Safe Routes to School Curriculum

Grades 3–4

CITY OF
BLOOMINGTON
PLANNING AND TRANSPORTATION

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About the Curriculum

This curriculum was developed by the City of Bloomington for elementary students in the Bloomington community. It is organized into three grade bands (K-2, 3-4, and 5-6) and is designed to be revisited as students progress through elementary school.

The curriculum includes five lessons, each featuring discussion questions, a presentation, a book suggestion, and optional activities to reinforce the lesson. Each presentation is designed to be delivered in less than 30 minutes, with additional time for a book and/or activity. Little to no prep is needed for the lesson, and little to no materials are required.

Its goal is to empower students with the knowledge and skills to navigate their world more safely and confidently. The curriculum is part of a broader program that includes infrastructure improvements, events, communication efforts, and planning initiatives.

Designed to be short and flexible, the curriculum aims to fit within existing busy schedules. Educators are encouraged to use the components that are most helpful, adapt them to their needs, and make changes as necessary.

Questions or suggestions about the curriculum can be sent to planning@bloomington.in.gov.

Our Approach and Principles

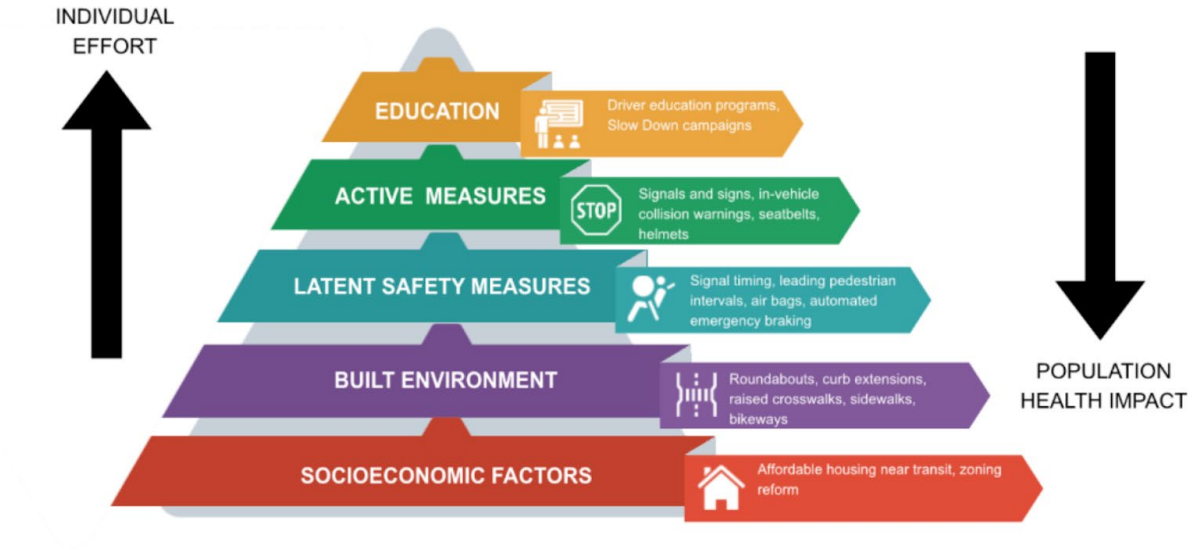
Between the years 2019-2023, there were 10,391 crashes on Bloomington's streets; 443 of these crashes resulted in either a major injury or death. These crashes are more than a statistic to track. These crashes forever impact families, friends, and neighbors throughout Bloomington. As a community, we do not accept these crashes as status quo.

While often referred to as “accidents,” the reality is that traffic deaths from crashes are preventable. Our approach views traffic deaths as an urgent public health issue with the goal of using a variety of strategies to eliminate all serious injuries and deaths from crashes, not necessarily eliminate all crashes.

Road and vehicle design strongly influence driver behavior. That’s why our approach focuses on streets and transportation systems that reduce risks, promote safe speeds, and accommodate inevitable human error. People will make mistakes, but those mistakes should not cost lives. Self-explaining and self-enforcing infrastructure (such as crosswalks, protected bike lanes, and traffic-calming measures) helps make streets safer for everyone. Our approach also acknowledges the issue of access, acknowledging that distance, cost, and other factors can impact how easily and safely people travel.

Children are especially vulnerable, relying on walking, biking, and buses for independent travel. We do not blame children for mistakes on the road. Instead, we work to address the systems that put them at risk, ensuring that streets, trails, and transit are safe for all users, regardless of age, income, or mode of transportation.

