



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

# Memorandum

Subject: **INFORMATION**: Bicycle and Pedestrian Planning,  
Program, and Project Development Guidance

Date: May 19, 2023

From: Derrell Turner *Derrell E. Turner*  
Acting Associate Administrator  
Office of Planning, Environment, and Realty

In Reply Refer To:  
HEPH-10

To: Division Administrators  
Directors of Field Services

The purpose of this memorandum is to provide background information and guidance on Federal legislation, policies, and reference materials related to bicycle, pedestrian, and shared micromobility programs and projects. The Infrastructure Investment and Jobs Act (Public Law 117-58, also known as the Bipartisan Infrastructure Law (BIL)) expanded funding opportunities, promoted Complete Streets policies, and modified eligibility related to bicycling and walking. This guidance describes the range of opportunities to improve conditions for bicycling, walking, and shared micromobility, consistent with the Department of Transportation's goals for a safe, accessible, comfortable, equitable, and integrated multimodal transportation network infrastructure that serves all ages and abilities.

This guidance incorporates by reference the fact sheet [Pedestrian and Bicycle Funding Opportunities: U.S. Department of Transportation Transit, Safety, and Highway Funds](#), as revised. This guidance replaces the "[Federal Highway Administration \(FHWA\) Bicycle and Pedestrian Planning, Program, and Project Development](#)," revised on September 26, 2019.

Except for the statutes and regulations cited, the contents of this document do not have the force and effect of law and are not meant to bind the States or the public in any way. This document is intended only to provide information regarding existing requirements under the law or agency policies.

This document will be accessible on the [FHWA Bipartisan Infrastructure Law Website](#), through the FHWA [Policy and Guidance Center](#) and on the [Bicycle and Pedestrian Program](#) web page.

If you have questions concerning this document, please contact Darren Buck ([darren.buck@dot.gov](mailto:darren.buck@dot.gov)) or Christopher Douwes ([christopher.douwes@dot.gov](mailto:christopher.douwes@dot.gov)) in the Office of Planning, Environment, and Realty.

Attachment

# Bicycle and Pedestrian Planning, Program, and Project Development

## CONTENTS

### **Bicycle and Pedestrian Planning, Program, and Project Development Guidance**

[Program Purpose](#)

[Guidance on Administration Priorities and Use of the Federal-Aid Highway Formula Funding](#)

[Governing Authorities](#)

[Providing Due Consideration for Bicyclists and Pedestrians](#)

[Facility Need](#)

[Network Connectivity](#)

[Safety](#)

[Federal Statutory and Regulatory Requirements](#)

[Planning](#)

[Due Consideration](#)

[Integrated Management](#)

[Safety and Security Planning](#)

[Integrated System](#)

[Intermodal System](#)

[Interested Parties](#)

[Grouping Projects](#)

[Tracking Bicycle and Pedestrian Investment](#)

[Increasing Safe and Accessible Transportation Options](#)

[Road User Defined](#)

[Safety Performance](#)

[Project Development](#)

[Accelerated Project Delivery](#)

[NEPA](#)

[Additional Project Development Considerations](#)

[Other Key Provisions](#)

[Preliminary Engineering and Design](#)

[Right-of-Way Needs](#)

[Severance Not Permitted](#)

[Railway-Highway Crossings](#)

[Considerations for Bicycling and Walking](#)

[Bridge Deck Rehabilitation or Replacement](#)

[Integration into Larger Projects](#)

[Maintenance and Operations](#)

[Accessibility](#)

[Youth Service and Conservation Corps](#)

[Funding Provisions](#)

[Accessibility for Pedestrians with Disabilities](#)

[Bicycle and Pedestrian Coordinator Positions](#)

[Bridges and Tunnels](#)

[Emergency Relief](#)

[Federal Lands Restriction](#)

[Ferry Boats and Terminals](#)

[Funding Programs](#)

[Location](#)

# **Bicycle and Pedestrian Planning, Program, and Project Development**

[Motorized Vehicle Use](#)

[Nonconstruction Activities](#)

[Planning](#)

[Railroad Crossings](#)

[Realty Guidance](#)

[Recreational Trail Projects](#)

[Research](#)

[Safe Routes to School](#)

[Safety Improvements](#)

[Shared Micromobility and Electric Bicycle Use](#)

[Transit Projects](#)

[Transportation Purpose](#)

[Federal Share and Matching Requirements](#)

[Design Resources](#)

[Websites](#)

[Standards](#)

[Guidance](#)

[Information](#)

# Bicycle and Pedestrian Planning, Program, and Project Development

## Program Purpose

The Intermodal Surface Transportation Efficiency Act ([ISTEA](#)) of 1991 (Public Law 102-240) enacted significant changes to Federal transportation policy and programs that expanded consideration of and eligibility for bicycling and walking activities and projects. The National Highway System Designation Act of 1995 (Pub. L. 104-59), Transportation Equity Act for the 21st Century ([TEA-21](#)) of 1998 (Pub. L. 105-178), and the Safe Accountable, Flexible, Efficient Transportation Equity Act: a Legacy for Users ([SAFETEA-LU](#)) of 2005 (Pub. L. 109-59) continued or expanded the pedestrian and bicycle provisions. The Moving Ahead for Progress in the 21<sup>st</sup> Century Act ([MAP-21](#)) of 2012 (Pub. L. 112-141) enacted program changes and continued broad eligibility for bicycling and walking activities and projects. The Fixing America's Surface Transportation ([FAST](#)) Act of 2015 (Pub. L. 114-94) allowed for additional design flexibility for projects that benefit pedestrians and bicyclists. The [Infrastructure Investment and Jobs Act](#) (IIJA) (Pub. L. 117-58, also known as the [Bipartisan Infrastructure Law](#) (BIL)) expanded funding opportunities, promoted Complete Streets policies, increased attention to safety for all users of the surface transportation system, modified some eligibilities related to bicycling and walking activities and projects, and added provisions for shared micromobility. The statutory provisions affecting bicycling and walking are codified in titles 23 and 49 of the [United States Code](#) (U.S.C.). This document supports the [USDOT Strategic Plan](#) and [FHWA Strategic Plan](#) goals: Safety, Economic Strength and Global Competitiveness, Equity, Climate and Sustainability, and Transformation.

## Guidance on Administration Priorities and Use of the Federal-Aid Highway Formula Funding

### 1. Overview:

The purpose of this document is to provide background information and guidance on Federal legislation, policies, and reference materials related to bicycle, pedestrian, and [shared micromobility](#), safety, accessibility, comfort, equity, and network connectivity. This guidance describes the range of opportunities to improve conditions for bicycling and walking, consistent with U.S. Department of Transportation (USDOT) goals for a safe, comfortable, equitable, and integrated multimodal transportation network infrastructure that serves all ages and abilities.

### 2. Safety:

#### Prioritizing Safety in All Investments and Projects

The National Roadway Safety Strategy (NRSS) (issued January 27, 2022) commits the USDOT and FHWA to respond to the current crisis in traffic fatalities by “taking substantial, comprehensive action to significantly reduce serious and fatal injuries on the Nation’s roadways,” in pursuit of the goal of achieving zero highway deaths and serious injuries. The FHWA recognizes that zero is the only acceptable number of deaths and serious injuries on our roads and achieving that is our safety goal. The FHWA therefore encourages States and other funding recipients to prioritize safety in all Federal highway investments and in all appropriate projects, using relevant Federal-aid funding.

The Safe System approach addresses the safety of all users, including those who walk, bike, drive, ride transit, and travel by other modes. It involves a paradigm shift to improve the safety culture, increase collaboration across all safety stakeholders, and refocus transportation system design and operation on anticipating human mistakes and lessening impact forces to reduce crash

## Bicycle and Pedestrian Planning, Program, and Project Development

severity and save lives. To achieve the vision of zero fatalities and serious injuries, safety should be fully reflected in a State's transportation investment decisions, from planning and programming, environmental analysis, project design, and construction, to maintenance and operations. States should use data-driven safety analyses to ensure that safety is a key input in any decision made in the project development process and fully consider the safety of all road users in project development.

The FHWA encourages State and local agencies to consider the use of various Pedestrian and Bicycle Funding Opportunities to address safety and implement the Safe System approach wherever possible. Improvements to safety features, including traffic signs, pavement markings, and multimodal accommodations that are routinely provided as part of a broader Federal-aid highway project can and should be funded from the same source as the broader project, as long as the use is eligible under that funding source. For many bicycle and pedestrian facilities, a Safe System approach may involve on- and off-road facilities.

Because of the role of speed in fatal crashes, FHWA is also providing resources on the setting of speed limits and on reengineering roadways to help "self-enforce" speed limits. To achieve the vision of zero fatalities and serious injuries on the Nation's roads, FHWA encourages States to assess safety outcomes for all project types and promote and improve safety for all users, particularly vulnerable road users. The FHWA recommends that surface transportation networks be designed and operated to maximize the existing right-of-way for accommodation of nonmotorized modes and transit options that increase safety and connectivity. Pedestrian facilities in the public right-of-way must comply with the Americans with Disabilities Act. (28 CFR 35.149).

### Complete Streets

As one approach to ensuring the safety of all roadway users, FHWA encourages States and communities to adopt and implement Complete Streets policies that prioritize the safety of all users in transportation network planning, design, construction and operations. Section 11206 of the BIL defines Complete Streets standards or policies as those which "ensure the safe and adequate accommodation of all users of the transportation system, including pedestrians, bicyclists, public transportation users, children, older individuals, individuals with disabilities, motorists, and freight vehicles." A Complete Street includes, but is not limited to, sidewalks, bike lanes (or wide paved shoulders), special bus lanes, accessible public transportation stops, safe and accommodating crossing options, median islands, pedestrian signals, curb extensions, narrower travel lanes, and roundabouts. A Complete Street is safe, and feels safe, for everyone using the street.

**3. Transit Flex:** FHWA, working with the Federal Transit Administration (FTA), seeks to help Federal-aid recipients plan, develop, and implement infrastructure investments that prioritize safety, mobility, and accessibility for all transportation network users, including pedestrians, bicyclists, transit riders, micromobility users, freight and delivery services providers, and motorists. This includes the incorporation of data sharing principles and data management. For title 23 funds that are flexed to FTA, section 104(f) of title 23, U.S.C., allows funds made available for transit projects or transportation planning to be transferred to FTA and administered in accordance with chapter 53 of title 49, U.S.C., except that the Federal share requirements of the original fund category continue to apply (See 23 U.S.C. 104(f)(1)).

## Bicycle and Pedestrian Planning, Program, and Project Development

The use of Federal-aid funding on transit and transit-related projects can provide an equitable and safe transportation network for travelers of all ages and abilities, including those from marginalized communities facing historic disinvestment. The FHWA encourages recipients to consider using funding flexibility for transit or multimodal-related projects and to consider strategies that: (1) improve infrastructure for nonmotorized travel, including pedestrian accessibility barrier removal, public transportation access, and increase public transportation service in underserved communities; (2) plan for the safety of all users, particularly those on arterials, through on- and off-road infrastructure improvements and advanced speed management; (3) reduce single-occupancy vehicle travel and associated air pollution in communities near high-volume corridors; and (4) use equitable and sustainable practices and the consideration of environmental justice populations.

**4. Transferability Between FHWA Programs:** Section 126 of title 23, U.S.C., provides that a State may transfer up to 50 percent of the amount apportioned for the fiscal year for certain highway programs to other eligible apportioned highway programs. *See also* FHWA Order 4551.1, “[Fund Transfers to Other Agencies and Among Title 23 Programs](#).” Historically States have used this flexibility to address unmet needs in areas where apportioned funding was insufficient.

