



U.S. Department of Transportation
Federal Highway Administration



Complete Networks with Trails: Federal Transportation Funds **International Trails Summit — April 19, 2023**

Federal Highway Administration

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Disclaimer

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





Bipartisan Infrastructure Law Priorities

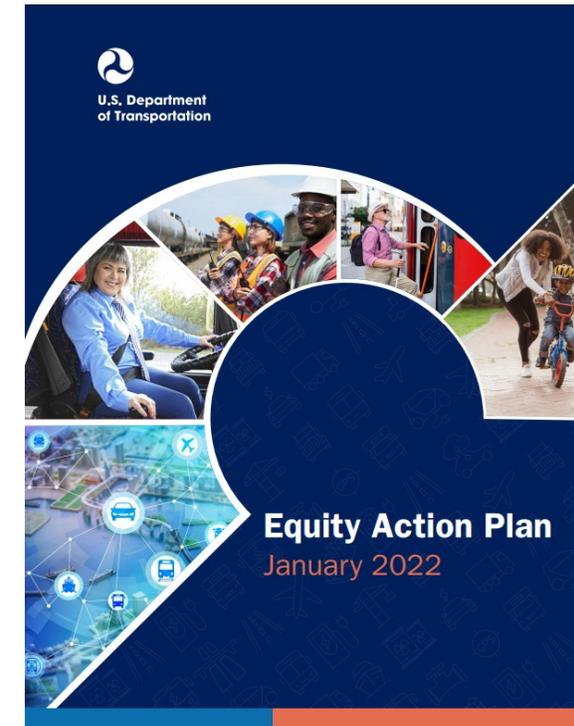
- Safety
- Complete Streets
- Americans with Disabilities Act
- Equity
- Transit Flex
- Transferability
- Climate Change and Sustainability
- Labor and Workforce





Equity

- USDOT Equity Action Plan:
<https://www.transportation.gov/priorities/equity/equity-action-plan>
- [Justice40 Initiative](#)
- Executive Orders [13985](#) and [14091](#).
- FHWA Environmental Justice Reference Guide:
https://www.fhwa.dot.gov/environment/environmental_justice/
- TA Guidance webpage resources:
https://www.fhwa.dot.gov/environment/transportation_alternatives/guidance/
- [Transportation Disadvantaged Census Tracts](#)
- [EJ Screen: Environmental Justice Screening and Mapping Tool](#)
- [Screening Tool for Equity Analysis of Projects \(STEAP\)](#)
- Resources through advocacy organizations



USDOT Equity Action Plan

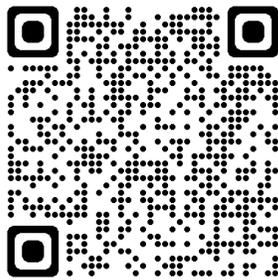
DOT Navigator



U.S. Department
of Transportation

Coordinating and Improving Access to the range of DOT Technical Assistance Resources

<https://transportation.gov/dot-navigator>



Sample Grant Application Resources

- Overview of DOT Funding and Financing
- USDOT Discretionary Grant Process
- Understanding Federal Match Requirements
- Federal Tools to Determine Disadvantaged Community Status
- Maximizing Award Success
- Is Federal Funding the Right Fit for My Organization?
- [Technical Assistance Resources](#)

The screenshot shows the DOT Navigator website homepage. At the top, there is a navigation bar with the U.S. Department of Transportation logo, the text "U.S. Department of Transportation", and menu items for "ABOUT DOT", "PRIORITIES", and "CONNECT". Social media icons for Facebook, Twitter, Instagram, LinkedIn, and YouTube are also present. The main content area features a large image of a person riding a bicycle on a wooden boardwalk. Overlaid on this image is a text box with the heading "DOT Navigator" and a description: "The DOT Navigator is a new resource to help communities understand the best ways to apply for grants, and to plan for and deliver transformative infrastructure projects and services." Below this text is a red button that says "LEARN MORE ABOUT THE DOT NAVIGATOR". Below the main image, there is a section titled "WHAT DO YOU WANT TO DO?" with three columns of content. The first column is titled "Apply for DOT Grants" and includes a sub-heading "Resources to help understand the federal grant-making process and key federal requirements". The second column is titled "Find Technical Assistance Resources" and includes a sub-heading "Resources available to public agencies and other transportation stakeholders". The third column is titled "Learn About the Bipartisan Infrastructure Law" and includes a sub-heading "Information to help access BIL funding programs". At the bottom of the page, there is a "Stay Connected" section with a sub-heading "Receive email updates about the latest information on DOT grant technical assistance resources." and a red button that says "SUBSCRIBE FOR UPDATES".



Technical Assistance

Thriving Communities Program (TCP) – technical assistance, planning and capacity building to advance a program of projects that support transportation, economic opportunity, and community development goals. Four capacity builders will support 64 communities in 42 States, including 6 Tribal nations and Puerto Rico. <https://transportation.gov/thriving-communities>

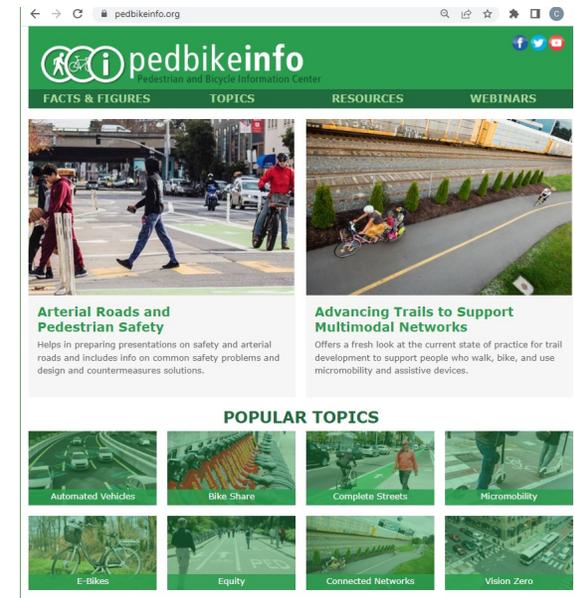
Contact: thrivingcommunities@dot.gov

Pedestrian and Bicycle Information Center (PBIC) develops and shares resources vital to advancing mobility, access, equity, and safety for pedestrians and bicyclists. <https://www.pedbikeinfo.org/>

Contact: pbic@pedbikeinfo.org

Local Technical Assistance Programs (LTAP) provide training, technical assistance, and tech transfer in each State. <https://www.fhwa.dot.gov/clas/ltap/>

Tribal Technical Assistance Programs (TTAP) provide technical assistance to Tribal governments to administer transportation programs. <https://highways.dot.gov/federal-lands/programs-tribal/partners-resources/ttap>





Technical Assistance

Reconnecting Communities Program (RCP) – Planning Grants and Capital

Construction Grants: The USDOT anticipates focusing its technical assistance on recipients that demonstrate need as underserved, overburdened, and disadvantaged communities. Technical assistance is for building organizational or community capacity to engage in transportation planning and to identify innovative solutions to infrastructure challenges, including reconnecting communities that are bifurcated by eligible facilities or lack safe, reliable, and affordable transportation options.

<https://www.transportation.gov/grants/reconnecting-communities>

Andrew.Emanuele@dot.gov

FY 2022 Awards announced on February 28.

Contact:





Technical Assistance – Coming Soon!

