



rails-to-trails
conservancy

ACCESSIBILITY ON RAIL-TRAILS AND OTHER SHARED-USE PATHS

MAR. 4, 2022 WEBINAR



Join the Trail Expert Network (TEN) today

The screenshot displays the Trail Expert Network website interface. At the top left, there is a section titled "Trail-Building Toolbox" with a sub-header "Basics" and a brief description: "Here you'll get all the basics for creating a vibrant rail-trail for your community, including technical tips and tried-and-true methods for generating neighborhood, political and funding support for your project." Below this is a "facebook" link. A sidebar on the left lists "Topics in this section" with icons for "Corridor Research" and "Acquisition Strategy". The main content area features the "Trail Expert Network" logo and "rails-to-trails conservancy" branding, dated "January 2020". It includes navigation links for "Web Version", "Update Preferences", and "Subscribe", along with social media icons. The featured article is titled "Railbanking Changes" and includes a photograph of railroad tracks. The article text states: "As of Feb. 2, 2020, the Surface Transportation Board (STB) is modifying the railbanking negotiation timeline under the National Trails System Act (Trails Act). The rule change reflects that upon the STB granting interim trail use: 1) the involved parties have an initial negotiation term of one year; 2) If the trail sponsor and

- Exclusive newsletter
- Grant Announcements
- Trail-Building Toolbox
- Webinar library
- Peer-to-peer learning on TEN Facebook group

Join at rtc.li/TEN



Juliet Shoultz



Juliet Shoultz joined the Access Board's Office of Technical and Information Services in 2017 as a Transportation Systems Engineer. She has fifteen years of experience in transportation planning and engineering for state government. Prior to working at the Access Board, she worked as the Americans with Disabilities Act (ADA) Policy Engineer at the Illinois Department of Transportation, where she led development and implementation of the department's ADA transition plan, and served as the department's accessibility expert, providing technical assistance and reviewing plans for state projects. She previously served as a member of the Illinois Accessibility Code Revision Committee, which was tasked with revising the Illinois Accessibility Code. Shoultz has been an active participant as a member of a National Cooperative Highway Research Program (NCHRP) panel and Transportation Research Board (TRB) standing committees.

Christopher Douwes



Christopher Douwes is a Community Planner with the Federal Highway Administration (FHWA) in Washington DC. He has managed the [Recreational Trails Program](#) (RTP) since 1992, [Transportation Enhancement](#) activities since 2003, [Transportation Alternatives](#) since 2012, and has assisted with [Bicycle and Pedestrian Activities](#) since 1992. He manages contracts for research, technology development, technical assistance, and training for trail and bicycle and pedestrian-related activities. Christopher received his Masters of Science in Transportation from Northwestern University in 1990.

Matt Ludwig



Matt is a licensed civil engineer and certified planner with over 14 years' experience on a wide variety of transportation projects, which includes specialized expertise in the planning, design, and management of active transportation facilities. His experience includes trails and greenways, bicycle lanes, complete streets, urban bicycling and pedestrian networks, Vision Zero, and first/last mile solutions. Matt leads the Active Transportation planning and design practice in NV5's Philadelphia office.



rails·to·trails
conservancy

Railstotrails.org



Accessible Trails and Shared Use Paths

Trails



Key Elements of Trails

- Designed for the “recreation experience”
- Does not connect elements and spaces on a site
- Generally, includes a trailhead
- Has limited to no transportation function



Architectural Barriers Act

Chapter 10: Recreation Facilities

- 1011 Outdoor Constructed Features
- 1012 Parking Spaces within Accessible Camping Units and Picnic Units
- 1013 Tent Pads and Tent Platforms
- 1014 Camp Shelters
- 1015 Viewing Areas
- 1016 Outdoor Recreation Access Routes
- **1017 Trails**
- 1018 Beach Access Routes
- 1019 Conditions for Exceptions

Architectural Barriers Act (ABA) Standards (2015)

Note: This edition includes new provisions for outdoor developed areas and emergency transportable housing.

Adopted by the:
Department of Defense (2008)
General Services Administration (2005)
U.S. Postal Service (2005)



Covered

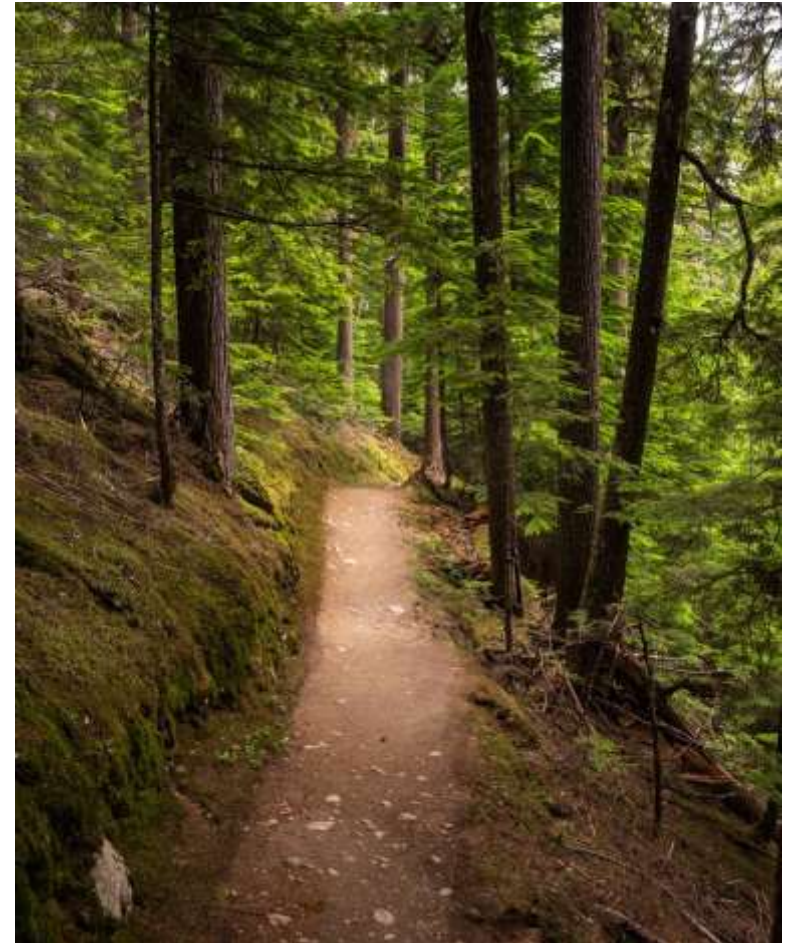
Not Covered

- Facilities constructed or altered by
 - Federal agencies
 - Non-federal entities constructing facilities on federal land on behalf of federal agencies e.g., a concession contract, partnership agreement, or similar arrangement

