

## High School Complete Streets Curriculum

The program will teach students about transportation planning and have them analyze their transportation needs. The goal is to create project suggestions of specific import to youth and young adults that ultimately could be brought to professional planners and elected officials for implementation in their community.

**Overview:** This course will help students to:

1. Recognize the role transportation plays in their lives and the lives of others
2. Understand the importance of looking at the needs of all transportation/road users
3. Engage others, particularly other students, about their transportation needs
4. Learn basic transportation design standards to create viable and realistic plans and suggestions to share with local transportation agencies and elected officials
5. Develop strategies to engage local leaders and decision makers

**General Structure:**

1. 8–10 sessions, 45 minutes per session
2. Any group of students, be it a class, club or ad-hoc gathering
3. Curriculum, materials, and support provided free of charge
4. Availability to support a field trip to transportation-related groups and organizations

Program offers extreme flexibility to meet the specific needs of the school. Adaptation to meet the needs of a specific group of students is encouraged.

For more information, contact:

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### **Lesson 1: The Impacts of Transportation**

Purpose: Students will learn how transportation is a part of the “bigger picture” of society; students will explore various ways transportation connects to the world around them; students will discover the many effects and costs related to using gasoline.

- Discussion of how transportation affects the lives of all people, specifically students.
- Examine up to five topics transportation impacts:
  - The environment
  - Physical health
  - Personal transportation spending
  - Property values and housing process
  - Crime rates
- Explore impact and cost associated with car-related travel

Homework: Transportation log – Students collect information on how they travel over the course of a 7-day period

### **Lesson 2: Public Engagement**

Purpose: Students explore the use of different forms of transportation; students will explore the use of surveys and discuss the need for public engagement in transportation planning.

- Examine student transportation logs and discuss reasons for student travel choices
- Establish reasons for public engagement
- Discuss different strategies to gain community input
- Determine strategies to create a valid survey

Homework: Students will survey a variety of individuals/constituencies to determine goals to implement in their planning work.

### **Lesson 3: User Needs/Complete Streets**

Purpose: Students will learn about the principles of Complete Streets and how roads can be designed to incorporate the needs of all users and types; students will investigate their own transportation needs and the needs of other user groups

- Video: challenges many non-car users face
- Explore concept of “complete streets” as a road design principle
- Work to identify conditions that make it challenging for some users to use certain roadways to get around

Homework: Walkability Assessment

### **Lesson 4: Complete Streets Applications**

Purpose: Students will learn about the principles of Complete Streets and how roads can be designed to incorporate the needs of all users and types; students will investigate their own needs and the needs of other user groups

- Look at possible complete street solutions
- Examine pictures of incomplete streets and make relevant suggestions
- Brainstorm final project

Homework: Finish “What Do We Need Here?” worksheet

### **Lesson 5: Transportation System Analysis and Street Typologies**

Purpose: Students will analyze the various elements of transportation structures and understand how they together create the complete transportation system

- Video: exploring various complete street examples
- Talk about varieties of street types that exist and how they dictate accessibility
  - Arterials/Boulevards (major roadways)
  - Collectors/Avenues (minor roadways)
  - Locals/Streets (neighborhood roadways)
- Discuss factors of “context sensitive solutions” when creating complete streets

Homework: Students begin work on final project

### **Lesson 6: Street and Transportation Design Needs**

Purpose: Students will learn about specific transportation design elements and standards to gain the “nitty gritty” knowledge needed to begin designing transportation options.

- Videos: traffic calming and road diet
- Practice redesigning streets to fit complete streets model

Homework: Complete “Design a Street” worksheet; continue work on final project.

### **Lesson 7: When You’re Not a Planner: Advocate**

Purpose: Students will learn how to effectively advocate for change to decision makers.

- Discuss reasons for advocacy
- Video: example of a successful student advocacy effort
- Examine successful outreach strategies

Homework: Continue work on final project.

### **Lesson 8: Final plan presentation – Making your case**

Purpose: Students present designs and ideas about improvements to the local transportation system; students share visual representations of both current and suggested facilities; students will also share information they gained during the survey/interview process.

