

# FTA

FEDERAL TRANSIT ADMINISTRATION

## Manual on Pedestrian and Bicycle Connections to Transit

December 4, 2017

Edwin Rodriguez



U.S. Department of Transportation  
Federal Transit Administration



# FTA Manual Beginning

- FTA entered in a cooperative agreement with Portland State University (PSU) to create a manual to address pedestrian and bicyclist safety, accessibility, and mobility related to transit facilities and vehicles.
- Manual is part of the U.S. Department of Transportation (DOT) Safer People, Safer Streets: Pedestrian and Bicycle Safety Initiative.

# Acknowledgments

## **FTA's Office of Research, Demonstration, and Innovation:**

- Vincent Valdes
- Jamie Pfister
- Mary Leary
- Faith Hall
- Michael Baltes
- Roy Chen

# Acknowledgments

## **Other FTA Key Involvement:**

- Matthew Welbes – Office of the Administrator
- Joanne Waszczak – Office of Safety and Oversight
- Richard Wong – Office of Chief Council
- Valerie Berton – Office of Communications and Congressional Affairs
- Justin John – Office of Budget and Policy

# Acknowledgments

## **Other DOT Key Involvement:**

- McCann, Barbara – Office of the Secretary
- Anthony Burton – Office of the Secretary
- Paul Heberling – Office of the Secretary
- Sherry Riklin – FHWA
- Daniel Goodman – FHWA
- Gabriel Rousseau – FHWA

# Acknowledgments

## **Portland State University (PSU):**

- Dr. Jennifer Dill
- Nathan McNeil
- Dr. Lynn Weigand
- Dr. Allison Duncan
- Russ Doubleday
- Drew DeVitis