- Facilities subject to ADA
- ADA facilities built or altered with Federal grants and loans (ABA)

Trail Width

- 36 inches minimum width
- 5ft x 5ft passing space every 1000ft if trail width is less than 60 inches



Trail Slope/Grade

Running Slope of Trail Segment		Maximum Length of Segment
Steeper than	But not Steeper than	
1:20	1:12	200 feet (61 m)
1:12	1:10	30 feet (9 m)
1:10	1:8	10 feet (3050 mm)

Other Trail Technical Requirements

- Cross slope for trails constructed of concrete, asphalt, or board 1:48 max.
 - Otherwise 1:20 max.
- Surface must be firm and stable
- Gates and barriers – clear width, gate hardware operable parts



Tread Obstacles

- Measured vertically to the highest point
- If trail surface is constructed of concrete, asphalt, or board ½ inch max
 - Otherwise 2 inches max
- Openings – ½ inch maximum



Protruding Objects

- Constructed elements on trails (ex. Signs & other post mounted objects)
- Resting intervals and passing spaces
- Compliance with 307



Signage

Required information

- Length of the trail or trail segment
- Surface type
- Tread width (typical & minimum)
- Running and cross slope (typical & maximum)



Trailheads

- Outdoor space developed to serve as an access point to a trail
- Not a junction of two or more trails where no other access point is provided
- 20% of each type of outdoor constructed feature provided within trailhead to be accessible



Conditional Exceptions

- Compliance is not practicable due to terrain
- Compliance cannot be accomplished with the prevailing construction practices



Conditional Exceptions



- Compliance would fundamentally alter the function or purpose of the facility or the setting
- Compliance is precluded by the:
 - Endangered Species Act;
 - National Environmental Policy Act;
 - National Historic Preservation Act;
 - Wilderness Act; or
 - Other Federal, State, or local laws

Conditional Exceptions

- Apply on a provision-by-provision basis
- Where full compliance with a technical provision is not possible because of the limitations and constraints included in the conditional exceptions...“extent practicable”

Shared Use Paths



Key Elements of Shared Use Paths

- Intended for multi-use
- Bicycle/transportation focus
- Machined, layered surface (improved)
- Located in either an “independent corridor” or public right-of-way



PROWAG

- Board working to finalize Public Right-of-Way Accessibility Guidelines (PROWAG) – aiming to complete rule Fall 2022
- Once adopted and implemented as enforceable standards, will apply to the construction and alteration of facilities covered by the ADA, the ABA, and the Rehabilitation Act (Section 504)

Shared Use Path width

- PROWAG does not specify a minimum path width
- However, entire path width must meet accessibility requirements
- Passing space every 200ft if shared use path width is less than 5ft

Grade of Shared Use Path located within the Right-of-Way

Pedestrian access routes located within street right-of-way shall not exceed the general grade established for the adjacent street.



Grade of Shared Use Path located outside the Right-of-Way

Where pedestrian access routes are **not** contained within a street right-of-way

Grade: 5 % max.



Shared Use Path Cross Slope



Cross Slope Exception at Signalized Intersection

- Shared use path pedestrian street crossings without yield or stop control

Cross slope: 5% max



Cross Slope Exception at Midblock Crossing



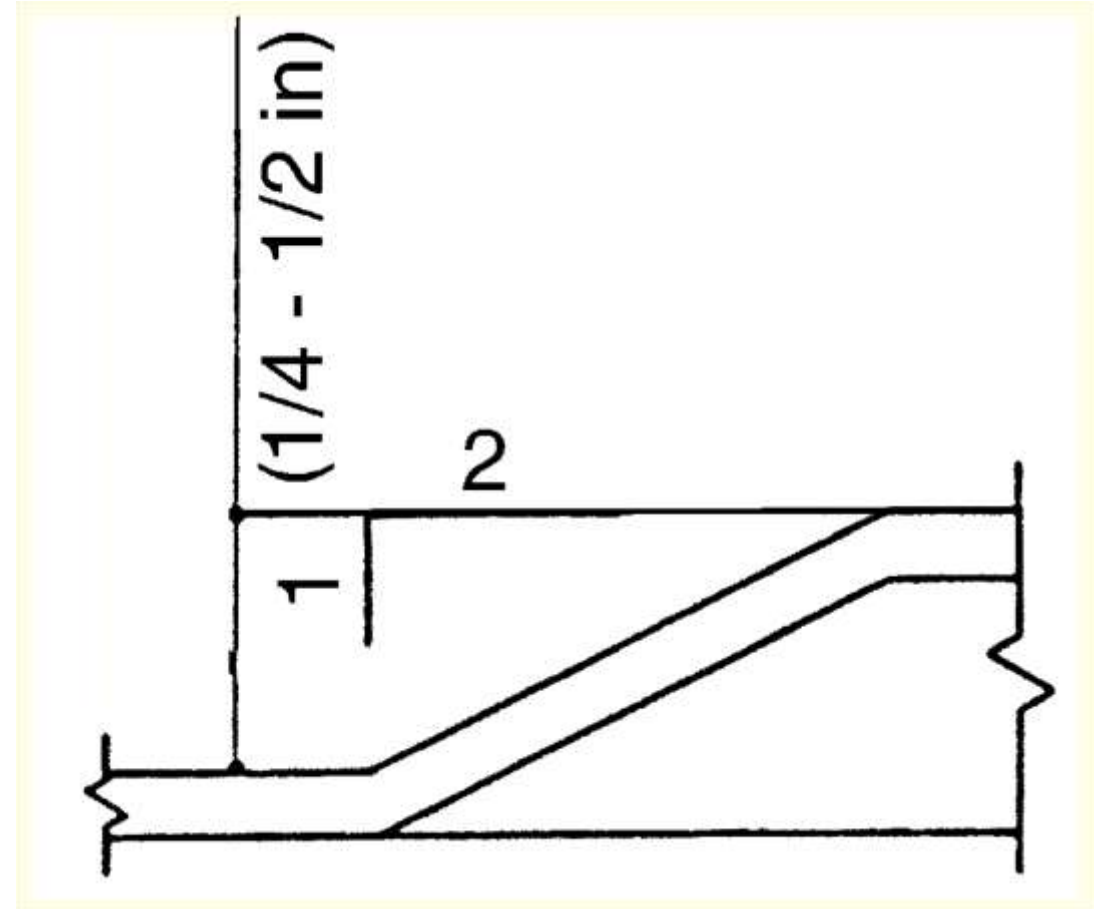
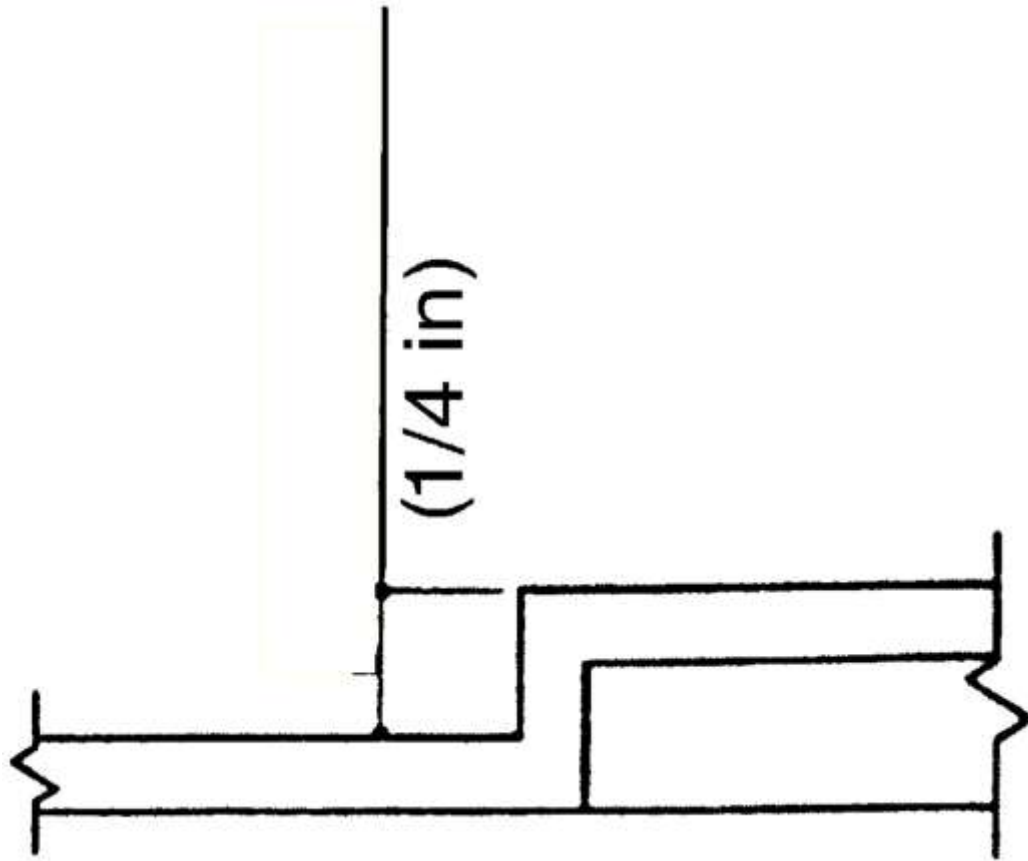
- Shared use path midblock pedestrian street crossings
Cross slope can equal street or highway grade

