



# The Economic Value of a Walkable & Bikeable Ohio

2025



Department of  
Transportation



## Flashing Beacon Crossing Improvement - Hilliard, Ohio

*Photo Source: City of Hilliard, Ohio*

*Cover Page Photo Source: City of Columbus, Ohio*

# Introduction

## ABOUT THIS REPORT

The benefits of a walkable and bikeable Ohio are clear: investments in bicycle and pedestrian infrastructure benefit Ohio's economy and its residents. Active transportation opportunities provide mobility, health, safety, and quality of life benefits to residents. These investments impact tourism, local business spending, and business activity in the state while uplifting nearby property values and local tax revenue. Achieving safe and connected active transportation networks in Ohio requires leadership, coordination, and investment across all levels of government.

This report outlines the many ways in which active transportation provides economic value in Ohio, including:

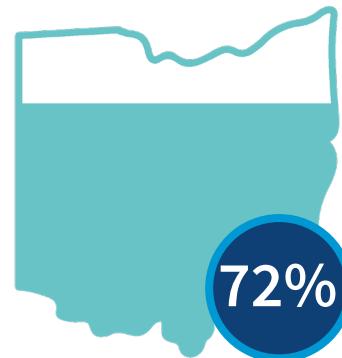
- Household cost savings and health benefits from replacing vehicular trips.
- Benefits from reduced vehicle congestion, fewer crashes, and avoided noise and pollution.
- Property value uplift and tax revenue impacts.
- Business activity supported by construction of quality infrastructure.
- How tourism and local businesses are supported by walking and biking events and trails.

## What is Active Transportation?

Active transportation is human-powered transportation that engages people in healthy physical activity while they travel from place to place.

## MEETING THE DEMAND

Results from ODOT's recent Transportation Preference Survey (2024)<sup>1</sup> underscore the value of active transportation for Ohioans:



72% of Ohioans believe that improving the bike and pedestrian network is important.

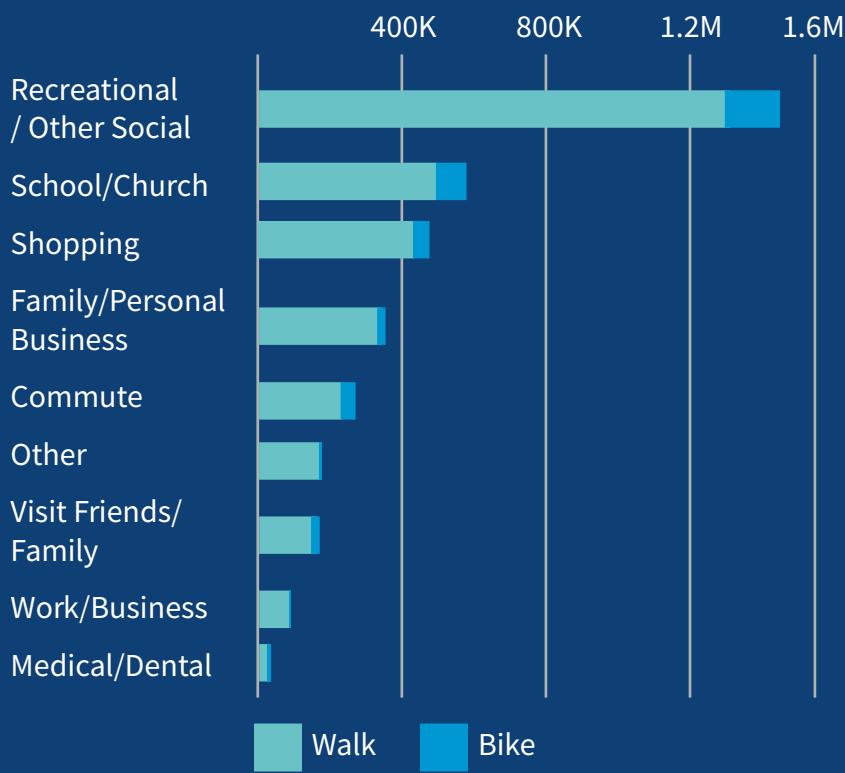


35% of Ohioans rely on walking infrastructure at least a few times a week to go to work, school, or to go shopping.

