

# E. Mobility Options: Active Transportation

The Mobility 2045 Update represents the extensive research and compilation of the locally adopted plans for active transportation infrastructure throughout the region. Various new or updated plans are adopted each year throughout the region, and the North Central Texas Council of Governments regularly coordinates with local jurisdictions to maintain an updated database of existing, funded, and planned active transportation facilities.

**Local Adopted Plans with Shared-Use Paths (Trails) and On-Street Bikeways, September 2021**

Type of City and County Plans	Number of Adopted Plans
Plans that include trails	71
Plans that include on-street bicycle facilities	37

Source: NCTCOG, September 2021

## Policies

MTP Reference #	Active Transportation
BP3-001	Support the planning and design of a multimodal transportation network with seamless interconnected active transportation facilities that promotes walking and bicycling as equals with other transportation modes.
BP3-002	Implement pedestrian and bicycle facilities that meet accessibility requirements and provide safe, convenient, and interconnected transportation for people of all ages and abilities.
BP3-003	Support programs and activities that promote pedestrian and bicycle safety, health, and education.

## Programs

Active Transportation Planning and Design	
Reference	BP2-001
Background	The Active Transportation Planning and Design Program consists of plans, studies, policies, laws/legislation, and data collection/analysis to support multimodal transportation networks and context-sensitive facilities.
Related Goals	<ul style="list-style-type: none"> <li>• Improve the availability of transportation options for people and goods.</li> <li>• Support travel efficiency measures and system enhancements targeted at congestion reduction and management.</li> <li>• Ensure all communities are provided access to the regional transportation system and planning process.</li> <li>• Preserve and enhance the natural environment, improve air quality, and promote active lifestyles.</li> <li>• Encourage livable communities which support sustainability and economic vitality.</li> <li>• Ensure adequate maintenance and enhance the safety and reliability of the existing transportation system.</li> <li>• Develop cost-effective projects and programs aimed at reducing the costs associated with constructing, operating, and maintaining the regional transportation system.</li> </ul>
Related Policies	BP3-001

Active Transportation Planning and Design	
Implementation	<ul style="list-style-type: none"> <li>• <b>Multimodal Transportation Plans:</b> Encourage development of local pedestrian and bicycle plans, as well as modifications to local transportation plans and standards that provide for pedestrian accommodations, on-street bikeways, and the network of off-street trails.</li> <li>• <b>Context-Sensitive Complete Streets:</b> Facilitate and support the adoption of local policies and the implementation of context-sensitive Complete Streets projects with bicycle and pedestrian facilities as routine accommodations for new roadway construction and reconstruction projects.</li> <li>• <b>Context-Sensitive Design:</b> Incorporate bicycle and pedestrian modes in all transportation corridor studies, support the adoption of local policies, and implement context-sensitive Complete Streets projects and roadway projects that are sensitive in design to the context of their surroundings.</li> <li>• <b>Corridor Studies:</b> Integrate bicycle and pedestrian mobility in all transportation corridor studies, incorporate bicycle and pedestrian modes in corridor studies, and support the funding and construction of bicycle and pedestrian elements of final corridor studies.</li> <li>• <b>Active Transportation Safety Plans:</b> Implement the regional Pedestrian Safety Action Plan and develop a regional Bike Safety Action Plan.</li> <li>• <b>Americans with Disabilities Act Transition Plans:</b> Encourage local agencies to adopt and implement Americans with Disabilities Act transition plans.</li> <li>• <b>Local Regulations:</b> Encourage local jurisdictions to adopt ordinances, zoning standards, engineering standards, and guidelines that accommodate bicycle and pedestrian modes of travel through such means as context-sensitive Complete Streets policies, thoroughfare technical specifications, right-of-way and easement preservation, bicycle parking ordinances, bicycle passing ordinances, and end-of-trip facilities.</li> <li>• <b>Data Collection and Analysis:</b> Monitor and evaluate the North Central Texas region's bicycling and walking efforts by collecting bicycle and pedestrian count data, analyzing bicycle and pedestrian crash data, conducting regional nonmotorized travel surveys, and publishing findings.</li> <li>• <b>Technical Support/Resources/Research:</b> Collect relevant research materials regarding bicycle and pedestrian transportation to utilize in regional initiatives and provide as resources to local governments and area stakeholders.</li> </ul>
Cost Estimate	N/A – Program costs associated with planning elements only

Active Transportation Network Implementation	
Reference	BP2-002
Background	The Active Transportation Accessibility and Safety Program consists of funding and implementing bicycle and pedestrian projects, completing linkages with other modes of transportation, enhancing safety, and improving accessibility for disadvantaged populations.
Related Goals	<ul style="list-style-type: none"> <li>• Improve the availability of transportation options for people and goods.</li> <li>• Support travel efficiency measures and system enhancements targeted at congestion reduction and management.</li> <li>• Ensure all communities are provided access to the regional transportation system and planning process.</li> <li>• Preserve and enhance the natural environment, improve air quality, and promote active lifestyles.</li> <li>• Encourage livable communities which support sustainability and economic vitality.</li> <li>• Ensure adequate maintenance and enhance the safety and reliability of the existing transportation system.</li> <li>• Develop cost-effective projects and programs aimed at reducing the costs associated with constructing, operating, and maintaining the regional transportation system.</li> </ul>