Shared Use Path Surface

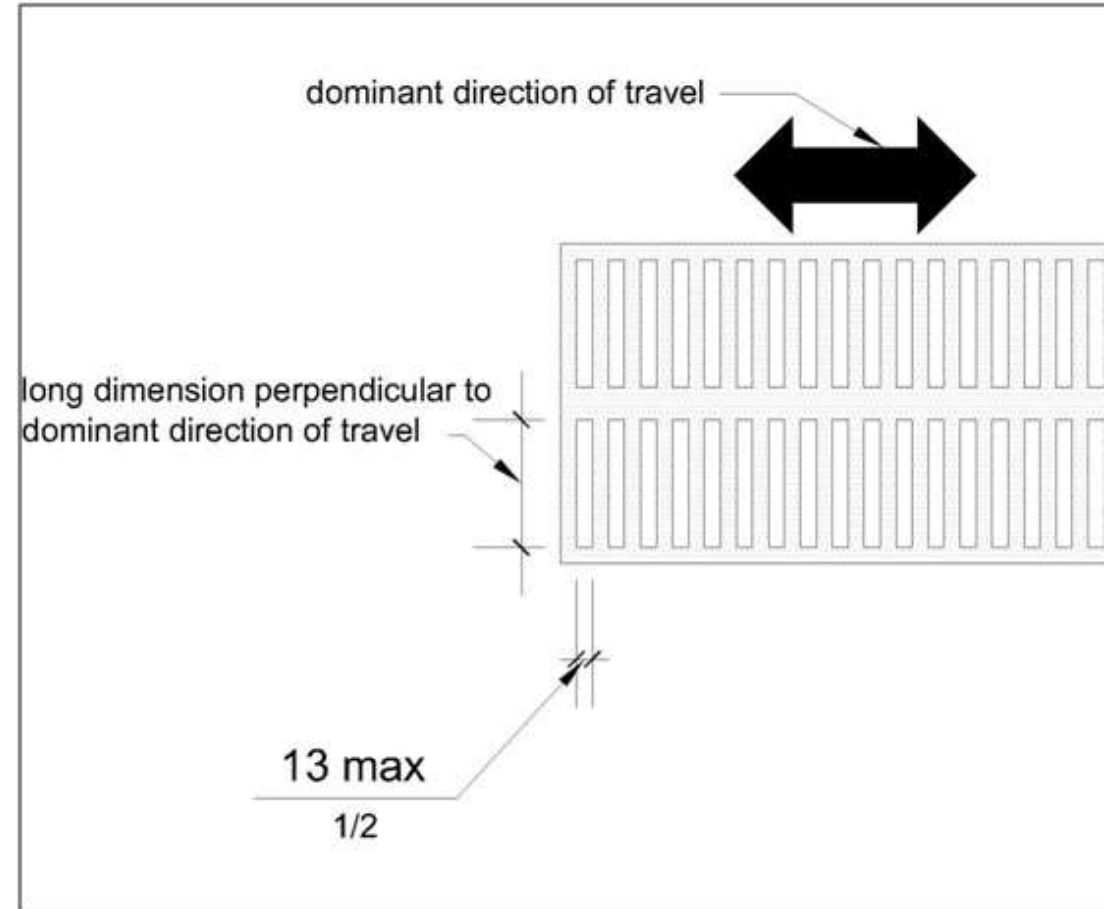
- Firm
- Stable
- Slip resistant



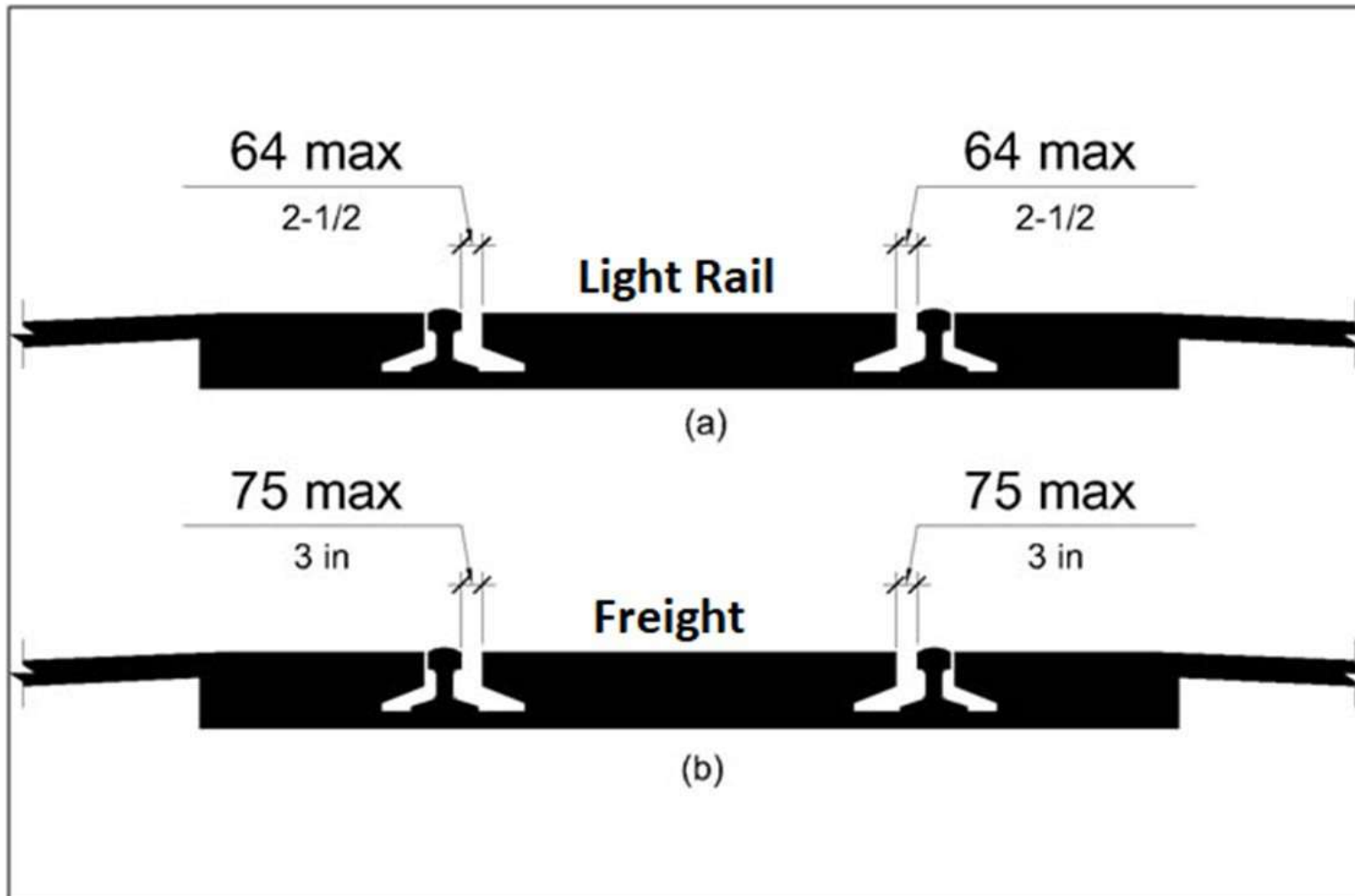
Changes in Level



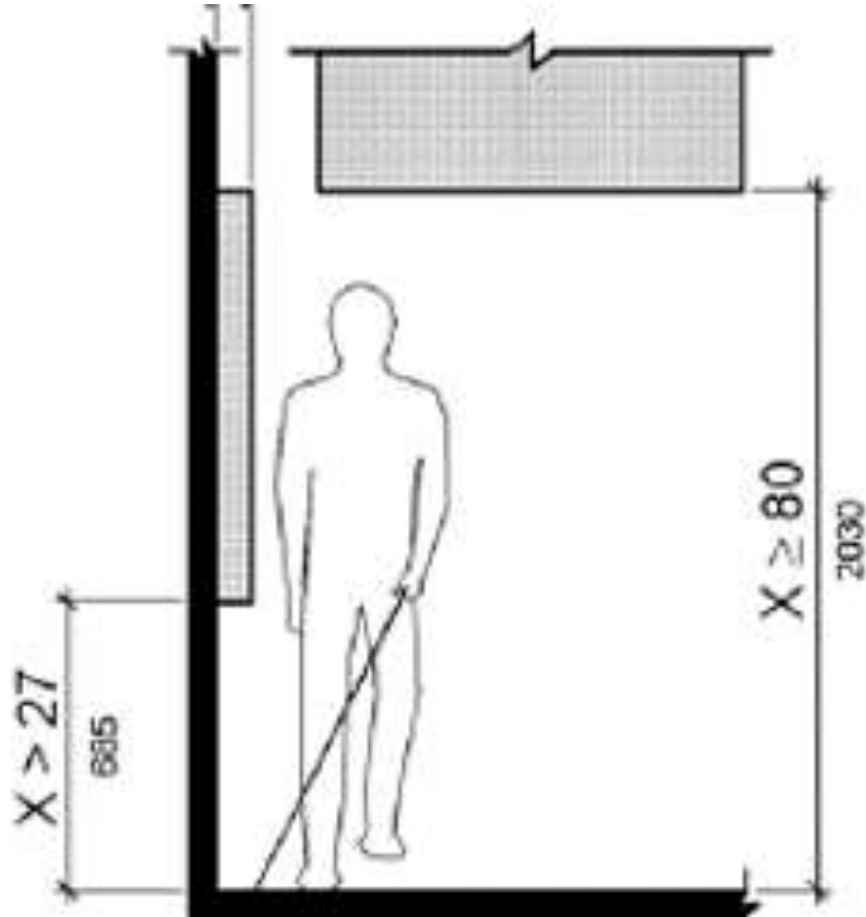
Horizontal Openings



Flangeway Gaps



Protruding Objects



Curb Ramps at Shared Use Paths



Curb ramp must extend full width of a shared use path

Physical Constraints

Where compliance with grade requirements is not feasible due to:

- Existing terrain or infrastructure
- Right-of-way availability
- Notable natural feature, or similar existing physical constraints

Compliance is required to the extent practicable.

Regulatory Constraints

Where compliance with grade requirements is precluded by federal, state, or local laws the purpose of which is to preserve

- Threatened or endangered species
- The environment
- Archaeological, cultural, historical, or significant natural features

Compliance is required to the extent practicable.