# Building Safe and Thriving Communities

## Purpose of Active Transportation Trips in Ohio

Active transportation infrastructure makes Ohio an attractive place for people to live, work, and play. **Every day, Ohioans make over 3 million walking trips and 240 thousand bike rides** for leisure and exercise, to go to school, to commute, to shop, and to visit friends and relatives.<sup>2</sup>



## Cost Savings

Active transportation directly benefits users in diverse ways. **Every year, walking and biking trips save Ohioans \$1.3 billion**, including savings on vehicle operating costs and fares, as well as reductions in costs to society from congestion, noise, crashes, and poor air quality.<sup>3</sup> In addition to saving Ohioans costs, active transportation has additive benefits for health and wellbeing, as walking and biking to work in Ohio reduces mortality risk up to 12%. This is the equivalent of avoiding 28 deaths each year.<sup>4</sup>

			
\$90 Million	\$854 Million	\$211 Million	\$368 Million
<i>Fare cost savings for rideshares, taxis, and transit</i>	<i>Vehicle operating cost savings</i>	<i>External highway use costs (congestion, noise, crashes, emissions)</i>	<i>Health benefits from walking and biking to work</i>

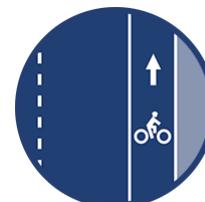
## Crash Reduction Statistics for Key Interventions

Quality walking and biking infrastructure makes Ohio's roads safer for people walking, biking, and driving. Active transportation improvements have been found to meaningfully reduce crashes that result in injury or death.



### Crosswalk Visibility Enhancements

- High-visibility crosswalks reduce crashes by 40%.<sup>6</sup>
- Installing advanced yield or stop markings and signs reduces crashes by 25%.<sup>7</sup>
- Providing intersection illumination reduces crashes by 42%.<sup>8</sup>



### Bicycle Lanes

- Bicycle Lanes reduce crashes by 30%.<sup>9</sup>
- Converting traditional bicycle lanes to separated bike lanes with flexi-posts reduces crashes by 50%.<sup>10</sup>



### Rectangular Rapid Flashing Beacons

- Installing rectangular rapid flashing beacons (RRFB) reduces crashes by 47%.<sup>11</sup>



### Medians & Pedestrian Refuge Islands

- Raised medians with marked crosswalks reduce crashes by 46%.<sup>12</sup>



### Pedestrian Hybrid Beacons

- Installing a pedestrian hybrid beacon (PHB or HAWK) reduces crashes by 46%.<sup>13</sup>

Icon Image Source: FHWA

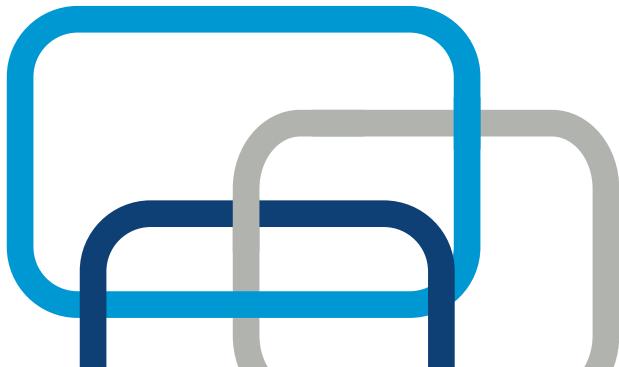
## Property Value & Property Tax Impacts

When making decisions about where to live, people seek quality walking and biking infrastructure as one component of an attractive, thriving community.

Research has found price premiums of 3-14% for homes within 1/4 mile of a trail and more modest premiums of approximately 1.1% up to 1 mile away.

Based on this research, it is estimated that:

*In Ohio, major trails raise home values by \$1.6 billion statewide. This results in \$182 million in additional property tax revenues for communities each year.<sup>5</sup>*



# Impacts on Ohio Businesses



## CONSTRUCTION IMPACTS

Ohio's active transportation projects not only benefit users but also Ohio's economy at large.