The BIL made historic investments in highway programs including more than \$300 billion in Contract Authority from the Highway Trust Fund. This represents an average annual increase of 29 percent in Federal-aid funding over the amount of Contract Authority for FHWA programs compared to fiscal year 2021. Congress also established more than a dozen new highway programs to help address urgent surface transportation needs.

States have the flexibility to transfer funds to other apportioned programs, but FHWA encourages States to first consider the need to transfer in light of the significant increase in apportioned funding and the considerable funding for new programs. States, working with FHWA, should determine the need for funds – including the ability to apply funds to eligible assets owned by local governments, counties, and Tribes – and identify and prioritize projects that maximize the funding before deciding to transfer funds.

**5. ADA:** The Americans with Disabilities Act (ADA) of 1990 and Section 504 of the Rehabilitation Act of 1973 prohibit discrimination against people with disabilities and ensure equal opportunity and access for persons with disabilities. The Department of Transportation’s Section 504 regulations apply to recipients of the Department’s financial assistance (*See* 49 CFR 27.3(a)). Title II of the ADA applies to public entities regardless of whether they receive Federal financial assistance (*See* 28 CFR 35.102(a)). The ADA requires that no qualified individual with a disability shall be excluded from participation in, or be denied the benefits of the services, programs, or activities of a public entity, or be subjected to discrimination by any public entity (*See* 28 CFR 35.149). A public entity’s pedestrian facilities are considered a “service, program, or activity” of the public entity. As a result, public entities and recipients of Federal financial assistance are required to ensure the accessibility of pedestrian facilities in the public right-of-way, such as curb ramps, sidewalks, crosswalks, pedestrian signals, and transit stops in accordance with applicable regulations.

Funds from various programs, as shown under [Pedestrian and Bicycle Funding Opportunities](#), are available to improve accessibility and to develop and implement recipients’ ADA transition plans and upgrade their facilities to eliminate physical obstacles and provide for accessibility for

## Bicycle and Pedestrian Planning, Program, and Project Development

individuals with disabilities. The FHWA will provide oversight to recipients of funds to ensure that each public agency's project planning, design, and construction programs comply with ADA and Section 504 accessibility requirements.

**6. Equity:** The BIL provides considerable resources to help States and other funding recipients advance projects that consider the unique circumstances affecting community members' mobility needs and allocate resources consistently with those needs, enabling the transportation network to equitably and effectively serve all community members. FHWA will work with States to ensure consideration of using funds for projects and inclusion of project elements that proactively address racial equity, workforce development, economic development, and remove barriers to opportunity, including automobile dependence in both rural and urban communities as a barrier to opportunity or to redress prior inequities and barriers to opportunity.

Federal-aid recipients are responsible for involving the public, including traditionally underserved and underrepresented populations in transportation planning and complying with participation and consultation requirements in 23 CFR 450.210 and 23 CFR 450.316, as applicable. "Underserved populations" include minority and low-income populations but may also include many other demographic categories that face challenges engaging with the transportation process and receiving equitable benefits (*See [FHWA's Environmental Justice Reference Guide](#)* for additional information). In addition, many bicycle and pedestrian programs and projects can support the Justice40 Initiative, which establishes a goal that at least 40 percent of the benefits of Federal investments in climate and clean energy infrastructure are distributed to disadvantaged communities. *See* OMB's Interim Implementation Guidance for the Justice40 Initiative and the DOT's Justice40 webpage (or any successor guidance) for additional information.

To assist with these public engagement efforts, FHWA expects recipients of Federal funds to engage with all impacted communities and community leaders to determine which forms of communication are most effective. Recipients of Federal funds should gain insight on the unique circumstances impacting various disadvantaged and underrepresented groups so that new channels for communication may be developed, and the recipients should use this information to inform decisions across all aspects of project delivery including planning, project selection, and the design process. *See [DOT's Public Involvement webpage](#)* for more information.

Among other things, recipients of Federal funds are also required to assure equitable treatment of workers and trainees on transportation programs and projects through compliance with Equal Employment Opportunity requirements under 23 CFR Part 230, Subpart A, as well as ensuring nondiscrimination in all their operations on the basis of race, color, or national origin under Title VI of the Civil Rights Act of 1964. Recipients of Federal funds should ensure that they have the capacity and expertise to address Federal civil rights protections that accompany grant awards.

**7. Climate Change and Sustainability:** The United States is committed to a whole-of-government approach to reducing economy-wide net greenhouse gas pollution by 2030. The BIL provides considerable resources—including new programs and funding—to help States and other funding recipients advance this goal in the transportation sector. In addition, the BIL makes historic investments to improve the resilience of transportation infrastructure, helping States and communities prepare for hazards such as wildfires, floods, storms, and droughts exacerbated by climate change.

## Bicycle and Pedestrian Planning, Program, and Project Development

FHWA encourages the advancement of eligible projects that address climate change and sustainability. To enable this, FHWA encourages recipients to consider climate change and sustainability throughout the planning and project development process, including the extent to which projects align with the President's greenhouse gas reduction, climate resilience, and environmental justice commitments. In particular, consistent with the statute and guidance below, recipients should fund projects that, in addition to reduce criteria pollutant emissions, also reduce carbon dioxide emissions. FHWA encourages recipients to fund projects that, support fiscally responsible land use and transportation efficient design, or incorporate electrification or zero emission vehicle infrastructure. In addition, FHWA encourages recipients to consider projects that support climate change resilience, including consideration of the risks associated with wildfires, drought, extreme heat, and flooding, in line with guidance for projects in floodplains. FHWA also encourages recipients to consider projects that address environmental justice concerns.

**8. Labor and Workforce:** Highway programs may provide opportunities to support the creation of good-paying jobs, including jobs with the free and fair choice to join a union, and the incorporation of strong labor standards, such as the use of project labor agreements; employer neutrality with respect to union organizing; the use of an appropriately trained workforce (in particular registered apprenticeships and other joint labor-management training programs); and the use of an appropriately credentialed workforce in project planning stages and program delivery.

Recipients should work with FHWA, to the extent possible, to identify opportunities for Federal-aid highway investments to advance high-quality job creation through the use of local or other geographic or economic hire provisions authorized under section 25019 in the BIL, and Indian employment preference for projects that are located on or near Tribal reservations authorized under 23 U.S.C. 140(d), or other workforce strategies targeted at expanding workforce training opportunities for people to get the skills they need to compete for these jobs, especially underrepresented populations: women, people of color, and groups with other systemic barriers to employment (people with disabilities, formerly incarcerated, etc.).

### Governing Authorities

1. [23 U.S.C. 217](#) is the statutory law for bicycle transportation and pedestrian walkways.
2. Other sections of title 23 are referenced throughout this document.

### Providing Due Consideration for Bicyclists and Pedestrians

Providing safe, accessible, comfortable, equitable, and interconnected networks for bicycling and walking creates an integrated, intermodal transportation system that provides travelers with a real choice of transportation modes. Bicyclists, pedestrians, and micromobility users have the same origins and destinations as other transportation system users. It is important for all users to have safe, accessible, equitable, and convenient access to destinations such as airports, ports, ferry services, transit stations and stops, and other intermodal facilities as well as access to jobs, education, health care, and other essential services. Transportation professionals are encouraged to plan, design, construct, and maintain transportation facilities to support complete networks, especially on urban and suburban nonfreeway arterials with posted speed limits less than 50 miles per hour (mph), or to rural arterials that serve as main streets in smaller communities. Complete networks consist of on-road and off-road facilities, including shared use paths and



## Bicycle and Pedestrian Planning, Program, and Project Development

other trails and connections to transit, which will help achieve transportation networks that serve all users, including bicyclists, pedestrians, and micromobility users.

Almost every transportation improvement is an opportunity to enhance the safety, accessibility, equity, and convenience of walking and bicycling. Bicyclist and pedestrian needs must be given “due consideration” in the comprehensive transportation plans developed by each metropolitan planning organization (MPO) and State, and bicycle transportation facilities and pedestrian walkways must be considered, where appropriate, in conjunction with all new construction and reconstruction of transportation facilities, except where bicycle and pedestrian use are not permitted (23 U.S.C. 217(g)(1)). In addition, a design for new construction, reconstruction, resurfacing (except for maintenance resurfacing), restoration, or rehabilitation of a highway on the National Highway System (NHS) (other than a highway also on the Interstate System) shall consider access for other modes of transportation (23 U.S.C. 109(c)(1)(D)). Interstate system bridges also should accommodate pedestrians and bicyclists where feasible because they are often the only access available over major rivers.

Accordingly, entities developing projects should seek to include safe and comfortable facilities for bicyclists and pedestrians, including persons with disabilities.

### Facility Need

Where bicycle and pedestrian use is permitted, the determination not to include provisions for bicyclists and pedestrians in transportation projects should be rare. Such facilities are particularly critical on roadways where adjacent land use suggests that trips could be served by various modes, and where those facilities will help achieve complete travel networks for various types of road users. This is commonly the case on urban and suburban nonfreeway arterials with posted speed limits less than 50 mph, and on rural arterials that serve as main streets in smaller communities.

In addition, when public transportation is present, many transit users will walk or bicycle to reach transit stations and stops. Pedestrian and bicycle routes to access transit should reflect a connected network of roadway, sidewalk, and bicyclist facilities. See [Improving Safety for Pedestrians and Bicyclists Accessing Transit](#) (FHWA-SA-21-130).

Agencies should take into account the context of the project and examine expected trends in land use and traffic growth and the potential for conflicts with other road users. The consideration of modal needs should be informed by a review of bicycle and pedestrian planning documents; Americans with Disabilities Act (ADA) Transition Plans; the State Department of Transportation (State DOT) Strategic Highway Safety Plan and Highway Safety Improvement Program Implementation Plan; Vulnerable Road User Safety Assessments; regional, tribal, or local Safety Action Plans; freight corridor and last mile delivery plans; the statewide comprehensive outdoor recreation plan; and other relevant documents. Any determination not to include provisions for pedestrians or bicyclists should be made only after consultation with transportation providers, roadway users and other user groups, and the public, and documented by the agency. (23 U.S.C. 217(g)).

### Network Connectivity

Measuring the connectivity of walking and bicycling networks can help transportation practitioners identify high priority network gaps, implement cost-effective solutions that address multiple needs, optimize potential co-benefits, and measure the long-term impacts of strategic pedestrian and bicycle investments. Analyzing multimodal connectivity may assist agencies in proactively identifying bicycling and walking needs to inform project planning. The FHWA

## Bicycle and Pedestrian Planning, Program, and Project Development

[Guidebook for Measuring Multimodal Network Connectivity](#) (FHWA-HEP-18-032) provides information on incorporating connectivity measures into State, metropolitan, and local transportation planning processes.

States, MPOs, and local governments should ensure that highway projects, including those affecting facilities where bicycle use and walking are prohibited, do not create additional barriers that would make bicycle and pedestrian access along or across a corridor more difficult or impossible. Pursuant to 23 U.S.C. 109(m), FHWA will not approve any project under title 23, U.S.C., that will result in the severance of an existing major route or have significant adverse impact on the safety of nonmotorized transportation traffic, unless such project provides for a reasonable alternate route or such a route exists. An expanded provision in BIL also requires for inclusion of the safe accommodation of bicycles and pedestrians in federally-funded highway bridge deck replacement or rehabilitation projects located on a highway when they are allowed to operate at either end of the bridge, if this can be done at a reasonable cost (23 U.S.C. 217(e)). Where bridge deck accommodation is not feasible, operational solutions can be provided, such as warning signals or turnouts for shuttle services to provide access across a bridge.