Accessible Pedestrian Trails and Shared Use Paths full length webinar is archived at

<https://www.accessibilityonline.org/ao/archives/>



rails·to·trails
conservancy

Railstotrails.org



Accessibility on Rail-Trails and Other Shared-Use Paths

Christopher Douwes, Community Planner
Federal Highway Administration
March 4, 2022





U.S. Department of Transportation Priorities

- Safety
- Climate resilience
- Equity
- Economic strength
- Transformation

↳ TransportationGov Retweeted



Secretary Pete Buttigieg ✓
@SecretaryPete



Not every generation gets to literally build anew and shape its own future, but the generations living today in America have that chance. This is a season for thinking big about infrastructure.

4:09 PM · Mar 22, 2021 · Twitter Web App





Accessibility Guidelines for Trails

- Building and Sites
- Public Rights-of-Way
- Shared Use Paths
- Outdoor Developed Areas
- Recreation Facilities



Transportation Alternatives



- Fact Sheet: <https://www.fhwa.dot.gov/bipartisan-infrastructure-law/ta.cfm>
- About \$14.6 billion, nearly 40,000 projects since 1992 (including previous Transportation Enhancements)
- Funds: 10% of Surface Transportation Block Grant Program (STBG): ~\$1.4 billion per year (was \$850 million)
 - Up to \$84.16 million for the Recreational Trails Program
- Competitive project selection process (State and large MPO)
- TA projects are eligible for Surface Transportation Block Grant Program (STBG) (~\$14 billion per year)
- Project sponsors are encouraged to use [Youth Corps](#).



Transportation Alternatives

Eligible Projects

Must relate to surface transportation.

- **Pedestrian and bicycle facilities and related projects, including rail trails.**
- **Construction of turnouts, overlooks, and viewing areas.**
- Community improvement activities, including-
 - inventory, control, or removal of outdoor advertising;
 - **historic preservation and rehabilitation of historic transportation facilities;**
 - vegetation management practices in transportation rights-of-way to improve roadway safety, prevent against invasive species, and provide erosion control; and
 - archaeological activities relating to impacts from implementation of a transportation project.
- Environmental mitigation activity to:
 - Address stormwater management, control, and water pollution prevention
 - Reduce vehicle-caused wildlife mortality or to restore and maintain connectivity among terrestrial or aquatic habitats.
- **Recreational trails program projects**
- **Safe Routes to School projects**
- Vulnerable Road User Safety Assessment



Transportation Alternatives

Annual Report



- Project applications and dollars requested
- Project selections and dollars requested
- Locations of selected projects
- https://www.fhwa.dot.gov/environment/transportation_alternatives/annual_reports/
- Rails-to-Trails Data: <https://www.railstotrails.org/resource-library/resources/trade-fy20/>

FY 2019-2020 Transportation Alternatives Report National Summary

	2019	2020
Total TA Projects Applications Received	6,835*	4,667**
State Aggregate Cost of TA Project Applications	\$3,619,305,270.23	\$4,400,188,505.31**
Total TA Projects Selected	4,784*	1,956
State Aggregate Cost of All Selected TA Projects	\$918,069,407.31	\$591,903,258.11

* 2019: Includes 2,000+ North Carolina curb ramp projects

** 2020: California received applications for multiple years of projects but did not select projects until FY 2021.

Recreational Trails Program

RTP Purpose

- Provides funds to the States to develop and maintain recreational trails for all trail uses.
- Represents a portion of the \$281 million in Federal motor fuel excise tax paid by OHV users (including snowmobilers).
- Project sponsors are encouraged to use [Youth Corps](#).



Recreational Trails Program

Funding

- Up to \$84.16 million per year.
- States may opt out (funds then remain TA funds)
- Usually administered through a State resource agency.
- States solicit and select projects for funding.
- https://www.fhwa.dot.gov/environment/recreational_trails/rtpstate.cfm



Recreational Trails Program

Eligible RTP 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.



Recreational Trails Program



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

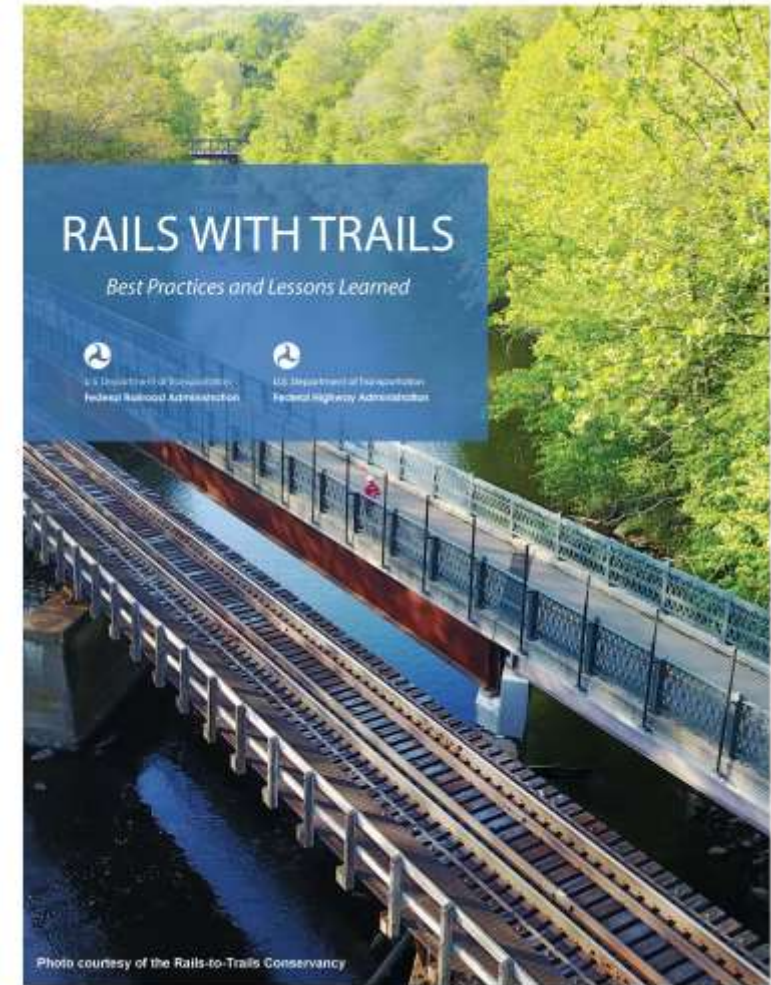
- More than 26,500 project examples
- Searchable by State or project type
- See <http://recreationaltrailsinfo.org/>





