peopleforbikes

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The Great Bike Infrastructure Project

Supplemental Guide for Funding Bike Infrastructure

Why Fund Bike Infrastructure?

A lack of safe infrastructure for bicycling is the most significant barrier to riding a bike. A systematic review of bike infrastructure found that 84% of people report that separated bike infrastructure would enable them to ride a bicycle more. Increasing bicycling is an important strategy to address many of the challenges our communities face.

Quality bike infrastructure provides safe and connected transportation and recreation options that allow people to ride a bike wherever they need or want to go. Everyone should be able to choose a safe and comfortable way to get to their destination, whether it be biking, walking, driving, or taking any other mode of transportation.

PeopleForBikes' 2022 U.S. Bicycle Participation Study found that safety is a concern for riders and non-riders alike that and Americans want more bike infrastructure to address those concerns:

- 53% of Americans worry about being hit by a motor vehicle (an increase from 47% in 2020).
- 44% say they would be more likely to ride a bike if there were barriers physically separating bikes from motor vehicles.
- Less than one-third of Americans are satisfied with the quantity and quality of bike lanes, paths, and trails in their area.

Safe and protected bike infrastructure improves road safety for ALL road users.

- In 2012, Teschke and colleagues found that streets with protected bike lanes experienced 90% fewer injuries per mile than streets without bike infrastructure.

- Research conducted by Marshall and Ferenchak in 2019 revealed that cities with protected bike lanes experienced 44% fewer fatalities for all road users and 50% fewer serious injuries compared to average cities, meaning protected bike lanes make roads safer for everyone, regardless of transportation mode.

    - In both international and U.S. contexts, transit-oriented communities had a significantly lower fatality rate than car-centric communities. Specifically, in the U.S., the fatality rate was five times lower in transit-oriented communities. This results from a combination of lower vehicle speeds due to urban design as well as a reduced volume of cars from increased utilization of alternate modes of transportation.

    - Only half of drivers are comfortable driving near people riding bikes on roads without bike infrastructure. That number increases to between 79-100% with protected bike lanes.

- A 2009 review of 23 studies on injuries related to riding a bike found that off-road paths, on-road marked bike lanes, and on-road bike routes are where cyclists are the safest.

- A 2020 U.S. Department of Transportation Federal Highway Administration report found that adding bike lanes can reduce crashes by as much as 49%.

- In 2007, Seville, Spain, expanded a network of protected bike lanes from 7.5 to 93 miles. Between 2007 and 2013, bike trips increased by 435% while the risk of being involved in a crash with a motor vehicle dropped by 61%.

Bike infrastructure leads to many positive public health outcomes.

- Bike infrastructure upgrades that improve road safety reduce healthcare-related costs from crashes and crash-related injuries.

    - A National Complete Streets Coalition analysis found that 37 communities collectively averted $18.1 million in crash and injury costs in just one year.

    - The cost savings from averting crashes and related injuries typically far exceed the original investment in bike infrastructure upgrades. The National Complete Streets Coalition analysis found that when West Jefferson, North Carolina, invested $300,000 in a Complete Streets project, it saved more than $2.7 million in health care costs in the first year alone.

- Physical activity reduces the risk of cardiovascular disease, diabetes, certain types of cancer, arthritis, asthma, and mental health issues. Improved health outcomes lead to significant healthcare cost savings and reduced burden on the healthcare system.

    - A Rails to Trails Conservancy analysis found that the health cost savings of active transportation is currently $20 billion annually, with the potential to grow to nearly $92 billion annually with increased opportunities to engage in active transportation.

- Every $1 invested into active transportation saves $24 in averted medical costs.

- People living in walkable and bikeable neighborhoods get an average of 35-45 more minutes of moderate physical activity each week compared to their peers.

- A study of the American Tobacco Trail in Durham, North Carolina, showed that building infrastructure to connect trail segments increased trail use by 133% and physical activity from 138 to 162 minutes per person per week.

- Proximity to trails is associated with people being 50% more likely to meet the recommended physical activity guidelines and 80% more likely to ride a bicycle.

Bike infrastructure reduces vehicle miles traveled (VMTs) and greenhouse gas (GHG) emissions by expanding transportation options.

- The transportation sector emits 29% of all GHG emissions in the U.S., making it the most significant contributor to national GHG emissions.