# Webinar Outline

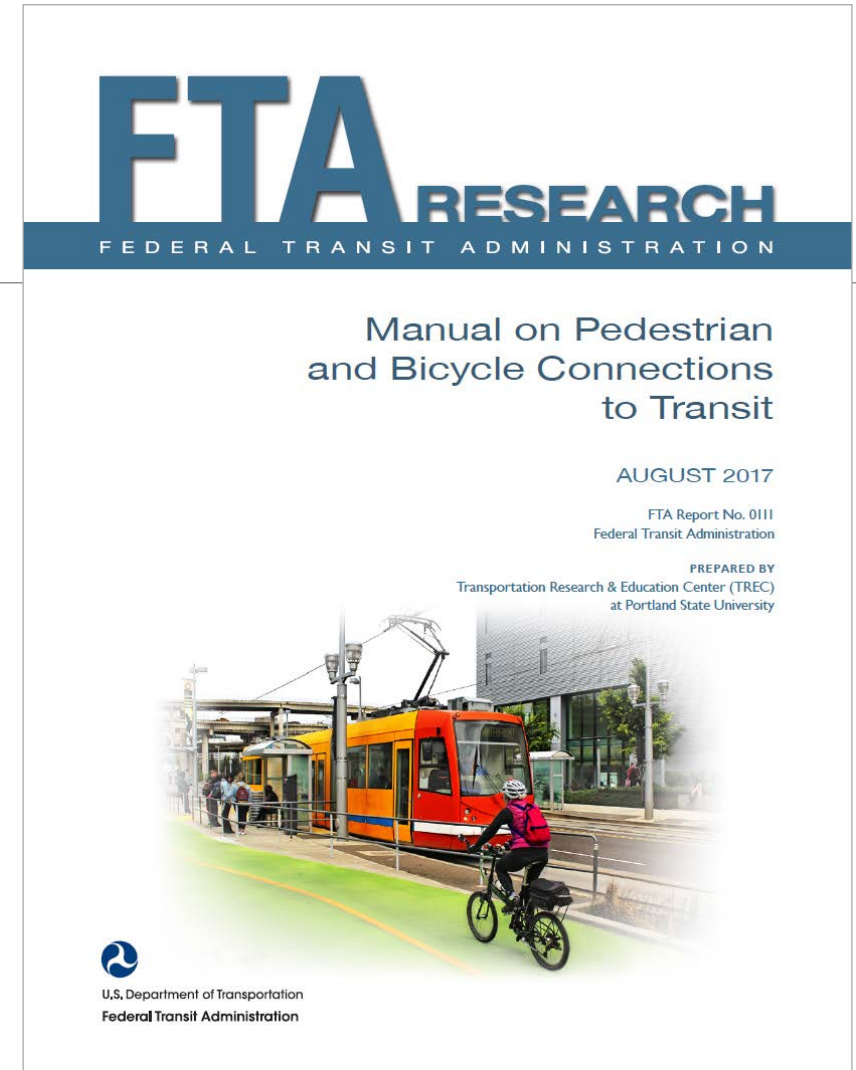
Background on Manual

Station Areas

Pedestrian Access

Bicycle Access

Planning and Implementation



# Manual Goals

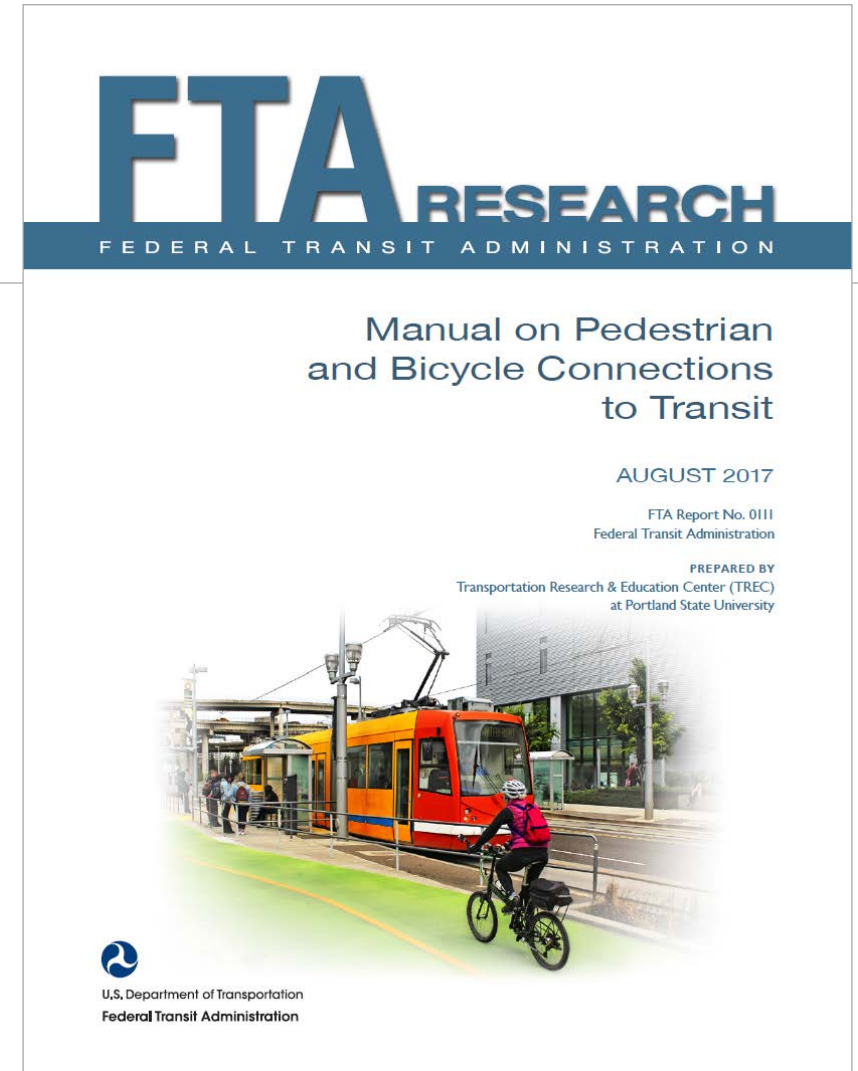
Making the case for walking and biking connections

Access for users of all ages and abilities

Tools, examples and best practices

Connect research and practice

How to plan and implement





# Benefits of Ped/Bike Connections to Transit

Provides Benefit to	Transit Agency	Riders	Everyone
Transit depends on safe pedestrian access	✓	✓	
More Equitable		✓	
Extend the Reach of Transit	✓	✓	
Gives Riders more Options		✓	
Supports Multitmodal trips		✓	
Alleviates Crowding	✓	✓	
Helps in cases of Transit Outages	✓	✓	✓
Improves Health and Well-being	✓	✓	✓

