table group identify the most important 2 to 4 opportunities for improvement. Have participants at each table review their responses and notes from the questions.

Dialogue Prompts:

- **3** What opportunities are revealed by the responses and dialogue?
- What opportunities provide the greatest likelihood of improving pedestrian safety? Why?
- Have table groups review the <u>Tool: Ways to Prioritize Pedestrian Safety and Bolster</u>
 <u>Current Approaches</u> to get them started (these ideas are only meant as examples and not meant to limit their thinking). Each table group should be prepared to share their ideas.
- Share out opportunities from each small table group capturing the ideas on a flip chart or shared screen. If ideas are similar between groups, augment existing ideas as needed.
- Post the flip charts around the room so each sheet is visible (or provide access to the shared document in a virtual setting). Have each participant indicate what they believe are the most important opportunities by using sticky dots, a marker to place a dot, or adding an "X" on the shared document. Consider giving each participant 2 or 3 "votes."
- Now it is time to identify appropriate next steps for the prioritized ideas. Have
 participants self-assemble into groups around the opportunities individuals want to
 work on. If no one wants to work on an opportunity that was voted as a high priority,
 discuss the challenges or barriers that may have inhibited people from working on it.
- For each prioritized opportunity, identify who (or which organization) should take
 the lead and who else may be involved. Identify immediate next steps. As these
 opportunities may be complex and require more research and engagement by people
 not present, focus on immediate next steps recognizing additional planning work may
 be required.
- Have each group share their ideas on the next steps. Others can share ideas to improve their immediate next steps.
- Conclude by thanking participants and discussing what will happen next. Discuss how participants can stay involved.

After the Dialogue

- Capture all the notes from the flip charts and share those with the participants.
- Engage those identified in the action plans and facilitate efforts on the opportunities.
 Not all opportunities identified may be able to be addressed (and perhaps not all at the same time). Focus on those with the most impact and for which stakeholders are willing to engage.

Questions for Guided Dialogue About Pedestrian Safety

Instructions: These questions for guided dialogue will be used to help you engage in conversations about pedestrian safety. These questions aren't meant to be a "survey" but will be used to talk about the beliefs we have about pedestrian safety. Please answer the questions individually. You will have an opportunity to share your responses in a small group. You will not be asked to turn in your responses. Take notes and jot down any ideas or thoughts you have as you engage in conversations in your small group.

Prioritization of Pedestrian Safety

1. E	Based on what	your organization sa	avs. how is t	the safety of	pedestrians	prioritized?
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Low Priority	Somewhat	Somewhat Moderate		Highest

2. Based on what your organization does, how is the safety of pedestrians prioritized?

Low Priority	Somewhat	Moderate	High	Highest

3. In your opinion, how do the following organizations prioritize the safety of pedestrians? Even if you are not sure, give your best guess.

	Low	Somewhat	Moderate	High	Highest
Your state's Department of Transportation (DOT)					
Most local departments of transportation/ public works in your state					
Most Metropolitan Planning Organizations (MPOs) and Regional Planning Organizations (RPOs) in your state					

In your opinion, how responsible are the following for the	safety of pedestrians?
--	------------------------

	Not at all	Somewhat	Moderately	Very	Extremely
The pedestrians themselves					
Design engineers					
Planners					
System owners (e.g., the state, county, city)					
Elected officials					
Advocacy organizations in your state/community					

5. In your opinion, how much do the following agree or disagree with the statement: "A transportation system should be designed and operated to account for and accommodate the users most likely to be injured or seriously injured." Even if you are not sure, give your best guess.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
You					
Most leaders in your organization					
Your state's Department of Transportation (DOT)					
Most local departments of transportation/public works in your state					
Most planning organizations (MPOs, RPOs, RTPOs) in your state					
Most elected officials in your state					

Current Approaches to Pedestrian Safety

6. How would you describe your organization's current approach to pedestrian safety? Even if you are not sure, give your best guess.

	1	2	3	4	5	
We focus on strategies we have used in the past						We are changing our approaches to pedestrian safety
Pedestrian safety is isolated or siloed						Pedestrian safety is integrated throughout our programmatic areas

7. How would you describe your organization's current investment in/spending on pedestrian safety?

Much less than in the recent past	Somewhat less than in the recent past	About the same	Somewhat more than in the recent past	Much more than in the recent past

8. How familiar are you with the following practices?

	Not familiar at all	Somewhat familiar	Moderately familiar	Very familiar	Extremely familiar
Crosswalk visibility enhancements					
Leading pedestrian interval					
Medians and pedestrian refuge islands					
Pedestrian hybrid beacons					
Rectangular rapid flashing beacons					
Road diets (roadway configuration)					
Raised crosswalks					
Separating pedestrians from the roadway					
Reducing speeds in areas where pedestrians cannot be separated from the roadway					

