

Active Transportation

Mobility 2045 represents the extensive research and compilation of the locally adopted master 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 (NCTCOG) regularly coordinates with local jurisdictions to maintain an updated database of existing, funded, and planned active transportation facilities.

Local Adopted Master Plans with Shared-Use Paths (Trails) and On-Street Bikeways, February 2018

Type of Master Plans	Number of Adopted Plans
Cities and counties with adopted trails master plans	63
Cities and counties with adopted master plans with on-street bikeways	61

Source: NCTCOG, February 2018

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 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.

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

The Mobility 2045 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 In some areas, Veloweb alignments reflected in previous plans were updated and replaced by on-street wide-paved shoulder accommodations.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

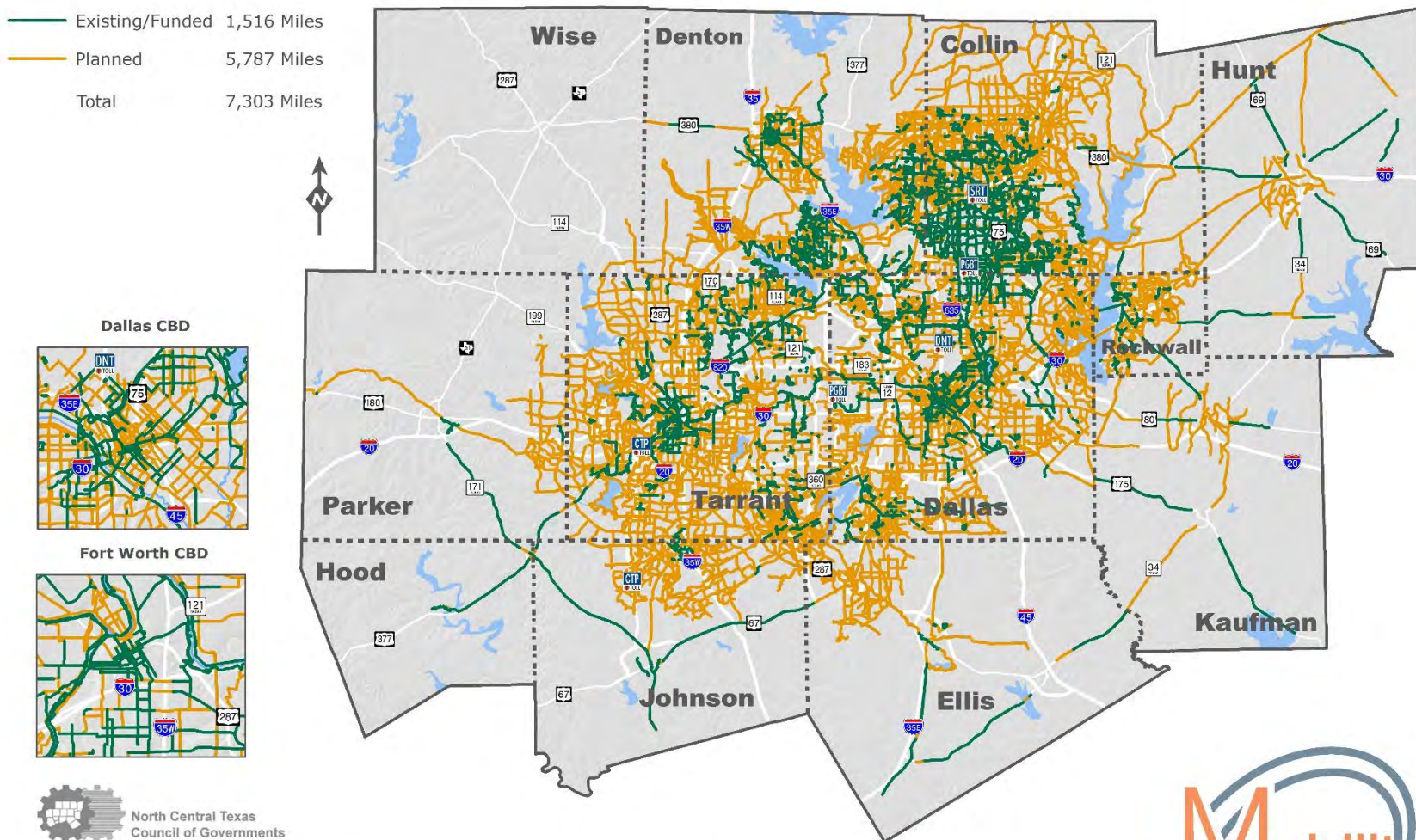
Costs to implement various sections of the Veloweb and Community Paths will vary based on the location and context of the local area. For example, some sections may require extensive grade separation crossings of highways or waterways while other portions of the network can be implemented with fewer 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 \$950,000 per mile as detailed in following table.