*Every \$1 invested in active transportation infrastructure in Ohio generates approximately \$2 in output.*

From 2014 to 2023, ODOT invested in 538 active transportation projects, including pedestrian facilities, bike facilities, enhanced crossings, and shared use paths. Ohio's annual capital spending of \$66 million on these projects ultimately supports 700 jobs (primarily in the construction sectors) and contributes \$131 million every year to the state's economy through wages, business activity, and tax revenue.<sup>14</sup>

*In Ohio, Active Transportation Construction Supports At Least...*



**\$65.9 million**  
in direct infrastructure spending annually.



**700 Jobs**  
each year for construction, suppliers, and related economic activity.



**\$131 million**  
in annual economic activity (output) in the state through infrastructure spending.

## What are Economic Impacts?

Economic impacts include (1) direct impacts to businesses that build active transportation projects or serve visitors, (2) indirect impacts to suppliers who provide related materials and services, and (3) induced impacts to Ohio businesses from directly and indirectly employed workers spending their income.



## VISITOR SPENDING & TOURISM ECONOMY

By enabling cycling events and tours, Ohio's active transportation network also supports Ohio's tourism economy and related jobs and businesses. This includes, for example, people who visit to ride the Ohio to Erie Trail or participate in cycling events.

*In 2024 alone, 110 cycling events in Ohio generated \$8.81 million in business sales.<sup>15</sup>*

When people travel to participate in these events and tours, they spend money at local businesses on food, lodging, recreational activities, and shopping. This money directly supports businesses and causes broader multiplier effects within the statewide economy.

93 Daytime Events

+ 17 Overnight Events

110 Events with 27,600+ Participants

\$1.74 million Food & Beverage

+ \$1.26 million Recreation

+ \$1.21 million Retail

+ \$941 thousand Lodging

\$5.16 million in Spending by Visitors

**\$8.81 million Business Value**  
*(Total Statewide Impact, Output)*



## LOCAL BUSINESS ACCESS & SPENDING

Shared use paths and trails in Ohio provide opportunities for recreation, provide access to local and regional destinations, and connect people to businesses.

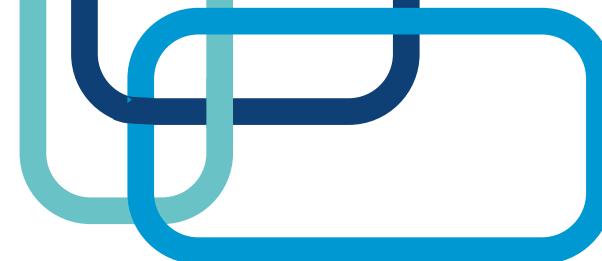
**Over 650,000 jobs, or 12% of all jobs in Ohio, are located within a half mile of a major trail.**

This includes over 177,000 jobs in education and health, 115,000 professional and business jobs, and 70,000 jobs in hospitality industries including the arts, entertainment, recreation, and restaurants and bars.<sup>16</sup>

| Research has shown that trail users often stop at businesses along their routes, spending money that contributes to the vibrancy of local economies.

| For example, a survey of more than 1,200 trail users on the Central Ohio Greenway trail network found that about **20% of users reported spending between \$15 and \$20. This averages to more than \$3.00 per trail visit.<sup>17</sup>**

# Case Studies



## CITY OF HILLIARD, OH: CENTER STREET PEDESTRIAN IMPROVEMENTS

The City of Hilliard pedestrianized Center Street in Downtown Hilliard, which turned a former one-way street into a vibrant community hub. Initially, the street was closed temporarily in 2021 to allow for more outside seating for nearby restaurants due to the COVID-19 Pandemic. However, due to strong local support, the change became permanent. The initiative improved safety for cyclists and pedestrians while boosting local businesses. Center Street now serves as an extension of nearby businesses and Hilliard Station Park, hosting events and enhancing the community experience. The project highlights the benefits of pedestrian-friendly infrastructure, demonstrating its role in fostering economic growth, community engagement, and a higher quality of urban life.

**KEY TAKEAWAYS:** Trial applications of low-cost solutions combined with effective communication can build buy-in for more permanent change.