9. How much do you agree or disagree that each of the following improves pedestrian safety?

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree	I don't know
Crosswalk visibility enhancements						
Leading pedestrian interval						
Medians and pedestrian refuge islands						
Pedestrian hybrid beacons						
Rectangular rapid flashing beacons						
Road diets (roadway configuration)						
Raised crosswalks						
Separating pedestrians from the roadway						
Reducing speeds in areas where pedestrians cannot be separated from the roadway						

10. To what degree do you think the leadership of your organization supports the use of these practices?

	Not at all	Somewhat	Moderately	Very	Extremely	l don't know
Crosswalk visibility enhancements						
Leading pedestrian interval						
Medians and pedestrian refuge islands						
Pedestrian hybrid beacons						
Rectangular rapid flashing beacons						
Road diets (roadway configuration)						
Raised crosswalks						
Separating pedestrians from the roadway						
Reducing speeds in areas where pedestrians cannot be separated from the roadway						

11. When applicable, how often are these practices actually used?

	Never	Rarely	Sometimes	Often	Very frequently	l don't know
Crosswalk visibility enhancements						
Leading pedestrian interval						
Medians and pedestrian refuge islands						
Pedestrian hybrid beacons						
Rectangular rapid flashing beacons						
Road diets (roadway configuration)						
Raised crosswalks						
Separating pedestrians from the roadway						
Reducing speeds in areas where pedestrians cannot be separated from the roadway						

12. How well do you think your organization does the following?

	Not well at all	Somewhat well	Moderately well	Very well	Extremely well
Gets input from people who may be potentially impacted by changes to the roadway system before starting designs					
Gets feedback on designs					
Tries small scale (sometimes temporary) changes so people can actually see and experience how a new design might work					

Complete Streets

13. How	familiar are	you with the	Complete St	treets app	roach to	planning,	designing,
building	, operating,	and maintaini	ng streets?				

	Not at all	Somewhat	Moderately	Very	Extremely	I don't know

14. Does your organization have a Complete Streets policy?

No	Yes	l don't know	

15. To what degree does your Complete Streets policy...

	Not at all	Somewhat	Moderately	Very	Extremely	I don't know
Establish commitment and vision						
Prioritize underinvested and underserved communities						
Apply to all projects and phases						
Allow only clear exceptions						
Mandate coordination						
Adopt excellent design guidance						
Require proactive land-use planning						
Measure progress						
Set criteria for choosing projects						
Create a plan for implementation						

\rightarrow	Dialogue Questions
	In small groups, discuss the following after each section:
	1 In what ways do you agree with the responses of others at your table? Why?
	4 In what ways do you disagree with the responses of others at your table? Why?
	What would it look like if responses were strong for each question (i.e., very supportive opedestrian safety)?
\Rightarrow	Next, as a small group, identify the 2-4 most important opportunities for improvement. Use your responses to the questions and notes that you have written from your small group discussions. Discuss the following:
	What opportunities are revealed by the responses and dialogue?

Use the Tool: Ways to Prioritize Pedestrian Safety and Bolster Current Approaches to support your small group conversations. The examples in this tool are organized to align with the questions for guided dialogue. These are only examples, and each group and context may have many more ideas.

What opportunities provide the greatest likelihood of improving pedestrian safety? Why?

Pedestrian Safety Practices Term Definitions

Crosswalk visibility enhancements - Crosswalk visibility enhancements help make crosswalks and those using crosswalks more visible to drivers. They include things like lighting, signing and pavement marks, and visible crosswalk patterns that help make crosswalks more visible from farther distances.

Leading pedestrian interval – A leading pedestrian interval allows pedestrians to enter the crosswalk at an intersection 3-7 seconds before vehicles are given a green indication.

Medians and pedestrian refuge islands – Medians are areas between opposing lanes of traffic to separate motorized and non-motorized road users. Pedestrian refuge islands are medians with a refuge area that helps protect pedestrians crossing a road.

Pedestrian hybrid beacons – Pedestrian hybrid beacons are traffic control devices designed to help pedestrians safely cross higher-speed roadways at midblock crossings and uncontrolled intersections. The beacons use red and yellow flashing and steady lenses, activated by pedestrians to signal their desire to cross the roadway.

Rectangular rapid flashing beacons – Rectangular rapid flashing beacons accompany pedestrian warning signs that flash with an alternating high frequency when activated to increase awareness to drivers that pedestrians are at the crossing.

Road diets (roadway configuration) – Road diets consist of roadway improvements that are done to traditional four-lane undivided highways to enhance safety and accommodate all road users. A classic Road Diet usually consists of converting an existing four-lane, undivided roadway segment to a three-lane segment consisting of two through lanes and a center, two-way left-turn lane.

Raised crosswalks – Raised crosswalks are ramped speed tables spanning the entire width of the roadway, often placed at midblock crossing locations.



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Ways to Prioritize Pedestrian Safety and Bolster Current Approaches



This tool provides examples of ways to prioritize pedestrian safety, bolster current approaches to pedestrian safety, and links to additional resources.

