**Biking as Primary Mode of Transportation**

**Grades:** Upper Elementary - 4-6

**Content:** *English Standards of Learning* 4.6, 4.7, 4.8, 4.9, 5.6, 5.7, 5.8, 5.9, 6.6, 6.7, 6.8, 6.9

 (nonfiction reading, composing, editing, research)

**Resource:** WCVE PBS - [http://ideastations.org/radio/news/bike-commuters-eager-richmonds-new- infrastructure](http://ideastations.org/radio/news/bike-commuters-eager-richmonds-new-%20infrastructure)

It’s a typical busy morning at the house of Catherine and Matt Illian.

Matt Illian: Do you want some banana on your oatmeal?

After breakfast is served, there’s a hustle getting the three kids out the door for school.

Catherine Illian: Hey Jack, did you get your lunchbox in your backpack?

It’s a brisk 45 degrees outside, so everyone bundles up. But instead of climbing into a minivan, the Illians are strapping on helmets and getting out bikes.

Jack Illian: I started when I was two. [I like riding bikes] because it’s fun and it’s exercise.

And we’re not just riding directly to school - this is a bike pool. Our first stop is several blocks away where we pick up two boys. The growing caravan makes a few turns through Richmond’s Church Hill neighborhood and slows down at another house where a four-year-old gets into Illian’s bike trailer. The trip to Chimborazo Elementary is about a mile and the children riding have no problem peddling this distance. They chat with each other, follow Illian’s instructions to stop at each intersection, and seem invigorated once we reach the school grounds.

Catherine Illian: I’m just glad they get a little exercise before going to school, I think it helps their brains get ready to learn. I love that they’re outside a little bit. I think it also builds confidence for them, I think it’s a huge confidence booster to ride on the road and for me to trust them to do that is really good for them.

The Illians are a one-car family and use bikes as much as they can: running errands, going to doctors appointments, and traveling to social events. They’re even upgrading to a cargo bike, specially built for bigger and heavier loads.

Catherine Illian: If I have to get from A to B, I’d rather get from A to B on a bike than a car.

In addition to getting exercise, Illian says biking is an experience that can lead to the discovery of new places and people. [Illian's bike and trailer can transport 3 children.](https://ideastations.org/sites/default/files/storage/secondary-images/illian_holt_belle.jpg)

Catherine Illian: I love spending time with my kids and being present to my neighborhood and my city more. So if I can bike, I think it’s important because I like the relationships it fosters in our family and with the wider community.

About 2 percent of Richmond’s population use bikes to commute to work. And currently, there’s just 16 miles of bike lanes. But officials are taking steps to make Richmond bike-friendly. City Council passed a resolution supporting Complete Streets, a design policy that takes into consideration cyclists and pedestrians. A two-mile-long bike boulevard is planned for Floyd Avenue. And Richmond’s Bike Master plan is nearly complete. That 200-page document envisions a network of approximately 120 miles of conventional, buffered and protected bike lanes.

Richmond doesn’t have any protected lanes yet - those are separated from motorized traffic by posts, barriers, or parked cars.

* The teacher should read the article aloud or play the story online using the WCVE PBS link above.
* Ask students how many have bicycles? Ask if any students have ever ridden their bike to school? Why or why not? List reasons why this would work or might be a problem in some areas. Are there areas better suited to bike transportation than others? Create a Venn diagram with advantages and disadvantages of riding bikes as the primary way of transportation. Are there any commonalities? Draw conclusions about biking as a primary mode of transportation.
* Break students into small groups and take them to the library to research areas where biking may be the primary mode of transportation. Assign each group a different topic including bike laws/rules, safety tips, equipment, best locations to ride. Provide a short period of time to actually research. Students will take notes on what they find and prepare a short report including a listing of sources used.
* Possible Sources:
	+ <http://www.pedbikeinfo.org/data/factsheet_general.cfm>
	+ <http://www.virginiadot.org/programs/bk-laws.asp>
	+ <http://www.virginiadot.org/bikemap/>