Active Transportation Infrastructure Investment Program (ATIIP): This FHWA program will distribute \$45 million via competitive grants to State and local governments or organizations to construct projects that provide safe and connected active transportation facilities as part of an active transportation network or active transportation spine. Technical Assistance will be available. **Contact:** Darren.Buck@dot.gov

Build America Center: This USDOT program will offer educational programs, information, and resources for transportation agencies in all areas of alternative and innovative project financing and delivery. It will help public entities access technical assistance in financial planning and innovation project delivery methods, as well as provide education and training. <https://www.transportation.gov/buildamerica/about/build-america-institute/build-america-center>

Neighborhood Access & Equity Grant Program: This \$3.5 billion FHWA program establishes discretionary grants for removing, replacing, or retrofitting highways and freeways to improve connectivity in communities and for planning and capacity building to increase community involvement in transportation planning and related activities. It prioritizes grants that fund projects in economically disadvantaged communities or that meet other criteria. **Contact:** Bernadette.Dupont@dot.gov

For updates go: <https://www.fhwa.dot.gov/livability/index.cfm>



Complete Streets / Complete Networks

- “A complete street is safe, and feels safe, for everyone using the street.” - FHWA Deputy Administrator Stephanie Pollack
- Complete Streets create a *safe, connected, and equitable* transportation network for travelers of all ages and abilities, particularly those from underserved communities facing historic disinvestment.
- Webpage: <https://highways.dot.gov/complete-streets>



BIL/IRA/Budget Provisions that Support Walking/Bicycling and Trails

■ ***Existing programs***

- National Highway Performance Program
- Surface Transportation Block Grant Program
- Transportation Alternatives Set-Aside
- Recreational Trails Program
- Highway Safety Improvement Program
- Congestion Mitigation and Air Quality Improvement Program
- Federal Lands Transportation Program
- Federal Lands Access Program
- Tribal Transportation Program
- National Scenic Byways Program (discretionary)
- Pedestrian and Bicycle Funding Opportunities:
https://www.fhwa.dot.gov/environment/bicycle_pedestrian/funding/funding_opportunities.cfm

■ ***New programs***

- Reconnecting Communities (disc)
- Safe Streets and Roads for All (disc)
- Bridge Formula Program
- Carbon Reduction Program (formula)
- PROTECT (formula)
- Active Transportation Infrastructure Investment Program (disc)
- Wildlife Crossings Program (disc)
- Neighborhood Access and Equity (disc)

■ ***Misc. Provisions***

- National Roadway Safety Strategy
- Complete Streets Report to Congress
- Manual on Uniform Traffic Control Devices
- Vulnerable Road Users Report to Congress

Pedestrian and Bicycle Funding Opportunities: U.S. Department of Transportation Transit, Safety, and Highway Funds

September 9, 2022

This table indicates potential eligibility for pedestrian and bicycle activities and projects under U.S. Department of Transportation surface transportation funding programs. Activities and projects need to meet program eligibility requirements. See notes and basic program requirements below, with links to program information. Project sponsors should integrate the safety, accessibility, equity, and convenience of walking and bicycling into surface transportation projects.

Activity or Project Type	Pedestrian and Bicycle Funding Opportunities: U.S. Department of Transportation Transit, Safety, and Highway Funds																													
	Key: \$ = Activity may be eligible. Restrictions may apply, see program notes and guidance. -\$ = Eligible, but not competitive unless part of a larger project.																													
	OST Programs					Federal Transit					NHTSA		Federal Highway Administration																	
	RAISE	INERA	RCP	SS4A	Thrive	RRIE	TIFIA	ETA	ATI	TOD	AoPP	402	405	BEP BIP BRR	CRP	CMAQ	HSIP	RHCP	NHPP	PRO TECT	STBG	TA	RTP	SRTS	PLAN	NSBP	ELTTP	TIP	TIPSE	
Access enhancements to public transportation (benches, bus pads)	\$	\$	\$	\$		-\$	-\$	\$	\$		-\$				\$	\$			\$	\$	\$	\$				\$	\$	\$		
Americans with Disabilities Act (ADA)/504 Self Evaluation / Transition Plan				\$	TA					\$	\$				\$							\$	\$	\$		\$		\$	\$	
Barrier removal for ADA compliance	\$	\$	\$	\$		-\$	-\$	\$	\$	-\$	-\$			\$	\$					\$	\$	\$	\$	\$	\$		\$	\$	\$	
Bicycle plans			-\$	\$				\$		\$	\$				\$						\$	\$	\$		\$	\$	\$	\$	\$	
Bicycle helmets (project or training related)												\$										\$	\$SRTS		\$			\$		
Bicycle helmets (safety promotion)																						\$	\$SRTS		\$				\$	
Bicycle lanes on road	-\$	-\$	\$	\$		-\$	-\$	\$	\$		-\$				\$	\$	\$	\$	\$	\$	\$	\$	\$	\$		\$	\$	\$	\$	
Bicycle parking (see Bicycle Parking Solutions)	-\$	-\$	\$	\$		-\$	-\$	\$	\$		-\$				\$	\$			\$		\$	\$	\$	\$		\$	\$	\$	\$	
Bike racks on transit	-\$		\$	-\$			-\$	\$	\$		-\$				\$	\$						\$	\$					\$	\$	
Bicycle repair station (air pump, simple tools)	-\$		\$	-\$		-\$	-\$	\$	\$						\$							\$	\$					\$	\$	
Bicycle share (capital and equipment; not operations)	-\$	-\$	\$	-\$		-\$	-\$	\$	\$						\$	\$				\$		\$	\$					\$	\$	
Bicycle storage or service centers (example: at transit hubs)	-\$		\$	-\$		-\$	\$	\$	\$						\$	\$						\$	\$					\$	\$	
Bridges / overcrossings for pedestrians and/or bicyclists	\$	\$	\$	\$		-\$	-\$	\$	\$						\$	\$	\$	\$	\$	\$	\$	\$	\$	\$		\$	\$	\$	\$	
Bus shelters and benches	\$	\$	\$	-\$		-\$	-\$	\$	\$						\$	\$				\$	\$	\$	\$				\$	\$	\$	\$
Coordinator positions (State or local) (limits on CMAQ and STBG)				\$							\$					\$						\$	\$SRTS		\$				\$	
Community Capacity Building (develop organizational skills/processes)				\$	TA					\$	\$															\$			\$	
Crosswalks for pedestrians, pedestrian refuge islands (new or retrofit)	\$	\$	\$	\$		-\$	-\$	\$	\$						\$	-\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Curb ramps	\$	\$	\$	\$		-\$	-\$	\$	\$						\$	\$	-\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Counting equipment		\$	\$	\$			-\$	\$	\$									\$		\$		\$	\$	\$	\$	\$	\$	\$	\$	\$
Data collection and monitoring for pedestrians and/or bicyclists	\$	\$	\$	\$			-\$	\$	\$	\$	\$				\$		\$		\$		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Emergency and evacuation routes for pedestrians and/or bicyclists	\$	\$	\$	-\$			\$	\$	\$	-\$	-\$				\$					\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Historic preservation (pedestrian and bicycle and transit facilities)	-\$		-\$	-\$		-\$	-\$	\$	\$		-\$	-\$			\$							\$	\$				\$	\$	\$	\$
Landscaping, streetscaping (pedestrian/bicycle route; transit access); related amenities (benches, water fountains); usually part of larger project	-\$	-\$	-\$	-\$		-\$	-\$	\$	\$	-\$	-\$				\$					-\$	\$	\$						\$	\$	
Lighting (pedestrian and bicyclist scale associated with pedestrian/bicyclist project)	\$	\$	\$	\$		-\$	-\$	\$	\$		-\$				\$	-\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Maps (for pedestrians and/or bicyclists)				\$				\$	\$	\$	-\$				\$	\$						\$	\$		\$	\$	\$	\$	\$	\$
Micromobility projects (including scooter share)	\$		\$	-\$		-\$	-\$			-\$					\$	\$						\$	\$					\$	\$	\$
Paved shoulders for pedestrian and/or bicyclist use	\$	-\$	\$	\$		-\$	-\$								\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Pedestrian plans	\$	-\$	-\$	\$				\$		\$	\$				\$						\$	\$		\$	\$	\$	\$	\$	\$	\$
Rail at-grade crossings	\$	\$	\$	-\$		\$	\$	\$	\$						\$			\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Recreational trails	\$		\$	-\$			-\$															\$	\$	\$	\$			\$	\$	\$
Resilience Improvements for pedestrians and bicyclists	\$	\$	\$	-\$		-\$	-\$			\$	-\$				-\$	-\$	-\$			\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Road Diets (pedestrian and bicycle portions)	\$	\$	\$	\$		-\$	\$								\$	\$	\$			\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$