The organization of this tool aligns with the **Questions for Guided Dialogue** within the **Tool: Growing Supportive Beliefs to Improve Pedestrian Safety.**

Prioritizing Pedestrian Safety

Ways to Grow Actions that Prioritize the Safety of Pedestrians

- Raise concern about pedestrian safety by sharing data about serious injury and fatal crashes involving pedestrians in your geographic region of interest. Most states have crash databases that provide this information. You can also use the Fatality Analysis Reporting System (FARS) and review data for pedestrian fatalities by year and state (see https://www-fars.nhtsa.dot.gov/People/PeopleAllVictims.aspx). See FHWA's Roadway Safety Problem summary (https://www.transportation.gov/NRSS/SafetyProblem). Also, see Tool: Engaging in Meaningful Conversations About Pedestrian Safety for ideas to raise concern and hope about pedestrian safety.
- Engage with advocacy groups that can bring additional information and energy to the effort.
- Review your state's Strategic Highway Safety Plan (https://highways.dot.gov/safety/hsip/shsp/shsp-resources) and State Highway Safety Plan and Annual Reports (https://www.nhtsa.gov/highway-safety-grants-program/state-highway-safety-plans-and-annual-reports) and review to what degree pedestrian safety is highlighted. Look for opportunities to improve future plans (or elevate alignment of current actions with the plan if pedestrian safety is prioritized in the plan).
- If an organization's actions don't align with their stated priorities (e.g., pedestrian safety is highlighted in plans and communication efforts but limited actions are being taken to improve pedestrian safety), seek to identify what it would be like if pedestrian safety was truly prioritized. What are barriers that need to be addressed? What would need to change? Who could foster such changes?
- Share success stories of improving pedestrian safety from other areas to show that it can be
 done and create expectations for change. See <u>Tool: Telling Your Pedestrian Safety Story</u>
 for ideas on how to do this.
- Increase public participation throughout the planning, design, and construction phases. See
 Resource: Growing Public Participation for ideas on how to do this.

Ways to Grow Shared Responsibility for Pedestrian Safety / Support for Accommodating the Most Vulnerable Road Users

- Increase knowledge about the Safe System Approach (https://www.transportation.gov/
 NRSS/SafeSystem) and how it has been effective in significantly reducing roadway fatalities and serious injuries in other countries.
- Increase public participation throughout the planning, design, and construction phases, especially by people who rely on pedestrian access to get to work, go to the grocery store, and do other daily activities. See <u>Resource: Growing Public Participation</u> for ideas on how to do this.
- Share information about designing and operating Complete Streets (https://www.transportation.gov/mission/health/complete-streets) streets that enable safe use and mobility for all road users.

Bolstering Current Approaches to Pedestrian Safety

Ways to Grow More Investment/Effort and More Integration of Pedestrian Safety

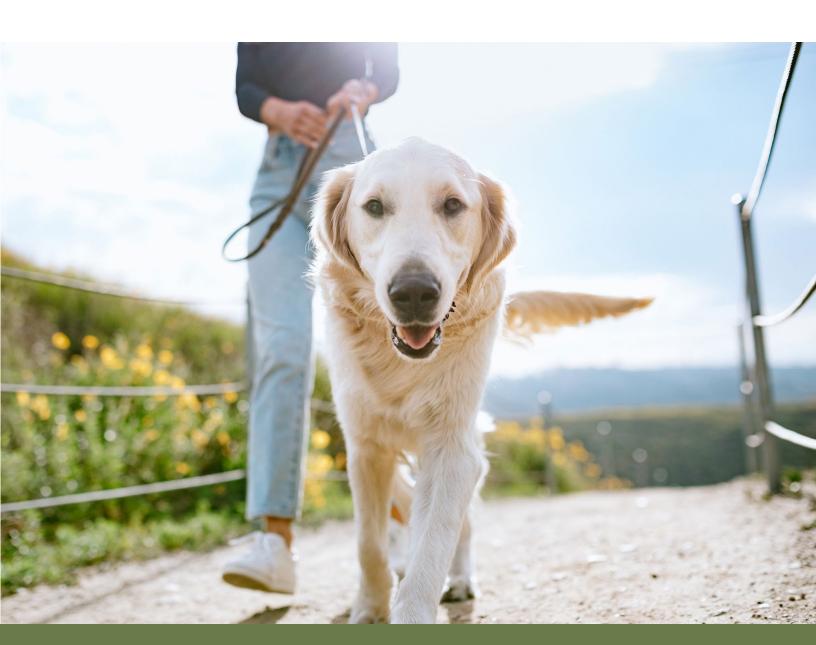
- Identify opportunities to build the capacity of key stakeholders (e.g., planners, engineers) on best practices for pedestrian safety.
- Elevate the prioritization of pedestrian safety in the state Triennial Highway Safety Plan (3HSP) and its Strategic Highway Safety Plan (SHSP).
- Seek funding from a Federal Safe Streets for All grant to improve pedestrian safety (https://www.transportation.gov/grants/SS4A).
- Consider actions that can be promoted at each layer of the social environment to support pedestrian safety. See <u>Tool: Promote Pedestrian Safety Across the Social Environment</u> for ideas on how to do this.