# Around the Stop or Station

---

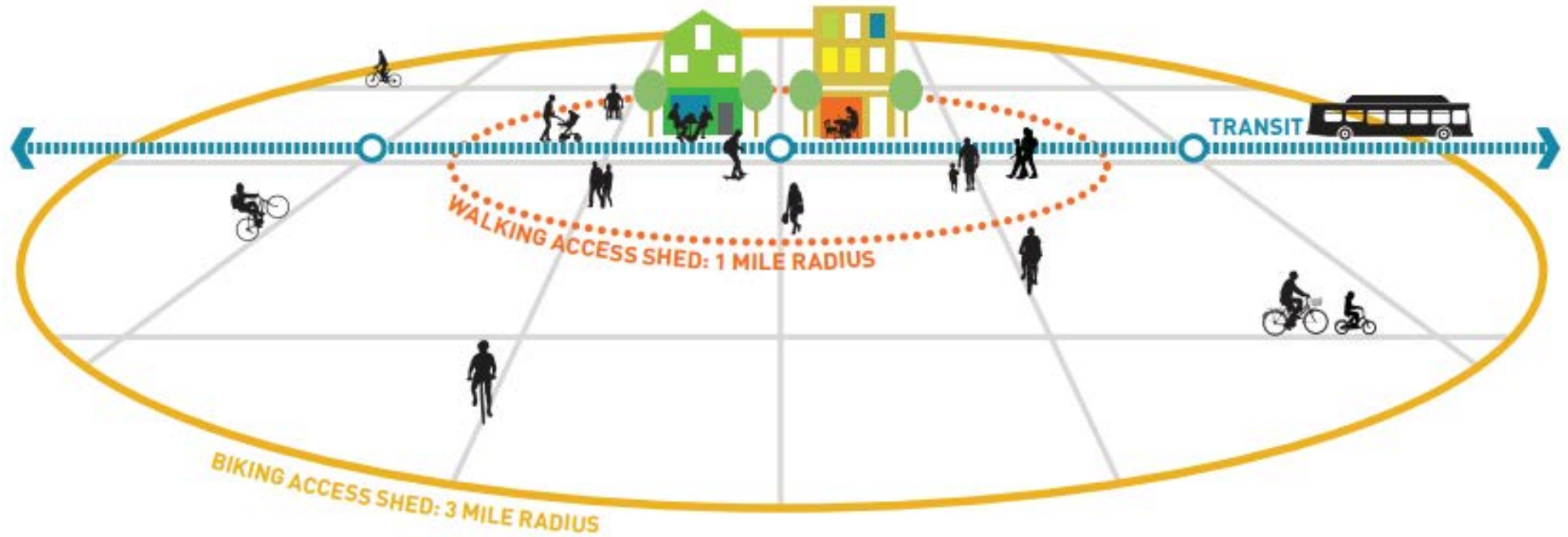
# FTA Policy on First and Last Mile Connections

The Federal Transit Administration's 2011 *Final Policy Statement on Eligibility of Pedestrian and Bicycle Improvements Under Federal Transit Law* states:

*all pedestrian improvements located within one-half mile and all bicycle improvements located within three miles of a public transportation stop or station shall have a de facto physical and functional relationship to public transportation. Pedestrian and bicycle improvements beyond these distances may be eligible for FTA funding by demonstrating that the improvement is within the distance that people will travel by foot or by bicycle to use a particular stop or station.*