Connecting Communities: Integrating Transportation and Recreation

- We can connect and integrate transportation and recreation infrastructure.
- Trails: spines for transportation networks.
- “Transportation” and “Recreation” aren’t an either/or!



Bridges and Tunnels: Essential Links for Networks

- Long life spans: Plan for future demand, use, and reuse.
- Bridges connect communities.



Tunnels and Underpasses: Essential Links for Networks

- Reconnect communities.



Recreational trails used for transportation

- Network spines: rail-trails and other shared use paths.
- No Federal law or regulation requires pavement.
- Accessibility requires “firm and stable”.
- No Federal law or regulation prohibits equestrian use.





Highway Cap Parks



- Transportation purpose
- Trail connectivity
- Trailside and trailhead facilities

The Benefits of Highway Cap Parks: A Report to Congress

- Transportation Benefits: safety and connectivity.
- Economic Benefits: property value and business opportunities
- Social Benefits: cohesion, connections, access to parks and green space
- Environmental Benefits: noise reduction; air quality improvement; stormwater filtration; reduced urban heat island effects; carbon sequestration from park landscaping.





Congestion Mitigation and Air Quality Improvement (CMAQ) Program

- Federal-aid program to help fund transportation projects or programs that contribute to attainment or maintenance of the National Ambient Air Quality Standards.
- Provides funding to State DOTs and MPOs.
- State DOTs and MPOs make planning, programming, and project selection decisions.
- Projects must meet applicable requirements.
- No Federal role in project selection.

CMAQ Eligibility

- **Three basic eligibility elements of CMAQ:**

- ❖ **Transportation project**

- ❖ **Emissions reduction**

- ❖ **Nonattainment or maintenance area**

- **Eligible project types**

- ❖ Transit improvements

- ❖ Traffic flow improvements

- ❖ Shared ride services

- ❖ Demand management

- ❖ Bicycle and pedestrian projects

- ❖ Alternative fuels

- ❖ Inspection and maintenance programs

- ❖ Freight services

- ❖ Experimental pilots

- ❖ Diesel retrofits

- ❖ Anti-idling facilities

- For more information, visit FHWA's CMAQ website

- https://www.fhwa.dot.gov/environment/air_quality/cmaq/

- View CMAQ 101 video: <https://www.youtube.com/watch?v=XKXcs0WtNHA>

Transportation Alternatives

Background

- Nearly 40,000 projects since 1992: \$14.6 billion
- 10% of Surface Transportation Block Grant (STBG) Program: \$1.4 billion/year
- Projects also eligible for STBG funds.
- Up to \$84 million/year set-aside for Recreational Trails Program
- See https://www.fhwa.dot.gov/environment/transportation_alternatives/
- [Guidance](#) issued March 30, 2022



Photo source: American Tobacco Trail, Durham NC and Holmes County Rail-Trail, Ohio: National Transportation Enhancements Clearinghouse project library



Suballocation

State's Transportation Alternatives Set-Aside

Set-Aside for Recreational Trails Program (unless Governor opts out)

59% Suballocated to sub-State areas based on relative population size.

- Cannot be transferred to other categories.

41% any area of State: State competitive process.

- State may develop process to suballocate 100%.
- Funds available for transfer only after State holds a competitive process.

Urbanized areas with populations over 200,000.

- Suballocated to each urbanized area over 200,000 by relative population.
- MPOs for urbanized areas select projects.

Urbanized areas with population 50,000 to 200,000.

Urban areas with population 5,000 to 49,999.

Areas with population less than 5,000.



NEW: State Technical Assistance

- State may use up to 5% of funds to provide technical assistance.
- Purpose:
 - Administer program.
 - Provide technical assistance to potential applicants.
 - Assist application process, planning, design, NEPA, permits, project management.
- State may hire staff or issue contracts to other entities.
 - State may assist MPOs with their processes.
- May include a State Safe Routes to School coordinator.





Transfers: New Provisions

Transfers to other Federal-aid programs

- **NEW:** Transfers out only allowed from the 41% not suballocated.
- **NEW:** Before a State may transfer funds out, it must:
 - Hold competitive grant opportunity.
 - Offer and provide technical assistance to applicants.
 - Demonstrate lack of suitable applications.

Other Transfers

- States may transfer other funds *to* TA without new restrictions.
- Transit Flex: States may transfer selected projects to FTA to administer.





Federal Share

- **Generally: 80% Federal share, with sliding scale**
- **Flexibility:**
 - HSIP funds credit, programmatic Federal share, financial controls
 - Some Safety projects may be up to 100%
 - Projects on Federal lands
 - Tribal and Federal land transportation funds may match
 - **In-kind match is permitted (23 U.S.C. 323(c)).**
- **Recreational trails using FHWA apportioned funds use RTP match.**
- RTP funds may match or be matched by other Federal funds.



Transportation Alternatives

Competitive project selection process

- TA Set-Aside projects must be selected through a competitive process submitted by eligible entities.
- Metropolitan Planning Organizations (MPOs) select projects for large urbanized areas (over 200,000).
- State DOTs select projects for “any area”, small urbanized, small urban, and rural funds.
- States may develop a process to further suballocate.
- **New:** Prioritization for high-need areas.



Top photo source: Red Creek Bridge over I-75, near MI-134. Coalition for Recreational Trails, www.americantrails.org/awards/CRT05awards/redcreek.html.

Bottom photo source: Marjorie Harris Carr Cross Florida Greenway Land Bridge over I-75, south of Ocala FL, www.americantrails.org/i/resourceimages/landbridge2.jpg.

Transportation Alternatives

Eligible Project Sponsors

- Local governments;
- Regional transportation authorities;
- Transit agencies;
- Natural resource or public land agencies;
 - May include Federal, State, or local public land agencies
- School districts, local education agencies, or schools;
- Tribal governments;
- **New:** Metropolitan Planning Organization for small urbanized area (under 200,000);
- Nonprofit entity (previous restrictions removed)
- Any other local or regional governmental entity with responsibility for oversight of transportation or recreational trails (other than an MPO or a State agency) that the State determines to be eligible...
- **New:** State DOT, only at request of another eligible entity.
- *RTP project sponsors determined by States.*



Photo source: Stuart Macdonald,
American Trails: www.americantrails.org

Transportation Alternatives

Eligible Projects

The TA Set-Aside authorizes funding for programs and projects defined as ***transportation alternatives***, including:

- On- and off-road pedestrian and bicycle facilities, including trails for nonmotorized use.
- Construction of turnouts, overlooks, and viewing areas.
- Community improvement activities:
 - Historic preservation
 - Vegetation management
- Environmental mitigation for stormwater and habitat connectivity
- Recreational trail projects
- Safe routes to school (SRTS) projects
- Vulnerable Road User Safety Assessments



Photo source: Pedestrian and Bicycle Information Center: www.pedbikeimages.org.