Facility	Estimated Costs Per Mile
12-foot wide concrete shared-use path ¹	\$420,000
Retaining wall, bridges, railings, culverts, or other major structures	\$530,000
Total	\$950,000

¹ Based on 12-foot width, includes mobilization, site prep, demolition, earthwork

Source: NCTCOG, 2015

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



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.

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 area do not include: signed bike "routes", signed "share the road", unmarked wide outside lanes, or signed wide shoulders.

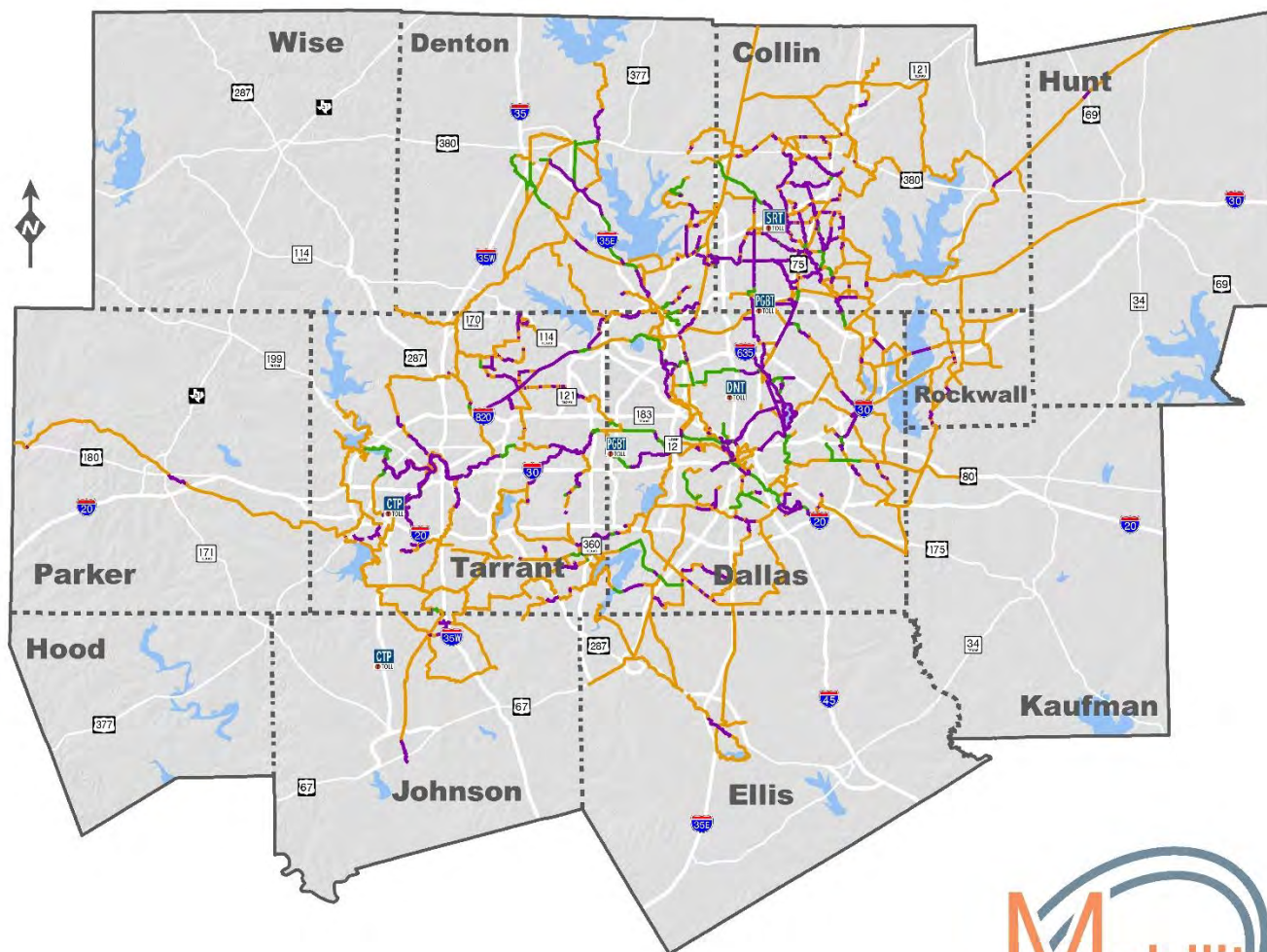
The use of wide shoulders is included on various roadways linking rural communities outside of the urbanized area.

Facility recommendations indicate transportation need. Corridor-specific alignment, design, and operational characteristics for the network will be determined through ongoing project development.