# Key Concept: Access Sheds



“as the crow flies” access sheds

Source: Atlanta Regional Commission's Walk. Bike. Thrive! plan



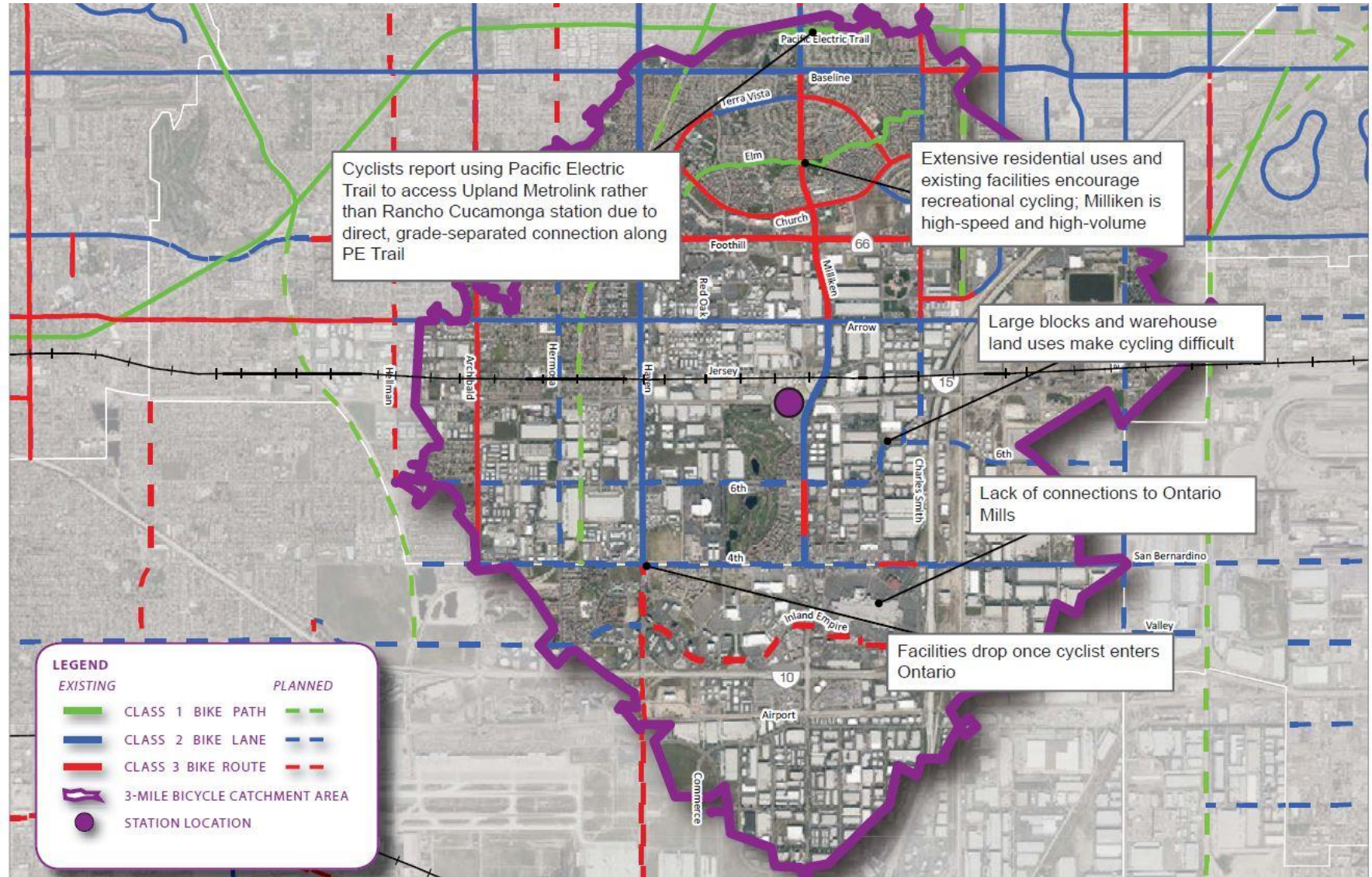
# Access Sheds: Network Distances



Source: NCTCOG Active Transportation Routes to Rail study

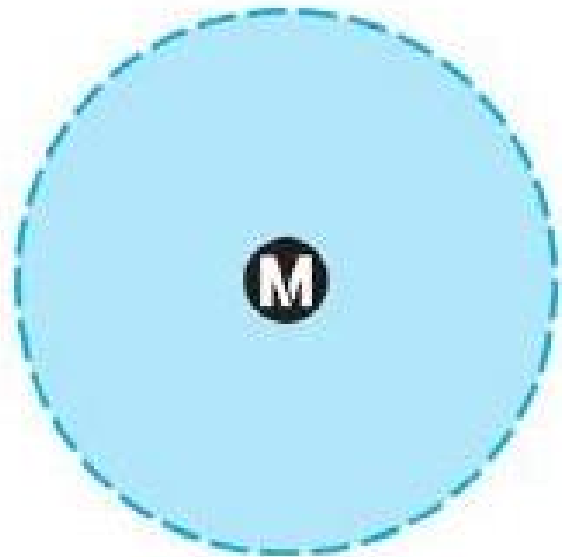


# Bike Shed Example



# Expanding the Access Shed

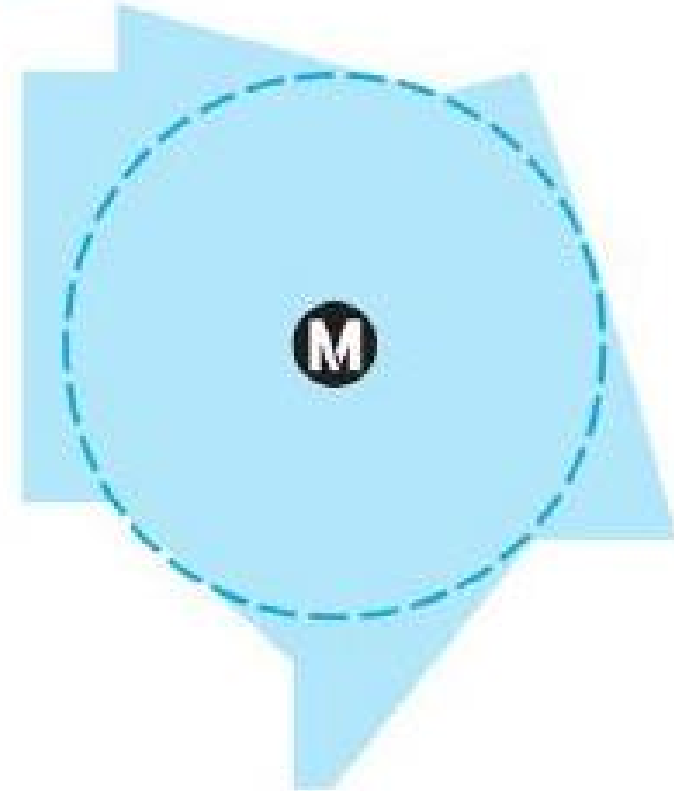
Policy:



Reality:



Goal:

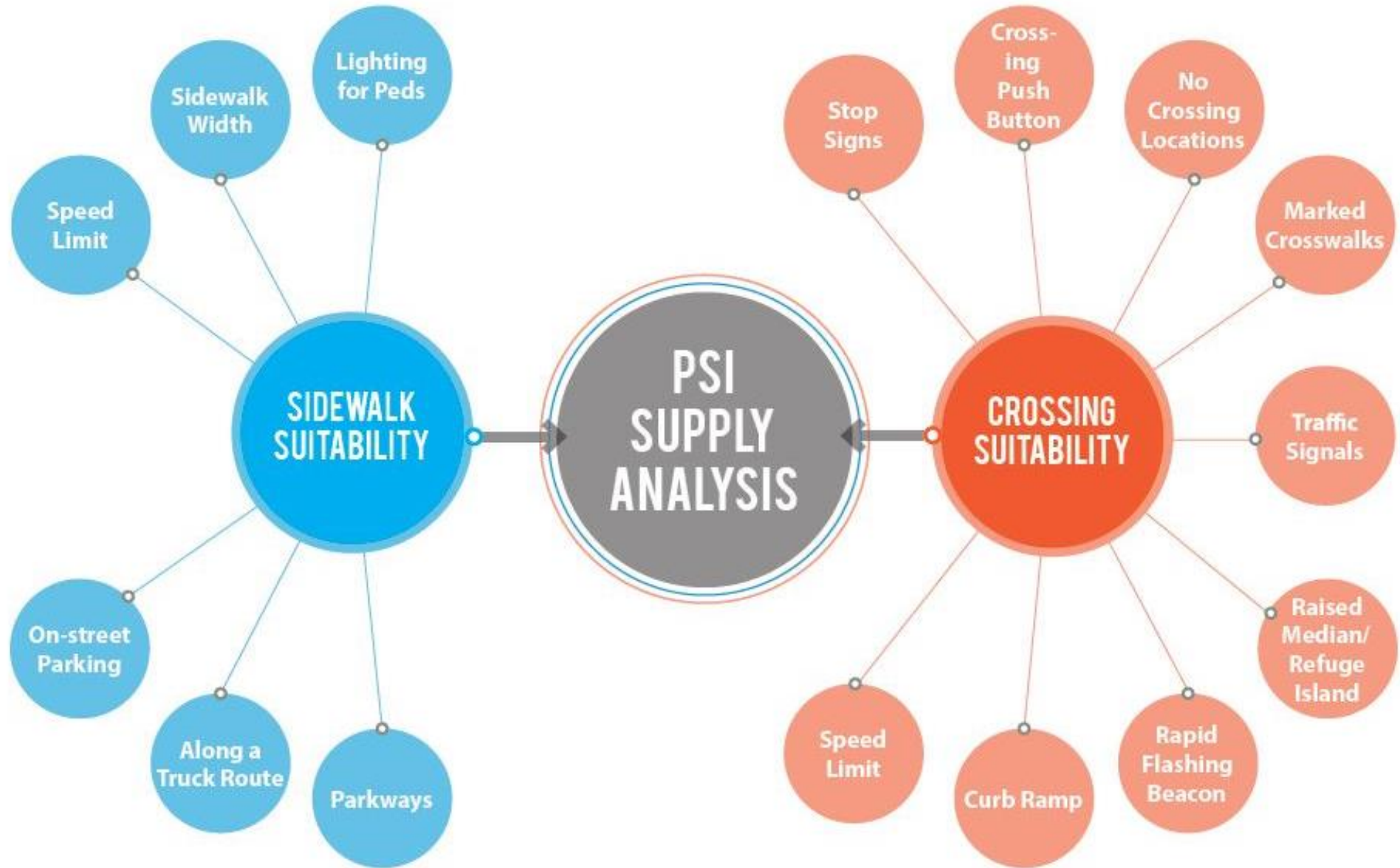


# Pedestrian Access

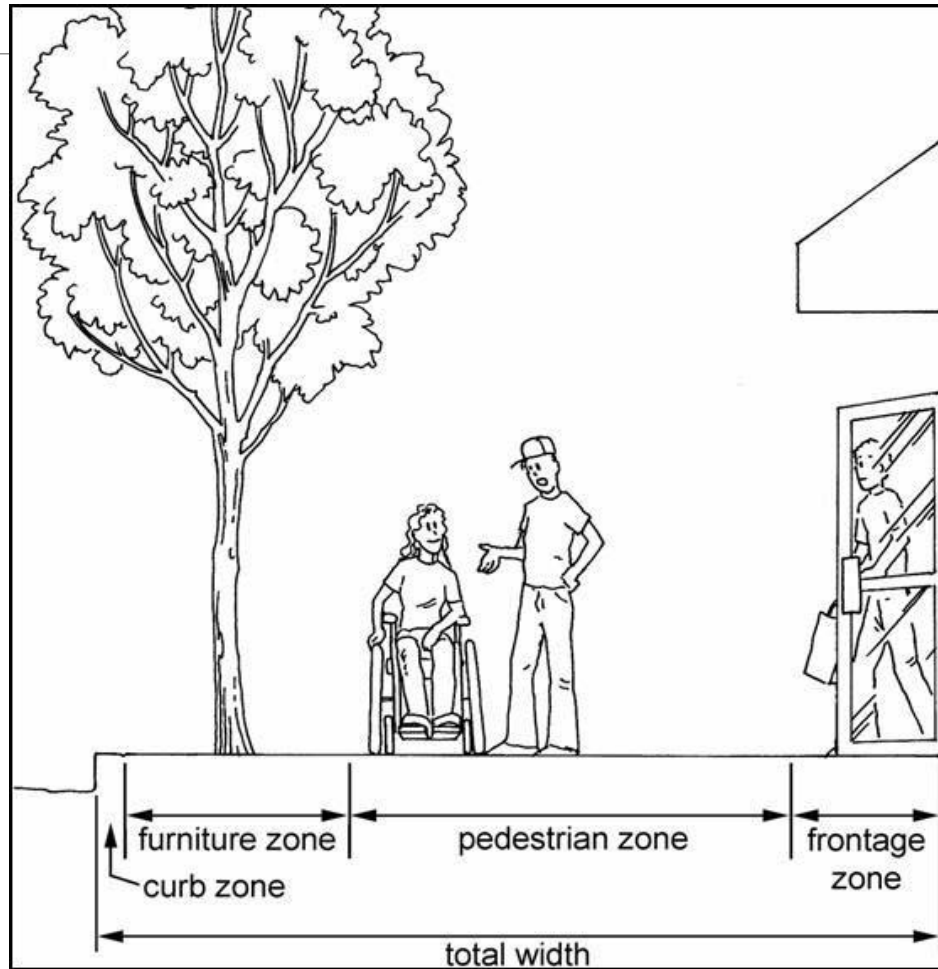
---



# Pedestrian Suitability



# Sidewalks



Graphic: FHWA Vegetation Control for Safety, 2007



# Crossings

Full signal,  
Minneapolis





# Effective Wayfinding





# Atlanta – Buford Highway (before)





# Atlanta – Buford Highway





# Atlanta – Buford Highway



# Bicyclist Access

---



# Wayfinding (and safe routes)



Near LA Metro Silver Line, Los Angeles

LA Metro Bike Map



# Bicycle Parking at Stations and Stops



LA Metro - North Hollywood Station

TriMet MAX Orange Line – Milwaukie





# Bicycle Parking at Stations and Stops



MARTA Station in Atlanta



Metro Transit Station in Minneapolis



# Bicycle Parking at Stations and Stops



SE Tacoma Avenue Station, TriMet MAX Orange Line



# Bicycle Parking at Stations and Stops: Alternatives







Bikehub at El Monte Station, Los Angeles



# Bikes on Transit: Buses





# Bikes on Transit: Trains



Photo: CALSTART