### Safety

For people traveling outside of automobiles, continuous facilities appropriate to their nonautomotive mode are essential to ensuring safety for their entire trip (see [Moving to a Complete Streets Design Model: A Report to Congress on Opportunities and Challenges, March 2022](#)). The BIL requires a focused attention on the safety needs of vulnerable road users in its requirement that States conduct Vulnerable Road User Safety Assessments (23 U.S.C. 148(l)) and by requiring that States in which 15 percent or more of the total annual crash fatalities in the State are of vulnerable road users to obligate at least 15 percent of their Highway Safety Improvement Program (HSIP) funds for highway safety improvement projects to address the safety of vulnerable road users (23 U.S.C. 148(g)(3)). See also FHWA's [Highway Safety Improvement Program webpage](#), [Highway Safety Improvement Program Special Rules Guidance \(February 2, 2022\)](#) and [Vulnerable Road User Safety Assessment Guidance \(October 21, 2022\)](#).

Consideration of pedestrian and bicycle safety can begin in project planning with an assessment of existing infrastructure and the collection and analysis of crash, volume, roadway, and speed data to identify specific safety problems or high-risk roadway features. Data-Driven Safety Analysis can be used to quantify current and future safety performance. A Road Safety Audit is a proven way to qualitatively evaluate and report on potential road safety issues and identify opportunities for safety improvements for all road users. Further resources on safety analysis can be found at FHWA's [Road Safety Audit and Data Driven Safety Analysis](#) webpages.

In addition to support for Complete Streets policies and planning discussed above, FHWA encourages the incorporation of a Complete Streets Design Model on roadways where adjacent land use suggests that trips could be served by varied modes, and to achieve complete travel networks for various types of road users. A Complete Streets Design Model prioritizes safety, comfort, and connectivity for all users of the roadway, including but not limited to pedestrians, bicyclists, motorists, and transit riders, of all ages and abilities. In general, this design model includes careful consideration of measures to set and design for appropriate speeds; separation of various users in time and space; improvement of connectivity and access for pedestrians, bicyclists, and transit riders, including for people with disabilities; and implementation of safety countermeasures. Bicycle and pedestrian programs and projects can use this model to help achieve safe, accessible, interconnected, and equitable networks through both on- and off-road

## Bicycle and Pedestrian Planning, Program, and Project Development

facilities. Various funding sources in the table [Pedestrian and Bicycle Funding Opportunities](#) may be applied to fund projects that support safety for all users.

More information can be found on FHWA's [Complete Streets webpage](#) and in the [Design Resources](#) listed at the end of this guidance.

At the Federal level, [FHWA](#) works with the National Highway Traffic Safety Administration ([NHTSA](#)), the Federal Transit Administration ([FTA](#)), the Federal Railroad Administration ([FRA](#)), and other agencies to implement the bicycle and pedestrian provisions of Federal surface transportation law. State and local agencies should work cooperatively with transportation providers, roadway users and other user groups, and the public, with specific outreach to underserved communities, to develop plans, programs, and projects to achieve safe, accessible, equitable, and comfortable networks.

### Federal Statutory and Regulatory Requirements

There are several key provisions of Federal surface transportation law relating to planning requirements and building connected networks of bicycle and pedestrian facilities. Bicycle and pedestrian provisions are concentrated in [23 U.S.C. 217](#), but there are provisions and references throughout title 23, U.S.C., and in the transit section of title 49, U.S.C., including program and project eligibility, and references to safety, planning, and design. The list below is organized by project development phase and is not exhaustive. Other sections of law also support bicycle and pedestrian safety and mobility.

#### Planning

Information on the transportation planning process is available in [The Transportation Planning Process Briefing Book: Key Issues for Transportation Decisionmakers, Officials, and Staff](#) (FHWA-HEP-18-015). The following provides statutory and regulatory citations relating to the transportation planning of bicycle and pedestrian programs and projects in particular.

#### Due Consideration

Per 23 U.S.C. 217(g)(1):

Bicyclists and pedestrians shall be given due consideration in the comprehensive transportation plans developed by each metropolitan planning organization and State in accordance with sections 134 and 135, respectively. Bicycle transportation facilities and pedestrian walkways shall be considered, where appropriate, in conjunction with all new construction and reconstruction of transportation facilities, except where bicycle and pedestrian use are not permitted.

The process for developing long-range statewide and metropolitan transportation plans and transportation improvement programs shall provide for consideration of “all modes of transportation.” (23 U.S.C. 134(c)(3) and 135(a)(3); 49 U.S.C. 5303(c)(3) and 5304(a)(3)). Refer to the section on [Providing Due Consideration for Bicyclists and Pedestrians](#) above for more information.

The FHWA's planning regulation defines consideration as meaning “that one or more parties takes into account the opinions, action, and relevant information from other parties in making a decision or determining a course of action. (23 CFR 450.104).

# Bicycle and Pedestrian Planning, Program, and Project Development

## Integrated Management

The long-range metropolitan and statewide transportation plans, and the metropolitan and statewide transportation improvement programs must “provide for the development and integrated management and operation of transportation systems and facilities (including accessible pedestrian walkways, bicycle transportation facilities, and intermodal facilities...) that will function as an intermodal transportation system...” (23 U.S.C. 134(c)(2) and 135(a)(2); 49 U.S.C. 5303(c)(2)) and 49 U.S.C. 5304(a)(2)).

## Safety and Security Planning

The scope of the metropolitan and statewide planning processes shall provide for consideration of projects and strategies that will increase the safety and security for motorized and nonmotorized users (23 U.S.C. 134(h)(1)(B)-(C) and 135(d)(1)(B)-(C); 49 U.S.C. 5303(h)(1)(B)-(C) and 5304(d)(1)(B)-(C)) and that will ensure that the transportation planning process is being carried out in accordance with all applicable requirements of the ADA (42 U.S.C. 12101 et seq.) and 49 CFR parts 27, 37, and 38. (23 CFR 450.220(a)(6), 450.336(a)(7)).

## Integrated System

The long-range metropolitan transportation plans are to include “an identification of transportation facilities (including major roadways, transit, multimodal and intermodal facilities, nonmotorized transportation facilities, and intermodal connectors) that should function as an integrated metropolitan transportation system.” (23 U.S.C. 134(i)(2)(A); 49 U.S.C. 5303(i)(2)(A)).

## Intermodal System

The long-range statewide transportation plans are to provide “for the development and implementation of the intermodal transportation system.” (23 U.S.C. 135(f)(1); 49 U.S.C. 5304(f)(1)).

## Interested Parties

MPOs and States must allow “representatives of users of pedestrian walkways and bicycle transportation facilities” a reasonable opportunity to comment during the development of the long-range metropolitan and statewide transportation plans. (23 U.S.C. 134(i)(6)(A) and 135(f)(3)(A)); 49 U.S.C. 5303(i)(6)(A) and 5304(f)(3)(A)).

## Grouping Projects

Bicycle and pedestrian projects of a similar nature that are not determined to be regionally significant may be grouped together for the purposes of funding without each project having to be approved individually. (23 U.S.C. 134(j)(3)(B)(ii) and 135(g)(5)(C)(ii)); 49 U.S.C. 5303(j)(3)(B)(ii) and 5304(g)(5)(C)(ii)).

## Tracking Bicycle and Pedestrian Investment

Metropolitan areas shall publish (or otherwise make available by the cooperative effort of the State, transit operator, and metropolitan planning organization) annual listings of projects, including “investments in pedestrian walkways and bicycle transportation facilities” for which Federal funds have been obligated in the preceding year for public review. (23 U.S.C. 134(j)(7)(B) and 49 U.S.C. 5303(j)(7)(B)).

## Bicycle and Pedestrian Planning, Program, and Project Development

Under the Vulnerable Road User Special Rule, discussed below in [Safety Performance](#), if the VRU Special Rule applies to a State in a particular year, the FHWA will set aside the required amount of funds from the next fiscal year's HSIP apportionment along with associated obligation limitation. This set-aside will have its own FMIS code. See FHWA's [Notices](#) website for more information on VRU Special Rule set-aside funding amounts per fiscal year at the appropriate future time.

### Increasing Safe and Accessible Transportation Options

The BIL requires each State to use 2.5 percent of its State Planning and Research (SPR) funding under 23 U.S.C. 505 and each MPO to use at least 2.5 percent of its Metropolitan Planning funds (PL) on activities to increase safe and accessible options for multiple travel modes for people of all ages and abilities. (BIL § 11206). If permissible under applicable State and local laws, such activities may include adoption of Complete Streets standards or policies; development of a Complete Streets prioritization plan that identifies a specific list of Complete Streets projects to improve the safety, mobility, or accessibility of a street; development of transportation plans to create a network of active transportation facilities to connect neighborhoods with destinations, to integrate active transportation facilities with public transportation service or improve access to public transportation; to develop ADA transition plans; to create multiuse active transportation infrastructure facilities that make connections within or between communities, to increase public transportation ridership, and to improve the safety of bicyclists and pedestrians; regional and megaregional planning to address travel demand and capacity constraints through alternatives to new highway capacity; and development of transportation plans and policies that support transit-oriented development. See also FHWA's [Metropolitan Planning Program Fact Sheet](#).

Section 11206(d) of BIL provides that the Federal share of the cost of an activity carried out under section 11206 "shall be 80 percent, unless the Secretary determines that the interests of the Federal-aid highway program would be best served by decreasing or eliminating the non-Federal share." On January 5, 2023, the FHWA Administrator issued a memo waiving the State and MPO 20 percent non-Federal match requirement for the 2.5 percent of FHWA SPR and PL funds set aside for Complete Streets planning activities for each fiscal year under the BIL, subject to the following conditions: (1) it would cover the 2.5 percent minimum SPR and PL fund expenditure thresholds described in BIL section 11206(b); and (2) it would end once a State or MPO receives FHWA approval of a request to opt out of meeting the requirements described in BIL section 11206(e). See [Waiver of Non-Federal Match for State Planning and Research \(SPR\) and Metropolitan Planning \(PL\) Funds in Support of Complete Streets Planning Activities \(BIL § 11206\)](#).

On March 10, 2023, in keeping with the January 5, 2023, decision by FHWA, the FTA Administrator issued a letter that informs States and MPOs that FTA has approved a waiver of the non-Federal match requirement under the FTA Metropolitan Planning Program (MPP) and the FTA State Planning and Research Program (SPRP) for Complete Streets planning activities conducted by States and MPOs in their transportation planning processes. This waiver is similarly in effect for each fiscal year of the BIL and subject to the following conditions: (1) the SPRP and MPP funds would be expended on Complete Street planning activities; and (2) the waiver will end once a State or MPO receives FHWA approval of a request to opt out of meeting the requirements described in BIL section 11206(e). See [FTA's Dear Colleague letter of March 10, 2023](#).

## Bicycle and Pedestrian Planning, Program, and Project Development

### Road User Defined

“The term “road user” means a motorist, passenger, public transportation operator or user, truck driver, bicyclist, motorcyclist, or pedestrian, including a person with disabilities.” (23 U.S.C. 148(a)(8)). In addition, BIL includes a definition of Vulnerable Road User (VRU) for purposes of assessing the safety of nonmotorized roadway users and distributing HSIP funds to ensure their safety. Vulnerable road users are defined in 23 U.S.C. 148(a)(15) as “a nonmotorist—(A) with a fatality analysis reporting system person attribute code that is included in the definition of the term ‘number of non-motorized fatalities’ in section 490.205 of title 23, Code of Federal Regulations (or successor regulations); or (B) described in the term ‘number of non-motorized serious injuries’ in that section.” *See also* FHWA’s [Highway Safety Improvement Program Special Rules](#) website for more information on the Vulnerable Road Users (VRU) Safety Special Rule.