Education, like this curriculum, sits at the top of the Safe Systems Pyramid for traffic safety. It is designed to complement broader changes to socioeconomic factors, the built environment, and other safety measures. Education alone is not a solution but it works best as part of a larger, shared responsibility to create streets that are safe for everyone.



David J. Ederer et al., "The Safe Systems Pyramid: A New Framework for Traffic Safety," *Transportation Research Interdisciplinary Perspectives* 21 (2023): 100905, https://doi.org/10.1016/j.trip.2023.100905.

More Resources

The City of Bloomington is committed to supporting safe routes to school, and is able to provide resources to support this goal including staff time and trainings, a revolving library of SRTS-related books, event support, signage, bike games and activities, walking school bus training and support, bike bus training and support, bike rodeos, and more.

To learn more about our SRTS initiative and connect with staff visit https://bton.in/SRTS.

Lesson 1: Safe Crossings and Signs

3-4 Safe Routes to School Lesson Plan

Lesson Introduction

Third and fourth graders are increasingly independent walkers, often navigating streets before and after school without adult supervision. The lessons focuses on judgment including reading a situation, understanding right-of-way, using peripheral vision, and making decisions when conditions are less than ideal. Crossing the street involves multiple steps and takes practice. This lesson reviews the basics and adds independent judgment for students who now navigate streets on their own. This lesson will cover types of intersections that students will encounter, each with different rules, including 4-way stop intersections, intersections with lights, and roundabouts. This intersection will also cover signage relevant to students walking, biking, or rolling to school.

Lesson outcome: Students will be able to describe the steps to cross safely with an emphasis on independent judgment, demonstrate how to scan left and right at an intersection using peripheral vision, and identify safer places to cross when ideal conditions are absent. Students will be able to identify different types of intersections and describe how to behave safely at each one.

Presentation

This presentation is available via Google Slides. It covers walking on the sidewalk or face oncoming traffic where there is none, making eye contact with drivers, looking left-right-left, and how to evaluate a crossing when conditions are not ideal (no crosswalk, poor visibility, heavy traffic). Students will learn about signage, signal types, and the different rules for each intersection type.

Activity

- **Walking Reflection:** Students write a short route reflection (3–5 sentences) describing a walk they take regularly (to school, a friend's house, a park, or a store). Where do they need to pay the most attention? What makes those spots feel less safe?

Book Suggestions

- ***City Streets Are for People*** **by Andrea Curtis**
  This fun, accessible and ultimately hopeful book explores sustainable transportation around the globe, including electric vehicles, public transit, bicycles, walking and more. It invites us to conjure up a city of the future, where these modes are all used together to create a place that is sustainable, healthy, accessible and safe.

Lesson 2: Visibility and Being Seen

3-4 Safe Routes to School Lesson Plan

Lesson Introduction

Streets should be safe for everyone, no matter what they're wearing. This lesson asks students to think about how well drivers can actually see them and what choices they can make to improve visibility. Research shows that pedestrians wearing retroreflective or high-visibility materials can be seen by drivers up to four times farther away than those in dark clothing, a difference that can determine whether a driver has enough time to stop. Visibility is partly a personal choice and partly a design issue: better lighting, lower speeds, and well-designed intersections all reduce the burden on pedestrians to be seen. This lesson covers both.

Lesson Outcome: By the end of this lesson, students will be able to identify clothing colors and materials that increase visibility, describe conditions (time of day, weather) that reduce how well drivers can see pedestrians, and make choices to improve their own visibility.

Presentation

This presentation is available via Google Slides. It covers visibility, high-visibility colors, gear that can help, and times when visibility is limited like dusk and dawn.

Book Suggestion

- ***Parker the Planner by Madeline Peck***
  Summary: Planning a city is a big project, but Parker is up for the challenge. He has all kinds of ideas about how to create a place that will benefit everyone. Part of a STEAM career-themed picture book series, Parker the Planner shows kids they can help create change in their own communities. Like Parker, they can use their passion and ideas to make the world a better place. Perfect for encouraging critical and creative thinking! Spatial analysis and critical thinking skills in K-12 students better prepare them for success, especially in science, engineering, and mathematics.

Activity

Provide students with a table of speeds and approximate total stopping distances:

- 10 mph: 16 ft
- 20 mph: 40 ft
- 30 mph: 75 ft
- 40 mph: 120 ft
- 50 mph: 175 ft

Ask students to create a bar graph from this data, labeling axes and adding a title.

1. How many more feet does a car need to stop going 30 mph than 20 mph?
2. If a school zone speed limit is 20 mph, how much shorter is the stopping distance compared to 30 mph? Why does that matter?

