Safe Routes to School Curriculum

Grades 5–6

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

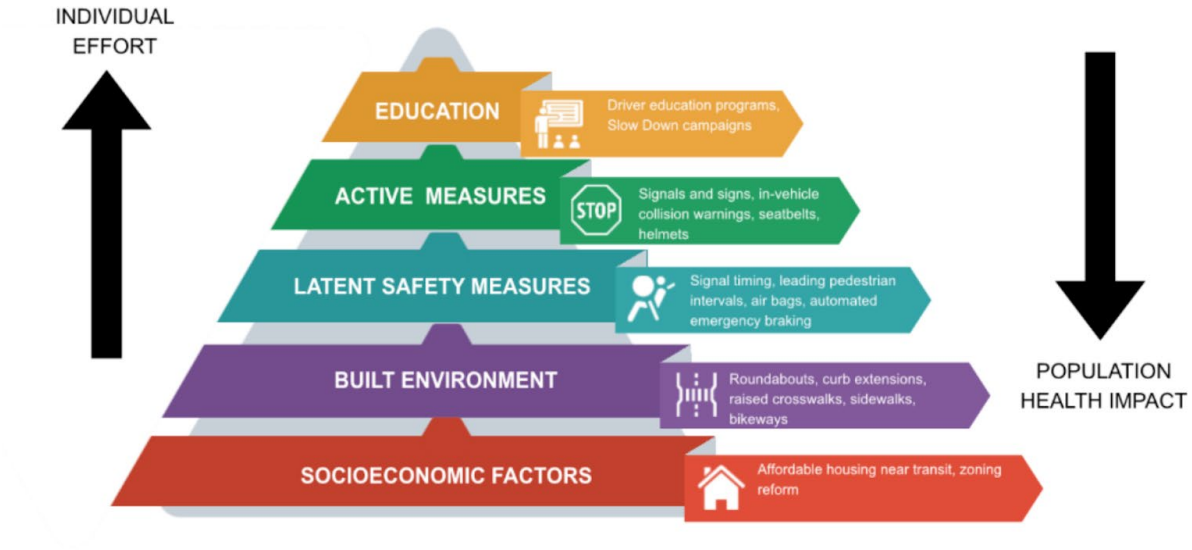
Between the years 2019-2023, there were 10,391 crashes on Bloomington's streets; 443 of these crashes resulted in either a major injury or death. These crashes are more than a statistic to track. These crashes forever impact families, friends, and neighbors throughout Bloomington. As a community, we 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: Intersections and Street Design

5-6 Safe Routes to School Lesson Plan

Lesson Introduction

This lesson explains intersections and common traffic signs they will encounter when walking or cycling. Students will learn to recognize different intersection types, understand what each sign and signal means, and practice using them to make safe decisions. As students in this grade band have more independence on streets, the lesson also asks them to think critically about which intersections feel unsafe and why.

Learning Objectives: Students will be able to identify different types of intersections and how to behave safely at each one. Students will also begin to think about what design features make intersections safer or less safe.

Presentation

This presentation is available via Google Slides. Students will learn about signage, signal types, and intersection types, and will compare what makes some intersections safer than others by design.

Book Suggestion

- ***Look Both Ways* by Jason Reynolds**
  This is a collection of ten interconnected short stories about middle schoolers walking home from school, each focusing on a different city block and its inhabitants. The book explores themes like friendship, bullying, family struggles, and identity through the characters' realistic and often humorous, poignant, and powerful experiences as they navigate the "in-between" moments of their lives. The stories are linked by shared characters and a mythical flying school bus, offering a look at the hidden lives and struggles within a single community.

Activity

- **Intersection Design Audit:** Take students on a short walk to observe a nearby intersection. If multiple intersection types are accessible, visit more than one so students can compare how they operate.

  Once at the intersection, ask students to silently observe for one minute before beginning discussion.

Guide observations using the following prompts:

- Where can a pedestrian cross?
- What signs, signals, or markings help people know when it is safe to cross?
- Where is the safest place to stand while waiting to cross?
- Where should you look before crossing? What should you look for behind you?
- How many directions can traffic come from?
- Are there vehicles turning into the crosswalk?
- Is there a pedestrian push-button, countdown timer, crossing guard, or other feature that helps people cross safely?
- What is the speed limit?
- What clues tell you whether it is safe to cross?

Have students watch several signal cycles or groups of vehicles and discuss what they notice. Encourage students to identify examples of safe behavior.

Students then complete Attachment A by sketching a simple diagram of the intersection.

Lesson 2: Visibility and Maps

5-6 Safe Routes to School Lesson Plan

Lesson Introduction

This lesson asks students to think about how well drivers can actually see them and what they can do to make themselves more visible. Research shows that pedestrians wearing retroreflective or high-visibility materials can be seen by drivers much farther away than those wearing dark clothing, a difference that can determine whether a driver has enough time to stop. This lesson also encourages students to think beyond personal choice: better street lighting, lower speeds, and well-designed crossings all reduce the burden on pedestrians to be seen.