Active Transportation Network Implementation	
Related Policies	BP3-002
Implementation	<ul style="list-style-type: none"> <li>• <b>Complete the Regional Active Transportation Network:</b> Improve, expand, and complete the region's bicycle and pedestrian facilities network, end of trip facilities, signage and wayfinding, and related programs throughout the region with continued use of the Regional Transportation Council's Local Funding Program Initiatives, Local Air Quality and Sustainable Development Funding programs, the Congestion Mitigation and Air Quality Program, the Transportation Alternatives Program, and other available funding sources.</li> <li>• <b>Close Gaps and Improve Connectivity in the Regional Veloweb, On-Street Bikeway Network, and Pedestrian Network:</b> Eliminate major gaps in the regional network and complete connections to address major barriers such as freeways, railroads, and waterways.</li> <li>• <b>Linkages to Transit and Major Destinations and Areas with Highest Demand:</b> Support and complete the development of pedestrian and bicycle facilities that provide access from neighborhoods to public transportation services, education facilities, employment centers, medical, retail, and other destinations.</li> <li>• <b>Environmental Justice Areas and Transit-Dependent Populations:</b> Improve accommodations for pedestrians and bicyclists in environmental justice areas and improve connections for transit-dependent populations.</li> <li>• <b>Regional Pedestrian Network:</b> Develop a Regional Pedestrian Network and Safety Plan. Implement projects that improve accommodations and safety for pedestrians, with special attention given to vulnerable road users and disadvantaged communities.</li> <li>• <b>Safe Routes to School:</b> Coordinate with Independent School Districts, municipalities, public safety officials, and other agencies throughout the region to ensure safe and accessible walking and bicycling corridors to education facilities.</li> <li>• <b>Safety Improvements:</b> Support efforts to reduce crashes and fatalities between motor vehicles and pedestrians and bicyclists, including the implementation of Proven Safety Countermeasures outlined by the Federal Highway Administration Office of Safety. Prioritize infrastructure design techniques and safety countermeasures projects in areas with high rates of pedestrian and bicycle crashes and fatalities.</li> <li>• <b>Americans with Disabilities Compliance:</b> Support efforts to identify Americans with Disabilities accessibility needs and incorporate improvements into the overall transportation network.</li> </ul>
Cost Estimate	\$4,150,000,000

Active Transportation Education and Outreach	
Reference	BP2-003
Background	The Education and Outreach Program includes activities to improve safety, reduce crashes and fatalities, raise awareness, and promote healthier communities.
Related Goals	<ul style="list-style-type: none"> <li>• Improve the availability of transportation options for people and goods.</li> <li>• Ensure all communities are provided access to the regional transportation system and planning process.</li> <li>• Preserve and enhance the natural environment, improve air quality, and promote active lifestyles.</li> <li>• Encourage livable communities which support sustainability and economic vitality.</li> <li>• Ensure adequate maintenance and enhance the safety and reliability of the existing transportation system.</li> </ul>
Related Policies	BP3-003
Implementation	<ul style="list-style-type: none"> <li>• <b>Safety Education Programs and Campaigns:</b> Support and create programs and campaigns that educate bicyclists, pedestrians, and the general public about bicycle operation, bicyclists' and pedestrians' rights and responsibilities, and lawful interactions between motorists, bicyclists, and pedestrians to increase safety for all road users. Support programs aimed at increasing bicycle and walking trips by providing incentives, recognition, or services that make bicycling and walking more convenient transportation modes.</li> <li>• <b>Healthy and Livable Communities:</b> Create healthier and more livable communities by encouraging the use of bicycle and pedestrian facilities for work and non-work trips, and for daily physical activity.</li> <li>• <b>Enforcement:</b> Encourage enforcement efforts of traffic laws and target unsafe bicyclist, pedestrian, and motorist behaviors to improve safety and reduce collisions and conflicts between motorists, bicyclists, and pedestrians.</li> <li>• <b>Technical Training and Education:</b> Provide pertinent training to transportation-related professionals.</li> <li>• <b>Mapping Facilities and Plans:</b> Maintain a regional database and provide information regarding existing and planned active transportation facilities and related amenities throughout the region.</li> </ul>
Cost Estimate	N/A – Program costs associated with planning elements only

## Recommended Off-Street Network: The Regional Veloweb 2045

The Regional Veloweb plan was first developed in 1997 based on an extensive study conducted by NCTCOG's (North Central Texas Council of Governments) Bicycle and Pedestrian Transportation Task Force.

Over the years, as additional planning has occurred in cities and counties throughout the region, this planned regional network has grown as new prioritized corridors have been identified that provide connectivity between cities and counties, as well as linkages to transit stations and major destinations.