### Safety Performance

The number of nonmotorized fatalities and nonmotorized serious injuries are among the five performance measures under the [National performance management measures for the Highway Safety Improvement Program](#). (23 CFR 490.207). This provision, and the VRU Safety Special Rule described in the next paragraph, may affect State use of HSIP funds. Also, the implementation of safe, accessible, equitable, and comfortable pedestrian and bicycle networks can help with safety performance using other Federal surface transportation funding programs.

The VRU Special Rule at 23 U.S.C. 148(g)(3) provides: “If the total annual fatalities of vulnerable road users in a State represents not less than 15 percent of the total annual crash fatalities in the State, that State shall be required to obligate not less than 15 percent of the amounts apportioned to the State under section 104(b)(3) for the following fiscal year for highway safety improvement projects to address the safety of vulnerable road users.” See the Highway Safety Improvement Program Special Rules Guidance, February 2, 2022, [page 9](#).

BIL also requires all States to complete an initial Vulnerable Road User Safety Assessment by November 15, 2023 (23 U.S.C. 148(l)(1)) and include it as part of their State Strategic Highway Safety Plan (23 U.S.C. 148(a)(13)(G)). See the [Vulnerable Road User Safety Assessment Guidance, October 21, 2022](#).

### Project Development

#### General

Bicycling, walking, and enhancing accessibility help to quietly, cleanly, efficiently, and effectively serve local transportation needs and enhance quality of life, providing access to jobs, education, health care, and other essential services. In addition, Complete Networks provide low-carbon-impact transportation to address climate change and provide resilient transportation options, and they are also critical to ensuring that people can get to and from transit services.

States, MPOs, and local officials should consider how to incorporate on- and off-road bicycle and pedestrian networks to provide resilient surface transportation infrastructure. Bicycle and pedestrian networks also provide access to facilitate emergency response and evacuation. The needs of bicyclists and pedestrians should be incorporated into emergency preparedness, response, and evacuation plans. On highways where bicycling and walking generally are

## Bicycle and Pedestrian Planning, Program, and Project Development

prohibited, there may be a need for emergency use by these modes, such as when an individual's vehicle breaks down along the highway.

### Accelerated Project Delivery

Federal policy also supports accelerated project delivery (23 U.S.C. 101(b)(4)). The FHWA provides maximum opportunities for States to accelerate the approval and implementation of bicycle and pedestrian projects and programs. States, MPOs, local project sponsors, and other program partners can find additional information about how to accelerate the implementation of pedestrian and bicycle projects in [Strategies for Accelerating Multimodal Project Delivery](#) (FHWA-HEP-19-006).

### NEPA

FHWA-funded pedestrian and bicycle projects, as well as larger Federal-aid and Federal Lands highway projects and multimodal projects that include pedestrian and bicycle elements, are subject to environmental review and approval under the National Environmental Policy Act (NEPA) and FHWA's NEPA implementing regulations in 23 CFR part 771. See FHWA's [Environmental Review Toolkit](#). When NEPA reviews are required, bicycle and pedestrian project sponsors must identify, and should minimize or avoid, any environmental impacts the proposed projects may have on various environmental resources. Federal-aid and Federal Lands highway projects and traffic signal operations that benefit bicycle and pedestrian safety and mobility typically qualify for a Categorical Exclusion (CE) under FHWA's NEPA implementing regulations (23 CFR 771.117). Examples of typical projects include FHWA's [Proven Safety Countermeasures](#) that benefit pedestrians and bicyclists, including [Bicycle Lanes](#) (FHWA-SA-21-051), [Crosswalks](#) (FHWA-SA-21-049), [Leading Pedestrian Interval](#) signals (FHWA-SA-21-032), [Lighting](#) (FHWA-SA-21-050), [Medians and Pedestrian Refuge Islands](#) (FHWA-SA-21-044), [Pedestrian Hybrid Beacons](#) (FHWA-SA-21-045), [Rectangular Rapid Flashing Beacons](#) (FHWA-SA-21-053), [Road Diets](#) (FHWA-SA-21-046), [Road Safety Audits](#) (FHWA-SA-21-048), and [Walkways](#) (FHWA-SA-21-047). Bicycle and pedestrian facility project sponsors should work closely with their States and FHWA division staff to identify specific requirements for environmental review and documentation. Under 23 CFR 771.117(c)(3), the construction of bicycle and pedestrian lanes, paths, and facilities meet the criteria for a CE in the Council of Environmental Quality's (40 CFR 1508.4) and FHWA's regulations (23 CFR 711.117(a)) and normally do not require any further NEPA approvals by FHWA. Such projects do not normally require extensive environmental documentation, instead relying on streamlined NEPA reviews and documentation, such as a CE checklist.

- **Section 4(f):** It is possible that a bicycle and pedestrian project could involve a park, recreation area, wildlife or waterfowl refuge, or historic site, and be required to undergo a Section 4(f) evaluation. See FHWA's Memo, [Section 4\(f\) Statement and Determination for Independent Bikeway or Walkway Construction Projects](#), May 23, 1977, and FHWA's [Section 4\(f\) Policy Paper, at Part II, Section 15](#), July 20, 2012. The FHWA may not approve the use of Section 4(f) property unless a determination is made under 23 CFR 774.3(a) or (b). Section 4(f) exceptions are provided in 23 CFR 774.13. In particular, 23 CFR 774.13(f) and (g) provide exceptions to Section 4(f) approvals for projects involving "certain trails, paths, bikeways, and sidewalks," and for "transportation enhancement activities, transportation alternatives projects and mitigation activities," under certain conditions.

## Bicycle and Pedestrian Planning, Program, and Project Development

- **Transportation Conformity Requirements:** Bicycle and pedestrian facilities are exempt from transportation conformity requirements in nonattainment and maintenance areas (40 CFR 93.126). See FHWA’s [Transportation Conformity](#) webpage for more information.
- **Emergency Relief Projects:** Categorical exclusions are available for certain emergency repairs to transportation facilities damaged by an incident resulting in an emergency declared by the Governor of the State and concurred in by the Secretary of Transportation, or a disaster or emergency declared by the President (23 CFR 771.117(c)(9)).

### Additional Project Development Considerations

In addition, planners and other decisionmakers may consider:

- How automated and connected vehicle technologies may affect pedestrians, bicyclists, and other nonmotorized users within the highway right-of-way and how these technologies may affect access to transit services.
- How transportation and recreation planning can help connect and integrate transportation and recreation infrastructure to work together seamlessly.
- How bicycle and accessible pedestrian facilities fit into initiatives to conserve, protect, connect, and restore public lands and waters across the country.

### Other Key Provisions

Other key provisions to keep in mind for FHWA-funded projects include:

- **Nondiscrimination:** Title VI of the Civil Rights Act ([42 U.S.C. 2000d](#)) ensures that no person shall be subject to discrimination based on race, color, or national origin under any program or activity that receives Federal financial assistance. Title VI applies to bicycle and pedestrian projects of a State or local DOT who is a recipient of Federal financial assistance even if the project is funded solely with the recipient’s own funds. The Civil Rights Restoration Act of 1987 (Pub. L. 100-259) clarifies that “any program or activity” means “all the operations of” the State or local government department or agency that receives Federal financial assistance.

### Preliminary Engineering and Design

The following list has statutory and regulatory citations focusing on the preliminary engineering and design phases of project development, with an emphasis on network connectivity related to pedestrian, bicycle, and shared micromobility programs and projects.

#### Right-of-Way Needs

Under 23 U.S.C. 109(f), FHWA must not, as a condition to authorizing a project under 23 U.S.C. 106, require any State to acquire title to, or control of, any marginal land along the proposed highway in addition to that reasonably necessary for road surfaces, median strips, bikeways, pedestrian walkways, gutters, ditches, and side slopes, and of sufficient width to provide service roads for adjacent property to permit safe access at controlled locations in order to expedite traffic, promote safety, and minimize roadside parking.

- The FHWA interprets section 109(f) to mean that bikeways and pedestrian walkways can be included as reasonably necessary parts of highway projects.

#### Severance Not Permitted

Under 23 U.S.C. 109(m), FHWA must not approve any project or take any regulatory action under title 23, U.S.C., that will result in the severance of an existing major route or have



## Bicycle and Pedestrian Planning, Program, and Project Development

significant adverse impact on the safety for nonmotorized transportation traffic and light motorcycles, unless such project or regulatory action provides for a reasonable alternate route or such route exists.

- Title 23 does not define “major route”, but bicyclists and pedestrians must be given due consideration in transportation plans (23 U.S.C. 217(g)(1)). See [Due Consideration](#), above. These plans must provide due consideration for safety and contiguous routes for bicyclists and pedestrians (23 U.S.C. 217(g)(2)). The FHWA interprets 23 U.S.C. 109(m) as requiring recipients to provide appropriate replacement detour accommodations in the event of permanent or temporary closures, using adequate warning, delineation, channelization, and other traffic control devices that are compliant with the Manual on Uniform Traffic Control Devices ([MUTCD](#)).

### Railway-Highway Crossings

Railway-highway crossing projects must take into account bicycle safety (23 U.S.C. 130(j)). See also [Railroad Crossings](#), below.

### Considerations for Bicycling and Walking

#### Designs on the NHS

Pursuant to 23 U.S.C. 109(c)(1), a design for new construction, reconstruction, resurfacing (except maintenance resurfacing), restoration, or rehabilitation of a highway on the NHS (other than a highway also on the Interstate System) must consider (A) the constructed and natural environment of the area; (B) the environmental, scenic, aesthetic, historic, community, and preservation impacts of the activity; (C) cost savings by utilizing flexibility that exists in current design guidance and regulations; and (D) access for other modes of transportation.

- The FHWA interprets this provision to include consideration of community impacts and safety and access for pedestrians and bicyclists.

### All Federal-aid Projects

Per 23 U.S.C. 217(g)(1), bicycle transportation facilities and pedestrian walkways must be considered, where appropriate, in conjunction with all new construction and reconstruction of transportation facilities, except where bicycle and pedestrian use are not permitted. In addition, pursuant to 23 U.S.C. 217(g)(2), transportation plans and projects must provide due consideration for safety and contiguous routes for bicyclists and pedestrians. See also [Due Consideration](#), above. Safety considerations shall include the installation, where appropriate, and maintenance of audible traffic signals and audible signs at street crossings. FHWA supports the use of traffic control signals and pedestrian hybrid beacons with pedestrian signal heads and accessible pedestrian signals, and pedestrian activated sign conspicuity devices such as Rectangular Rapid Flashing Beacons (RRFBs) and warning beacons with audible information devices to provide safety considerations. The accessibility features should be made available to vulnerable road users by either pedestrian push buttons, passive detection, or automatic recall during all hours of operation.

### Bridge Deck Rehabilitation or Replacement

Per 23 U.S.C. 217(e), in any case where a highway bridge deck being replaced or rehabilitated with Federal financial participation is located on a highway on which pedestrians or bicyclists are permitted to operate at each end of such bridge, and FHWA determines that the safe

## Bicycle and Pedestrian Planning, Program, and Project Development

accommodation of pedestrians or bicyclists can be provided at reasonable cost as part of the replacement or rehabilitation, then the bridge shall be replaced or rehabilitated to provide such safe accommodations.