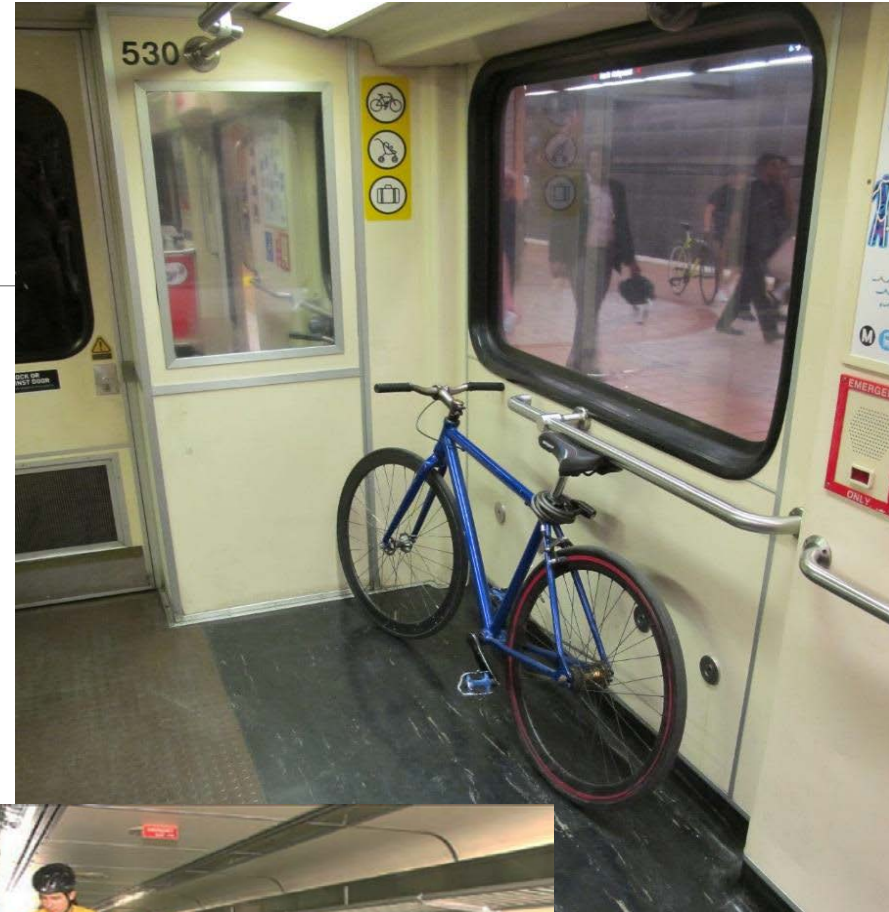


Photo: MBTA



# At the Stop/Station: Comfort, Safety, and Access

---

# Comfort

Exit Lankershim Bl



North Hollywood Red Line BRT stop



Culver City Expo Line Stop



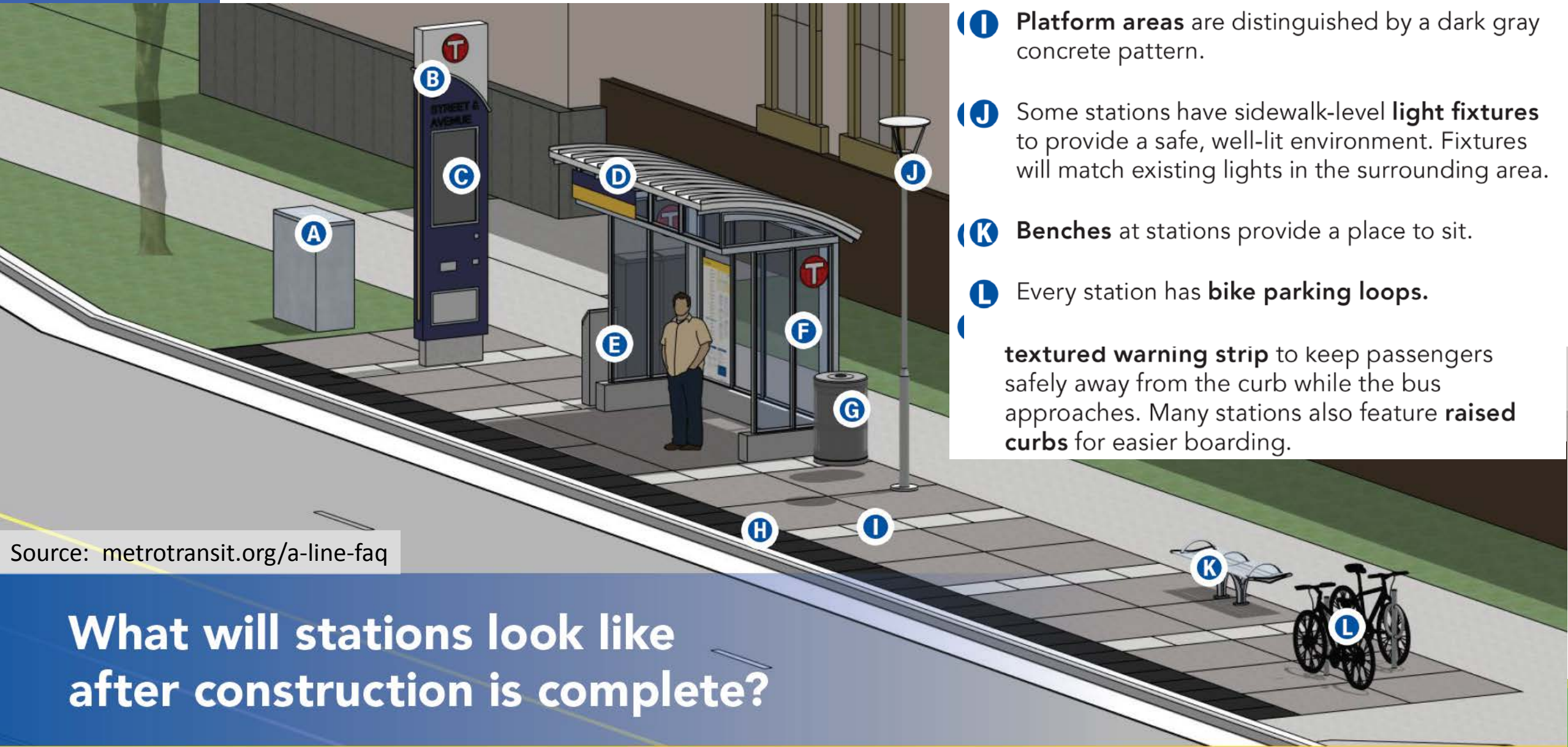


# Universal Design



A Line Rapid Bus stop, St. Paul

# Twin Cities – A Line stop features



- I** Platform areas are distinguished by a dark gray concrete pattern.
- J** Some stations have sidewalk-level **light fixtures** to provide a safe, well-lit environment. Fixtures will match existing lights in the surrounding area.
- K** Benches at stations provide a place to sit.
- L** Every station has **bike parking loops**.  
**textured warning strip** to keep passengers safely away from the curb while the bus approaches. Many stations also feature **raised curbs** for easier boarding.

Source: [metrotransit.org/a-line-faq](http://metrotransit.org/a-line-faq)

What will stations look like after construction is complete?