**Historical Combined Regional Veloweb, Community Shared-Use Paths, and On-Street Bikeways Network Miles by Facility Status (February 2022)**

Facility Type	Mobility 2020 (1996)	Mobility 2025 (2000)	Mobility 2030 (2007)	Mobility 2035 (2011)	Mobility 2040 (2016)	Mobility 2045 (2018)	Mobility 2045 Update (2022)
<b>Regional Veloweb Paths<sup>1</sup></b>							
Regional Veloweb Paths, Existing	-	106	108	237	442	455	538
Regional Veloweb Paths, Funded	-	-	-	31	146	143	131
Regional Veloweb Paths, Planned	-	512	512	1,400	1,288	1,285	1,496
<b>Total Regional Veloweb Paths</b>	<b>644</b>	<b>618</b>	<b>620</b>	<b>1,668</b>	<b>1,876</b>	<b>1,883</b>	<b>2,165</b>
<b>Community Shared-Use Paths<sup>1</sup></b>							
Community Shared-Use Paths, Existing	-	-	-	-	333	318	470
Community Shared-Use Paths, Funded	-	-	-	-	42	57	94
Community Shared-Use Paths, Planned	-	-	-	-	1,999	2,584	3,135
<b>Total Community Paths</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,374</b>	<b>2,959</b>	<b>3,699</b>
<b>Total Regional Veloweb &amp; Community Paths</b>	<b>644</b>	<b>618</b>	<b>620</b>	<b>1,668</b>	<b>4,250</b>	<b>4,842</b>	<b>5,864</b>
<b>On-Street Bikeways<sup>2</sup></b>							
On-Street Bikeways, Existing	-	-	-	-	200	212	276
On-Street Bikeways, Funded	-	-	-	-	71	84	82
On-Street Bikeways, Planned	-	-	-	-	2,161	1,817	2,051
<b>Total On-Street Bikeways (Urbanized Areas)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,432</b>	<b>2,113</b>	<b>2,409</b>
On-Street Bikeways, Existing (rural areas between communities)	-	-	-	-	248	247	247
On-Street Bikeways, Planned (rural areas between communities)	-	-	-	-	100	101	98
<b>Total On-Street Bikeways (Rural Areas)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>348</b>	<b>348</b>	<b>345</b>
<b>Total On-Street Bikeways</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,780</b>	<b>2,461</b>	<b>2,754</b>
<b>Total All Facilities</b>	<b>644</b>	<b>618</b>	<b>620</b>	<b>1,668</b>	<b>7,030</b>	<b>7,303</b>	<b>8,618</b>

<sup>1</sup> The Regional Veloweb and Community Shared-Use Path network does not include recreational paths/loops, private paths, equestrian or nature trails, or wide sidewalks less than 10 feet in width. Regional Veloweb and Community Shared-Use Paths facility mileages are based on linear miles.

<sup>2</sup> On-street bikeways in the urbanized area include separated or protected bike lanes/cycle tracks, bike lanes, marked shared lanes, and marked bicycle boulevards. On-street bikeways in the urbanized areas do not include signed bike "routes," signed "shared the road," unmarked wide outside lanes, or signed wide shoulders. The use of wide shoulders is included on various roadways linking rural communities outside of the urbanized area. On-street bikeways facility mileage is based on centerline miles.

### Historical Mileage of Regional Veloweb Network

	1997 Regional Veloweb	Mobility 2035 Regional Veloweb (2011)	Mobility 2035-2013 Update (2013)	Mobility 2040 Regional Veloweb (2016)	Mobility 2045 Regional Veloweb (2018)	Mobility 2045 Update Regional Veloweb (2022)
Length (miles)	644	1,668	1,728	1,876	1,883	2165
Number of Cities Connected	50	116	117	105	106	105
Number of Counties Connected	4	10	10	10	10	10

The Mobility 2045 Update Regional Veloweb includes adjustments in much of the unincorporated rural areas of the region. In some areas, Veloweb alignments reflected in previous plans were updated and replaced by on-street wide-paved shoulder accommodations. These shoulder accommodations are more suitable for providing opportunities for travel between small communities located outside of the urban area. They are reflected in the regional On-Street Bikeway Network.

### Costs

Costs to implement various sections of the Veloweb and Community Paths will vary based on the location and context of the local area. For example, some sections may require extensive grade separation crossings of highways or waterways while other portions of the network can be implemented with fewer barrier crossings. Additional costs for lighting, traffic signal or roadway crossing accommodations, and engineering and design are not calculated into the overall Veloweb construction costs of \$1,400,000 per mile as detailed in following table.