## XENIA, OH: DOWNTOWN TRAIL CONNECTION

Xenia addressed a four-block gap in its extensive regional trail network by building a parking-separated bicycle lane. The \$1.53 million project, completed in 2018, enhanced safety for pedestrians and cyclists while maintaining parking for local businesses. Public outreach played a critical role in securing support for the project. The trail improvements better connected Xenia to a larger network of trails. This was a big motivating factor for a brewery which chose to move to Xenia in response to the project. The initiative underscores the benefits of integrating cycling infrastructure into community planning for economic and mobility improvements.

**KEY TAKEAWAYS:** Filling in the smaller missing gaps of regional trails leads to improved mobility outcomes and better connectivity.

*Photo Sources (top to bottom): City of Hilliard, Ohio; City of Xenia, Ohio*

*Facing Page Photo Sources (top to bottom): City of Saint Paul, Minnesota; Traverse City, Michigan; and Spartanburg County, South Carolina*



## SAINT PAUL, MN: CAPITAL CITY BIKEWAY

St. Paul developed the Capital City Bikeway, a separated bike lane, to better connect downtown St. Paul to an existing multi-modal trail network. The project contributed to increased business activity, reduced car dependency, and decreased congestion in a growing and auto-dependent environment. The bikeway's integration with existing transit and pedestrian routes promoted connectivity for all users and made it more attractive for residents to move downtown. St. Paul's commitment to sustainable urban planning highlights the economic and social advantages of investing in comprehensive bicycle networks.

**KEY TAKEAWAYS:** Multi-modal investments benefit all road users, including motorists, and branding matters to bring projects and people together.



## TRAVERSE CITY, MI: SEPARATED CYCLE TRACK

Traverse City implemented a separated cycle track along 8th Street after a pilot road diet in 2014 was opposed for not meeting the community's goals. The revised project, completed in 2018, improved safety by changing an on-street bike-lane to a protected cycle track. The \$5 million investment attracted \$22 million in private investment, including mixed-use, multi-family, and commercial developments. The project connects to existing trails, enhancing accessibility and economic benefits. Despite initial resistance, strong community engagement ensured long-term success, leading to a more bike-friendly urban environment.

**KEY TAKEAWAYS:** Engage the community early and often, projects should lead with resident feedback, and cultivate a long-term view for project development.



## SPARTANBURG COUNTY, SC: DANIEL MORGAN TRAIL SYSTEM

Play, Advocate, Live Well (PAL), in collaboration with Spartanburg County Parks, The City of Spartanburg, and community partners launched the Daniel Morgan Trail System (DAN) in 2019. The DAN is a 24-mile connected bikeway network, with plans for a 55-mile expansion. The initiative started with a 2-mile recreational trail to gain public support. The DAN has spurred economic growth, generating \$1.52 million per \$1 million invested, attracting businesses, and increasing property values. The DAN serves as a model for integrating bike-friendly infrastructure into urban development.

**KEY TAKEAWAYS:** Strong public, non-profit, and private partnerships are vital to regional projects. Choose the first project wisely to build public support.

# Active Transportation Infrastructure in Your Community

## Benefit Cost Analysis Tool

Supplementing this report is a benefit-cost analysis (BCA) tool. This tool helps evaluate proposed projects by quantifying their diverse economic, safety, environmental, and mobility benefits, enabling apples-to-apples comparisons of investments to support informed decision-making.

This BCA tool will help ODOT and its local planning partners be good stewards of Ohioans' taxpayer dollars, maximizing dollar-for-dollar benefits. By quantifying the full range of benefits of walking and biking infrastructure, the BCA tool is designed to empower communities when making data-driven investment decisions.

This tool follows USDOT BCA guidance and can be used to support applications for funding.

## Moving Forward Together

Findings from this report can be used to make the case for walking and biking projects in your community.

Together we can:

- Find effective solutions that provide safe travel options, advance economic competitiveness, and improve quality of life
- Evaluate and make the case for investments
- Demonstrate how walking and biking benefits all Ohioans
- Make the most of projects and funding

For more information on planning, designing, and funding active transportation projects, visit the ODOT active transportation webpage at:

**[https://www.transportation.ohio.gov/programs/  
Active+Transportation](https://www.transportation.ohio.gov/programs/Active+Transportation)**

There, you will also find additional economic analysis resources from this study, including more detailed case studies.



