



Coach Sam Balto of Portland, Oregon with bike bus riders. Photo by Jonathan Maus / BikePortland

BIKE BUSES: ACTIVE TRANSPORTATION TO SCHOOL

The Bike Bus movement is gaining momentum. A research project at Portland State University's Transportation Research and Education Center (TREC) gathered information on bike buses nationwide, from logistics and numbers (the average bike bus has 19 child participants and 11 adult participants!) to some of the most common safety concerns (car drivers) and the most oftcited benefits (joy, exercise, learning traffic safety, helping the environment).

Bike buses could be the missing puzzle piece, researchers say, to a complete active transportation to school (ATS) approach. The 2025 report published by Evan Howington, John MacArthur, and Nathan McNeil concludes that bike buses have the potential to leverage the last 20 years of Safe Routes To School (SRTS) interventions, ensuring that the miles of bike lanes, sidewalks, and crosswalks funded by districts, communities, states, and the federal government have their full value realized.

A BETTER COMMUTE TO SCHOOL

In addition to reviewing the existing literature around bike buses, the researchers conducted two online surveys and ten video interviews with parent and child participants of bike buses in the Portland, Oregon metro area. They also created a "Bike Bus Tracker" showing bike bus programs around the United States.

"We have a lot of neighbors and people who are now like, 'it's a thing in our neighborhood.' And people treat us differently, they treat bikes differently, they drive slower. They support it and that is slowly changing the culture. Supporting physical exercise, expanding people's minds about ways you can get to and from school or to and from anything. That there are alternatives beyond cars. Just one less car on the road."

- Amber Kinney, bike bus leader

The first survey was targeted at bike bus coordinators and leaders, focusing on logistics, school policies, and the street environment. The second survey was targeted at bike bus parent participants, focusing on perceptions, parent and student attitudes, and the urban environment. The interviews built on both surveys, also bringing child participant voices into the study.

The findings indicate that bike buses can change the narrative about active transportation to school, or ATS. The sense of community and fun often cited by both adults and children, as well as a desire expressed by parents to inculcate a sense of confidence and love of biking in their children, indicate an entirely new slate of attitudes towards ATS compared with what the previous research literature describes.

TRANSPORTATION RESEARCH AND EDUCATION CENTER (TREC)

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KEY FINDINGS

The final report offers a range of insights on Portland's bike buses, from who coordinates them and how long they've been in operation, to participant demographics and sources of funding and support. A few highlights from the surveys and interviews are below. Throughout the 10 interviews, approximately nine themes emerged that most participants mentioned:

- bike bus logistics,
- traffic safety,
- convenience/schedule,
- socialization/community,
- politics/lifestyle,
- school support,
- fun,
- exercise/physical activity/health, and
- weather.

All participants, including some of the child participants, mentioned safety concerns at least once during the interview. Commonly cited safety concerns included: Car drivers not appropriately yielding along streets and at intersections or marked crossings, including along neighborhood greenways; Reckless behavior from car drivers, including around school zones; Unsafe riding conditions, including lack of appropriate facilities along the route; and Difficulty managing unsafe crossings, even marked ones with signals.

The highest reported impact of the bike bus on respondents' children was good exercise (39%), followed by learning traffic safety (19%.)

Barriers to participating in bike buses still exist, including dissatisfaction with infrastructure and a lack of funding, but this initial research shows promise for expanding the available options for ATS in North America.

The results from the first phase of this research informed the development and implementation of schoolwide surveys of parents in four elementary schools with bike buses in Portland (Phase 2 of the study). The school-wide surveys focus on what barriers and opportunities exist for the wider adoption of bike buses through the lens of parent and student perceptions and travel behavior as it relates to school SRTS policies, the street environment, and the urban environment.

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MORE ABOUT THIS STUDY

The complete report can be found at: https://trec.pdx.edu/research/project/1597



The Transportation Research and Education Center (TREC) at Portland State University (PSU) is a multidisciplinary hub for all things transportation. We are home to the Initiative for Bicycle and Pedestrian Innovation (IBPI), the data programs PORTAL and BikePed Portal, the Better Block PSU program, and PSU's membership in PacTrans, the Pacific Northwest Transportation Consortium. Our continuing goal is to produce impactful research and tools for transportation decision makers, expand the diversity and capacity of the workforce, and engage students and professionals through education, seminars, and participation in research.

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