Ways to Grow Use of Best Practices to Improve Pedestrian Safety

- Share information about proven safety countermeasures (https://highways.dot.gov/safety/proven-safety-countermeasures) focusing on those designed to improve pedestrian safety. These can be shared with a wide variety of stakeholders (not just planners or engineers). Informing the general public about these best practices can encourage citizens to ask for them.
- Seek assistance from your Local Technical Assistance Program (LTAP) or Tribal Technical Assistance Program (TTAP) (https://www.fhwa.dot.gov/clas/ltap/) (each state has one).
- Seek assistance from FHWA Resource Center (https://www.fhwa.dot.gov/resourcecenter/training.cfm).
- Share stories from within your state (or from other states) demonstrating the use of best practices. See **Tool: Telling Your Pedestrian Safety Story** for ideas on how to do this.
- See <u>Tool: Growing Public Participation</u> for ideas on how to increase public participation.

Ways to Grow Complete Streets

- Share case studies of Complete Streets
 (https://smartgrowthamerica.org/tag/complete-streets-case-studies/).
- Prioritize which components of your Complete Streets policies need to be improved to make the most impact.
- Take steps to improve your Complete Streets policies (https://smartgrowthamerica.org/resources/the-best-complete-streets-policies-2023/).
- Identify opportunities to better align actions with your Complete Streets policies. Identify where in the lifecycle of a project actions could be improved.
- Share stories of successful Complete Streets in your state. See <u>Tool: Telling Your Pedestrian Safety Story</u> for ideas on how to do this.



Telling Your Pedestrian Safety Stories

TOOL

Why share success stories?

- Inform and educate the community
- Grow support from various stakeholders
- Inspire other traffic safety organizations
- Demonstrate/normalize best practices
- Celebrate accomplishments and share pride in your work

Who can contribute information for the success story?

Many individuals and agencies may have helpful input for building the success story. Include all involved agencies and organizations and also consider including other community members and sectors who are impacted by pedestrian safety improvements. Consider:

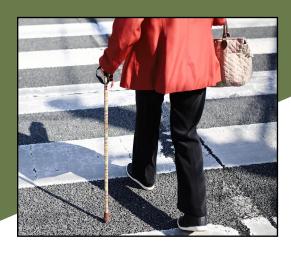


- Traffic safety leaders and staff
 - Your state's Department of Transportation (DOT)
 - Public health
 - Planning organizations [e.g., Metropolitan Planning Organizations (MPOs), Regional Planning Organizations (RPOs), Regional Transportation Planning Organizations (RTPOs)]
- Advocates
- Community members/pedestrians
- **Business owners**
- Law enforcement and first responders
- ightarrow Soliciting input and assistance in developing the success story from multiple stakeholders who are involved in pedestrian safety in your community can highlight contributions by various partners. Asking involved partners to contribute to pieces of the success stories minimizes the burden and ensures diverse perspectives are included.

What to do with the success story?

- Share with the community and stakeholders
- Share with traffic safety colleagues in other states or localities
- Celebrate your success!
- Update with future accomplishments in pedestrian safety
- Utilize to share successes in other areas of traffic safety
- Before you start: Spend some time identifying characters for your story. Think about the character who is harmed by the problem or issue as well as who is solving the problem. The character(s) harmed might even have a role in solving the problem. Personalizing the story with characters can make it more effective!

Pedestrian Safety in



PROBLEM STATEMENT:

Activities/Strategies:

Organizations & Partners:

Results & Impact:



Recommendations:

Engaging in Meaningful Conversations About Pedestrian Safety

TOOL

Engaging others in meaningful conversations about the importance of pedestrian safety and the safety of all users of our roadway system is an important action that leaders and stakeholders across disciplines can take. Connecting to shared values and raising concern and hope are strategies that can support engagement on this important issue.

In conversations about pedestrian safety, it is important to connect pedestrian safety to broadly shared values that are important to your audience. For example, if health is a broadly shared value for your audience. consider ways to connect pedestrian safety to this shared value. You could highlight the extensive health benefits of walking and its role in overall health and wellness. Or maybe accessibility for everyone is a broadly shared value. You could tailor your conversation to include the connection between accessibility and walking as the most basic, common, affordable, and universal mode of transportation. Considering what broad values are important to your audience and how those values connect to pedestrian safety can provide opportunities for meaningful dialogue.

Further, raising concern about pedestrian safety and hope that together we can improve pedestrian safety can increase engagement. Raising concern includes increasing a person's cognitive engagement and emotional engagement.⁵ Raising concern is different than eliciting fear. Fear is generally defined as a

Wondering where to start to identify broadly shared values?