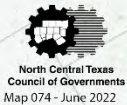
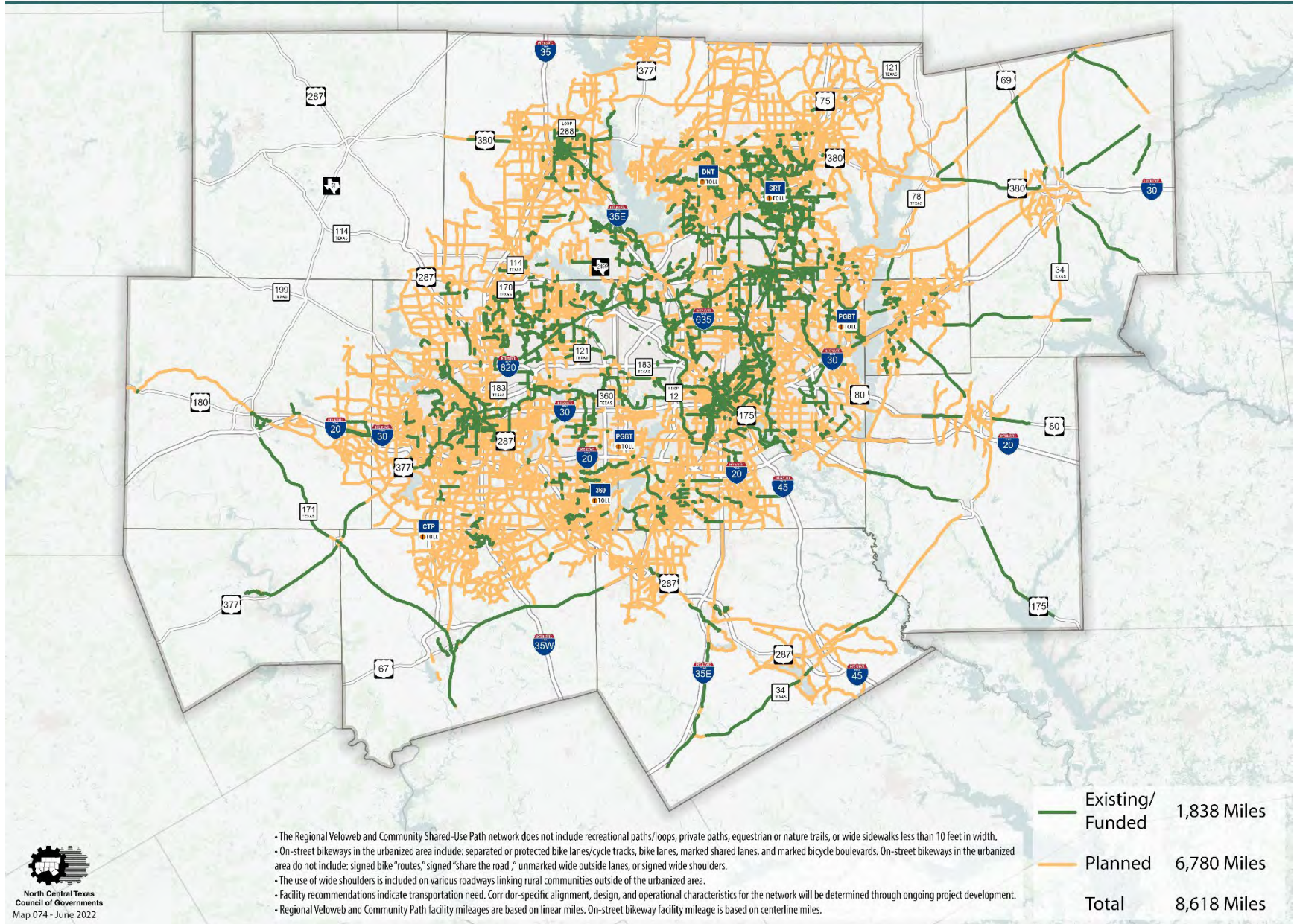
Facility	Estimated Costs Per Mile
12-foot wide concrete shared-use path <sup>1</sup>	\$966,000
Retaining wall, bridges, railings, culverts, or other major structures	\$434,000
<b>Total</b>	<b>\$1,400,000</b>

<sup>1</sup> Based on 12-foot width, includes mobilization, site prep, demolition, earthwork  
 Source: NCTCOG, 2021





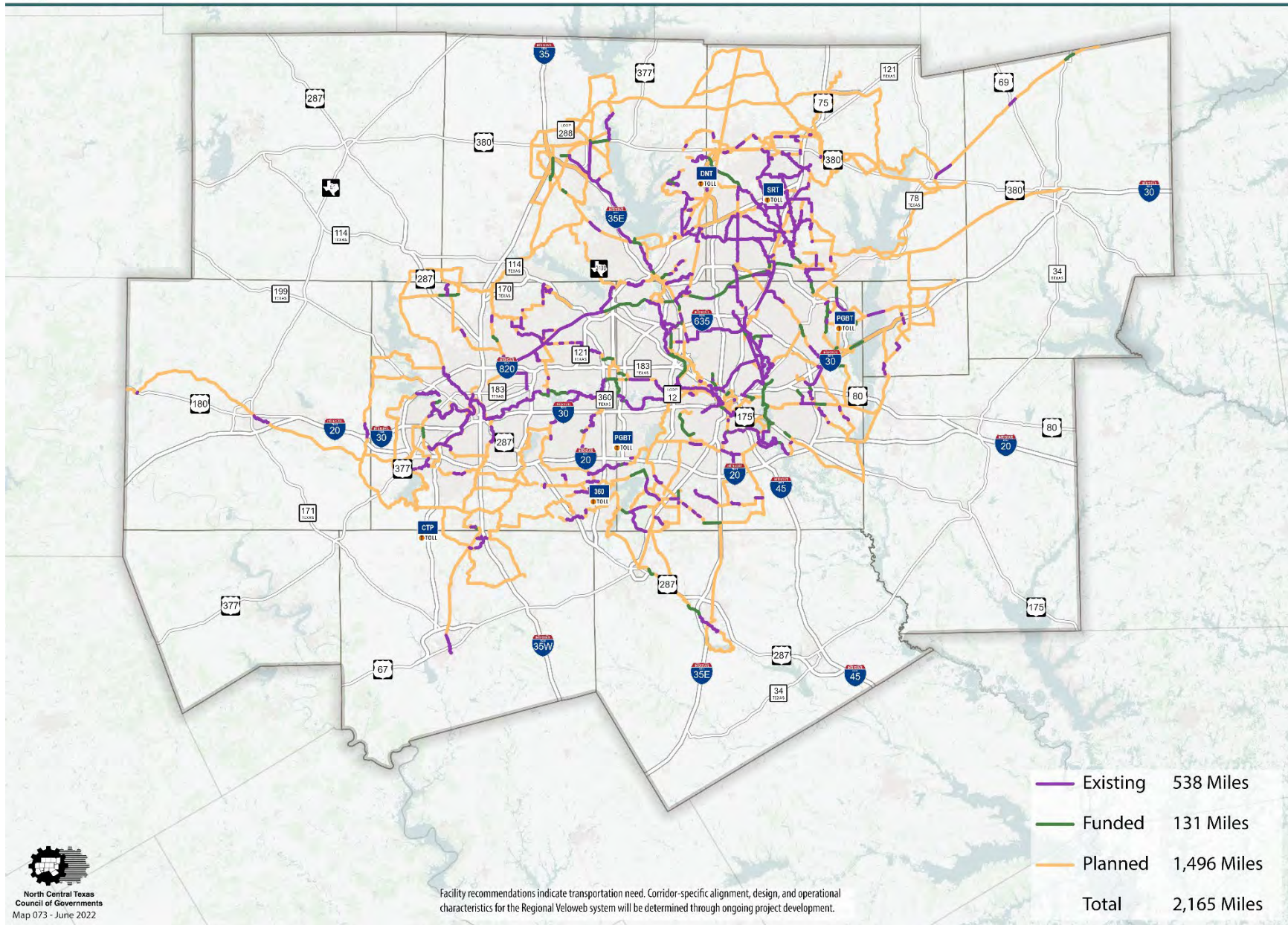
# Combined Regional Veloweb, Community Paths, and On-Street Bikeway Network