### Integration into Larger Projects

There are many cost-effective ways to integrate nonmotorized users into the design and operation of the transportation system by including safe, accessible, and comfortable bicycle and pedestrian facilities as part of larger programs and projects. Examples include:

- Installing Proven Safety Countermeasures. See [FHWA's Proven Safety Countermeasures webpage](#) for more information.
- Building accessible sidewalks and trails as a part of new or reconstructed highways, and including sidewalks and bicycle facilities with new or reconstructed bridges and tunnels.
- Integrating recreational trails into transportation networks, where appropriate.
- Providing paved shoulders on new and reconstructed roads for pavement integrity and motorist safety, as well as providing bicyclists a place to ride.
- Purchasing transit vehicles that have bicycle racks or hooks already installed.
- Restriping roads, either as stand-alone projects or after resurfacing or reconstruction projects, to create marked crosswalks or on-street bike lanes. For example, see [Incorporating On-Road Bicycle Networks into Resurfacing Projects \(FHWA-HEP-16-025\)](#), FHWA's webpage on [Safe Transportation for Every Pedestrian \(STEP\)](#), and Parts 3 and 9 of the [MUTCD](#).
- Integrating additional safety improvements for bicyclists and pedestrians into resurfacing, restoration, and rehabilitation projects (see [Review of State Geometric Design Procedures or Design Criteria for Resurfacing, Restoration, and Rehabilitation Projects on the NHS, March 1, 2023](#)).

### Maintenance and Operations

#### Obligation to Maintain

Once a transportation project is constructed using Federal-aid funds, the State DOT or other recipient must maintain it (23 U.S.C. 116). Note that trail maintenance is permitted using Recreational Trails Program (RTP) (23 U.S.C. 206(d)(2)(A)), Transportation Alternatives (TA) Set-Aside program (23 U.S.C. 133(h)(5)(A)), and Surface Transportation Block Grant Program (STBG) (23 U.S.C. 133(b)(7)) funds.

#### Obligation to include Bicycle and Pedestrian considerations in Operations

Management and operations of the transportation system should consider pedestrian and bicycle travelers. Transportation systems management and operations means “integrated strategies to optimize the performance of existing infrastructure through the implementation of multimodal and intermodal, cross-jurisdictional systems, services, and projects designed to preserve capacity and improve security, safety, and reliability of the transportation system; and the consideration of incorporating natural infrastructure.” (23 U.S.C. 101(a)(32)). The definition includes bicycle and pedestrian operations. (23 U.S.C. 101(a)(32)(B)(i)).

#### Accessibility

Public entities are responsible for ensuring that accessible pedestrian routes and operable features, such as accessible pedestrian signals, are maintained in operable working condition. (28 CFR 35.133(a)). This includes snow removal; debris removal; trimming vegetation; repairing broken or shifting sidewalks (including sidewalks damaged from tree roots); provision and

## Bicycle and Pedestrian Planning, Program, and Project Development

maintenance of accessible pedestrian walkways in work zones, pedestrian signals and detectors, and elevators; and the correction of other disruptions that impact pedestrian accessibility. Local ordinances should prohibit impeding accessible sidewalks with items such as outdoor cafés, trash cans, sports equipment, micromobility devices, and parked cars. Sidewalk sheds and temporary scaffolding should provide accessible passageways and should be removed promptly when no longer needed. This maintenance requirement does not prohibit isolated or temporary interruptions in service or access due to maintenance or repairs. (28 CFR 35.133(b)). In such cases, an alternative accessible route should be provided. Allowing obstructions such as cones or barricades, survey equipment, “out of service” equipment or other items to persist beyond a reasonable period of time violates 28 CFR 35.133 and is not permitted.

### Youth Service and Conservation Corps

Section 1524 of MAP-21 authorizes States and MPOs to sole source contracts and cooperative agreements to qualified youth service or conservation corps for appropriate bicycle and pedestrian projects eligible under 23 U.S.C. 162, 206, 213, 217, and section 1404 of the SAFETEA-LU. See the [MAP-21 Section 1524 Youth Service and Conservation Corps Questions and Answers, updated December 28, 2018](#), and FHWA’s [Youth Workforce Development Resources webpage](#).

## Funding Provisions

### General

Federal surface transportation law provides flexibility to States and MPOs to fund bicycle, pedestrian, micromobility, and trail projects and activities from a wide variety of programs. Bicycle transportation facilities and pedestrian walkways are eligible projects under nearly all Federal-aid and Federal lands highway programs, although specific program requirements must still be met, and eligibility would need to be determined on a case-by-case basis. When considering and evaluating ways to improve conditions for bicycling and walking, States and MPOs are encouraged to:

- Integrate bicycle and pedestrian improvements into larger projects, as described above.
- Use a variety of Federal surface transportation programs as potential funding sources. The table [Pedestrian and Bicycle Funding Opportunities](#) indicates potential eligibility for bicycle and pedestrian projects under several DOT funding programs. Note that Federal programs have specific requirements for projects, and eligibility is determined on a case-by-case basis.
- Explore State, local, and private funding sources, including public-private partnerships. See FHWA’s [Active Transportation Funding and Finance Toolkit webpage](#).

Specific citations include:

- Per 23 U.S.C. 217(a), States, subject to project approval by FHWA, can obligate funds apportioned to the State under the STBG program (23 U.S.C. 104(b)(2)) and the Congestion Mitigation and Air Quality Improvement (CMAQ) program (23 U.S.C. 104(b)(4)) for construction of pedestrian walkways and bicycle and shared micromobility transportation facilities and for carrying out nonconstruction projects related to safe access for bicyclists and pedestrians.
- Per 23 U.S.C. 217(b), States may obligate funds apportioned to it under the National Highway Performance program (23 U.S.C. 104(b)(1)) for construction of pedestrian walkways and bicycle transportation facilities on land adjacent to any highway on the NHS.

## Bicycle and Pedestrian Planning, Program, and Project Development

- Per 23 U.S.C. 217(c), funds authorized for forest highways, forest development roads and trails, public lands development roads and trails, park roads, parkways, Indian reservation roads, and public lands highways are available, at the discretion of the department charged with the administration of such funds, for the construction of pedestrian walkways and bicycle transportation facilities.

The broad eligibility of pedestrian and bicycle facilities for Federal surface transportation program funding means that additional improvements to include these facilities can generally be appropriate as part of larger transportation projects, except on highway facilities where bicycle and pedestrian travel is prohibited. One exception affects the Federal Lands Transportation Program (see [Federal Lands Restriction](#), below). The FHWA has several documents on its [Bicycle and Pedestrian Resources](#) webpage to provide information about incorporating bicycle and pedestrian facilities into highway projects. See also [Design Resources](#), below.

### Accessibility for Pedestrians with Disabilities

#### ADA Transition Plans

Self-evaluations are required under implementing regulations for title II of the Americans with Disabilities Act (28 CFR 35.105) and for Section 504 of the Rehabilitation Act (34 CFR 104.6(c)). Public agencies with 50 or more employees are required to have an ADA transition plan. (28 CFR 35.150(d)). Development of an ADA transition plan is considered a planning activity, and several types of funds can be used to create a plan to remove barriers to accessibility. Specific requirements for ADA transition plans can be found at [28 CFR 35.150\(d\)](#).

#### Construction of Accessible Pedestrian Facilities

Construction of new pedestrian facilities are required to be fully accessible, and alteration of existing pedestrian facilities are required to be accessible to the maximum extent feasible (28 CFR 35.151). Curb ramps, sidewalks, crosswalks, pedestrian signals, and transit stops must be designed and constructed in accordance with applicable regulations and be accessible to, and usable by, people with disabilities. (28 CFR 35.151(a)(1)). Construction and alterations of pedestrian facilities can be funded through several grant and funding programs. The [Pedestrian and Bicycle Funding Opportunities](#) table provides information on funding for barrier removal for ADA compliance, bus shelters and benches, crosswalks, curb ramps, shared use paths and sidewalks, and accessible pedestrian signals.

### Bicycle and Pedestrian Coordinator Positions

Each State receiving STBG or CMAQ funding must use an amount of the funding as may be necessary to fund a bicycle and pedestrian coordinator in the State DOT. (23 U.S.C. 217(d)). Many States refer to this position as an Active Transportation Coordinator. States may use STBG or CMAQ funds to support up to 2 coordinator positions. (23 U.S.C. 217(d)).

Under 23 U.S.C. 208(g)(3), each State must use a sufficient amount of the apportionment of the State under the Safe Routes to School (SRTS) program to fund a coordinator; however, if there is no dedicated funding apportionment or allocation for an SRTS program under [23 U.S.C. 208](#), then the State cannot be required to fund a State SRTS coordinator.

Funding a full-time SRTS coordinator can also be done under the STBG program (23 U.S.C. 133(b)(7) and (22)) and using TA Set-Aside funds (23 U.S.C. 133(h)(3)(B)). In addition, 23 U.S.C. 133(h)(6)(C) allows States to use TA-set aside funds to improve the ability of applicants

## Bicycle and Pedestrian Planning, Program, and Project Development

to access funding for TA Set-Aside projects by providing funding for 1 or more full-time State employees positions to administer the TA Set-Aside program.

For more information on coordinator positions, see:

- January 17, 1992, [Memorandum on the Designation of Bicycle and Pedestrian Coordinators within State DOTs](#). Attachments to this memo list the typical duties and qualities for the position.
- [State Bicycle and Pedestrian Coordinator](#) contacts
- [FHWA Bicycle and Pedestrian Coordinator](#) contacts

### Bridges and Tunnels

Bridges and tunnels are key links to provide safe, accessible, equitable, and comfortable network connectivity. Bridges and tunnels generally have long lifespans and may be difficult to retrofit to add pedestrian and bicycle facilities. States and MPOs must consider bicycle transportation facilities and pedestrian walkways in conjunction with all new construction and reconstruction of transportation facilities, where appropriate, except where bicycle and pedestrian use are not permitted. (23 U.S.C. 217(g)). This includes bridges and tunnels, especially in urban and suburban areas where bicycle and pedestrian use should be expected. Bridge and tunnel approach slopes also should be planned, designed, and constructed to comply with accessibility guidelines.

Pursuant to 23 U.S.C. 217(e), all projects with Federal financial participation that replace or rehabilitate a highway bridge deck are required to provide safe accommodation of pedestrians or bicyclists, as applicable, on the bridge, when both of the following conditions are met: (1) the bridge is located on a highway on which pedestrians or bicyclists are allowed to operate at each end of the bridge, and (2) FHWA determines that safe accommodation can be provided at reasonable cost as part of the replacement or rehabilitation. (See January 14, 2022, [Bridge Formula Program Implementation Guidance](#)).

The first step in this process is to assess whether the bridge is located on a highway on which pedestrians or bicyclists are allowed to operate at each end of the bridge, including along road or trail networks near the bridge approaches. If that is the case, in making a determination as to whether safe accommodation can be provided at a reasonable cost, FHWA will rely on the policy described in [Accommodating Bicycle and Pedestrian Travel: A Recommended Approach](#) (February 28, 2000). The FHWA will presume that safe accommodation for bicyclists and pedestrians can be provided at reasonable cost for all bridge projects absent an affirmative showing by the project sponsor that the cost of such accommodation would exceed 20 percent of the cost of the larger transportation project. For instances where such accommodation exceeds 20 percent, the addition of bicyclist and pedestrian accommodation is not required, but FHWA encourages States to consider providing for such accommodation. (See [Bridge Formula Implementation Guidance](#)). This 20 percent figure should be used in an advisory rather than an absolute sense. See [Supplementary Design Guidance for Bicycle and Pedestrian Projects](#) (August 30, 2000).

Although the bridge deck requirement is not specified for tunnels, States and MPOs should consider pedestrian and bicycle connectivity through tunnels. (See 23 U.S.C. 217(g)).

New or retrofit culverts which are distinct from bridges (other than those that meet the definition of a bridge under 23 CFR 650.305), that are under transportation barriers such as highways and railroad lines also may provide essential connections for pedestrians, bicyclists, and trail users.