Recent and Ongoing Research

- Rails-with-Trails: Best Practices and Lessons Learned
- Ebikes
- Trails and Resilience
- Tribal Development of Trails
- Trails as Resilient Infrastructure



https://www.fhwa.dot.gov/environment/recreational_trails/publications/rwt2021/



Youth Corps and Workforce Development

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





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 and RTP oversight:
Christopher Douwes, Community Planner
Transportation Alternatives
Recreational Trails Program
christopher.douwes@dot.gov
202-366-5013





rails·to·trails
conservancy

Railstotrails.org



Martin Luther King Jr. Trail







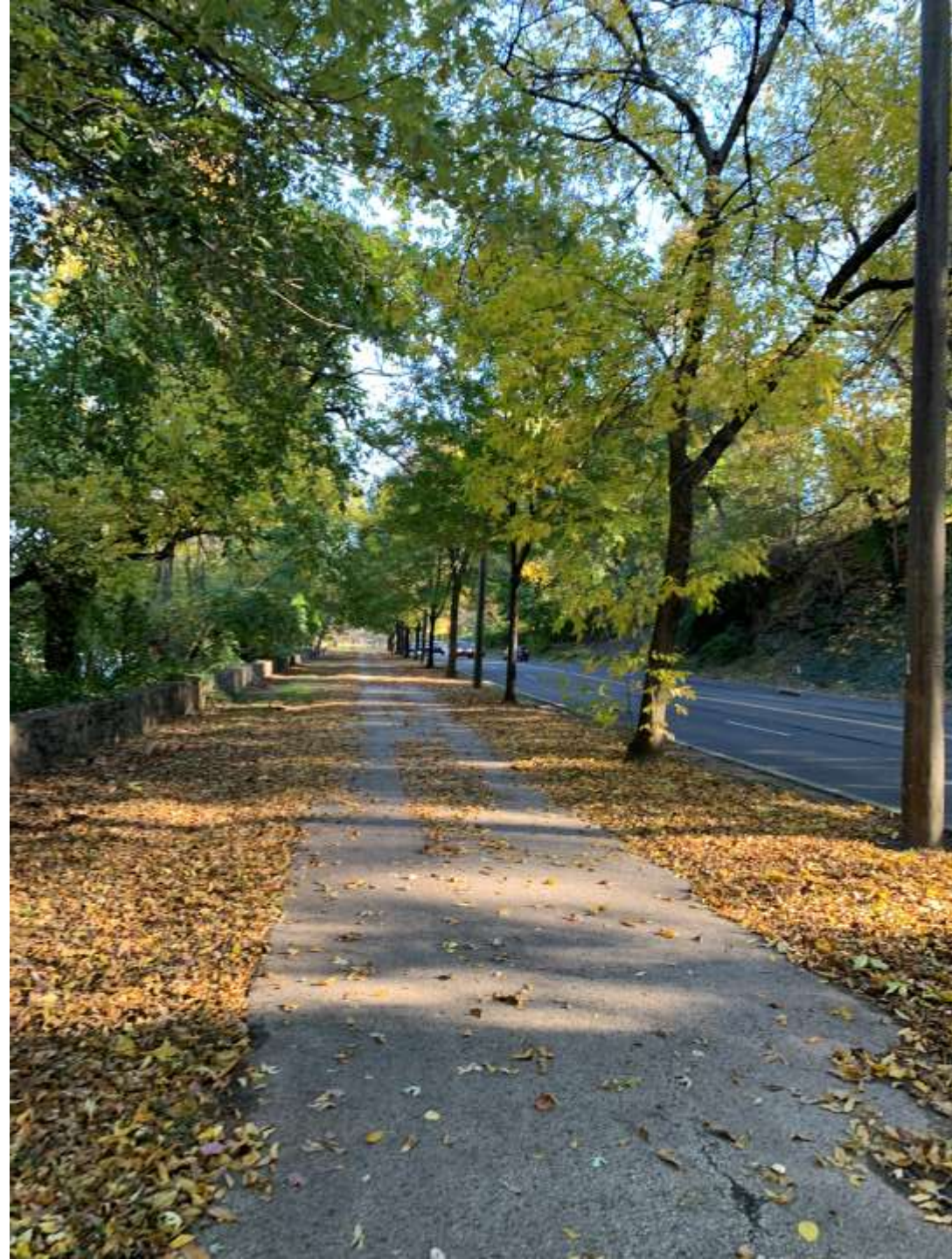
TRAIL TO
← Art Museum
Schuyler House
Center City
Strawberry Mansion
East Falls
Manhattan
New York City





MONTGOMERY CR
FAIRMOUNT PARK

NO
TURN
ON
RED



PI STA 225+23.57
 $\Delta = 41^{\circ}45'03''$ RT
 T = 47.67'
 L = 91.09'
 R = 125.00'
 E = 8.78'

APPROXIMATE
 EDGE OF WATER

SCHUYLKILL RIVER

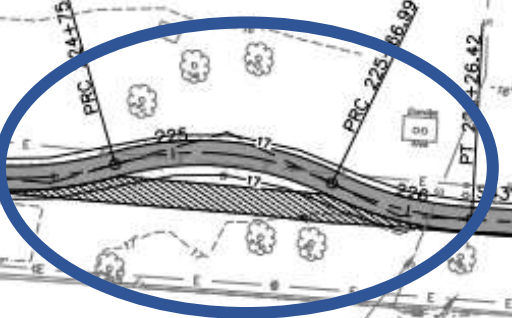
PI STA 230+66.21
 $\Delta = 6^{\circ}12'02''$ RT
 T = 81.25'
 L = 162.33'
 R = 1500.00'
 E = 2.20'

PI STA 231+89.47
 $\Delta = 16^{\circ}00'10''$ RT
 T = 42.17'
 L = 83.79'
 R = 300.00'
 E = 2.95'

PI STA 228+29.27
 $\Delta = 16^{\circ}44'07''$ RT
 T = 85.31'
 L = 169.41'
 R = 580.00'
 E = 6.24'