# Planning and Implementation

---

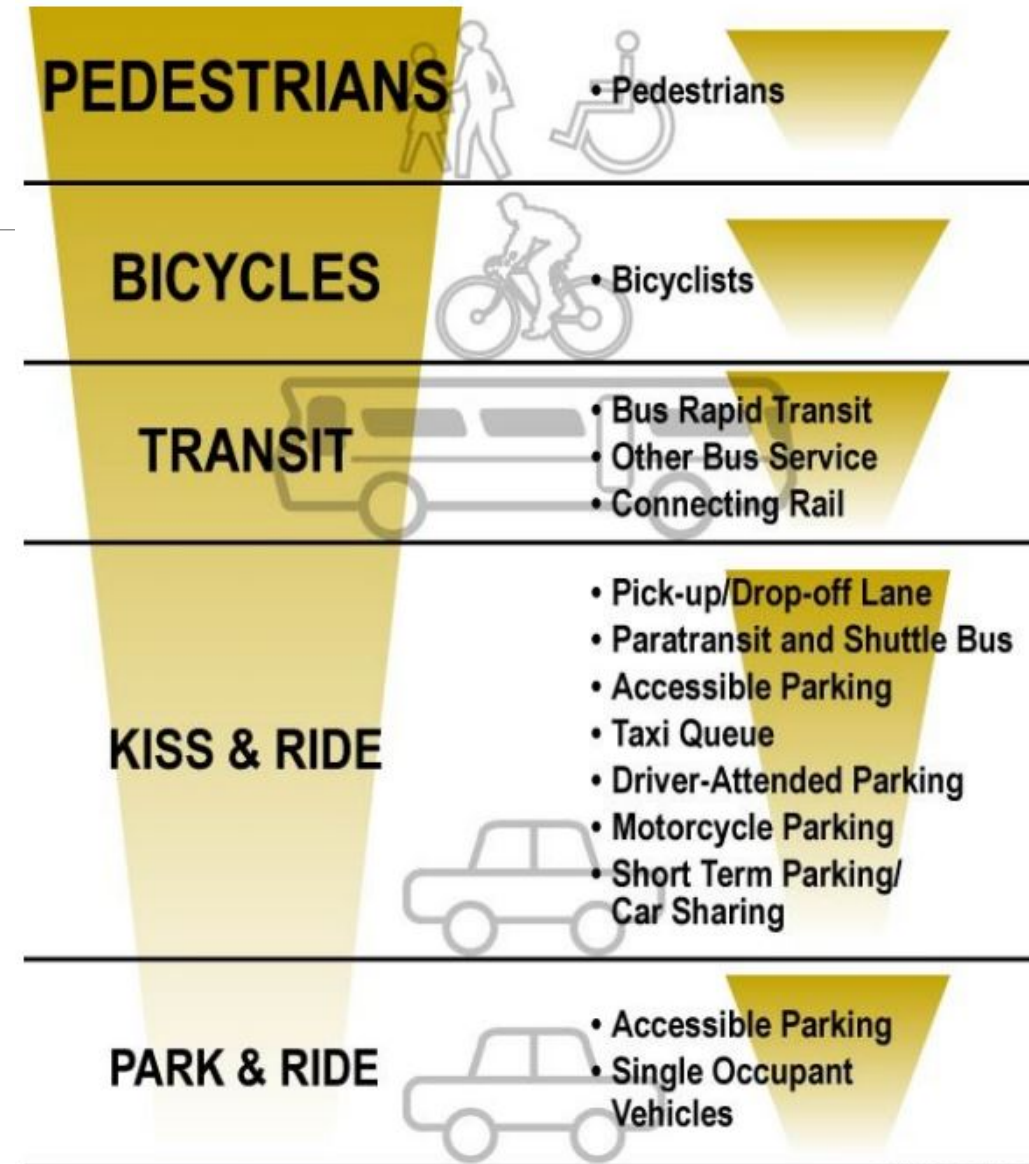


# Agency Priorities and Culture

**Prioritize walking and bicycling for transit access**

**Clarify agency policies and staffing**

**Leading by example**



WMATASA009

# Interagency Collaboration

Agency / Organization	Roles
<i>MPOs</i>	<b>Convening; Agenda Setting;</b> Capacity Building; Long Range Planning; Regional Planning;
<i>Transit Agency</i>	<b>Convening; Agenda Setting;</b> Service Integration; Facilities Planning; Station Access Planning
<i>Cities, Counties</i>	Bike/Ped Route Planning and Implementation
<i>BIDs, Foundations, Partners</i>	Marketing; Fundraising; Corridor Planning and Programming

# Funding

U.S. Department of Transportation  
Federal Highway Administration

Office of Planning, Environment, & Realty (HEP)

**Bicycle and Pedestrian Program**

Legislation  
Funding  
Guidance  
Resources

State Coordinator and FHWA Division Coordinator  
Each State has a Bicycle and Pedestrian Coordinator, and each FHWA Division office has a point of contact.  
FHWA Headquarters Contact  
For more information, please contact Dan Goodman, 202-366-9064.

FHWA → Environment → Bicycle and Pedestrian Program → Funding

### Pedestrian and Bicycle Funding Opportunities

U.S. Department of Transportation Transit, Highway, and Safety Funds  
Revised August 12, 2016

This table indicates potential eligibility for pedestrian and bicycle projects under U.S. Department of Transportation surface transportation funding programs. Additional restrictions may apply. See notes and basic program requirements below, and see program guidance for detailed requirements. Project sponsors should fully integrate nonmotorized accommodation into surface transportation projects. Section 1404 of the Fixing America's Surface Transportation (FAST) Act modified 23 U.S.C. 109 to require federally-funded projects on the National Highway System to consider access for other modes of transportation, and provides greater design flexibility to do so.

Pedestrian and Bicycle Funding Opportunities: PDF Version

Activity or Project Type	TIGER	TIFIA	ETA	ATI	CMAQ	HSIP	NHPP	STBG	TA	RTP	SRTS	PLAN	NHTSA 402	NHTSA 405	FLTP
Access enhancements to public transportation (includes benches, bus pads)	\$	\$	\$	\$	\$		\$	\$	\$						\$
ADA/504 Self Evaluation / Transition Plan								\$	\$	\$		\$			\$
Bicycle plans			\$					\$	\$		\$	\$			\$
Bicycle helmets (project or training related)								\$	\$SRTS		\$		\$*		
Bicycle helmets (safety promotion)								\$	\$SRTS		\$				
Bicycle lanes on road	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$				\$
Bicycle parking	~\$	~\$	\$	\$	\$		\$	\$	\$	\$	\$				\$
Bike racks on transit	\$	\$	\$	\$	\$			\$	\$						\$
Bicycle share (capital and equipment; not	\$	\$	\$	\$	\$		\$	\$	\$						\$

[http://www.fhwa.dot.gov/environment/bicycle\\_pedestrian/funding/funding\\_opportunities.cfm](http://www.fhwa.dot.gov/environment/bicycle_pedestrian/funding/funding_opportunities.cfm)

**Advocacy Advance**  
a partnership of Alliance for Biking & Walking and THE LEAGUE OF AMERICAN BICYCLISTS

**First Mile, Last Mile: How Federal Transit funds can improve access to transit for people who walk and bike**

This report looks at how biking and walking can be integrated with transit and the federal transit funds that can support projects and programs to increase accessibility among people who bike, walk, and take transit.