## Loveland, OH Bike Trail - Downtown Loveland

Photo Source: City of Loveland, Ohio

## References

<sup>1</sup>Ohio Department of Transportation (ODOT), Ohio Statewide Transportation Preference Survey (2024)

<sup>2</sup>EBP Analysis. Daily commute trips estimated based on ACS 2022 5-year estimates for Ohio and average commute trips per day from NHTS 2022 data. Trips by other purposes are estimated using ratios from commute trips calculated using NHTS 2022 data using 7-day national trip weights.

<sup>3</sup>EBP analysis using data from 2022 NHTS, ACS 2022 5-year estimates for Ohio, valuation factors from USDOT Benefit-Cost Analysis Guidance for Discretionary Grant Programs (November 2024), Rideshare/Taxi fares from TaxiFareFinder and Lyft, and transit data from the FTA National Transit Database, 2023 Metrics.

<sup>4</sup>EBP analysis using the World Health Organization's Health Economic Assessment Tool (HEAT), data from United States Centers for Disease Control and Prevention 2024 CDC Wide-ranging Online Data for Epidemiological Research (WONDER), 2022 NHTS, and ACS 2022 5-year estimates for Ohio.

<sup>5</sup>EBP analysis using price premium rates from research literature, statewide parcel data, and spatial analysis of the state and US bike routes in Ohio.

<sup>6</sup>L. Chen, C. Chen, and R. Ewing, "The Relative Effectiveness of Pedestrian Safety Countermeasures at Urban Intersections—Lessons from a New York City Experience," *Accident Analysis & Prevention*, vol. 48 (2012), pp. 478–486.

<sup>7</sup>Zegeer, C. V., et al., Development of crash modification factors for uncontrolled pedestrian crossing treatments. *Transportation Research Record: Journal of the Transportation Research Board*, 2636(1) (2017), 1–8.

<sup>8</sup>Elvik, R. and Vaa, T, "The Handbook of Road Safety Measures". Pergamon, Oslo (2004).

<sup>9</sup>Avelar, R., et al, "Developing Crash Modification Factors for Bicycle-Lane Additions While Reducing Lane and Shoulder Widths." Federal Highway Administration (2021).

<sup>10</sup>Federal Highway Administration, "Developing Crash Modification Factors for Separated Bicycle Lanes", FHWA-HRT-23-025, Washington, DC (2023).

<sup>11</sup>Federal Highway Administration, "Toolbox of Pedestrian Countermeasures and Their Potential Effectiveness", FHWA-SA-18-041, Washington, DC (2018).

<sup>12</sup>Zegeer, C. V., et al. "Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations: Executive Summary and Recommended Guidelines" (2002).

<sup>13</sup>Fitzpatrick, K., et al., "Evaluation of Pedestrian Hybrid Beacons on Arizona Highways" (Report No. FHWA-AZ-19-756). Arizona Department of Transportation (2019).

<sup>14</sup>EBP Analysis using IMPLAN.

<sup>15</sup>EBP Analysis with data from Tourism Economics, Ohio cycling event/tour organizers, and the GSA, using the IMPLAN economic model.

<sup>16</sup>EBP Analysis of 2022 LEHD LODES data, assessing employment within a half mile of the a shared use path or bike lane on the State and US Bike Route system.

<sup>17</sup>Ermagun, A., & Lindsey, G. (2016). Differences in Spending by Local Trail Users: Two-Part Model of Expenditures. *Transportation Research Record*, 2598(1), 58-66. <https://doi.org/10.3141/2598-07> (Original work published 2016)



## ACKNOWLEDGEMENTS:

### Ohio Department of Transportation

Caitlin Harley

Andrew Shepler

Jeremy Thompson, PE

Jordan Whisler

### Consultant Team

EBP (Project Lead)

Burton Planning Services

ms consultants

Toole Design Group



Department of  
Transportation