Learning Objectives: By the end of this lesson, students will be able to identify clothing colors and materials that increase visibility, describe conditions that reduce how well drivers can see pedestrians, and consider both personal and design-based solutions to visibility.

Presentation

This presentation is available via Google Slides. It covers visibility, high-visibility colors, reflective gear, conditions when visibility is most limited, and what street design features reduce the problem regardless of what people are wearing.

Book Suggestions

- ***The Playground Problem*** **by Ryan Lanclos & Matt Artz**

  Emma and David find a chain and padlock across the local playground entrance. Where can they play? With help from neighbor Kayla and her dog Blazer, Emma and David set out to find a new place to play. But how will they know where a good location is?

  Kayla shows them how they can use basic mapping, distance, direction, spatial pattern analysis, and overlay skills to find the perfect location. And just when they do, they encounter more obstacles—all of them have to work together quickly to solve their playground problem!

Mapping Activity

- **Visibility Mapping Activity:** Students will use Google My Maps to create a basic GIS map of visibility concerns along a route to school. A base map of the neighborhood is available here and students can follow along via Attachment B.

Lesson 3: Bike Safety

5-6 Safe Routes to School Lesson Plan

Lesson Introduction

This lesson focuses on the foundational skills and habits that keep people biking safe, including proper helmet fit, hand signals, bike maintenance, and understanding how to navigate the road on a bike. The discussion questions ask students to think about what makes streets feel safe or unsafe for biking and what would need to change.

Learning Objectives: 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 hand signals, helmet fitting, major bike parts, ABC Quick Check, basic bike repair, dooring, and bike lanes.

Book Suggestion

- ***Hero on a Bicycle* by Shirley Hughes**
  Hero on a Bicycle is Shirley Hughes's first novel, a historical fiction book for middle-grade readers set in Nazi-occupied Florence, Italy, in 1944, following siblings Paolo and Costanza as they get involved with the Italian Resistance, using their bicycle to help the Partisans and harbor escaped prisoners, showcasing courage and the harsh realities of war.

Activity

- **Writing prompt:** Imagine two futures: one where most people drive everywhere, and one where walking, biking, and transit are common. Compare how these futures might feel different for students and neighborhoods. Be specific and describe a morning commute, a school arrival, a street near your home.

Lesson 4: Transit and Transportation Skills

5-6 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 explore why transit systems exist, how they affect traffic and air quality, and the question of who has access to transportation options and who doesn't.

Learning Objectives: 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 route and stop, reading a schedule, using planning tools, boarding, riding, and exiting.

Student Activities

Book Suggestion

- ***City Streets Are for People* by Andrea Curtis**
  Congested city streets are noisy and thick with cars and trucks, while pedestrians and cyclists are squeezed to the dangerous edges—but does it have to be this way? Imagine a city where we aren't stuck in cars, where clean air makes it easier to breathe, and where transit is easy to access—and on time. Imagine a city where streets are for people! 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.

Activity

- **Trip Planning Exercise:** Have students identify two locations to travel via the bus. Students identify which bus route they would take, where they would board the bus, and where they would exit. Students should determine whether they would need to transfer buses and estimate how long the trip might take. Afterward, discuss which destinations were easiest to reach by transit, which destinations required transfers, and which destinations were easy and difficult to reach.

Lesson 5: Speed and Safety

5-6 Safe Routes to School Lesson Plan

Lesson Introduction

Streets look the way they do because of deliberate design choices, not because they naturally evolved that way. This lesson asks students to understand how streets are designed, why they look the way they do, and what different choices could look like.

This lesson connects the physics concepts of force and motion and applies them directly to pedestrian safety. Faster moving objects require more distance and time to stop, which also applies to speeding vehicles. Understanding this can better equip students to understand the risks of high speed roads.

Learning Objectives: 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 and neighborhoods protect pedestrians, and connect speed to their own safety decisions. Students will also be able to identify key street design features that affect safety, explain how street design choices influence driver behavior and speeds, and describe interventions that make streets safer.

Presentation

This presentation is available via Google Slides. It covers factors that influence road safety, design interventions, and the physics of road safety.

Book Suggestion

- **The Sunshine Project** by Uma Krishnaswami (4-6)
  Anil loves karate, his friends and the solar power project he has been championing in his community. He doesn't love having to speak up — as his karate sensei says, best fight, no fight. Still, Anil wishes his classmate Mohan would stop picking on him.Then Anil learns where the city is planning to build a new solar panel factory. More sustainable energy is good news — but this factory will threaten plant and animal species and force the village people who live on the land to move. Maybe staying quiet isn't an option anymore…

Activity

- **Road Audit Homework**
  Students will complete a road audit, identifying their safety concerns for commuting and how to make the road safer. Students will follow along via Attachment C.