Top: Olympia, WA, 2006 by [Dan Burden](#) Bottom: Ft Pierce, FL, 2006 by [Dan Burden](#)

Transportation Alternatives

Related Eligibility



TA eligibility includes:

- All projects eligible under SRTS and RTP
- All pedestrian and bicycle projects eligible under 23 U.S.C. 217

23 U.S.C. 217 includes:

- **New:** Shared micromobility; new definition for electric bicycles

STBG eligibility includes:

- All projects eligible under TA Set-Aside
- **Newly Clarified:** STBG allows recreational trail maintenance and restoration



Treatment of Projects

- Generally: STBG projects, including TA Set-Aside, must be treated as projects on a Federal-aid highway.
- Excludes: Recreational Trails Program (RTP) projects.

New under BIL:

- Any recreational trail funded under 23 U.S.C. 104(b) to use same procedures State uses for RTP projects.



Recreational Trails Program Purpose



- Provides funds to the States to develop and maintain recreational trails for all trail uses.
- Usually administered through a State resource agency.
- \$1.5 billion for 26,500 projects since 1993.
- Up to \$84.1 million/year, apportioned at 2009 levels.
- Part of \$281 million in Fed motor fuel excise tax paid by OHV users.
- States solicit and select projects for funding.
- 80% Federal share, with flexibility.
 - RTP funds may match or be matched by other Federal funds.
 - Some in-kind may be donated prior to project approval.
- Project sponsors are encouraged to use [Youth Corps](#).
- No changes in BIL except new provision to treat any recreational trail project as an RTP project.



State Trail Administrators build a boardwalk, White Clay Creek State Park, DE, September 21, 2005.
Source: FHWA.

RTP Eligible Projects

- Maintain and restore existing trails (and bridges).
- Develop and rehabilitate trailside and trailhead facilities.
- Purchase and lease trail construction and maintenance equipment.
- Construct new trails (limits on Federal lands).
- Acquire easements or property for trails (willing seller only: Condemnation is prohibited).
- Trail assessments for accessibility and maintenance.
- Trail safety and environmental protection education.
- State administrative costs.
- RTP projects also eligible under TA Set-Aside and STBG.



Top left: Meduxnekeag River Bridge (Maine): www.americantrails.org/awards/CRT09awards/Meduxnekeag-Trail-Maine-09.html

Top right: Western Wyoming Avalanche detection. www.americantrails.org/awards/CRT04awards/WWyoAvalanche.html

Bottom: NOHVCC Trailer (Tom Umphress, NOHVCC)

RTP Project Examples



Recreational Trails Program Annual Report

https://www.fhwa.dot.gov/environment/recreational_trails/

- \$1.5 billion for 26,500 projects since 1993

Recreational Trails Program Database

- More than 26,500 project examples
- Searchable by State or project type
- See <http://recreationaltrailsinfo.org/>



Photo source: Peter Axelson, Beneficial Designs

Transportation Alternatives

Safe Routes to School (SRTS)



- **New:** SRTS codified as 23 U.S.C. 208
- **New:** Expanded to K-12 (from K-8)
- **New:** Expanded eligibility under HSIP
- No dedicated SRTS funding, so references in section 208 related to apportionments cannot be required.
- SRTS projects broadly eligible under STBG and TA Set-Aside.



Youth Corps and Workforce Development

- **MAP-21 Section 1524, Youth Corps, is still in effect.**
- DOT encourages States to have contracts and cooperative agreements with qualified Youth Service and Conservation Corps.
- TA projects, trails, pedestrian and bicycle, safe routes to school, byways.
- Corps provide workforce development training.
- **Agencies can sole source contracts and agreements to qualified Corps.**
- https://www.fhwa.dot.gov/environment/transportation_alternatives/guidance/youth_workforcedev_2018.cfm
- The Corps Network: [Trails and Transportation](#) webpage.





Trail Planning and Design Guidance and Research

- Many Trail Resources available
- RTP [Publications](#) Page
- [Rails-with-Trails: Best Practices and Lessons Learned](#)
- Many Forest Service documents
- **NEW:** [Trails and Resilience: Review of the Role of Trails in Climate Resilience and Emergency Response](#)
- **NEW:** [The Future of E-Bikes on Public Lands Research Study](#)



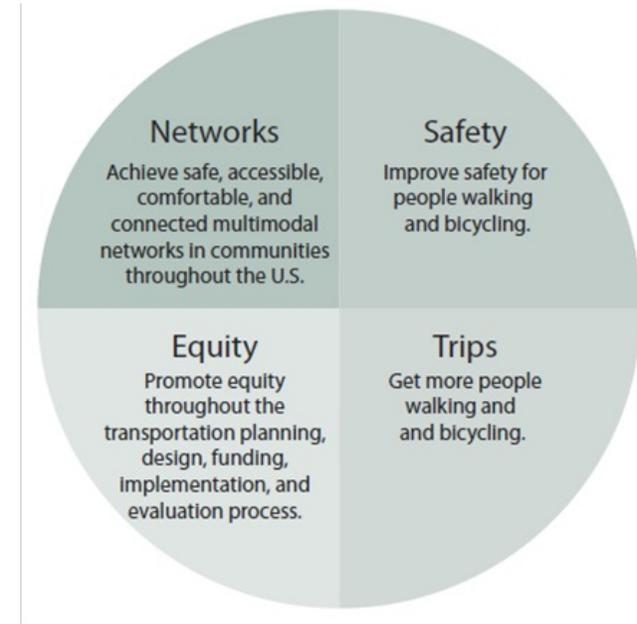


Pedestrian and Bicycle Planning and Design Guidance and Research

- Many Publications and Resources available
- Coming Soon:
 - FHWA Guidance: Bicycle and Pedestrian Planning, Program, and Project Development
 - Ebike Literature Review and Case Studies