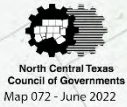
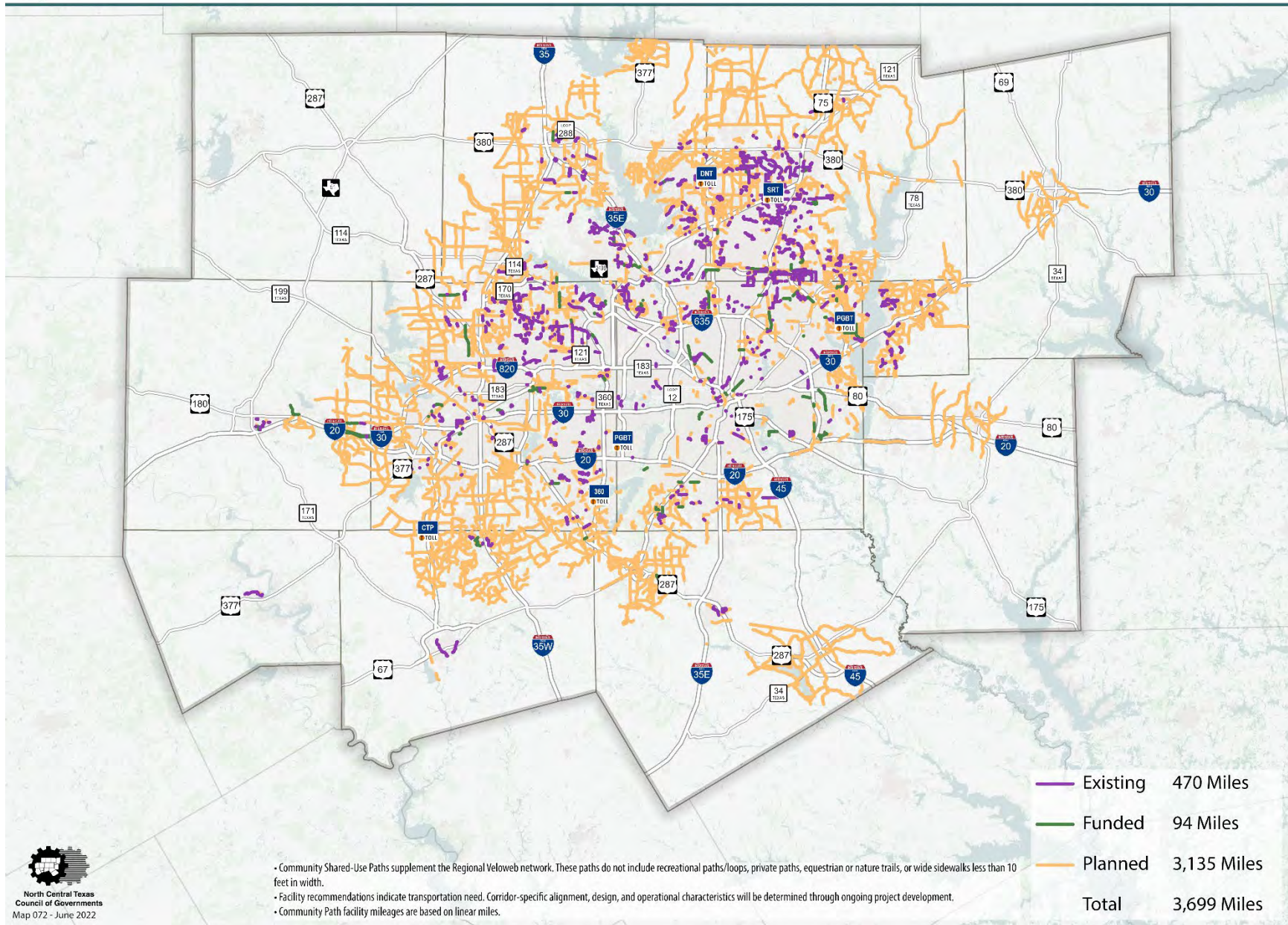
# Regional Veloweb