- Fifty-three percent of all car trips made in the U.S. are three miles or less, and 28% are one mile or less. Three miles is equivalent to a 20-minute bike ride for an average person, indicating that shifting close-to-home trips from cars to bicycles is possible and can significantly reduce the number of miles driven in cars.

- Shifting short car trips to walking or biking trips and using walking and biking to access public transit saves 13 million tons of CO_2 emissions annually. Building additional active transportation infrastructure holds the potential to save more than 54 million tons.

The ability to safely ride a bicycle has critical implications for equity.

- A disproportionate number of fatal crashes occur in historically marginalized communities. These disparities exist because these communities often have less access to safe recreational spaces, sidewalks, crosswalks, roads with slower speeds, and streets designed to reduce traffic volumes.

    - In low-income communities, the death rate for the poorest census tracts outpaces those in the wealthiest by 3.3 times.

    - The death rate for Black Americans is two times more than that of white non-Hispanics, and the death rate of Native Americans and Alaskan Natives is more than 2.5 times that of white non-Hispanics.

    - Older adults have the highest fatality and injury rates of all age groups.

- Safe and connected bike infrastructure allows bikes to serve as a dignified, affordable, and reliable mode of transportation. According to a Danish case study on transportation equity, Denmark's lowest-income residents make only 41% of their trips in cars. In contrast, the lowest-income Americans make 72% of their trips in cars.

Building bike infrastructure results in a multitude of economic benefits.

- **Construction costs for bike infrastructure projects are often cheaper than traditional road projects.**
    - According to an analysis by the National Complete Streets Coalition, the average cost of a Complete Streets project in the U.S. is $2.1 million, far below the $9 million average cost of state transportation improvement projects. This is because many Complete Streets projects rely on inexpensive upgrades within the existing right-of-way, including paint, concrete barriers, and bollards.
    - In 2011, Portland, Oregon, invested $60 million in connecting the city's bike network with 300 new miles of bike infrastructure. The same investment would have been equivalent of building just one mile of a four-lane urban freeway.
    - One mile of roadway through Golden Gate Park is 1,283 times more expensive for taxpayers in San Francisco than one mile of protected bike lane.
- **Bike infrastructure leads to higher spending and investment in local communities.**
    - The revenue generated by tourism in areas with active transportation opportunities is eight to nine times the original investment in infrastructure upgrades.
    - In Lancaster, California, a Complete Streets project led to a 96% increase in retail sales. Similarly, many other cities analyzed by the National Complete Streets Coalition saw retail sales grow between 20-46% after Complete Streets upgrades.
    - The New York City Department of Transportation found that redesigning Union Square to include a protected bike lane resulted in 49% fewer commercial vacancies. In contrast, commercial vacancies increased by 5% throughout Manhattan during that same time. Additionally, the addition of a protected bike lane on 9th Avenue led to a 49% increase in retail sales, while the average was only 3% on other streets in the area.

    - A 2019 Rails to Trails Conservancy analysis found that active transportation infrastructure contributes $34.1 billion annually to the U.S. economy. More connected infrastructure holds the potential to add more than $138.5 billion annually to the economy. This is more than seven times the cumulative investment of $20 billion for trails, walking, and biking projects made over the last three decades from federal programs.

- **Bike infrastructure increases employment.**

    - The American Association of State Highway and Transportation Officials found that building greenways, sidewalks, and bicycle infrastructure contributes 17 jobs per $1 million spent compared to other road and highway projects that range from 9 to 12.5 jobs created per $1 million spent.

    - In an analysis of Complete Streets projects conducted by the National Complete Streets Coalition:

        - A project in Lancaster, California, saw employment grow along the targeted corridor by 64% over three years. Comparatively, employment only increased by 3% citywide and a similar corridor that did not receive upgrades saw a decrease in employment during the same time.

        - In Orlando, Florida, streets with infrastructure updates saw 77 new businesses open, creating 560 jobs over seven years.

How to Fund Bike Infrastructure at the State and Local Levels

PeopleForBikes' legislative guide provides a menu of funding mechanisms to build bike infrastructure accompanied by real-world examples of successful implementation at the state and local levels. Combining several funding mechanisms can make an even more significant impact on your community. Funds can also be used to build complementary pedestrian and public transit infrastructure that can increase the success of funding approval.