## Bicycle and Pedestrian Planning, Program, and Project Development

Culvert retrofit projects may need to address accessibility, drainage, lighting, wildlife interaction, and other possible impacts.

### Emergency Relief

Under 23 U.S.C. 125(d), FHWA may expend emergency relief funds for the repair and reconstruction of highways on Federal-aid highways. In addition, FHWA may expend emergency relief funds for the repair or reconstruction of tribal transportation facilities, Federal lands transportation facilities, and other federally owned roads that are open to public travel. (23 U.S.C. 125(e)(2)). The FHWA may also reimburse Federal and State agencies for expenditures made for emergency relief projects. (23 U.S.C. 125(e)(3)). Repair to damaged bicycle and pedestrian transportation facilities within the right-of-way of a Federal-aid highway or Federal Land transportation facility eligible for emergency relief funding should be considered for emergency relief funding in the same manner as other surface transportation facilities.

### Federal Lands Restriction

The Federal Lands Transportation Program has a bicycle facility restriction. Under that program, the appropriate Federal land management agency shall prohibit the use of bicycles on each federally owned road that has a speed limit of 30 miles per hour or greater and an adjacent paved path for use by bicycles within 100 yards of the road unless the Secretary determines that the bicycle level of service on that roadway is rated B or higher (23 U.S.C. 203(d)).

### Ferry Boats and Terminals

Ferry boats and terminals are key links to provide safe, accessible, equitable, and comfortable network connectivity. States and MPOs should consider pedestrian and bicycle connectivity through ferry services and at ferry terminals. See [Implementation Guidance for the Ferry Boat Program \(FBP\) as Revised by the Bipartisan Infrastructure Law \(April 21, 2023\)](#).

### Funding Programs

The [Pedestrian and Bicycle Funding Opportunities](#) table provides basic information about potential eligibility for pedestrian and bicycle activities and projects under USDOT surface transportation funding programs. Some common sources of funding for pedestrian and bicycle projects are specifically described below:

- The [STBG](#) has wide eligibilities that encompass many types of pedestrian and bicycle infrastructure and safety countermeasures. Eligible STBG projects also include “Recreational trails projects eligible for funding under [\[23 U.S.C. 206\]](#)[,] including the maintenance and restoration of existing recreational trails,... pedestrian and bicycle projects in accordance with [\[23 U.S.C. 217\]](#) (including modifications to comply with accessibility requirements under the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.)), and the safe routes to school program under [\[23 U.S.C. 208\]](#).” (23 U.S.C. 133(b)(7)).
- The Transportation Alternatives Set-Aside program is a set-aside of funds from the STBG and has been the single largest funding source for pedestrian and bicycle projects (23 U.S.C. 133(h)). See FHWA’s [Transportation Alternatives Set-Aside](#) webpage for more information. It should be noted that all projects eligible under the TA Set-Aside program also would be eligible under the STBG program. (23 U.S.C. 133(h)(3)(A), 23 U.S.C. 133(b)(22)).
- Eligible highway safety improvement project types under the HSIP include several that benefit pedestrians and bicyclists, including but not limited to an improvement for pedestrian or bicyclist safety or safety of persons with disabilities (23 U.S.C. 148(a)(4)(B)(v));

## Bicycle and Pedestrian Planning, Program, and Project Development

installation or upgrades of traffic control devices for pedestrians and bicyclists, including pedestrian hybrid beacons and the addition of bicycle movement phases to traffic signals (23 U.S.C. 148(a)(4)(B)(xxvi)); roadway improvements that provide separation between pedestrians and motor vehicles or between bicyclists and motor vehicles, including medians, pedestrian crossing islands, protected bike lanes, and protected intersection features (23 U.S.C. 148(a)(4)(B)(xxvii)); and a pedestrian security feature designed to slow or stop a motor vehicle (23 U.S.C. 148(a)(4)(B)(xxviii)). Many SRTS projects may be eligible as highway safety improvement projects under HSIP. The BIL also authorized States to spend not more than 10 percent of its HSIP apportionment on specified safety projects, which include projects that support SRTS noninfrastructure-related activities described in 23 U.S.C. 208(g)(2). (23 U.S.C. 148(a)(11)(B)(v), 23 U.S.C. 148(e)(3)). See [FHWA's HSIP webpage](#) for more information.

- The BIL requires States to set-aside 15 percent of the State's HSIP funds for highway safety improvement projects that address the safety of vulnerable road users in States with a high proportion of pedestrian and bicycle fatalities. (23 U.S.C. 148(g)(3)). See the [HSIP Special Rules Guidance, February 2, 2022, pgs. 7-11 \(section on the VRU Safety Special Rule\)](#).
- The National Scenic Byways Program provides funds (subject to the availability of appropriations) for "construction along a scenic byway of a facility for pedestrians and bicyclists, rest area, turnout, highway shoulder improvement, overlook, or interpretive facility." (23 U.S.C. 162(c)(4)).
- The Reconnecting Communities Pilot Program is a discretionary grant program that seeks to reconnect communities by removing, retrofitting, or mitigating transportation facilities that create barriers to community connectivity, mobility, access, or economic development. (BIL §11509). Owners of eligible facilities awarded a Reconnecting Communities Pilot Program grant can use those grant funds to remove, retrofit, or mitigate an eligible facility and replace an eligible facility with a new facility that restores community connectivity, is sensitive to the context of the surrounding community, and is otherwise eligible for funding under title 23, U.S.C. (BIL § 11509(d)(3)). Under that program, an eligible facility is "a highway or other transportation facility that creates a barrier to community connectivity, including barriers to mobility, access, or economic development, due to high speeds, grade separations, or other design factors." (BIL § 11509(a)(1)). See FHWA's [Reconnecting Communities Pilot Program webpage for more information](#).
- The Neighborhood Access and Equity Grant Program is a discretionary grant program that provides funds for connectivity projects including improving walkability, safety, and affordable transportation access and mitigating or remediating negative impacts on the human or natural environment of surface transportation facilities. (23 U.S.C. 177).
- The Safe Streets and Roads for All Discretionary Grant Program funds regional, local, and Tribal Safety Action Plans and implementation projects that prevent roadway deaths and serious injuries. (BIL §24112). MPOs, political subdivision of States, and Tribes awarded a Safe Streets and Roads for All grant can use those grant funds to develop a comprehensive safety action plan; conduct planning, design, and development activities for projects and strategies identified in such a plan; or carry out projects and strategies identified in such a plan. (BIL §24112(a)(2), (a)(3)). See FHWA's [Safe Streets and Roads for All](#) Grant Program webpage for more information.
- The Active Transportation Infrastructure Investment Discretionary Grant Program provides funds (subject to the availability of appropriations) "to make grants, on a competitive basis, to

## Bicycle and Pedestrian Planning, Program, and Project Development

eligible organizations to construct eligible projects to provide safe and connected active transportation facilities in an active transportation network or active transportation spine.” (BIL Section 11529(a)) An “active transportation network” is defined as a facility built for active transportation, including sidewalks, bikeways, and pedestrian and bicycle trails, that connect between destinations within a community or metropolitan region. (BIL §11529(l)(2)). An “active transportation spine” is defined as a facility built for active transportation, including sidewalks, bikeways, and pedestrian and bicycle trails that connect between communities, metropolitan regions, or States.” (BIL §11529(l)(3)).

### Location

Bicycle and pedestrian projects may be funded on-road or off-road using STBG, TA Set-Aside, RTP, or CMAQ funds regardless of whether those projects are on or along Federal-aid highways (23 U.S.C. 133(c)(2) and (3), 133(b)(4) through (11), 133(h), and 149). HSIP funds may be spent on highway safety improvement projects on “any public highway or publicly owned bicycle or pedestrian pathway or trail.” (23 U.S.C. 148(e)). Additional information about these funds may be found on FHWA’s [STBG](#), [TA Set-Aside](#), [RTP](#), [CMAQ](#), and [HSIP](#) webpages.

### Motorized Vehicle Use

In general, under 23 U.S.C. 217(h), motorized vehicles are not permitted on nonmotorized trails and pedestrian walkways funded under title 23, U.S.C. Exceptions to this general rule exist for maintenance purposes; motorized wheelchairs; when snow conditions and State or local regulations permit, snowmobiles; when State or local regulations permit, electric bicycles (see below); “and such other circumstances as the Secretary deems appropriate.” (23 U.S.C. 217(h)). In 2008, the FHWA developed a [Framework for Considering Motorized Use on Nonmotorized Trails and Pedestrian Walkways](#) to provide guidance on when an exception may be granted under the “other circumstances” provision of 23 U.S.C. 217(h)(5). If a project agreement specifies a nonmotorized trail or pedestrian walkway, then 23 U.S.C. 217(h) applies.

The RTP has a specific definition for motorized recreation for projects that use RTP funds: “The term ‘motorized recreation’ means off-road recreation using any motor-powered vehicle, except for a motorized wheelchair.” [23 U.S.C. 206\(a\)\(1\)](#). This definition does not apply to 23 U.S.C. 217, and the requirement and exceptions under 23 U.S.C. 217(h) do not apply to RTP-funded projects. Under the RTP, electric bicycles and scooters are motorized uses and cannot be permitted on RTP-funded trails that are designated only for nonmotorized use (23 U.S.C. 206(a)(1)).

### Nonconstruction Activities

Nonconstruction projects include any project not involving physical construction, such as the publication of safety education materials. The BIL amended 23 U.S.C. 217(a) to authorize the use of STBG and CMAQ funds for nonconstruction projects related to safe access for bicyclists and pedestrians.

### Planning

Under the Active Transportation Infrastructure Investment Discretionary Grant Program, application considerations include “[w]hether the eligible organization submitted a plan for an eligible project for the development of walking and bicycling infrastructure that is likely to provide substantial additional opportunities for walking and bicycling.” (BIL § 11529(c)(1)).



# Bicycle and Pedestrian Planning, Program, and Project Development

## Railroad Crossings

The BIL authorized States to use Railway-Highway Crossings program funds for projects to reduce pedestrian fatalities and injuries from trespassing at grade crossings (23 U.S.C. 130(e)(1)(B)). See [Railway-Highway Crossing Program Policy and Guidance webpage](#). This includes providing new bridges over or underpasses below railroads. See also [Railway-Highway Crossings](#), above.

## Realty Guidance

In general, location and permit issues for bicycle and pedestrian projects are resolved in the planning and NEPA stages prior to the right-of-way phase. FHWA's [Real Estate Guidance for Enhancement Projects](#) issued in 2009 remains relevant for bicycle and pedestrian projects.

References in 23 CFR 710.403(e)(4) and 23 CFR 710.405(a)(2)(iii) refer to 23 CFR part 652, which was repealed. Pedestrian, bicycle, [shared micromobility](#) (discussed below), and trail projects are eligible under multiple Federal highway funding programs under title 23, U.S.C. Therefore, these projects may be located in highway rights-of-way without any charges or special use agreements. The repeal of 23 CFR part 652 does not require charges or special use agreements for these projects to be located in highway rights-of-way.

## Recreational Trail Projects

Funds that are obligated for a recreational trail or a related project using Federal-aid highway program funds apportioned under 23 U.S.C. 104(b)<sup>1</sup> are to be administered as if made available under the RTP ([23 U.S.C. 206\(j\)](#)). Therefore, the treatment of projects provision in 23 U.S.C. 133(i) does not apply to such projects. See also [Federal Share and Matching Requirements](#), below.

- See [Motorized Vehicle Use, above](#), for specifics under the RTP. Additional information is also available on FHWA's [RTP](#) webpage.
- See [Transportation Purpose, below](#), for recreational trail eligibility under other funding categories.