- → Reach out to other organizations (e.g., Public health) that may have data about your community's priorities.
- → Reach out to elected officials or others who interact with people in your community regularly.
- → Review recent media or news coverage about important topics or shared concerns.
 - ? Ask: What does my community care about? (Examples might include increased property values. improved air quality, reduced traffic congestion, protecting their family and other community members).

negative emotion caused by the belief that something is dangerous, likely to cause pain, or a threat. Fear can grab a person's attention and is memorable but can also result in a person feeling paralyzed to take any action. ^{6,7} Raising concern can increase interest, curiosity, and engagement.8 Hope is a positive emotion that provides a path toward a desired outcome and can be used to motivate and foster engagement in the promotion of safer behaviors.^{9, 10} Raising both concern and hope in conversations about pedestrian safety and the safety of all road users can help you engage others in meaningful conversation.

⁵ Center for Health and Safety Culture. (2023). *Positive Culture Framework manual.* Montana State University. https://chsculture.org/training-materials/
⁶ Cismaru, M. (2014). Using the extended parallel process model to understand texting while driving and guide communication campaigns against it. Social Marketing Quarterly, 20(1), 66–82. https://chi.org/10.1177/1524500413517883
⁷ Lewis, I., Watson, B., Tay, R., & White, K. M. (2007). The role of fear appeals in improving driver safety: A review of the effectiveness of fear-arousing (threat) appeals in road safety advertising. https://chi.org/10.1037/0736-9735.23.1.143
⁸ Tolmacz, R. (2006). Concern: A comparative look. https://chi.org/10.1037/0736-9735.23.1.143
⁸ Nabi, R. L., & Myrick, J. G. (2019). Uplifting fear appeals: Considering the role of hope in fear-based persuasive messages. https://chi.org/10.1037/0736-9735.23.1.143
¹⁰ Luthans, F., & Avolio, B. J. (2007). https://chi.org/10.1037/0736-9735.23.1.143
¹⁰ Luthans, F., & Avolio, B. J. (2007). https://chi.org/10.1037/0736-9735.23.1.143
¹⁰ Luthans, F., & Avolio, B. J. (2007). https://chi.org/10.1037/0736-9735.23.1.143
¹⁰ Luthans, F., & Avolio, B. J. (2007). https://chi.org/10.1037/0736-9735.23.1.143
¹⁰ Luthans, F., & Avolio, B. J. (2007). https://chi.org/10.1037/0736-9735.23.1.143
¹⁰ Luthans, F., & Avolio, B. J. (2007). https://chi.org/10.1037/0736-9735.23.1.143
¹⁰ Luth

Worksheet to Engage in Meaningful Conversations About Pedestrian Safety

This worksheet can be used to help you create a tailored plan to engage others about the importance of pedestrian safety. With your audience in mind, choose shared values that are relevant and make decisions about what concerns might be most salient to highlight and what speaking points might raise hope and motivate your audience to engage on this important topic.

Who is your audience? (e.g., a group of parents with young children, an outdoor recreation group, a county commissioner, a city planner, a community prevention coalition, a colleague at work, a healthcare provider, a small business owner, etc.)

Why should your audience care about pedestrian safety? Think about shared values that are important to your audience and how those values connect to pedestrian safety.

Here are some examples of broadly shared values and how those values connect to speaking points about pedestrian safety.

Value - Accessibility

- Walking is the most basic, common, affordable, and universal mode of transportation.
 - Most people are pedestrians at some point in their lives or during their everyday activities. Children and families, commuters, and older adults are all pedestrians. People who don't usually walk as a form of transportation may do so on vacation or for special events. 11
 - Pedestrian safety is for everyone in our communities.
- Pedestrians are among the most vulnerable users who rely on our shared roadway system to connect to people, places, goods, and services, and they should be able to get to their destinations safely.

Value - Health

- Walking offers extensive health benefits.
 - Walking promotes overall health and wellness. Being physically active can help you feel better and sleep better. 12
 - Walking provides many health benefits including lowering the risk of heart disease, Type 2 diabetes, depression, stroke, and some cancers. 13

¹¹ World Health Organization (WHO). (2013). Pedestrian safety: A road safety manual for decision-

makers and practitioners. https://www.who.int/publications-detail-redirect/pedestrian-safety-a-road-safety-manual-for-decision-makers-and-practitioners

"2 centers for Disease Control and Prevention (CDC). (2023, October 16). Physical activity basics.
U.S. Department of Health and Human Services. https://www.cdc.gov/physicalactivity/basics/index.

htm 13 Centers for Disease Control and Prevention (CDC). (2023, July 14). Physical activity. U.S. Department of Health and Human Services. https://www.cdc.gov/physiactivity/index.html

What information do you want to highlight to raise both concern and hope about pedestrian safety?

Consider what data are available and what data would be most helpful in connecting to your audience. Consider using regional data for your audience to ignite support and raise awareness for the issue of pedestrian safety. In addition to using data, consider connecting your conversation about a pedestrian safety issue that is of concern in your community or highlighting a success story or an accomplishment that fosters a sense of hope.

