

How Walking and Biking to School Helps Everyone

Over the last 40 years, the number of students that walk to school has decreased dramatically. In 1969, nationally, 48 percent of kindergarten through eighth grade students usually walked or biked to school; by 2009, that percentage had dropped to just 13 percent.¹ In 2014, 15 percent of children in Washington State walked to school, 1 percent biked to school, 44 percent rode the school bus and 38 percent were driven to school by a parent or guardian.²

Parents cite the most common barriers for children walking or biking to school as distance, age of the student and the presence of unsafe road crossings.³ These results are consistent with a national study that found that almost half of the decline in walking to school could be a result of the increased distances between home and school.⁴ Yet, about 53 percent of students in Washington State live within two miles of school and 30 percent of those children ride the school bus.⁵

Problem: Decline in walking or biking to school

The problems linked to a decline in students walking or biking to school impact the underlying costs of education, student health, climate change and traffic congestion.

Increase in student transportation costs. In the 2013-2014 school year, the state expenditures for school bus service totaled approximately \$318 million, up \$88 million from 2009. State funding covered about 82 percent of school bus costs statewide; schools and school districts cover the remaining expense.

Decrease in student physical activity. The Centers for Disease Control and Prevention recommends 60 minutes of physical activity every day. In 2014, only 24 percent of 10th graders in our state met this recommendation.⁶ Lack of physical activity is one risk factor for not being at a healthy weight. In 2014, about 71 percent of 10th grade students were at a healthy weight; 14 percent were overweight and 11 percent were obese.⁷ Extra weight puts young people at risk for being overweight in adulthood and for serious health problems like asthma, diabetes and heart disease.

Increase in air pollution. A byproduct of traffic congestion and idling related to school transportation is air pollution. Air quality directly affects respiratory conditions for people living with asthma. An estimated 110,000 youth in Washington have asthma.⁸ Asthma is linked to depression in youth and may result in missed school days and an inability to play sports or participate in other activities.⁹

Impact on climate change. Motor vehicles emit carbon dioxide and other air pollutants, known as greenhouse gas emissions. These gases trap heat in the atmosphere and increase the earth's surface temperature, which contributes to changes in the world's weather patterns and a rise in sea levels.¹⁰

Increase in traffic congestion. Private vehicles used to transport students to school can increase the number of vehicles on the road and lead to traffic congestion. It is estimated that parents and caregivers taking children to school cause 14 percent of all rush hour traffic.¹¹ Traffic congestion can lead to travel time delays, frustrated drivers and increased vehicle emissions.

¹ "How Children Get to School: School Travel Patterns from 1969 to 2009," National Center for Safe Routes to Schools, Chapel Hill, NC, November 2011. http://saferoutesinfo.org/sites/default/files/resources/NHTS_school_travel_report_2011_0.pdf accessed on November 7, 2013.

² Washington State Student Travel Survey, Washington State Department of Transportation and Washington State Department of Health, 2014.

³ Ibid.

⁴ Noreen C. McDonald et al. "Active Transportation to School," *American Journal of Preventive Medicine*, Vol. 32, No. 6, June 2007, pp. 509-516.

⁵ Washington State Student Travel Survey, Washington State Department of Transportation and Washington State Department of Health, 2014.

⁶ Healthy Youth Survey, Washington State, 2014, <https://www.askhys.net/>

⁷ Ibid.

⁸ "The Burden of Asthma in Washington State, 2013 Update," Washington State Department of Health, Tumwater, WA, <http://www.doh.wa.gov/Portals/1/Documents/Pubs/345-240-AsthmaBurdenRept13.pdf> accessed on April 8, 2015.

⁹ "How Asthma Affects the Quality of Life in Youth," Washington State Department of Health, Tumwater, WA, 2013, <http://www.doh.wa.gov/Portals/1/Documents/Pubs/345-332-QualityOfLife.pdf> accessed on December 22, 2014.

¹⁰ "Climate Change 101: Understanding and Responding to Global Climate Change," Center for Climate and Energy Solutions, Arlington, Va., January 2011. <http://www.c2es.org/docUploads/climate101-fullbook.pdf> accessed on March 17, 2015.