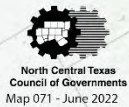
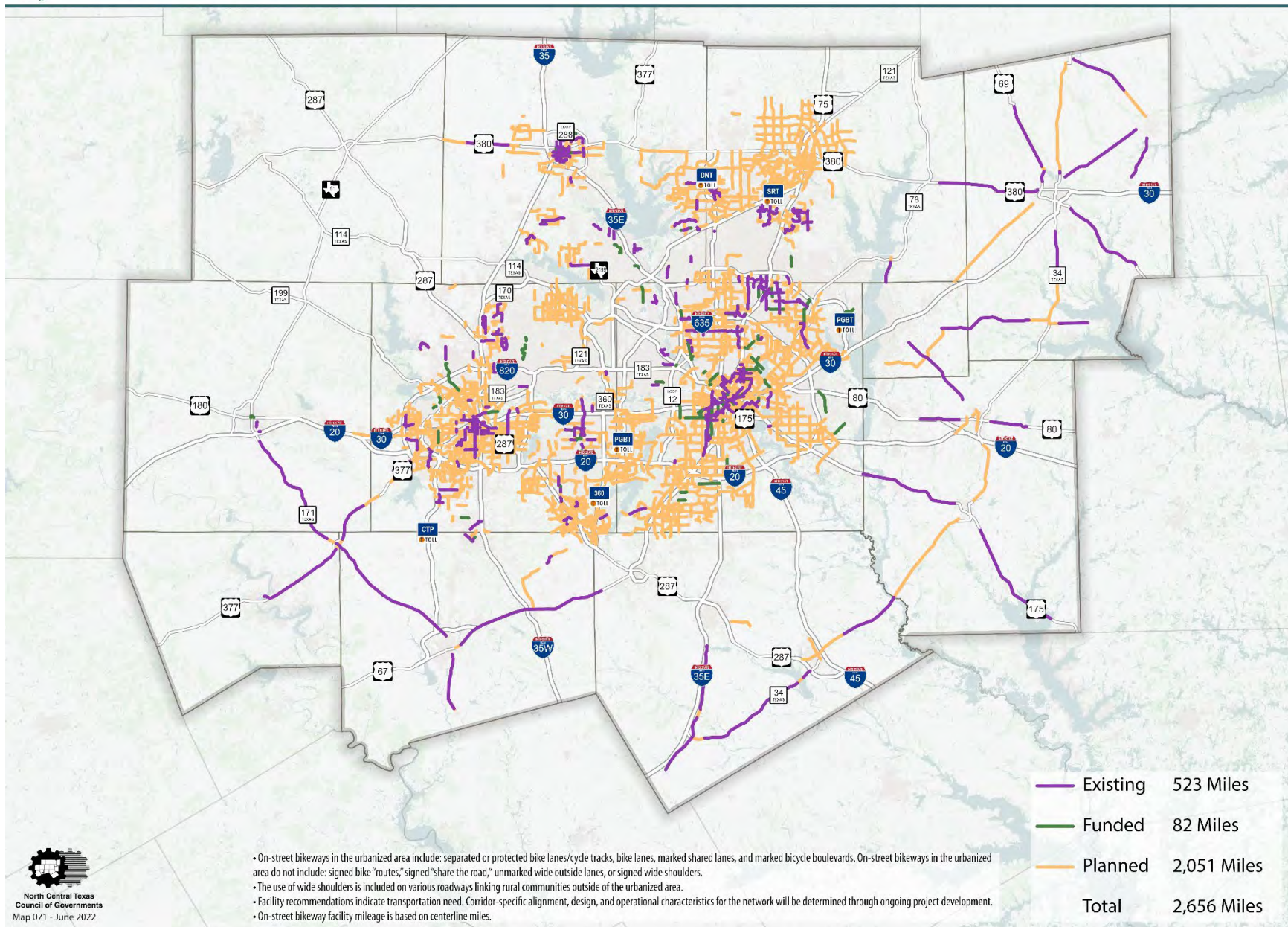
# Community Shared-Use Paths