USDOT Strategic Goal, and New Strategic Agenda



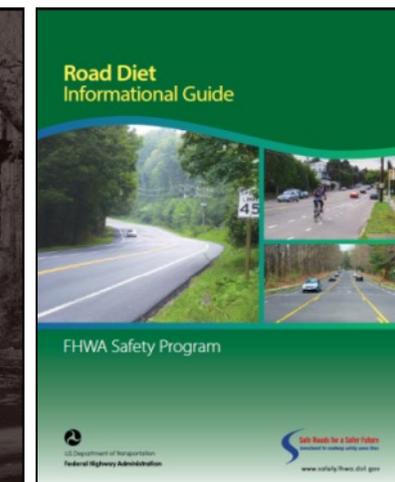
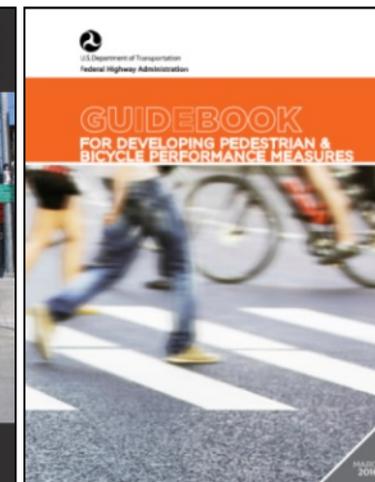
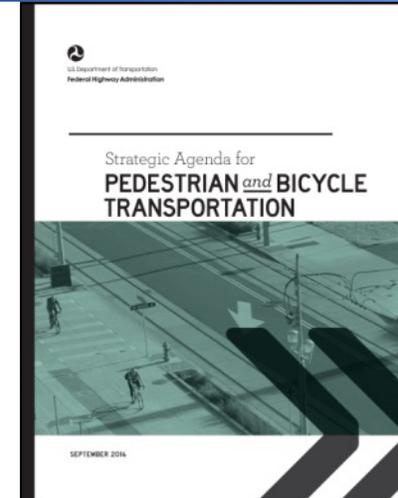
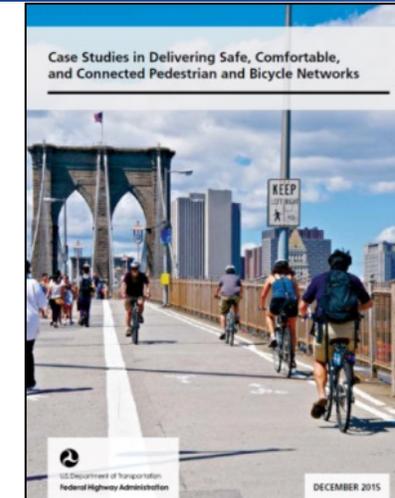
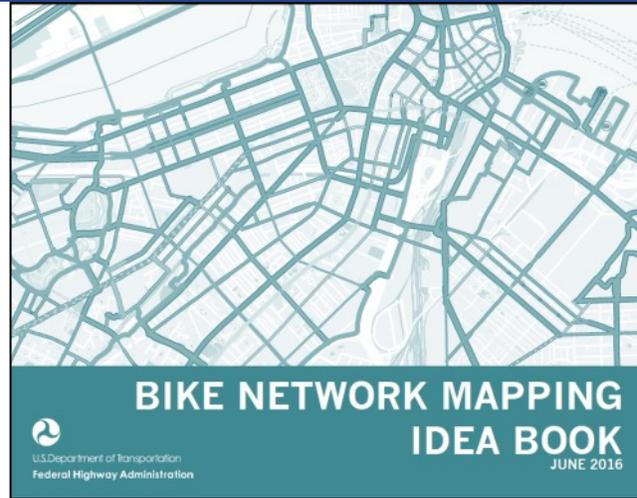
- Increase the percentage of person trips by transit and active transportation modes from roughly 4% in 2020 to 6%.
- That's 50% more!



U.S. Department of Transportation
Federal Highway Administration



Recent FHWA Pedestrian and Bicycle Resources



U.S. Department of Transportation
Federal Highway Administration

All available for download at:
https://www.fhwa.dot.gov/environment/bicycle_pedestrian/

Planning and Designing Bicycle Facilities for All Ages and Abilities



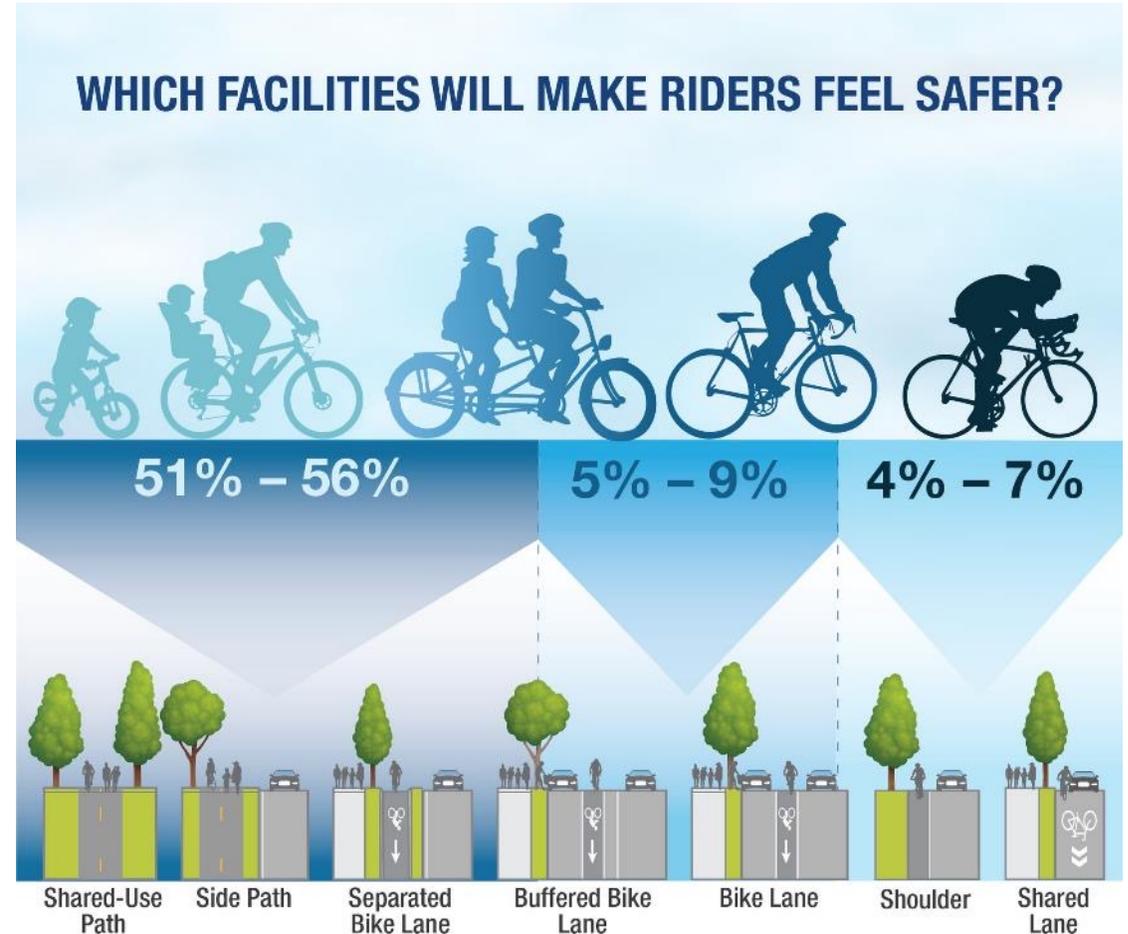
Bicycle Network Planning & Facility Design Approaches
in the Netherlands and the United States

FHWA Global Benchmarking Program

U.S. Department of Transportation
Federal Highway Administration



U.S. Department of Transportation
Federal Highway Administration
Office of International Programs



Note: Percentages represent the level of comfort that people feel bicycling, according to peer-reviewed surveys as recently as 2016.
Source: FHWA Bikeway Selection Guide: https://safety.fhwa.dot.gov/ped_bike/tools_solve/docs/fhwasa18077.pdf
For more information, please visit FHWA's Bicycle and Pedestrian Program webpage: https://www.fhwa.dot.gov/environment/bicycle_pedestrian/

Bike Network Mapping Idea Book

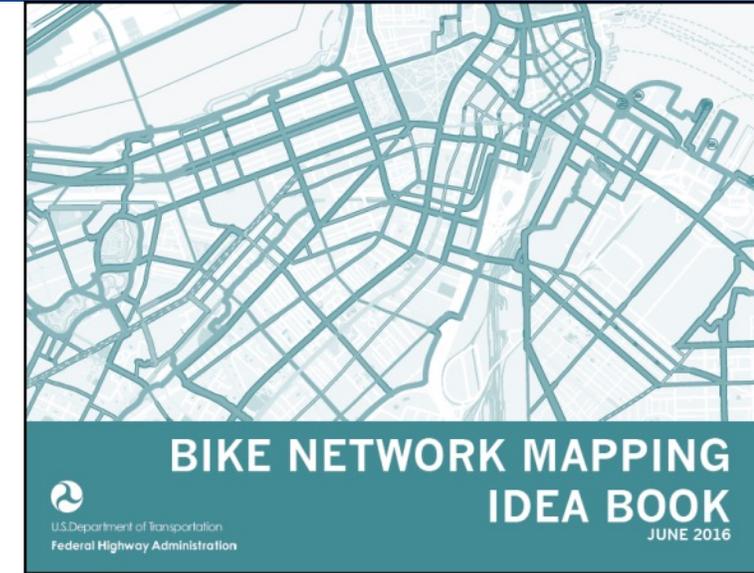


Provides examples of how bikeway map designers communicate:

- Connected networks
- Mapping techniques
- Local context

Available at:

https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/bikemap_book/



HENNEPIN COUNTY, MN

LOCATION	YEAR	PUBLICATION	RESPONSIBLE AGENCY
HENNEPIN COUNTY, MN	2015	HENNEPIN COUNTY BIKE PLAN	HENNEPIN COUNTY

Full Map (Click to view full size)

KEY MAP FEATURES

- Simple symbology - Two colors and two line types
- Map focuses on county and state roads. Local roads not shown to improve legibility.
- Downtown area is shown in more detail for closer inspection

COUNTY

LEGEND

- On-street bikeway system
 - Existing on-street bikeway
 - Planned on-street bikeway
- Off-street bikeway system
 - Existing off-street bikeway
 - Planned off-street bikeway

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Hennepin County
Transportation Department

Three Rivers
Bicycle Solutions

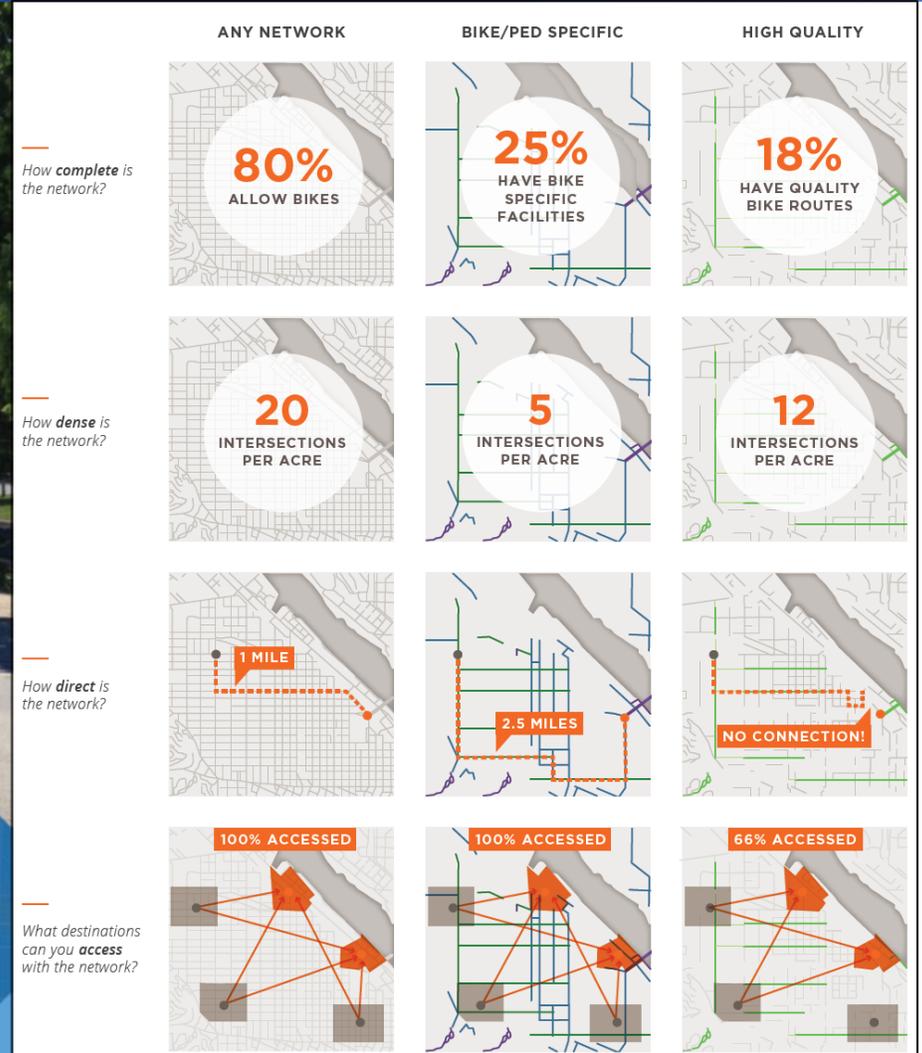
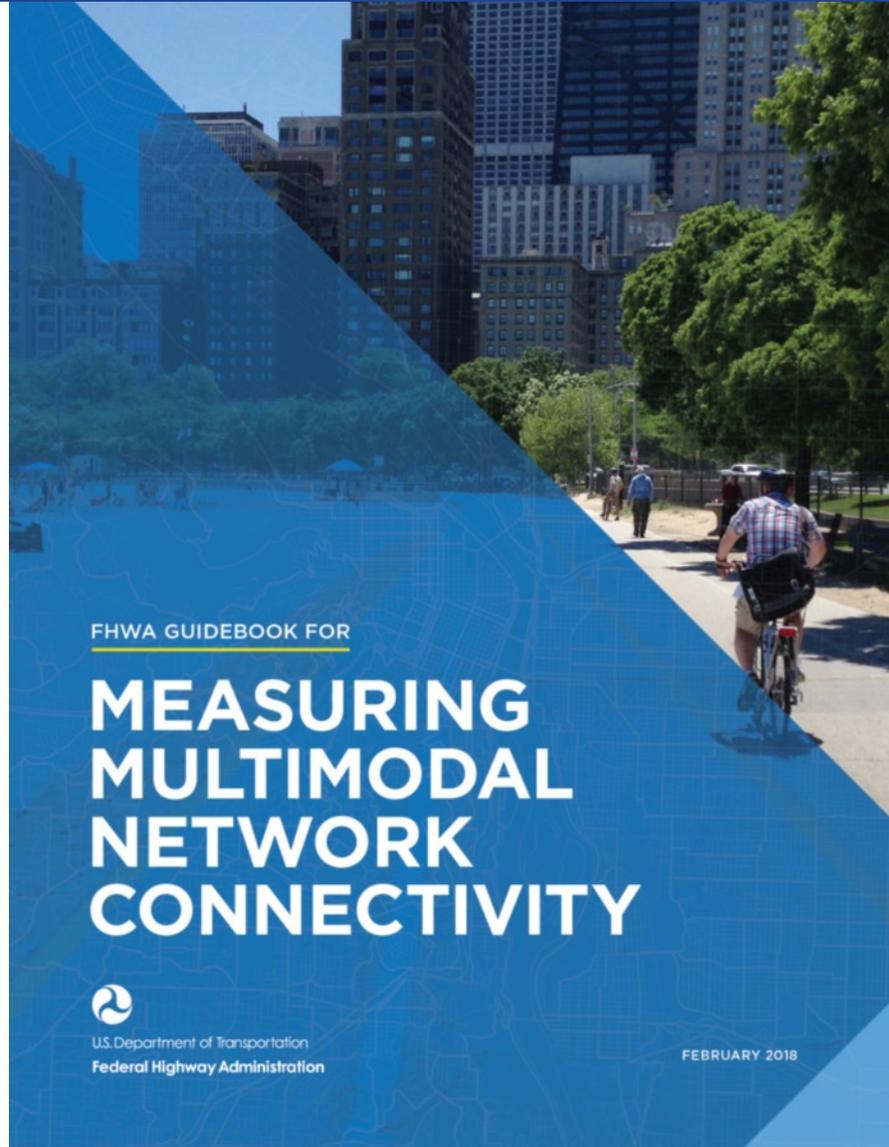