- Final project, including a presentation with visual aid

### **(Optional) Lesson 3B: Walkability Assessment**

Purpose: Students will conduct a walkability assessment as a class

- Together conduct assessment of nearby street conditions

### **(Optional) Lesson 6B: Creating a Successful Presentation**

Purpose: Students will learn how to effectively create and deliver a public presentation

- Specific elements of a presentation
- Plan a sample presentation

### **(Optional) Field Trip (best after Lesson 6 and before Lesson 8)**

Students will participate in an experiential learning activity that will involve connecting with transportation planners or other transportation professionals

**Purpose:** Students will learn about the principles of Complete Streets and how roads can be designed to incorporate the needs of all users and types; students will investigate their own transportation needs and the needs of other user groups

**Learning Objectives:**

1. Students will be able to define the term “complete street”
2. Students will connect the issues of safety with transportation design
3. Students will be able to identify issues that indicate unsafe transportation conditions

**Materials:**

- Completed student surveys from previous lesson
- Student homework from Lesson 1, transportation logs
- Copies of walkability assessment (if for homework, one per student)

**Survey Review (10 minutes)**

Using the students’ survey results, as a class make a list of some of the findings they discovered that answer the main question: What are the transportation issues facing HS students at this school? Then discuss with students:

- Were there any issues mentioned that surprised them?
- Were there any issues NOT mentioned that surprised them?
- Were there any differences students noticed between different demographic groups (such as students who had a license and car and those who did not)?

**Blueprint America (15 minutes)**

Show students the eight-minute video clip, “Blueprint America”

<http://video.pbs.org/video/1550369887> OR

[www.grist.org/sprawl/2011-07-21-pedestrians-and-transit-riders-theyre-disposable-video](http://www.grist.org/sprawl/2011-07-21-pedestrians-and-transit-riders-theyre-disposable-video)

Discuss any initial comments students have about the video. What do students see as the main issue discussed in the video? What, if any, issues do they face similar to those discussed in the video? What solutions do they suggest for those who are threatened by the dangers to walking/busing mentioned in the video but have no other options?

**Complete Streets Introduction (10 minutes)**

Introduce the idea of a complete street. First ask students what they think would be the definition of a “complete street.” Once students have shared some thoughts, share with them the following definition:



The National Complete Streets Coalition says, “Complete Streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across a complete street.” The street is designed and operated to readily and easily accommodate all users, regardless of age and mode type.

Some ways streets can accommodate all users:

- Pedestrians – quality pedestrian facilities include: adequate unobstructed walking space, lighting, benches, trees, shading, roadway separation, on-street parking, land access, safe and frequent crossing locations, signage and walkable destination access.
- Bikes – quality bicycle facilities include: clearly marked travel areas, appropriate separation based on speed and volume of vehicle traffic, bike parking areas, lighting, benches, trees, shading, intersection treatments, signage and bikeable destination access.
- Transit – quality transit facilities include: prominent and communicated connectivity (e.g. signs, street markings) to the bicycle and pedestrian network, functional shelters, separated/prioritized travel ways, coordinated land use planning, bike parking, lighting and walkable & bikeable stop/station distances.
- Places – the Complete Streets network connects the places people are to the places they want to go. This requires an understanding of the community and prioritizes places accordingly.

Ask students to return to their Transportation Logs and think about some of the trips they took. Ask, “Are there specific roads or segments of roads along any of your travel routes that might be defined as a “complete street? Almost complete? Not even close?” Have a few students share with the class reasons why they believe roads to be “complete streets,” nearly complete or incomplete. Also have students make suggestions about what they think could be done to help out the situation and create safer or more complete streets.

### **Explanation of Walkability Assessment (10 minutes)**

Distribute the Walkability Assessment worksheets to students and go through a few of the items with students to explain the process and provide an opportunity for clarifying questions.

The assessment should encompass one intersection and one street segment/block leading from the intersection. Have students note the streets and location of their assessment on their worksheet. While students may be tempted to speed through the list, encourage students to be thoughtful in the details they provide on the worksheet.

Mention to students that the overall transportation program in which they are participating includes a final project where they create a plan to redesign a streetscape—one or more intersection or street (or some combination)—and encourage them to select a location to audit that seems like a good place to propose changes based on the complete streets idea and/or information from student surveys.

Homework: Walkability Assessment (if not completed as a class in lesson 3B)