August 2014

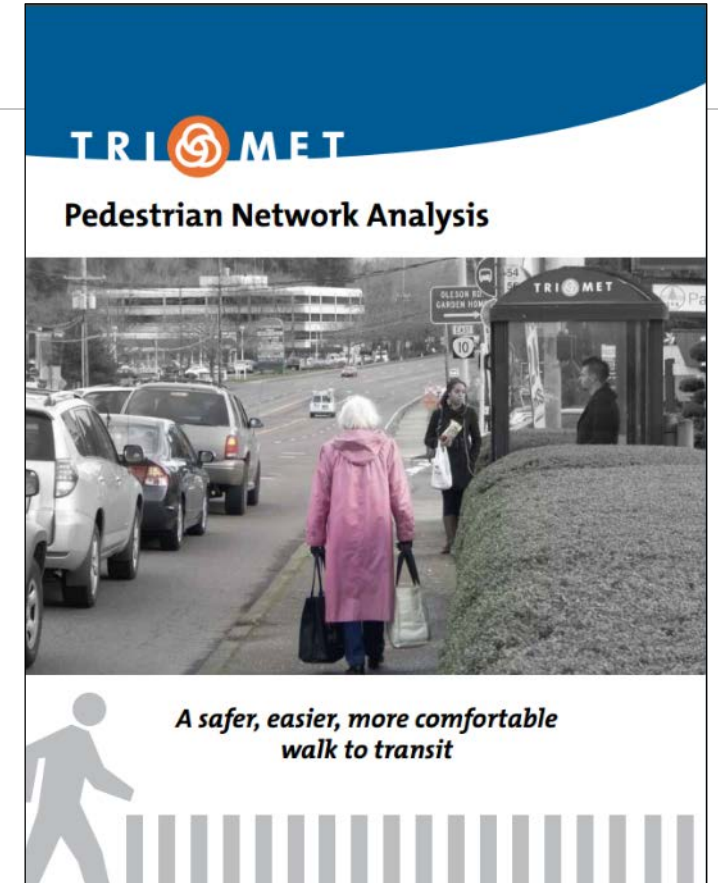
[http://www.advocacyadvance.org/docs/FirstMileLastMile\\_August2014\\_web.pdf](http://www.advocacyadvance.org/docs/FirstMileLastMile_August2014_web.pdf)





# Pedestrian access plans

- Sidewalks
- Crossings
- Stop/stations access points/locations
- Seating, shelter, and lighting



TriMet conducted a [Pedestrian Network Analysis](#) to develop “an objective, data-driven system for prioritizing places around the region where pedestrian infrastructure investments will provide safer and more comfortable access to transit”.

# Bicycle access plans

- Bicycle network connections
- Parking at stop locations
- Onboard accommodations for bicycles



BART sought to “retool its stations and approach to access planning to attract thousands more bikes than cars to the system each day” which reduces the need to build costly auto parking, bolsters ridership, and encourages public and environmental health.

# First Mile Last Mile Plans

Improving conditions for pedestrians and cyclists in the areas around the origin and destination stops



LA Metro's plan introduces "The Pathway," a "transit access network designed to reduce the distance and time it takes people to travel from their origins to stations and from stations to destinations, while simultaneously improving the user experience"



# Thanks to everyone who provided time and expertise, including staff at the following agencies:

Atlanta Regional Commission  
Metropolitan Council (Twin Cities)  
Southern California Association of Governments  
North Central Texas Council of Governments  
Bay Area Rapid Transit  
Charlotte Area Transit System  
Honolulu Area Rapid Transit  
Lane Transit District (Eugene, OR)  
Los Angeles County Metropolitan Transportation Authority  
Metropolitan Atlanta Rapid Transit Authority  
Massachusetts Bay Transit Authority  
Regional Transportation District (Denver)  
Sound Transit (Seattle)  
Tri-County Metropolitan Transportation District (Portland)  
Valley Metro (Phoenix)

Washington Metropolitan Area Transit Authority  
City of Atlanta, GA  
City of Los Angeles, CA  
City of Long Beach, CA  
City of Santa Monica, CA  
City of Charlotte, NC  
City of Minneapolis, MN  
City of Portland, OR  
Washington, DC  
Hennepin County, MN  
Montgomery County, MD  
Atlanta Beltline, Inc.  
Tualatin Parks and Recreation District  
Great Rides Bicycle Share (Fargo, ND)



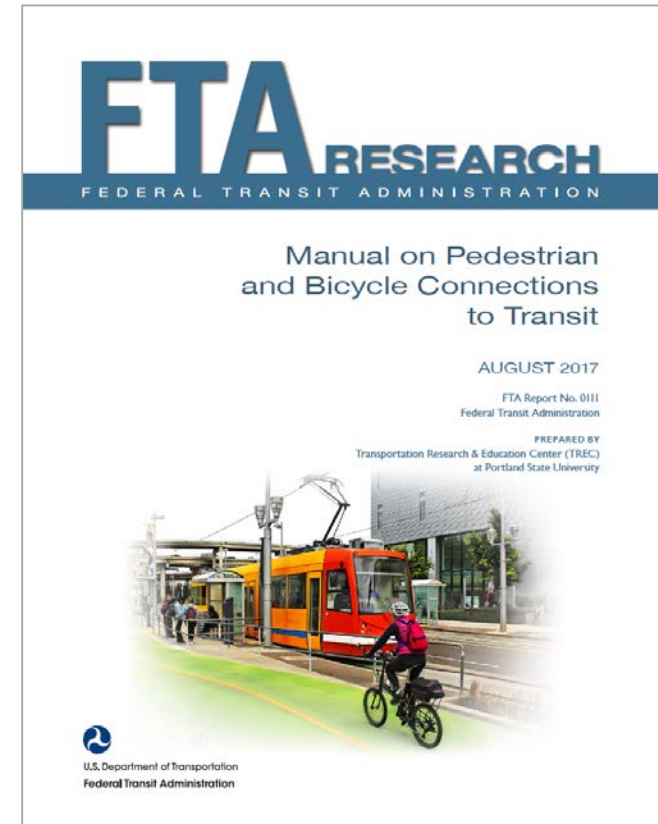
# Download the manual

Full manual available at:

<https://www.transit.dot.gov/research-innovation/manual-pedestrian-and-bicycle-connections-transit> or  
[tinyurl.com/PedBikeManual](https://tinyurl.com/PedBikeManual)

One page summary available at:

<https://www.transit.dot.gov/research-innovation/manual-pedestrian-and-bicycle-connections-transit-summary>





# THANK YOU!

PORTLAND STATE UNIVERSITY PROJECT TEAM:

NATHAN MCNEIL

JENNIFER DILL

DREW DEVITIS

RUSSELL DOUBLEDAY

ALLISON DUNCAN

LYNN WEIGAND