## Research

Pedestrian and bicycle research is eligible as safety research (23 U.S.C. 501(8), 503(b)(2)(C)(ix), and (503(c)(4)(B)(vi) and (xi)).

## Safe Routes to School

While the BIL did not provide dedicated funds for the SRTS program, changes were made to ways that States can use TA Set-Aside funds (as well as STBG and HSIP funds) for SRTS projects.

The BIL codified the SRTS program at [23 U.S.C. 208](#) and expanded eligibility from kindergarten through 8<sup>th</sup> grade to kindergarten through 12<sup>th</sup> grade. (See 23 U.S.C. 208(a)(2) and 208(b)).

---

<sup>1</sup> Programs funded under 23 U.S.C. 104(b) are: (1) National Highway Performance Program, (2) Surface Transportation Block Grant Program (including the Transportation Alternatives Set-Aside), (3) Highway Safety Improvement Program, (4) Congestion Mitigation and Air Quality Improvement Program, (5) National Highway Freight Program, (6) Metropolitan Planning, (7) Carbon Reduction Program, and (8) PROTECT Formula program.

## Bicycle and Pedestrian Planning, Program, and Project Development

The BIL reaffirmed SRTS eligibility under the TA Set-Aside (23 U.S.C. 133(h)(3)(B)) and STBG (23 U.S.C. 133(b)(7)) programs, and specifically added SRTS eligibility to the HSIP by including safe routes to school noninfrastructure-related activities as specified safety projects (23 U.S.C. 148(a)(11)(B)(v), 148(e)(3)). The BIL also added Federal share flexibility to allow HSIP funds to be credited toward the non-Federal share of the costs of TA Set-Aside safety projects, including SRTS projects, if the project is an eligible project described in 23 U.S.C. 148(e)(1) and is consistent with the State strategic highway safety plan. (23 U.S.C. 133(h)(7)(B)(i)); see also [Federal share flexibility, below](#) Some SRTS-eligible projects already were eligible as highway safety improvement projects under HSIP, subject to HSIP eligibility criteria.

Because the BIL did not provide any dedicated funds for the SRTS program, references in 23 U.S.C. 208 related to apportionments do not apply. Funding for State and local SRTS coordinator positions, however, can be done using Federal-aid funds, see the [Bicycle and Pedestrian Coordinator Positions](#) section, above.

### Safety Improvements

[Proven Safety Countermeasures](#), including [Bicycle Lanes](#) (FHWA-SA-21-051), [Crosswalk Visibility Enhancements](#) (FHWA-SA-21-049), [Leading Pedestrian Intervals at traffic control signals](#) (FHWA-SA-21-032), [Lighting](#) (FHWA-SA-21-050), [Medians and Pedestrian Refuge Islands in Urban and Suburban Areas](#) (FHWA-SA-21-044), [Pedestrian Hybrid Beacons](#) (FHWA-SA-21-045), [Rectangular Rapid Flashing Beacons](#) (FHWA-SA-21-053), [Road Diets](#) (FHWA-SA-21-046), [Road Safety Audits](#) (FHWA-SA-21-048), and [Walkways](#) (FHWA-SA-21-047) are eligible projects under several funding programs, including the STBG (23 U.S.C. 133(b)) and HSIP (23 U.S.C. 148).

### Shared Micromobility and Electric Bicycle Use

The BIL authorized shared micromobility projects, including bikesharing and shared scooter systems, as eligible under the CMAQ program (23 U.S.C. 149(b)(7)). In addition, STBG and CMAQ funds can be used for the construction of bicycle and shared micromobility transportation facilities. (23 U.S.C. 217(a)). For consistency, FHWA interprets this eligibility as applicable to projects using TA Set-Aside funds. Eligibility for FHWA (but not FTA) funds includes bicycles and scooter projects.

- CMAQ: Per 23 U.S.C. 149(b)(7), a project or program is eligible for CMAQ funding if it “shifts traffic demand to nonpeak hours or other transportation modes, increases vehicle occupancy rates, or otherwise reduces demand for roads through such means as ... shared micromobility (including bikesharing and shared scooter systems)[.]”
- Bicycle Transportation and Pedestrian Walkways: Per 23 U.S.C. 217(a), a State may obligate its apportioned STBG and CMAQ funds for “construction of pedestrian walkways and bicycle and shared micromobility transportation facilities and for carrying out nonconstruction projects related to safe access for bicyclists and pedestrians.”

The BIL changed the definition of an electric bicycle in [23 U.S.C. 217\(j\)\(2\)](#), which modified the kinds of electric bicycles that States and local governments may allow on nonmotorized trails and pedestrian walkways that use Federal-aid funds. (See 23 U.S.C. 217(h)(4)). Electric bicycle infrastructure is eligible under the TA Set-Aside program. However, the BIL did not amend 23 U.S.C. 217(h), which lists restrictions on the use of motorized vehicles, to allow other shared micromobility devices on nonmotorized trails and pedestrian walkways. See [TA Set-Aside Project Eligibility Questions and Answers, March 30, 2022](#).

# Bicycle and Pedestrian Planning, Program, and Project Development

## Transit Projects

Eligible transit projects include “pedestrian access and walkways” and “bicycle access, including bicycle storage shelters and parking facilities and the installation of equipment for transporting bicycles on public transportation vehicles.” (49 U.S.C. 5302(2)(D) and (E)). Eligible transit capital projects include a joint development improvement that may include “pedestrian and bicycle access to a public transportation facility.” (49 U.S.C. 5302(4)(G)(vi)(VII)).

## Transportation Purpose

Section 217(i) of title 23 requires that bicycle facilities “be principally for transportation, rather than recreation, purposes.” However, 23 U.S.C. 133(b)(7) lists “recreational trails projects” as eligible activities under STBG, and RTP projects can be funded using TA Set-Aside funds (23 U.S.C. 133(h)(5)). Therefore, the requirement in 23 U.S.C. 217(i) does not apply to recreational trails projects (including for bicycle use) using STBG, TA Set-Aside, and RTP funds. Section 217(i) continues to apply to bicycle facilities other than these trail-related projects, and to bicycle facilities using other Federal-aid highway program funds (e.g., National Highway Performance Program (NHPP), HSIP, CMAQ)). The transportation requirement under section 217(i) is applicable only to bicycle projects; it does not apply to any other trail use or transportation mode.

## Federal Share and Matching Requirements

The Federal share for pedestrian walkway, bicycle, or shared micromobility programs and projects funded under Federal highway programs is generally the same as any other project funded under the programs. The standard Federal share under the Federal-aid highway program is generally 80 percent of the cost of the activity or project funded, with a 20 percent State or local match (80/20 rule). (23 U.S.C. 120(b)). See the [BIL Fact Sheet on Federal Share](#).

See guidance for each specific funding program for more information on Federal share requirements for that program. There are exceptions to the general 80/20 rule for programs that fund bicycle and pedestrian projects. The examples provided below are for illustrative purposes only. To determine whether a project qualifies for increased Federal share, consult with the FHWA Division Office or the Office of the Chief Financial Officer for additional information.

- For States with significant Federal land holdings, a sliding scale, which is determined according to the percentage of public lands in the State, allows for a Federal share of up to 95 percent. (23 U.S.C. 120(b)). See [FHWA Notice 4540.12, Sliding Scale Rates In Public Land States - Rates Effective March 17, 1992](#).
- Funds that are obligated for a recreational trail or a related project using Federal-aid highway program funds apportioned under 23 U.S.C. 104(b)<sup>2</sup> are to be administered as if made available under the RTP (23 U.S.C. 206(j)). Therefore, any recreational trail using funds apportioned under 23 U.S.C. 104(b) is subject to the Federal share and flexible match and donation provisions available under 23 U.S.C. 206(f) and 206(h). See [Recreational Trails Program Federal Share and Matching Provisions, updated October 8, 2013](#).

---

<sup>2</sup> Programs funded under 23 U.S.C. 104(b) are: (1) National Highway Performance Program, (2) Surface Transportation Block Grant Program (including the Transportation Alternatives Set-Aside), (3) Highway Safety Improvement Program, (4) Congestion Mitigation and Air Quality Improvement Program, (5) National Highway Freight Program, (6) Metropolitan Planning, (7) Carbon Reduction Program, and (8) PROTECT Formula program.

## Bicycle and Pedestrian Planning, Program, and Project Development

- Projects obligated under the TA Set-Aside may use provisions described in the [Federal Share and Flexibilities for Increasing Federal Share](#) section of the [TA Set-Aside guidance](#).
- For projects funded using HSIP funds, the Federal share is generally 90 percent or the application of sliding scale per 23 U.S.C. 120(b), whichever is higher. (23 U.S.C. 148(j)).
- Certain types of improvements, predominantly safety improvements, listed in 23 U.S.C. 120(c)(1) may have a Federal share of 100 percent. Use of this provision is limited to 10 percent of the total funds apportioned to a State under 23 U.S.C. 104. See FHWA memorandum, [Increased Federal Share under 23 U.S.C. 120\(c\)\(1\)](#), dated November 25, 2014, for more information. Examples include pedestrian and bicyclist-focused [Proven Safety Countermeasures](#), described above.
- The Federal share of a project incorporating innovations described in 23 U.S.C. 120(c)(3)(A) may be increased by up to 5 percent if funded by the NHPP, STBG Program, or MPP. Examples include pedestrian and bicyclist-focused projects under the Every Day Counts (EDC) initiatives such as Safe Transportation for Every Pedestrian ([STEP](#)) or [Value Capture](#). Each fiscal year, States may use this authority for up to 10 percent of the combined apportionments of the State under the NHPP, STBG Program, or MPP. (23 U.S.C. 120(c)(3)(C)). See FHWA's [Every Day Counts](#) webpage for additional information.
- Section 120(f) of title 23, U.S.C. allows funds apportioned under 23 U.S.C. 104 to be used at 100 percent Federal share for Federal-aid highways within Indian reservations, and national parks and monuments under the jurisdiction of the Department of the Interior.
- Section 120(j) of title 23, U.S.C. allows Federal agency funds (other than those made available under title 23 or title 49, U.S.C.) to pay the non-Federal share of the cost of any transportation project that is within, adjacent to, or provides access to Federal land, for projects funded under title 23 or under chapter 53 of title 49, U.S.C.
- Section 120(k) of title 23, U.S.C. authorizes Tribal Transportation Program (TTP) funds under 23 U.S.C. 202 and Federal Lands Transportation Program (FLTP) funds under 23 U.S.C. 203 to be used to pay the non-Federal share of the cost of any project that is funded under title 23, or under chapter 53 of title 49, U.S.C. and that provides access to or within Federal or tribal land. This provision does not authorize the use of Federal Lands Access Program (FLAP) funds, which are made available under 23 U.S.C. 204, as the non-Federal match; however, the BIL increased the Federal share of FLAP projects to up to 100 percent (23 U.S.C. 201(b)(7)(B)), and the Federal share of TTP and FLTP projects remains 100 percent (23 U.S.C. 201(b)(7)(A)). See FHWA's webpages for the Office of Tribal Transportation, [Federal Lands Transportation Program](#), and [Federal Lands Access Program](#) for additional information.
- A State can meet its local match for Federal-aid highway projects through donations of funds, materials, services, or right-of-way ([23 U.S.C. 323](#)). In-kind contributions such as volunteer labor, land donations, and services may count towards the matching share requirement, provided that a reasonable cash value can be attributed to the donated time, resource, or service. Also see [Federal-Aid Guidance Non-Federal Matching Requirements](#) (May 15, 2019), for more information, including soft match and documentation provisions.
- The Active Transportation Infrastructure Investment Program allows the Secretary to increase the Federal share up to 100 percent for eligible projects serving communities with a poverty rate of over 40 percent based on the majority of census tracts.