UNDERGROUND ELECTRIC,
 UNK SIZE & COVER

15" VCP
 UNK. COVER



STA. 227+92.95
 END FULL DEPTH
 BEGIN MILL & OVERLAY







MARTIN LUTHER KING JR. DRIVE
 NOT SHOWN ON CITY PLANS

15" VCP
 UNK. COVER

UNDERGROUND ELECTRIC,
 UNK SIZE & COVER

15" VCP
 UNK. COVER

LEGEND

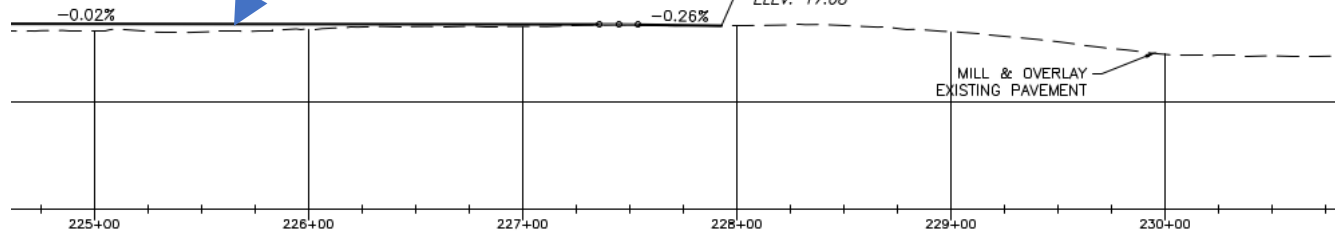
-  1.5" MILL & OVERLAY OF EXISTING TRAIL
-  FULL DEPTH ASPHALT TRAIL RECONSTRUCTION
-  NEW CONCRETE SIDEWALK CONSTRUCTION
-  PAVEMENT REMOVAL
-  EXISTING LIGHT POLE
-  EXISTING TREE W/DBH (INCHES)

PVI STA 227+45.00
 ELEV 17.20
 VC 18.00
 MO 0.01

PVC PVT

END FULL DEPTH PAVEMENT
 STA 227+92.95
 ELEV. 17.08

MILL & OVERLAY
 EXISTING PAVEMENT





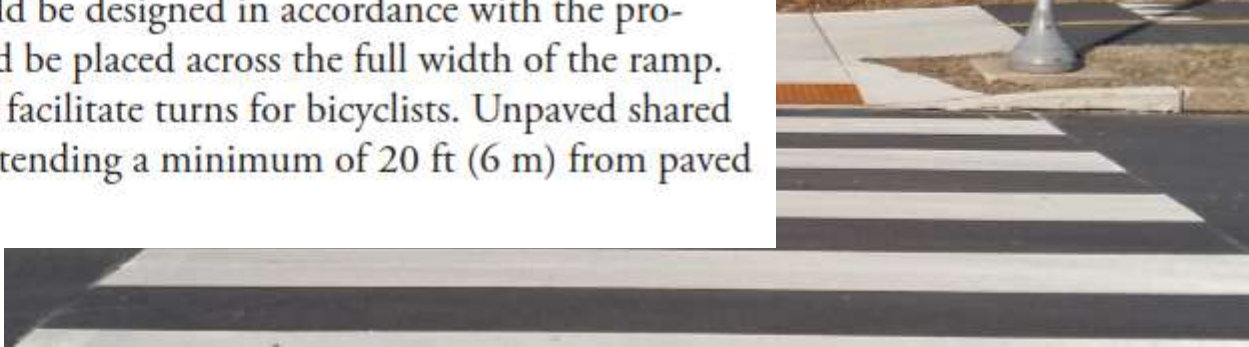
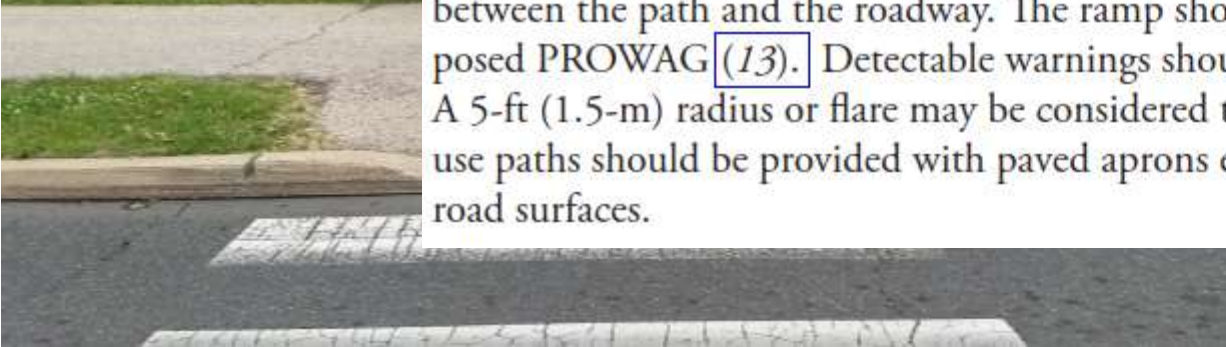