Concern

Hope

Stewart, T. (2023, April). Overview of motor vehicle traffic crashes in 2021 (Report No. DOT HS 813 435). National Highway Traffic Safety Administration. https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813435
 Insurance Institute for Highway Safety. (2022, May). Fatality Facts 2020: Pedestrians. https://www.iihs.org/topics/fatality-statistics/detail/pedestrians
 U.S. Department of Transportation. (2022, October). What is a safe system approach? https://www.transportation.gov/NRSS/SafeSystem



Here are some examples of data that could be used to raise concern and hope about pedestrian safety.

Concern

- 7,388 pedestrians were killed and over 60,000 pedestrians were injured in traffic crashes in the U.S. in 2021.¹⁴
- A pedestrian was killed every 71 minutes in traffic crashes in 2021.¹⁴
- Pedestrian deaths increased 59% between 2009 and 2020 while other deaths from motor vehicle crashes grew by 9% over the same time.¹⁵

Hope

Growing shared support for pedestrian safety and the safety of all road users can help us realize our goal of zero injuries and fatalities on our roadways.

There are many strategies to improve pedestrian safety. We must work together to fully embrace these strategies and create a shared culture that prioritizes the safety of all users of the roadway system including pedestrians, our most vulnerable users.

The Safe System Approach is a comprehensive approach to address roadway safety.¹⁶

The Safe System Approach:

- encourages safe behaviors and creates conditions that prioritize people reaching their destinations unharmed;
- prioritizes designing roadways to mitigate human mistakes, encourage safer behaviors, and facilitate safe travel;
- promotes vehicle systems and features that help to prevent crashes and minimize the impact of crashes;
- promotes safer speeds; and
- promotes post-crash care. ¹⁶

RESOURCE

Growing Public Participation

This section provides a curated list of resources and case studies for traffic safety professionals that provide best practices, strategies, and examples of meaningful public engagement in pedestrian safety projects. The U.S. Department of Transportation defines meaningful public involvement as "a process that proactively seeks full representation from the community, considers public comments and feedback, and incorporates that feedback into a project, program, or plan."17 Through meaningful public involvement, the needs of the community are highlighted and approaches that may lead to better outcomes with limited funding can be explored. Meaningful public engagement and participation in decision making are core responsibilities public entities have while they work to better the lives of the citizens they serve. Traffic safety professionals and those involved in traffic safety decision making can incorporate public involvement throughout their projects to learn from their communities and better understand their needs and concerns and then incorporate that learning into their projects and plans. The role of public engagement in transportation decision making is no longer viewed as a box to check in the lifecycle of a project. Public involvement is recognized as an integral and iterative part of the transportation planning process.

Table 2 includes a list of resources that will help to better inform those in a transportation planning role about the best practices for public engagement.

¹⁷ U.S. Department of Transportation. (2023). Promising practices for meaningful public involvement in transportation decision-making. https://www.transportation.gov/sites/dot.gov/files/2023-11/Promising%20Practices%20for%20Meaningful%20Public%20Involvement 2023Update FINAL.pdf



Resource

Summary

Best Practices for Meaningful Community Engagement

Source: Groundwork USA

(network of local
organizations transforming
the natural and built
environments for
low-resource communities)

Tips for engaging underrepresented populations – these tips can help meet people where they are.

Community Toolbox - Toolkit - Increasing Participation and Membership

Source: The University of Kansas

This toolkit is not traffic safety specific and is geared toward participation and engaging stakeholders in change efforts. However, there are great tips for identifying who needs to be involved in community participation efforts, how to recruit participants, and how to create conditions to allow diverse groups of people to participate.

Developing and Advancing Effective Public Involvement and Environmental Justice Strategies for Rural and Small Communities

Source: Federal Highway
Administration

This research publication provides an eight-step framework for planning agencies to use when trying to engage low-income community stakeholders as well as includes a list of additional resources and case studies from project sites that were selected to participate in this research.

Effective Public Involvement Using Limited Resources

Source: National Academies Press Successful and unsuccessful strategies and implementation techniques are used to engage the public when resources are limited.

Measuring Performance of Public Engagement in Transportation Planning: Three Best Principles

Source: Transportation
Research Record: Journal of
the Transportation
Research Board

Three Best Principles in Public Engagement:

- 1. Accessible events,
- 2. Engaging interactions, and
- 3. Outcome-oriented process.

Resource

Summary

Promising Practices for Meaningful Public Involvement in Transportation Decision-Making

Source: U.S. DOT

Overall, this resource document promotes practices and strategies transportation professionals should use to meaningfully engage the public throughout the project and program lifecycle. It emphasizes the need to move beyond public meetings as the only form of engagement and recognizes that one-size-fits-all strategies will not result in meaningful engagement or successful projects.

Appendix A- Overviews of laws, statutes, and policies that govern public involvement.

Appendix B- Techniques for meaningful involvement.