Please refer to our legislative guide for specific examples of states and local communities that passed funding mechanisms, with links to legislative language for each, including:

- **General Obligation Bond Measures** that enable state and local governments to fund public infrastructure supported by the full faith and credit of the issuing municipality

- **Sales Taxes** that can produce significant revenue for active transportation projects, especially in areas with robust tourism
- **Property Taxes** based on the assessed value of property such as real estate, motor vehicles, boats, and other assets
- **Hotel Taxes** that fund bike infrastructure and recreational facilities that can drive local tourism
- **Road Tolls**, which are fees for drivers traveling across bridges, highways, or highway express lanes *(typically, toll revenue funds maintenance projects, but revenue can also fund public infrastructure in the same corridor with supportive legislation)*
- **Vehicle Miles Traveled Fees**, which help replace decreasing gas tax revenues resulting from fuel efficiency advancements *(More fuel-efficient cars still contribute to wear and tear on roadways, so fees per mile traveled can provide a more resilient funding source)*
- **Gas Tax** revenue, which can fund active transportation infrastructure
- **Income Taxes**
- **Ridesharing Fees**, which are fees or taxes imposed on ridesharing services to offset congestion and increased demand for curb space

Opportunities for Federal Funding

With an unprecedented amount of federal funding available from the Bipartisan Infrastructure Law for active transportation projects, states and local communities must have local funding sources available as the often required 20-50% funding match will be more competitive in attracting federal investments.

Below are several programs that state and local governments can apply to for federal funding for bike infrastructure projects in their community:

- Safe Streets For All Grant Program (SS4A)
- Rebuilding American Infrastructure with Sustainability and Equity Grant Program (RAISE)
- Transportation Infrastructure Finance and Innovation Act (TIFIA)
- Congestion Mitigation and Air Quality Improvement Program (CMAQ)
- Reconnecting Communities and Neighborhoods Grant Program
- Forest Legacy Program
- Climate Pollution Reduction Grant Program
- Tribal Transportation Program Safety Fund
- Transportation Alternatives Program (TAP)
- Highway Safety Improvement Program (HSIP)
- Rural and Tribal Assistance Pilot Program
- Rural Surface Transportation Grant Program
- Areas of Persistent Poverty Program
- National Scenic Byways Program
- Nationally Significant Federal Lands and Tribal Projects Program
- Pilot Program for Transit-Oriented Development (TOD) Planning
- Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation Program (PROTECT)
- Strengthening Mobility and Revolutionizing Transportation (SMART) Grants
- Thriving Communities Program

- **Congestion Fees** that encourage people to choose alternate transportation options or to travel outside of peak hours to reduce vehicular congestion and fund the expansion of public infrastructure

- **Unused Utility Corridor Taxes** that encourage utility companies to sell underutilized corridors to allow for the construction of recreational trails

- **Parking Benefit Districts**, which are areas where parking fees generate revenue for services and infrastructure that benefit the district, like active transportation and public transit infrastructure

- **Tax Increment Financing Districts**, which are areas where a portion of future property tax revenue is saved in a designated account to fund infrastructure projects, such as bike share stations, sidewalks, and road safety improvements

- **Business Improvement Districts** that generate revenue through special assessments collected from property owners to fund infrastructure improvements, such as bike lanes and sidewalks, and operations, such as street cleaning and public safety

- **Development Fees** that generate revenue from fees imposed on developers as a condition of approval to pay for public facilities

- **Metropolitan Transportation Improvement Plans**

- **State Incentive Programs** like California's Local Partnership Program, which sets aside state funding for counties that have approved local taxes for transportation projects

Ensuring Equity

Several revenue sources listed above, like road tolls, gas taxes, and sales taxes, are flat fees, which apply equally to all users regardless of their ability to pay. To prevent such funding mechanisms from disproportionately impacting low-income residents, it's essential to address potential inequities in infrastructure revenue plans.

The most important way to create equitable outcomes is to ensure that the infrastructure funded by the fee benefits low-income residents in a way that offsets or exceeds potential impacts. Fortunately, bike, pedestrian, and transit infrastructure usually provides many benefits for low-income communities, increasing access to jobs and recreation, increasing road safety, reducing transportation costs, and improving public health.

Take Action

Contact your state and local elected officials and request that they sponsor legislation to create new funding sources for active transportation projects. You can reference our legislative guide for examples of how leading communities created successful funding mechanisms.