# Bicycle and Pedestrian Planning, Program, and Project Development

## Design Resources

Under 23 U.S.C. 109(c), States must use design standards that FHWA has established in [23 CFR part 625](#) when developing projects on the NHS. Under 23 U.S.C. 109(o), States establish their own design standards for projects not on the NHS. A locality may use a different roadway design publication than the State that the locality has adopted if the guide is recognized by FHWA, the roadway is under the ownership of the local jurisdiction (other than a highway on the NHS), and the local jurisdiction is the project sponsor, provided that the design complies with all other applicable Federal laws. (23 U.S.C. 109(o)(B)).

The FHWA encourages States and MPOs to adopt design standards for Federal surface transportation projects that provide for the safe and adequate accommodation (as determined by the State) of all users of the surface transportation network, including motorized *and* nonmotorized users in all stages of project planning, development, and operation. (FAST Act § 1442). The FHWA interprets “safe and adequate accommodation” as safe, accessible, equitable, comfortable, and convenient for all users.

The FHWA supports taking a flexible approach to bicycle and pedestrian facility design as described in the August 20, 2013 memo on [Bicycle and Pedestrian Facility Design Flexibility](#). FHWA maintains several websites that include recent updates that can influence state of the practice design. Please review these sites periodically as they will be updated on a greater frequency than the list of design resources provided below:

### Websites: FHWA Websites with Design Resources

- Office of Planning, Environment, and Realty, [Bicycle and Pedestrian Program](#)
- Office of Safety: [Pedestrian and Bicycle Safety](#)
- Office of Civil Rights: [Americans with Disabilities Act](#)
- Office of Infrastructure: [Geometric Design](#)
- Office of Operations: [Programs](#)
- Cross-Office: [Complete Streets](#)

The following list of references provide useful information for planning and design decisions.

### Standards: Publications incorporated by reference in the Code of Federal Regulations

- [Manual on Uniform Traffic Control Devices](#) (MUTCD), FHWA (required national standard for all traffic control devices installed on any street, highway, or bicycle trail open to public travel).
- A Policy on Geometric Design of Highways and Streets, 7th Edition, 2018, American Association of State Highway and Transportation Officials (required geometric design standard for NHS highways).

### Guidance: Major national publications that provide advice on policy or technical design issues

- [Accommodating Bicycle and Pedestrian Travel: A Recommended Approach](#), FHWA, February 2000; and [Supplementary Design Guidance for Bicycle and Pedestrian Projects](#), August 2000.
- [ADA Transition Plan](#) Memo, FHWA, November 12, 2015.
- [Designing Walkable Urban Thoroughfares: A Context Sensitive Approach](#), Institute of Transportation Engineers and Congress for the New Urbanism, March 2010.
- [Guide for the Development of Bicycle Facilities](#), American Association of State Highway and Transportation Officials, 2012. *Update expected 2023.*

## Bicycle and Pedestrian Planning, Program, and Project Development

- [Guide for the Planning, Design, and Operation of Pedestrian Facilities](#), American Association of State Highway and Transportation Officials, 2021.
- [Highway Capacity Manual](#), Transportation Research Board, 2016.
- [Highway Safety Manual](#), American Association of State Highway and Transportation Officials (links to multiple resources).
- [National Roadway Safety Strategy](#), DOT, February 18, 2022
- [Pedestrian and Bicycle Funding Opportunities](#), FHWA, September 2022.
- [Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way](#), [U.S. Access Board](#), 2011.
  - [Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way: Shared Use Paths](#) (Supplemental Notice), [U.S. Access Board](#), 2013.
- [Questions and Answers About ADA/Section 504](#), FHWA, 2006.
- [Roadside Design Guide, 4<sup>th</sup> Edition](#), American Association of State Highway and Transportation Officials, 2011.
- [Review of State Geometric Design Procedures or Design Criteria for Resurfacing, Restoration, and Rehabilitation Projects on the NHS](#), FHWA, March 1, 2023.
- [Transportation Alternatives Set-Aside Guidance](#), FHWA, March 30, 2022 (links to resources).
- [United States Department of Transportation Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations](#), DOT, March 11, 2010.
- [Vulnerable Road User Safety Assessment Guidance](#), FHWA, October 2022

### Information: Publications and resources providing education and knowledge on specific topics

- [Accessibility Guidebook for Outdoor Recreation and Trails](#), USDA Forest Service, August 2012. ([PDF](#)) ([Errata sheet](#))
- [Accessible Pedestrian Signals: A Guide to Best Practices](#), National Cooperative Highway Research Program, 2009.
- [Accessible Shared Streets: Notable Practices and Considerations for Accommodating Pedestrians with Vision Disabilities](#), FHWA, October 2017.
- [Achieving Multimodal Networks: Applying Design Flexibility and Reducing Conflicts](#), FHWA, August 2016.
- [Active Transportation Funding and Finance Toolkit](#), FHWA, February 2022.
- [Advancing Trails to Support Multimodal Networks](#), Pedestrian and Bicycle Information Center, April 2022
- [A Guide for Maintaining Pedestrian Facilities for Enhanced Safety](#), FHWA, October 2013.
- [Bicycle and Pedestrian Design Guidance](#), FHWA (links to multiple resources).
- [Bicycle and Pedestrian Facility Design Flexibility](#), FHWA, August 20, 2013.
- [Bicycle and Pedestrian Funding, Design, and Environmental Review: Addressing Common Misconceptions](#), DOT and FHWA, August 2015.
- [Bike Network Mapping Idea Book](#), FHWA, June 2016.
- [BIKESAFE](#), FHWA, 2014.
- [Bike Share Station Siting Guide](#), National Association of City Transportation Officials, 2016.
- [Bikeway Selection Guide](#), FHWA, February 2019.
- [Bridge to Everywhere: Examining Signature Gateways Across America](#), Rails-to-Trails Conservancy, June 2022.

## Bicycle and Pedestrian Planning, Program, and Project Development

- [Case Studies in Delivering Safe, Comfortable and Connected Pedestrian and Bicycle Networks](#), FHWA, December 2015.
- [Case Studies in Realizing Co-Benefits of Multimodal Roadway Design and Gray and Green Infrastructure](#), FHWA, March 2018.
- [Common Problems Arising in the Installation of Accessible Pedestrian Signals](#), U.S. Access Board, June 2009.
- [Context Sensitive Solutions and Design](#), FHWA (links to multiple resources).
- [Curbside Management](#) (fact sheet), FHWA 2021.
- [Curbside Inventory Report](#), FHWA, July 2021.
- Designing Sidewalks and Trails for Access:
  - Part 1: [Review of Existing Guidelines and Practices](#), FHWA, July 1999.
  - Part 2: [Best Practices Design Guide](#), FHWA, September 2001.
- [Department of Justice/Department of Transportation Joint Technical Assistance on the Title II of the Americans with Disabilities Act Requirements to Provide Curb Ramps when Streets, Roads, or Highways are Altered through Resurfacing](#)
  - [Q and As Supplement to the 2013 DOJ/DOT Joint Technical Assistance on the Title II of the Americans with Disabilities Act Requirements To Provide Curb Ramps when Streets, Roads, or Highways are Altered through Resurfacing](#)
- [DOT Pedestrian and Bicyclist Road Safety Assessments](#), DOT, October 2015.
- [Electric Bicycle \(E-bike\) Trends, Impacts, and Opportunities: Literature Review Summary and Case Studies](#), FHWA, May 2023.
- [Federal-aid Essentials for Local Public Agencies](#), FHWA (links to multiple resources).
- [Guidebook for Developing Pedestrian and Bicycle Performance Measures](#), FHWA, March 2016.
- [Guidebook for Measuring Multimodal Network Connectivity](#), FHWA, February 2018.
- [Guide for Scalable Risk Assessment Methods for Pedestrians and Bicyclists](#), FHWA, July 2018.
- [Handbook for Designing Roadways for the Aging Population](#), FHWA, June 2014.
- [Health in Transportation](#), FHWA (links to resources).
- [Highway-Rail Crossing Handbook, 3<sup>rd</sup> edition](#), FHWA, July 2019
- [How to Develop a Pedestrian and Bicycle Safety Action Plan](#), FHWA, August 2017.
- [Improving Safety for Pedestrians and Bicyclists Accessing Transit](#), FHWA, September 2022.
- [Incorporating On-Road Bicycle Networks into Resurfacing Projects](#), FHWA, December 2015.
- [Information: Design Standards and Section 1404 of the FAST Act](#), FHWA, October 6, 2016.
- [Memorandum on the Designation of Bicycle and Pedestrian Coordinators within State DOTs](#), FHWA, January 17, 1992.
- [Metropolitan Pedestrian and Bicycle Planning Handbook](#), FHWA, February 2017.
- [Micromobility Fact Sheets](#), FHWA, November 2020.
- [Moving to a Complete Streets Design Model: A Report to Congress on Opportunities and Challenges](#), FHWA, March 2022.
- [Noteworthy Local Policies That Support Safe and Complete Pedestrian and Bicycle Networks](#), FHWA, November 2016.
- [PBCAT Pedestrian and Bicycle Crash Analysis Tool Version 3.0 User Guide](#), FHWA, June 2022.

## Bicycle and Pedestrian Planning, Program, and Project Development

- [Pedestrian and Bicycle Information Center](#), FHWA-supported (links to multiple resources).
- [Pedestrian and Bicyclist Safety Information Search Tool](#), FHWA, October 2022.
- [PEDSAFE](#), FHWA, 2013.
- [Performance Based Practical Design Webpage](#), FHWA (links to multiple resources).
- [Pursuing Equity in Pedestrian and Bicycle Planning](#), FHWA, April 2016.
- [Promising Practices for Meaningful Public Involvement in Transportation Decision-Making](#), USDOT, October 2022.
- [Proven Safety Countermeasures](#), FHWA (links to multiple resources).
- [Questions & Answers about Design Flexibility for Pedestrian and Bicycle Facilities](#), FHWA, July 25, 2014.
- [Rails-with-Trails: Best Practices and Lessons Learned](#), FHWA, May 2021.
- [Road Diet Informational Guide](#), FHWA, November 2014.
- [Roadway Lighting's Effect on Pedestrian Safety at Intersection and Midblock Crosswalks](#), Illinois Center for Transportation, August 2021.
- [Safe Transportation for Every Pedestrian \(STEP\)](#), links to various FHWA Resources.
- [Safety Benefits and Best Practices for Intersection Lighting](#), Virginia Transportation Research Council, June 2020.
- [Safety in Numbers: A Literature Review](#), NHTSA, June 2022.
- [Separated Bike Lanes Planning and Design Guide](#), FHWA, May 2015.
- [Shared Micromobility and Equity Primer](#), FHWA, June 2022.
- [Small Town and Rural Multimodal Networks](#), FHWA, December 2016.
- [Speed Safety Camera Program Planning and Operations Guide](#), FHWA, January 2023.
- [Statewide Pedestrian and Bicycle Planning Handbook](#), FHWA, September 2014.
- [Strategies for Accelerating Multimodal Project Delivery](#), FHWA, October 2018.
- [The Future of E-Bikes on Public Lands: How to Effectively Manage a Growing Trend](#), FHWA, November 2022.
- [Trails and Resilience: Review of the Role of Trails in Climate Resilience and Emergency Response](#), FHWA, March 2023
- [Transit Street Design Guide](#), National Association of City Transportation Officials, April 2016.
- [Urban Bikeway Design Guide](#), National Association of City Transportation Officials, March 2014.
- [Urban Street Design Guide](#), National Association of City Transportation Officials, October 2013.
- [Urban Street Geometric Design Handbook](#), Institute of Transportation Engineers, December 2008.