Appendix C- Using federal funds for meaningful public involvement activities.

Public engagement in rural areas

Source: Transportation
Research Record: Journal of
the Transportation
Research Board

This journal article describes some of the unique challenges facing rural engagement and how to mitigate those challenges, recommendations to improve effectiveness in rural communities including meeting locations, timing, advertising, and outreach to promote public engagement opportunities, and an emphasis on recognizing that place, relationships, and context matter when planning.

Publications from the TRB Committee on Public Involvement in Transportation

Source: Transportation
Research Board

Here you will find reports from committee-sponsored research on how to measure the effectiveness of public involvement, information about virtual public involvement, practical approaches for underserved populations, and more.

Update on the State of the Practice: Public Involvement in the 21st Century

Source: Transportation Research Board This paper provides an overview of the history of public engagement in traffic safety, describes the current practice of public engagement including the Five I's of Public Involvement process, and describes a case study about an Alanta MPO that utilized multiple strategies for broad community engagement.



Another resource transportation agencies might consider is partnering with other agencies who are skilled at public input approaches. Community-based organizations, advocacy groups, consulting firms, and public health agencies at the local and sate levels could be great partners to support transportation agencies in conducing meaningful public engagement opportunities. These agencies may have already overcome barriers to engaging with the community

on a different health concern and could share the strategies they used to overcome those barriers. Growing relationships with other organizations working within the same community will build a network that can help sustain community engagement efforts.

Public Engagement in Pedestrian Project Case Studies

The following is a list of case studies (Table 3) that have been published and shared to inform other transportation agencies' efforts to effectively engage the public in planning and implementation processes.

Table 3. Case Studies

Case Study

Summary/Key Take Aways

Atlanta Uses
Quick-Build Projects to
Engage Community and
Improve Road Safety for
Young Pedestrians and
Bicyclists

Source: Pedestrian and Bicycle Information Center

- The City of Atlanta used a pilot project to build community interest and concern and sparked future changes for other areas of concern.
- Stakeholder input and feedback was collected through multiple meetings held in-person and virtually. Further, the City of Atlanta mailed project information out to affected neighborhoods, conducted door-to-door engagement, and used social media channels including Nextdoor.
- The City of Atlanta engaged youth in a pop-up demonstration of a walk/bike lane allowing people to experience proposed changes before implementation.
- The City of Atlanta focused on early and continuous outreach efforts.

Broward Metropolitan
Planning Organization
Complete Streets Initiative

Source: US. DOT

<u>Transportation Planning</u>

<u>Capacity Building</u>

- Broward MPO established strong partnerships with non-transportation agencies like health foundations, schools, and the health planning council.
- The Broward MPO Complete Streets initiative focused on changing culture through public engagement and training opportunities like their Safe Streets Summit and programs like Walking Audits.
- Continuous outreach and multiple mechanisms for feedback from stakeholders and the public were utilized.
- The Broward MPO acknowledged challenges of public participation and worked to find solutions to address them.

Case Study

Summary/Key Take Aways

Carson City, NV's Multifaceted Approach to Complete Streets

Source: US. DOT

<u>Transportation Planning</u>

<u>Capacity Building</u>

- Carson City ensured their Complete Streets policy included performance metrics so it could be evaluated and amended as needed.
- Multiple funding streams were utilized including a voluntary fee residents could opt into.
- The public was engaged early and continuously throughout projects.
 - o Multiple methods to collect feedback were used.
 - Shared understanding and language was promoted through education.
- Carson City developed champions for programs.

El Paso: From Good Intentions to Great Policy

Source: Pedestrian and Bicycle Information Center

- El Paso focused on building a strong and diverse coalition.
- El Paso connected active transportation solutions and benefits with public health initiatives.
- El Paso provided multiple opportunities for community engagement.

alone wasn't enough to gain progress; the MPO started making concerted efforts in 2015 to engage the local commuity. The MPO partnered with existing nonprofits and committees that served undersarred papulations in the area.

• The MPO had a Complete Streets policy since 2008, but that

- that served underserved populations in the area.
- The MPO staff engaged in a leadership academy that focused on the effective engagement of Spanish-speaking residents.
- The Empowerment Congress's Leadership Academy focused on five principles to better engage Spanish-speaking residents. Those included:
 - Hold public meetings at times when people will be able to attend.
 - Advertise your meeting through multiple means of communication.
 - Present problems in an open-ended way, without providing options for how the problem may be solved at the outset.
 - Provide professional interpreters for non-English speakers.
 - Create an environment that encourages the public to talk with you.

Engaging Underserved Communities to Focus on Building More Complete Streets

Source: Pedestrian and Bicycle Information Center

Case Study

Summary/Key Take Aways

Indianapolis Culture Trail

Source: Pedestrian and Bicycle Information Center

- The Culture Trail project focused on early and continuous outreach.
- The Culture Trail project engaged diverse stakeholders including community development, corporations, business owner groups, preservationists, and residents.
- Outside consultant teams were hired to assist with project management and design.
- Business owners were involved early and often to make sure concerns were addressed.
 - For example, attention was paid to ensuring that road closures did not adversely affect businesses.
- An affordable bike share was incorporated to encourage everyone to use the Culture Trail.