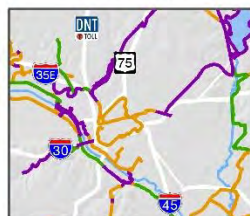
June 2018

Regional Veloweb

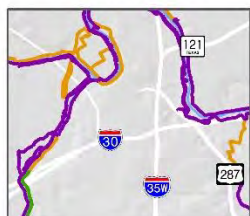
- Existing 455 Miles
- Funded 143 Miles
- Planned 1,285 Miles
- Total 1,883 Miles



Dallas CBD



Fort Worth CBD



North Central Texas
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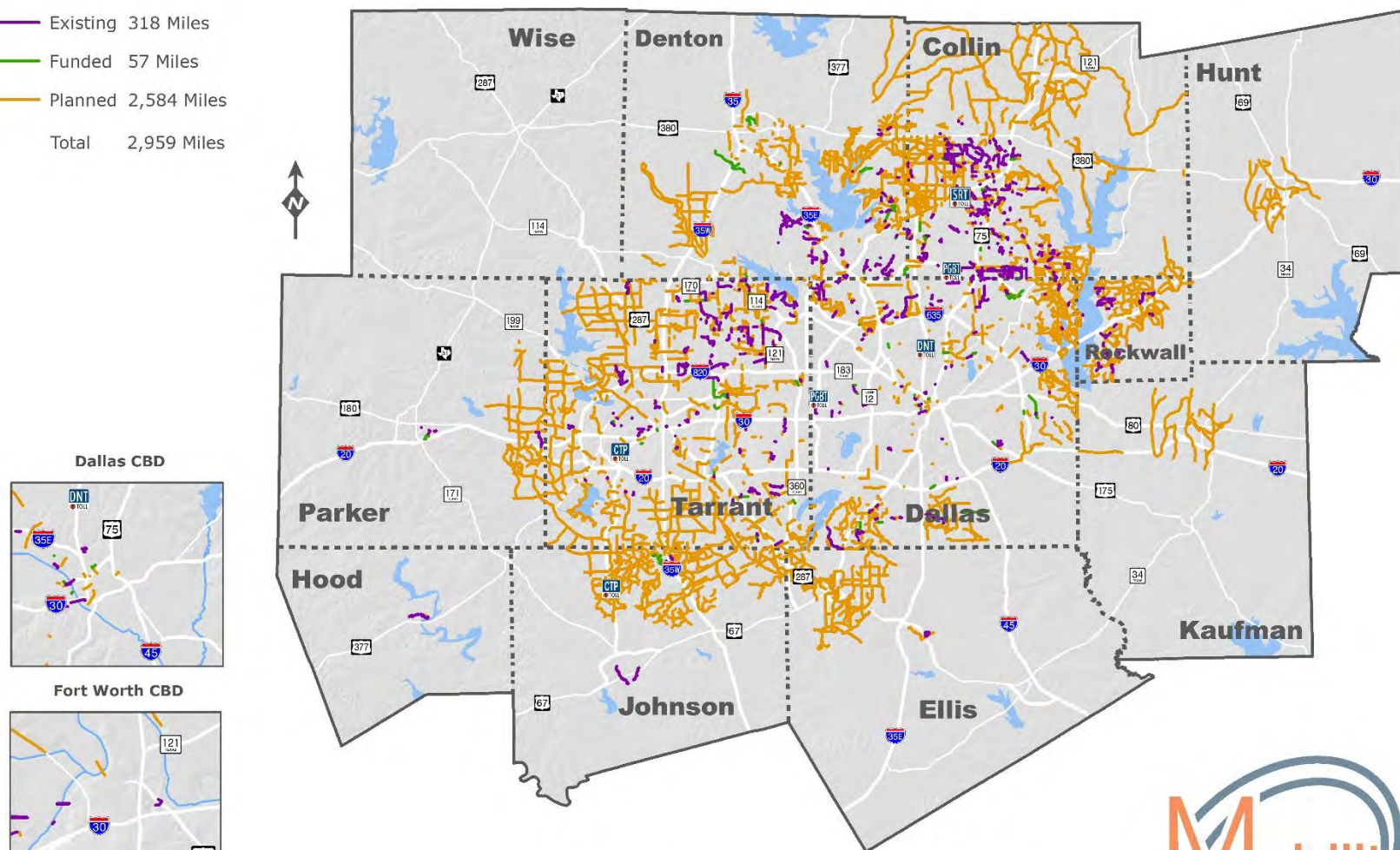
June 2018

Facility recommendations indicate transportation need. Corridor-specific alignment, design, and operational characteristics for the Regional Veloweb system will be determined through ongoing project development.



