

# Traveling Green

## Eco-Schools Topic:

Transportation

## Grade Level:

Lesson 1: Grades K-3

Lesson 2: Grades 4-6

## Standards:

Healthy Living

Personal Actions & Solutions

## Guiding Question:

What are alternative ways of transportation? How can I be safe when using them?

## Key Questions, Attitudes and Behaviors to Teach:

- Draw a picture of a form of transportation that does not use fossil fuels (K)
- I want to ride my bike to school (A)
- I get driven to school without any other students in the car (always, often, sometimes, never) (B)

## Lesson Objectives:

- Students will discover environmentally friendly and safe ways to get around their community
- Students will take action to make their community a better place

## Materials:

- Transportation Pictures (attached)
- Lesson 1--Grades K-3:
  - Google Maps screen capture
  - Pencils
  - Bike Safety Charade Cards
- Lesson 2--Grades 4-6:
  - Pencils and paper
  - Phones or laptops to use Google Maps
  - Printed transportation resources
  - Name and photo of Board of Supervisors or county council members

## Prep:

- Print Transportation Pictures
- Research alternative transportation methods in the area, be prepared to answer students' questions
- Prepare Google Maps screen capture
  - Locate their elementary school on Google Maps
  - Place a pin on a location no more than 2 miles away from their school
  - Make sure there are multiple obvious and reasonable routes between the school and the pinned location for the students to trace
- Print out Bike Safety Charade Cards
- Print out various transportation resources (bike maps, bus schedules, etc.). See links below for suggestions but add relevant material for your community.
- Research members of the Board of Supervisors or county council to find your representative
  - Place your representative's name and photo on a piece of paper to show students.



### Engaging Intro (Whole Group) (7 minutes)

- Show Transportation Pictures to students to begin a discussion about environmentally friendly transportation
- Ask the students questions and define the bolded terms:
  - What are some differences between the two pictures?
  - Which one has more pollution in the photo?
    - If you have already taught about CO<sub>2</sub>, which transportation method is emitting more CO<sub>2</sub>?
  - Why might this be a problem?
    - *Answers: Human health, air quality, lack of exercise, noise factors, etc.*
  - What can you do to change this?
    - Use **alternative modes of transportation**: Forms that don't produce as much pollution (biking, walking, skateboarding)
    - Use **public transportation**: A system of buses, trains, etc set up for the public to use instead of people driving their own vehicles.
    - Carpool with friends and neighbors

### Lesson 1: K-3

#### Exploratory Activity: Charades and Mapping (30 minutes)

- “Now we will play charades and act out ways we can travel without driving ourselves in a car.”
  - *Ex. biking, horseback riding, skateboarding, scootering, rollerblading, swimming, running, riding the bus, being in a carpool, kayaking, etc.*
  - Students split into groups of 4-5 students with an ESLI volunteer to help supervise.
  - Each person acts out an alternative mode of transportation of their choice
  - Once everyone has gone in the small group, pause and share out. Each group should share some of the alternate transportation modes they acted out.
- “Let's see if you can figure out the fastest way to get around town!”
  - Get in groups of 2-3 students. ESLI volunteers can move between groups to help.
  - Give each group a Google Maps screen capture and a pencil
  - Tell students their goal is to find the shortest bike or walking path between their school and the pinned location.
    - Remind students they should consider whether or not they are using major roads (less safe) or side streets (more safe).
  - Have groups share their path and see who came up with the shortest and safest route.
- *If time: Bike Safety Charades*
  - “Biking is great for the environment but it is important we stay safe.”
- Have ESLI volunteers act out safety situations on from the Bike Safety cards. Students should make suggestions about how to stay safe in each scenario. Volunteers should make suggestions about bike safety rules if students seem to be struggling.

#### Meaningful Discussion (5 minutes)

- Have students share one place they like to go and how they could use alternative transportation to get there.
- Have students discuss if they could bike to school or not.

### Lesson 2: 4-6

#### Exploratory Activity: Write a Letter to a Representative (30 minutes)

- Students get in groups of 3-4 with an accompanying ESLI volunteer
- Each groups picks a place they regularly go (supermarket, movie theater, park, etc.).
- Students must come up with a plan to get to their destination without driving themselves.
  - Provide students with printed transportation resources and phones with Google Maps.



- Ask students: Is it safe to be biking or walking where Google Maps suggests?
- What if students don't feel like they could get there without a car?
  - Have them discuss with their groups why they can't get someplace safely without a car. What do they think should be added (sidewalks, bike lanes, bike paths, bike racks, etc.) and where?
- Have students write letters to a local politician explaining what alternative transportation infrastructure they would like to see in their county, where they would like it to be, and why this is important to them. Have them conclude with what they appreciate that the county is doing.
- Mail these letters to your local representative with a note from your ESLI chapter explaining what the children are asking for.

*Meaningful Discussion* (5 minutes)

- Have students share out their destinations and whether or not they could get there safely by alternative transportation modes.
- Have students share out some of their ideas for new alternative transportation infrastructure.

*Links & Resources:*

- Bike Routes near Washington D.C.: <http://bikewashington.org/trails/index.htm>
- D.C. Metro Map: <http://www.washingtonpost.com/wp-srv/metro/images/metrorailmap.html>
- Fairfax County Board of Supervisors: <https://www.fairfaxcounty.gov/boardofsupervisors/>
- **Extension:** Participate in Bike to School or Walk to School day with kids and talk about initiatives in the county. <http://www.fabb-bikes.org/FairfaxSRTS.html>