Tucson Complete Streets is About More Than Pavement

Source: Smart Growth
America

- The Tucson's Living Streets Alliance viewed the community members as experts.
- Lived experiences helped to shape Tucson's Complete Streets policy.
- The Tucson's Living Streets Alliance engaged multiple partners and diverse groups of stakeholders across the social ecology.
- Addressing disparities was a core component of implementing the Complete Streets policy.

Promoting Pedestrian Safety Across the Social Environment

TOOL

Pedestrian safety is broadly relevant to all people.¹⁸ While it can be easy to focus on the individual behaviors of pedestrians themselves to improve safety, it is useful to embrace a social-ecological perspective where the focus shifts across the social environment to explore how various layers of the social environment (those surrounding pedestrians) can influence pedestrian safety. An individual's behavior is influenced by people and contexts across the social environment.^{19, 20} In other words, people in the individual's life – their families and peers, their schools and workplaces, and their communities more broadly – can influence the individual and their behavior. Using a social-ecological perspective to address pedestrian safety can expand the focus and maximize the impact of efforts to improve pedestrian safety. Pedestrian safety is a shared responsibility among all of us and we can work together to support pedestrian safety efforts.

Here are examples of actions that can be promoted at each layer of the social environment to support pedestrian safety (Figure 1).

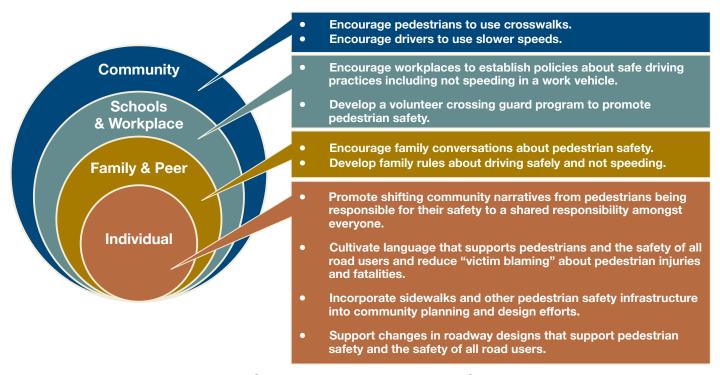


Figure 1. Actions Across the Social Ecology for Pedestrian Safety

¹⁸ National Highway Traffic Safety Administration (NHTSA). (n.d.). Pedestrian safety. U.S. Department of Transportation. https://www.nhtsa.gov/road-safety/pedestrian-safety
¹⁹ Browning, C. R., Soller, B., & Jackson, A. L. (2015). Neighborhoods and adolescent health-risk behavior: An ecological network approach. Social Science & Medicine, 125, 163–172. https://doi.org/10.1016/j.socscimed.2014.06.028

^{163–172.} https://doi.org/10.1016/j.socscimed.2014.06.028

²⁰ Ward, N. J., Otto, J., & Finley, K. (2019). Ten principles of traffic safety culture. In N. J. Ward, B. Watson, & K. Fleming-Vogl (Eds.), *Traffic Safety Culture: Definition, foundation, and application* (pp. 21–39). Emerald Publishing Group.

Questions to Consider When Promoting Pedestrian Safety Across the Social Environment

- What current pedestrian safety activities exist at each level of the social ecology?
- Where are there gaps in pedestrian safety activities?
 - What opportunities exist to promote pedestrian safety at that level of the social ecology? Who could be involved and collaborate?
 - What other traffic safety efforts are working at that level of the of the social ecology? How could those efforts be expanded to include pedestrian safety?



→ Include the activities of collaborators and other groups working to improve pedestrian safety in your community.

Using a table can help organize current activities across the social ecology, see where gaps exist, and identify collaborators to help fill gaps. See Table 4 for an example. With a row for each agency or organization, highlight the cells for the layers of the social ecology that the agency or organization interacts with and reaches. (This can be in general, not necessarily specific to pedestrian safety.) Then, list the strategies to promote pedestrian safety within those highlighted cells (i.e., for the relevant layers of the social ecology).

- Look for gaps where no strategies are listed for a level of the social ecology (by looking down the column).
- See opportunities where agencies/organizations have reach at that level of the social ecology (where the cells are highlighted) and consider how current efforts could be expanded to include pedestrian safety.



Table 4. Activities Across the Social Ecology

Agency/ Organization	Individual	Family & Peer	Schools & Workplaces	Community
Parent-Teacher Organization		Support Safe Routes to School	Volunteer crossing guards	Adopt resolution on improved infrastructure around schools
City Metropolitan Planning Organization				Include and elevate pedestrian safety best practices in the Transportation Improvement Program (TIP) and throughout each project lifecycle