¹¹ "How Children Get to School: School Travel Patterns from 1969 to 2009," National Center for Safe Routes to Schools, Chapel Hill, NC, November 2011. http://saferoutesinfo.org/sites/default/files/resources/NHTS_school_travel_report_2011_0.pdf accessed on November 7, 2013.

A Solution: Safe Routes to School programs

In 2005, the federal government established the Safe Routes to School Program with the goal of increasing the numbers of children walking or biking to school safely. The program supports pedestrian and bicycle safety infrastructure improvements such as sidewalks, crosswalks and bike paths as well as pedestrian and bicycle education programs.¹² In 2012, the federal Safe Routes to School Program was included in the Transportation Alternatives Program as a part of the Moving Ahead for Progress for the 21st Century Act.

Washington State formally established the state's program with the passage of Engrossed State Senate Bill 6091 in 2005. Demand for funding continually exceeds available resources. Over the past 10 years, the Washington State Department of Transportation (WSDOT) has awarded \$51 million in funding to 138 projects and has received over \$240 million in requests for funding.¹³

Safe Routes to School programs address the barrier of unsafe road conditions cited by over 60 percent of parents in the 2014 Washington State Student Travel Survey. On average, there are about 400 fatal and injury traffic crashes each year that involve pedestrians and bicyclists. School-aged children represent a disproportionately high share of these crashes.¹⁴ Schools participating in Safe Routes to School programs that have evaluated their program show an additional 75,000 feet of sidewalks near schools, a reduction in motorist travel speeds and increased student compliance with safe crossing.¹⁵

Community Successes

These three examples show how schools are helping to support the healthiest next generation by making Safe Routes to School programs their own.

Auburn School District. Pilot project funding resulted in sidewalks and bike lanes, while also improving traffic conditions for pedestrians such as increasing the number of four-way stops at crosswalks. Pioneer Elementary decreased its bus fleet from six busses down to one. About 85 percent of students walk or bike to school.¹⁶

Bonney Lake Fennel Creek Trail Connection. For \$1.5 million, Fennel Creek Trail was built to connect a large family housing area with schools on the other side of the watershed. The trail reduced the need for school bus routes.

Longview Elementary, Moses Lake. A grant of \$133,000 allowed the school to create a multi-use path and sidewalks to connect the school with a nearby neighborhood providing approximately 50 children with a safe and active route to and from school.¹⁷

Contacts

Kathleen Davis, Director of Local Programs
Department of Transportation
360-705-7871, DavisK@wsdot.wa.gov

Janna Bardi, Assistant Secretary for Prevention and Community Health
Department of Health
360-236-3723, Janna.Bardi@doh.wa.gov

¹² Noreen C. McDonald et al., "Impact of the Safe Routes to School Program on Walking and Bicycling," *Journal of the American Planning Association*, Vol. 80, No. 2, Spring 2014, p. 154.

¹³ "2015-2017 Prioritized Project List and Program Update: Pedestrian and Bicycle Safety & Safe Routes to School Grant Programs," Washington State Department of Transportation, Highways & Local Programs Division, Olympia, WA, December 2012.

¹⁴ "The Gray Notebook 56, WSDOT's quarterly performance report on transportation systems, programs, and department management," Washington State Department of Transportation, Olympia, WA, February 2015, pp. 1-3. <http://wsdot.wa.gov/publications/fulltext/graynotebook/Dec14.pdf>

¹⁵ Ibid.

¹⁶ "Auburn, Washington: Collaboration Creates Success," Safe Routes: National Center for Safe Routes to School, Chapel Hill, NC., <http://www.saferoutesinfo.org/data-central/success-stories/auburn-washington-collaboration-creates-success> accessed on December 22, 2014.

¹⁷ "Moses Lake, Washington: Safety Solutions Are a Community Effort," Safe Routes: National Center for Safe Routes to School, Chapel Hill, NC, <http://www.saferoutesinfo.org/data-central/success-stories/moses-lake-washington-safety-solutions-are-community-effort> accessed on December 22, 2014.