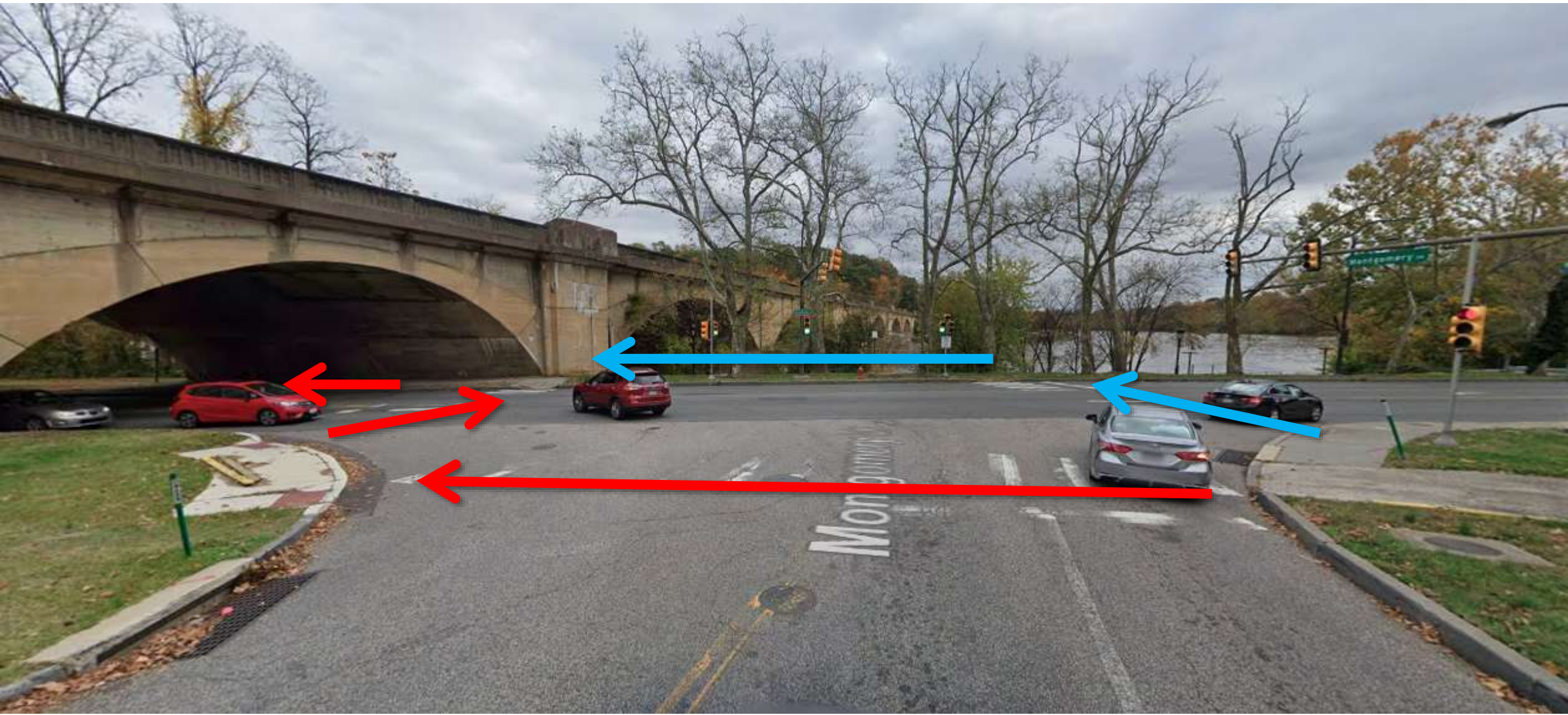
5.3.5 Other Intersection Treatments

Curb Ramps and Aprons

The opening of a shared use path at the roadway should be at least the same width as the shared use path itself. If a curb ramp is provided, the ramp should be the full width of the path, not including any side flares if utilized. The approach should provide a smooth and accessible transition between the path and the roadway. The ramp should be designed in accordance with the proposed PROWAG (13). Detectable warnings should be placed across the full width of the ramp. A 5-ft (1.5-m) radius or flare may be considered to facilitate turns for bicyclists. Unpaved shared use paths should be provided with paved aprons extending a minimum of 20 ft (6 m) from paved road surfaces.























MLK Drive Trail Project Details

- Required agency coordination between Philadelphia Parks & Recreation Department and Philadelphia Streets Department
- Total cost: \$1.4 million
- Funded by:
 - City of Philadelphia
 - PA Dept. of Conservation and Natural Resources
 - PA Dept. of Community and Economic Development
 - Delaware Valley Regional Planning Commission Regional Trails Program (William Penn Foundation)



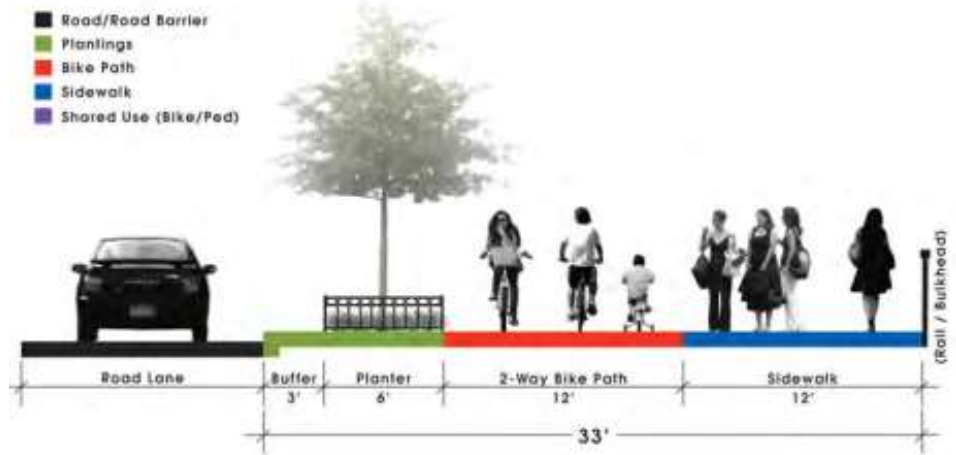
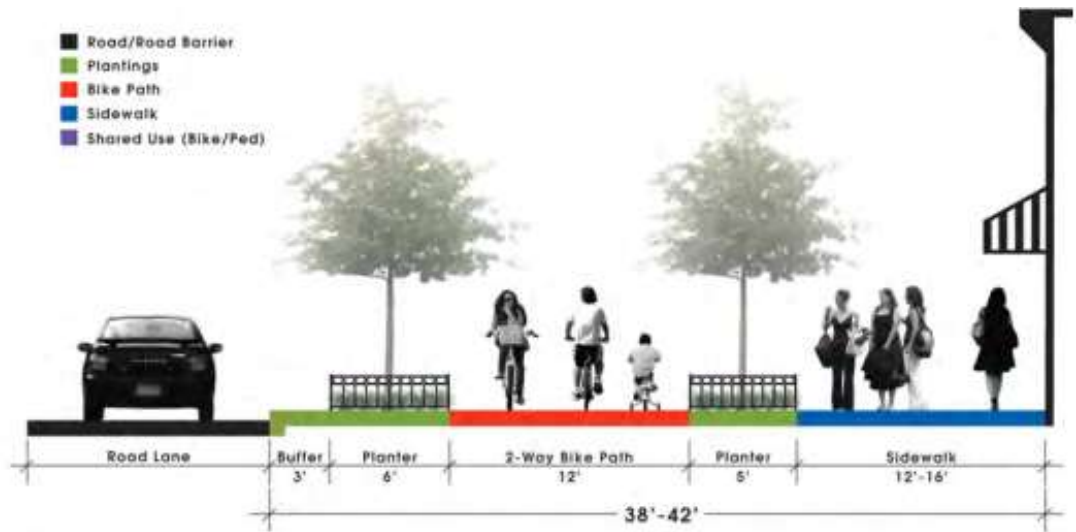
Delaware River Trail



Illustration from the *Master Plan for the Central Delaware*









Delaware River **Trail**

Elements of Design

- Separation between bikeway and sidewalk
- Controlled pedestrian crossings of bikeway
- ADA Ramps
- Vehicular parking
- Driveways/signalized intersections
- Entrances to buildings and public spaces















Questions?



Juliet Shoultz

Shoultz@Access-Board.gov



Christopher Douwes

Christopher.Douwes@dot.gov



Matt Ludwig

matt.ludwig@nv5.com

Moderated by Yvonne Mwangi yvonne@railstotrails.org



rails·to·trails
conservancy

Share your examples of trails prioritizing accessibility in design, in amenities and in offering inclusive events.

Email us at railtrails@railstotrails.org

Follow @railstotrails

Thank You!



rails·to·trails
conservancy

Railstotrails.org