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FHWA Guidebook for Measuring Multimodal Network Connectivity



Images from:
https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/multimodal_connectivity/



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Federal Highway Administration

FEBRUARY 2018

Achieving Multimodal Networks: Applying Design Flexibility and Reducing Conflicts



ACHIEVING MULTIMODAL NETWORKS

APPLYING DESIGN FLEXIBILITY
& REDUCING CONFLICTS



- Provide design flexibility, while reducing multimodal conflicts and achieving connected networks.
- Help practitioners address topics such as:
 - Intersection design
 - Road diets
 - Pedestrian crossing treatments
 - Transit and school access
 - Freight
 - Accessibility



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AUGUST 2016

FHWA Small Town and Rural Multimodal Networks



- Provide a bridge between existing guidance on bicycle and pedestrian design and rural practice.
- Encourage innovation in development of safe and appealing networks for bicycling and walking in small towns and rural areas.
- Provide examples of peer communities and project implementation that is appropriate for rural communities.

Available at:

www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/small_towns/



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Equity



U.S. Department of Transportation

Equity Action Plan
January 2022



U.S. Department of Transportation
Federal Highway Administration

Equity
RELATED TOPICS: Vision Zero, Health, Community Engagement

Historically, many low-income communities and underserved populations have been left out of conversations about transportation planning and this has led to unsafe conditions where pedestrians and bicyclists are over-represented in crashes. An equitable transportation system fosters fairness and helps facilitate access to opportunities for all community members. Equity can be considered both a process and an outcome. To achieve transportation equity, communities must engage in inclusionary, authentic outreach to address underlying disparities of mobility and access and prioritize equity during all stages of the planning and implementation process. This involves building an accessible, affordable, and reliable transportation network that effectively serves all people. Discriminatory enforcement of traffic laws is a form of transportation inequity.

Transportation equity requires understanding the unique needs and safety concerns of different populations and providing the appropriate amount of resources to each group. Numerous studies have shown that enhancing the ability of traditionally underserved populations to travel via nonmotorized modes can potentially lead to improved outcomes in public health, safety, and economic development; promote economic development and resource efficiency; strengthen inclusive neighborhood relations; and bolster public transit services. Benefits of an equitable transportation system positively impact the entire community.

Resources	Examples	Related Webinars
Pursuing Equity in Pedestrian and Bicycle Planning provides an overview of transportation equity, nonmotorized transportation options for traditionally underserved populations, and strategies for improving equity for	America Walks Social Justice Toolkit provides tools and resources to consider equity and mitigate disparities by working towards healthy, productive walking environments for everybody.	Pursuing Equity in Pedestrian and Bicycle Planning (6/26/2016) Transportation Equity: Issues and Approaches to Reduce Disparities in Access to Pedestrian and Bicycle

Pursuing Equity in Pedestrian and Bicycle Planning

April 2016

Laura Sandt, Ph.D.
Tabitha Combs, Ph.D.
Jesse Cohn, MRP

For:
U.S. Department of Transportation
Federal Highway Administration

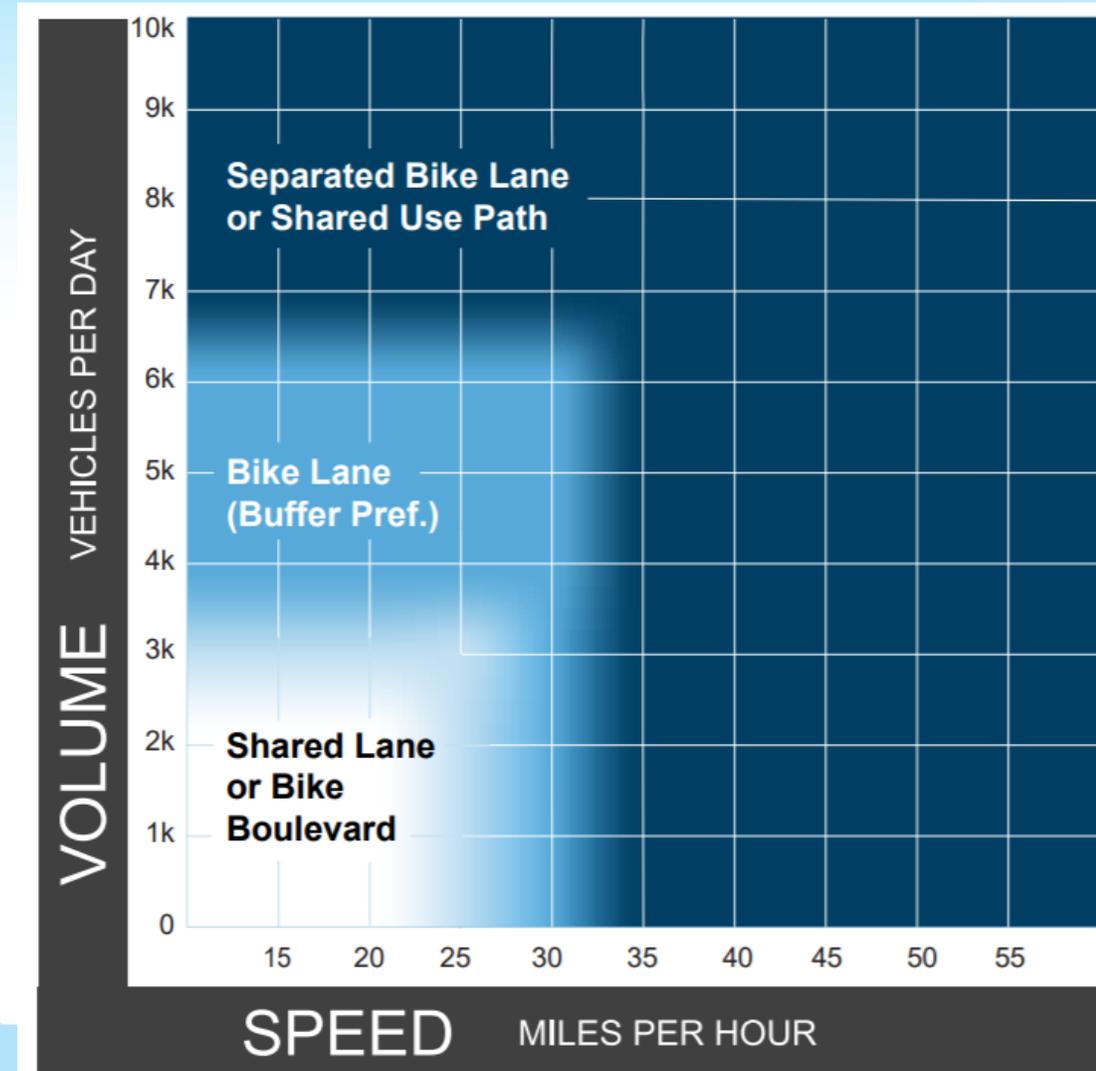
Pedestrian and Bicycle Information Center
www.pedbikeinfo.org

Images from: <https://www.transportation.gov/priorities/equity/actionplan> and <https://www.pedbikeinfo.org/topics/equity.cfm>