Lesson 3: Bike Safety

3-4 Safe Routes to School Lesson Plan

Lesson Introduction

This lesson focuses on the foundational skills and habits that keep cyclists safe: wearing a properly fitted helmet, knowing the basic parts of a bike, understanding hand signals, and keeping a bike in safe working condition. The discussion questions in this lesson ask students to think about what makes streets feel safe or unsafe for cycling, connecting individual skills to the broader conversation about street design.

Lesson outcome: By the end of this lesson, students will be able to demonstrate the three standard hand signals for left turn, right turn, and stop, fit a bicycle helmet correctly using the 2-V-1 rule, identify the major parts of a bike, and explain the function of each.

Presentation

This presentation is available via Google Slides. It covers the three hand signals, proper helmet fitting, major parts of a bike, and the ABC Quick Check.

Book Suggestion

- ***Major Taylor: World Cycling Champion*** **by Charles R. Smith**
  One hundred years ago, one of the most popular spectator sports was bicycle racing, and the man to beat was Marshall “Major” Taylor, who set records in his teens and won his first world championship by age twenty. The first African American world champion in cycling and the second Black athlete to win a world championship in any sport, Major Taylor faced down challenge after challenge, not least the grueling Six-Day Race, a test of speed, strength, and endurance. With energy, heart, and pounding verse, Charles R. Smith Jr. evokes the excitement of the crowd at Madison Square Garden as Major powered through exhaustion, hallucinations, and racist abuse from fellow riders, who tried to crash his bike throughout the competition.

Activity

- Play Simon Says using the three hand signals: left turn (left arm out), right turn (left arm bent up), and stop (left arm bent down). Teacher calls left turn, right turn, and stop with or without “Simon says.”

Lesson 4: Transit and Transportation

3-4 Safe Routes to School Lesson Plan

Lesson Introduction

This lesson uses public transit as a lens for understanding transportation systems, community planning, and environmental responsibility. Beyond learning how to ride a bus safely, students in this grade band will explore why transit systems exist, how they affect traffic and air quality, the economics of transit, and how to navigate their city.

Lesson Outcome: By the end of this lesson, students will be able to explain what public transit is, describe its benefits for the environment and community access, read a basic transit map and plan a simple trip.

Presentation

This presentation is available via Google Slides. It covers finding a bus route and stop, reading a schedule, using planning tools, boarding, riding, and exiting the bus.

Book Suggestion

- ***All Aboard for the Bobo Road* by Stephen Davies**
  All aboard for the Bobo Road! Fatima and Galo load the luggage while their dad Big Ali drives the bus. Help count bikes, sacks of rice, melons and even goats and chickens as the bus travels past Gurunsi houses, the hippo lake, waterfalls and jungle, all the way to Bobo. With the authentic setting in Burkina Faso drawn from the author's own experience, this is a wonderfully fun introduction for small children to an amazing culture.

Activity

- **Bus Stop Design:** Using Attachment A, students choose elements to include in a bus stop.

Lesson 5: Speed, Health, and Safety

3-4 Safe Routes to School Lesson Plan

Lesson Introduction

This lesson connects the physics of force and motion to pedestrian safety. Faster-moving objects require more distance and time to stop. Understanding this helps students grasp why speed limits near schools exist and why they protect real people. Research shows that a pedestrian struck by a car at 20 mph has roughly a 90% chance of survival. At 30 mph, that drops to about 50%. At 40 mph, survival is unlikely. This lesson also helps students understand the connections between transportation, health, and their community using real data.

Lesson Outcome: By the end of this lesson, students will be able to explain the relationship between speed and stopping distance using force and motion concepts, interpret data showing how stopping distance changes with speed, describe why speed limits near schools protect pedestrians, and connect speed to their own safety decisions Students will also be able to explain the health benefits of walking and biking and explain how vehicle emissions affect their community.

Presentation

This presentation is available via Google Slides. It covers force and motion, speed and stopping distance, why speed limits exist, and what pedestrians can do to stay safe.

Book Suggestion

- ***Our Green City* by Tanya Lloyd Kyi**
  In this green city, neighbors take care of all living things: people, plants and animals, too! Many people choose a bicycle, scooter or their own two feet to get where they need to go. A family collects the rain to water their garden, while solar panels capture the energy from the sun; pipes gather heat from underground, and a windmill turns to power the community. Residents keep hens and hives in their yards, and care for flower beds that feed bees, birds and butterflies. Here, people all work together to make the city green. Can we do the same where we live?

Activity

- **Lane Width and Speed:** Street designers know that wider lanes produce faster driving. Use tape to mark three lane widths on the floor: narrow (2 feet), standard (3 feet), and wide (5 feet). Students run through each without touching or going out of the tape. Which requires them to slow down? It is easier to stop when going slow or going fast?