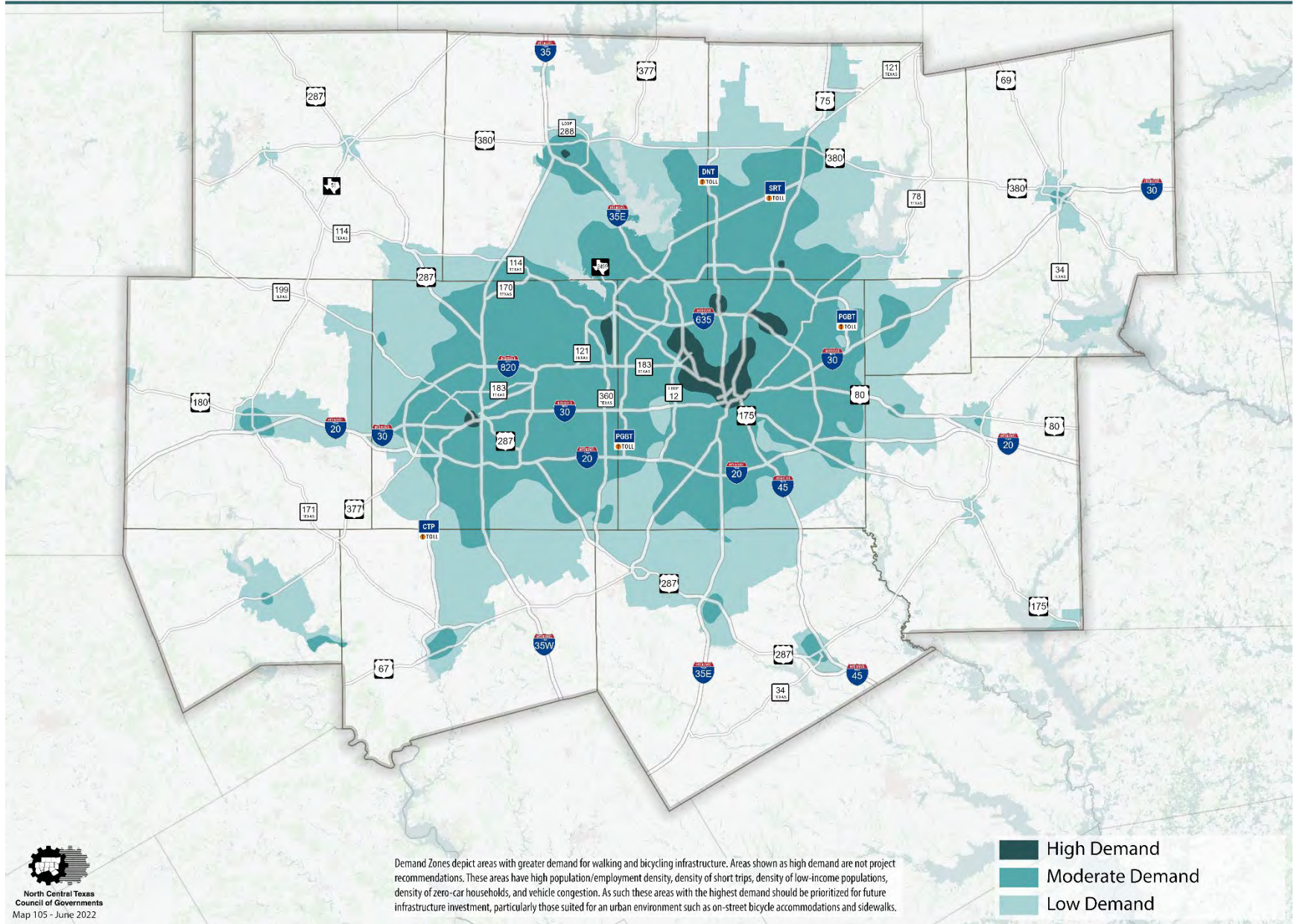
# On-Street Bikeway Network







# Demand Zones for Walking and Bicycling Travel



## **Funding the Active Transportation Network Plan**

The amount of federal funding allocated to pedestrian and bicycle projects throughout the region varies from year to year, as described in the current Transportation Improvement Program. While federal funds cover much of the cost of the Regional Veloweb network and portions of the other community pathway and on-street bicycle networks, local governments also contribute matching funds to these projects. In addition, local funding also implements a variety of local path, on-street bikeway, and pedestrian improvement and safety-related projects. The following table indicates potential eligibility for pedestrian and bicycle projects under the US Department of Transportation Surface Transportation Funding Program. Additional restrictions may apply.



## Pedestrian and Bicycle Funding Opportunities: US Department of Transportation Transit, Highway, and Safety Funds

	BUILD	INFRA	TIFIA	FTA	ATI	CMAQ	HSIP	NHPP	STBG	TA	RTP	SRTS	PLAN	402	405	FLTPP
Access Enhancements to Public Transportation (includes benches, bus pads)	\$	~\$	\$	\$	\$	\$		\$	\$	\$						\$
ADA/504 Self Evaluation/Transition Plan									\$	\$	\$		\$			\$
Bicycle Plans				\$					\$	\$		\$	\$			\$
Bicycle Helmets (project or training related)									\$	\$ <sup>S</sup>		\$		\$*		
Bicycle Helmets (safety promotion)									\$	\$ <sup>S</sup>		\$				
Bicycle Lanes on Road	\$	~\$	\$	\$	\$	\$	\$	\$	\$	\$		\$				\$
Bicycle Parking	~\$	~\$	~\$	\$	\$	\$		\$	\$	\$	\$	\$				\$
Bicycle 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 Bicyclists and/or Pedestrians	\$	~\$	\$	\$	\$	\$*	\$	\$	\$	\$	\$	\$				\$
Bus Shelters and Benches	\$	~\$	\$	\$	\$	\$		\$	\$	\$						\$
Coordinator Positions (state or local)						\$ <sup>L</sup>			\$	\$ <sup>S</sup>		\$				
Crosswalks (new or retrofit)	\$	~\$	\$	\$	\$	\$*	\$	\$	\$	\$	\$	\$				\$
Curb Cuts and Ramps	\$	~\$	\$	\$	\$	\$*	\$	\$	\$	\$	\$	\$				\$
Counting Equipment				\$	\$		\$	\$	\$	\$	\$	\$	\$*			\$
Data Collection and Monitoring for Bicyclists and/or Pedestrians				\$	\$		\$	\$	\$	\$	\$	\$	\$*			\$
Historic Preservation (bicycle and pedestrian and transit facilities)	\$	~\$	\$	\$	\$				\$	\$						\$
Landscaping, Streetscaping (bicycle and/or pedestrian route; transit access); Related Amenities (benches, water fountains); Generally, as Part of a Larger Project	~\$	~\$	~\$	\$	\$			\$	\$	\$						\$
Lighting (pedestrian and bicyclist scale associated with pedestrian/bicyclist project)	\$	~\$	\$	\$	\$		\$	\$	\$	\$	\$	\$				\$
Maps (for bicyclists and/or pedestrians)				\$	\$	\$			\$	\$		\$	\$*			
Paved Shoulders for Bicyclist and/or Pedestrian Use	\$	~\$	\$			\$*	\$	\$	\$	\$		\$				\$
Pedestrian Plans				\$					\$	\$		\$	\$			\$
Recreational Trails	~\$	~\$	~\$						\$	\$	\$					\$
Road Diets	\$	~\$	\$				\$	\$	\$	\$						\$
Road Safety Assessment for Pedestrians and Bicyclists							\$		\$	\$			\$			\$
Safety (education and awareness activities and programs to inform pedestrians, bicyclists, and motorists on pedestrian and bicyclist safety)									\$ <sup>S</sup>	\$ <sup>S</sup>		\$	\$*	\$*	\$*	