Bikeway Selection Guide

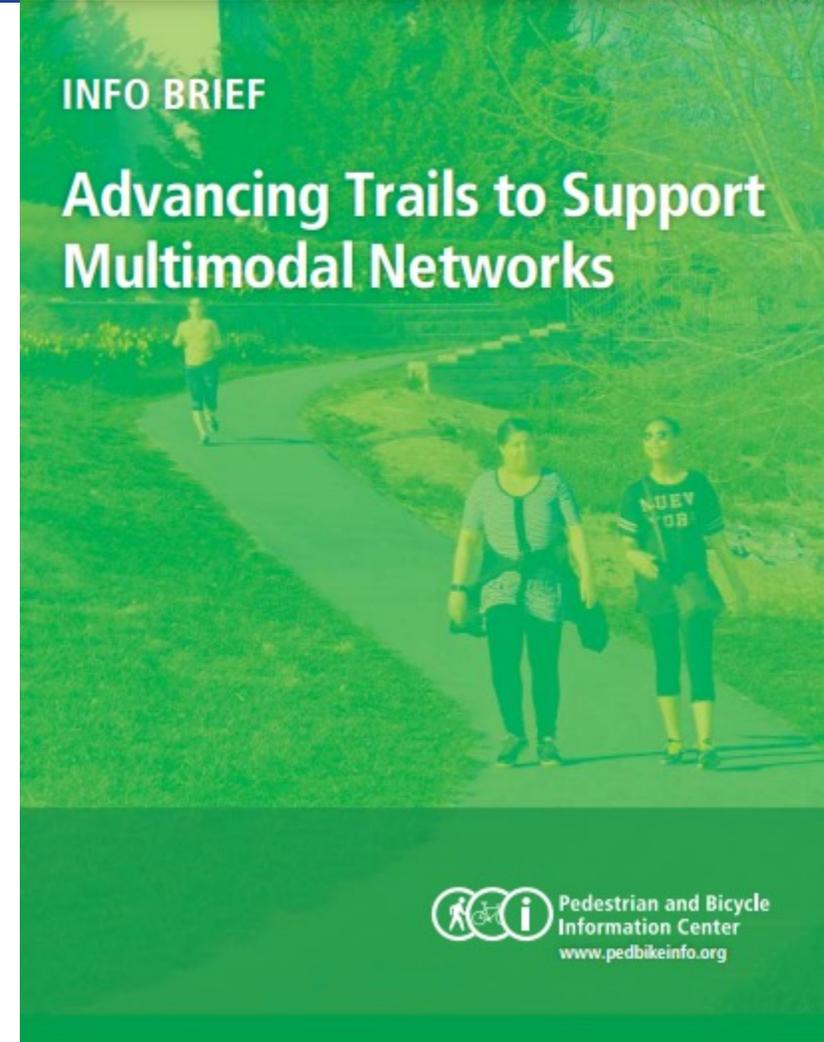
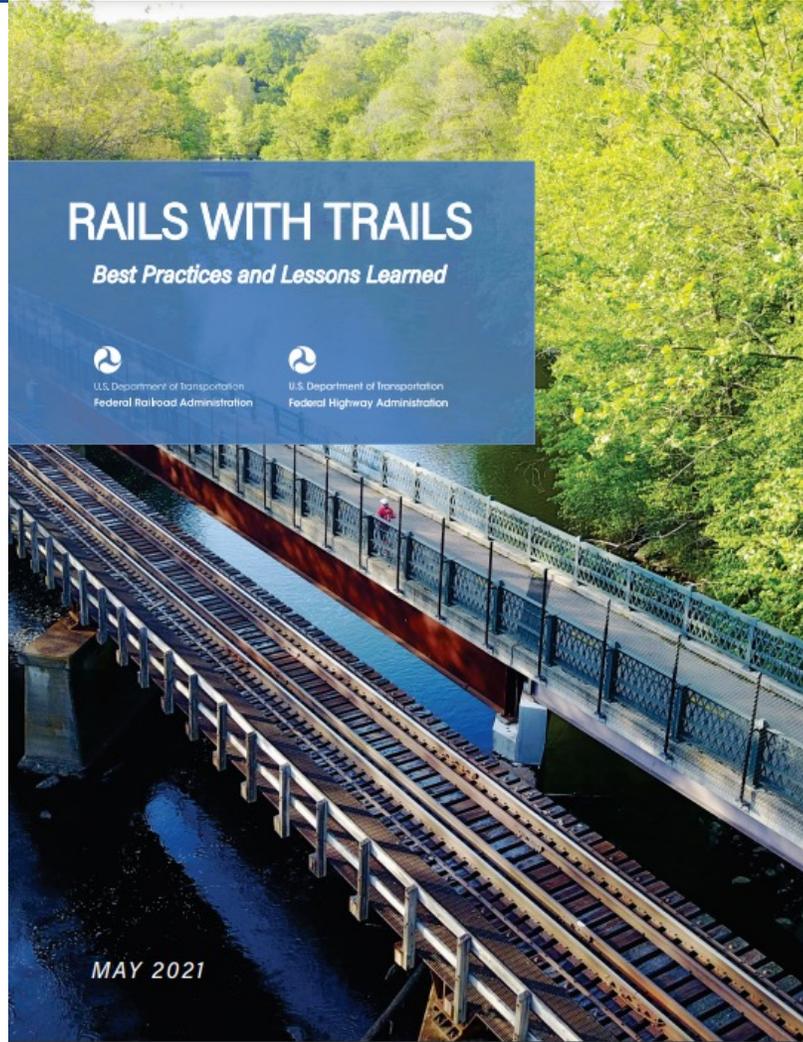
- Help practitioners make informed decisions about tradeoffs relating to the selection of bikeway types.
- Highlight linkages between the bikeway selection process and the transportation planning process.
- Emphasizes engineering judgment, design flexibility, documentation, and experimentation.
- Available at:
https://safety.fhwa.dot.gov/ped_bike/tools_solve/docs/fhwasa18077.pdf



Trails



- Trails are a low-stress and safe bikeway type
- Trails enhance access to transit, and complement it



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FHWA Newsletters



- **Human Environment Digest (Monthly):**
https://www.fhwa.dot.gov/livability/he_digest/
 - Every second Thurs of month



- **Fostering Multimodal Connectivity Newsletter (Quarterly):**
<https://www.fhwa.dot.gov/livability/newsletter/>
 - Published: Jan 2023, Next: Winter/Spring Edition (April 2023)



- **Research Review Newsletter (Quarterly):**
http://www.fhwa.dot.gov/hep/hep_research/
 - Just published: April 12, 2023.





Keys to Success

DOT Navigator: <https://www.transportation.gov/dot-navigator>

National Roadway Safety Strategy <https://www.transportation.gov/SS4A>

FHWA BIL: <https://www.fhwa.dot.gov/bipartisan-infrastructure-law/>

FHWA Complete Streets: <https://highways.dot.gov/complete-streets>

FHWA Pedestrian and Bicycle Program

https://www.fhwa.dot.gov/environment/bicycle_pedestrian/

Transportation Alternatives

https://www.fhwa.dot.gov/environment/transportation_alternatives/

Recreational Trails Program

https://www.fhwa.dot.gov/environment/recreational_trails/





Contacts

FHWA Website: <https://www.fhwa.dot.gov/bipartisan-infrastructure-law/>

Project Sponsors: Contact your State TA or RTP manager.

States: Contact your FHWA Division office.

- Transportation Alternatives:
www.fhwa.dot.gov/environment/transportation_alternatives/
 - State TA Manager contacts
- RTP: www.fhwa.dot.gov/environment/recreational_trails/
 - State RTP Administrator contacts

National TA Set-Aside and RTP oversight:

Christopher Douwes, Community Planner

Transportation Alternatives

Recreational Trails Program

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