	BUILD	INFRA	TIFIA	FTA	ATI	CMAQ	HSIP	NHPP	STBG	TA	RTP	SRTS	PLAN	402	405	FLTP
Safety Education Positions									\$ <sup>S</sup>	\$ <sup>S</sup>		\$		\$*		
Safety Enforcement (including police patrols)									\$ <sup>S</sup>	\$ <sup>S</sup>		R		\$*	\$*	
Safety Program Technical Assessment (for bicyclists and pedestrians)									\$ <sup>S</sup>	\$ <sup>S</sup>		\$	\$*	\$		
Separated Bicycle Lanes	\$	~\$	\$	\$	\$	\$	\$	\$	\$	\$		\$				\$
Shared-Use Paths/Transportation Trails	\$	~\$	\$	\$	\$	\$*	\$	\$	\$	\$	\$	\$				\$
Sidewalks (new or retrofit)	\$	~\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$				\$
Signs/Signals/Signal Improvements (including accessible pedestrian signals)	\$	~\$	\$	\$	\$	\$	\$	\$	\$	\$		\$				\$
Signed Bicycle or Pedestrian Routes	\$	~\$	\$	\$	\$	\$		\$	\$	\$		\$				\$
Spot Improvement Programs	\$	~\$	\$	\$			\$	\$	\$	\$	\$	\$				\$
Stormwater Impacts Related to Pedestrian and Bicycle Projects	\$	~\$	\$	\$	\$		\$	\$	\$	\$	\$	\$				\$
Traffic Calming	\$	~\$	\$	\$			\$	\$	\$	\$		\$				\$
Trail Bridges	\$	~\$	\$			\$*	\$	\$	\$	\$	\$	\$				\$
Trail Construction and Maintenance Equipment									\$ <sup>S</sup>	\$ <sup>S</sup>	\$					
Trail/Highway Crossings and Intersections	\$	~\$	\$			\$*	\$	\$	\$	\$	\$	\$				\$
Trailside and Trailhead Facilities (includes restrooms and water but not general park amenities; see Program Guidance)	~\$*	~\$*	~\$*						\$*	\$*	\$*					\$
Training						\$	\$		\$	\$	\$	\$	\$*	\$*		
Training for Law Enforcement on Bicyclist and Pedestrian Safety Laws									\$ <sup>S</sup>	\$ <sup>S</sup>		\$			\$*	
Tunnels/Undercrossings for Bicyclists and/or Pedestrians	\$	~\$	\$	\$	\$	\$*	\$	\$	\$	\$	\$	\$				\$

Source: Federal Highway Administration, Revised January 21, 2021

ADA/504	Americans with Disabilities Act of 1990/Section 504 of the Rehabilitation Act of 1973
BUILD	Better Utilizing Investments to Leverage Development Transportation Discretionary Grants
INFRA	Infrastructure for Rebuilding America Discretionary Grant Program
TIFIA	Transportation Infrastructure Finance and Innovation Act (loans)
FTA	Federal Transit Administration Capital Funds
ATI	Associated Transit Improvement (1% set-aside of FTA)
CMAQ	Congestion Mitigation and Air Quality Improvement Program
HSIP	Highway Safety Improvement Program
NHPP	National Highway Performance Program
STBG	Surface Transportation Block Grant Program
TA	Transportation Alternatives Set-Aside (formerly Transportation Alternatives Program)
RTP	Recreational Trails Program
SRTS	Safe Routes to School Program/Activities
PLAN	Statewide Planning and Research (SPR) or Metropolitan Planning Funds
NHTSA 402	State and Community Highway Safety Grant Program
NHTSA 405	National Priority Safety Programs (nonmotorized safety)
FLTP	Federal Lands and Tribal Transportation Programs (Federal Lands Access Program, Federal Lands Transportation Program, Tribal Transportation Program, Nationally Significant Federal Lands and Tribal Projects)

Key:

- \$ = Funds may be used for this activity (restrictions may apply)
- ~\$ = Eligible, but not competitive unless part of a larger project
- \$<sup>L</sup> = Limit one per state
- \$<sup>S</sup> = As SRTS
- \$\* = See program specific notes for restrictions