Community Shared-Use Paths

- Existing 318 Miles
- Funded 57 Miles
- Planned 2,584 Miles
- Total 2,959 Miles



Community Shared-Use Paths supplement the Regional Veloweb network. These paths do not include recreational paths/loops, private paths, equestrian or nature trails, or wide sidewalks less than 10 feet in width.

Facility recommendations indicate transportation need. Corridor-specific alignment, design, and operational characteristics will be determined through ongoing project development.



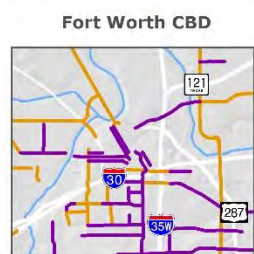
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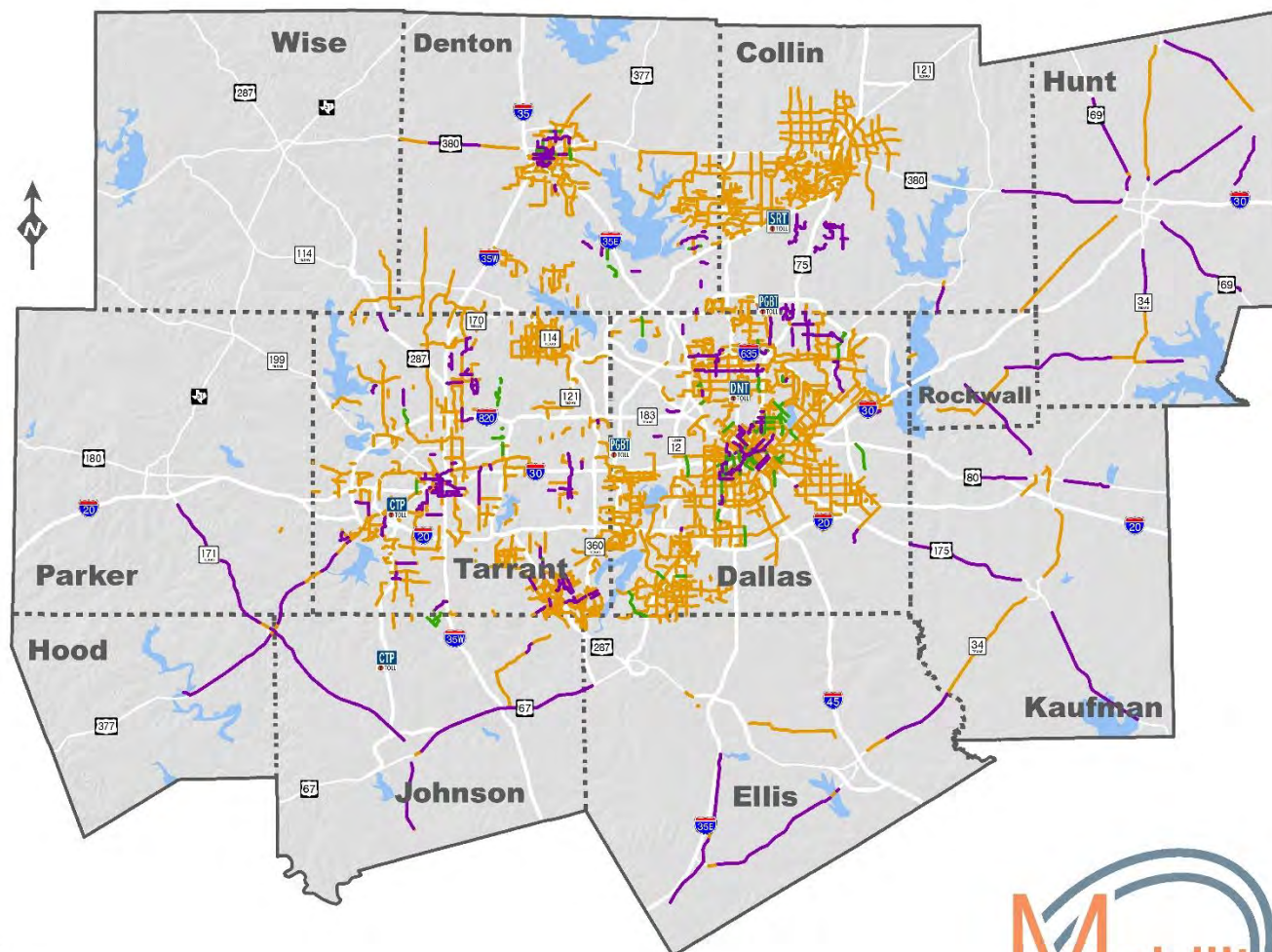


On-Street Bikeway Network

- Existing 459 Miles
- Funded 84 Miles
- Planned 1,918 Miles
- Total 2,461 Miles



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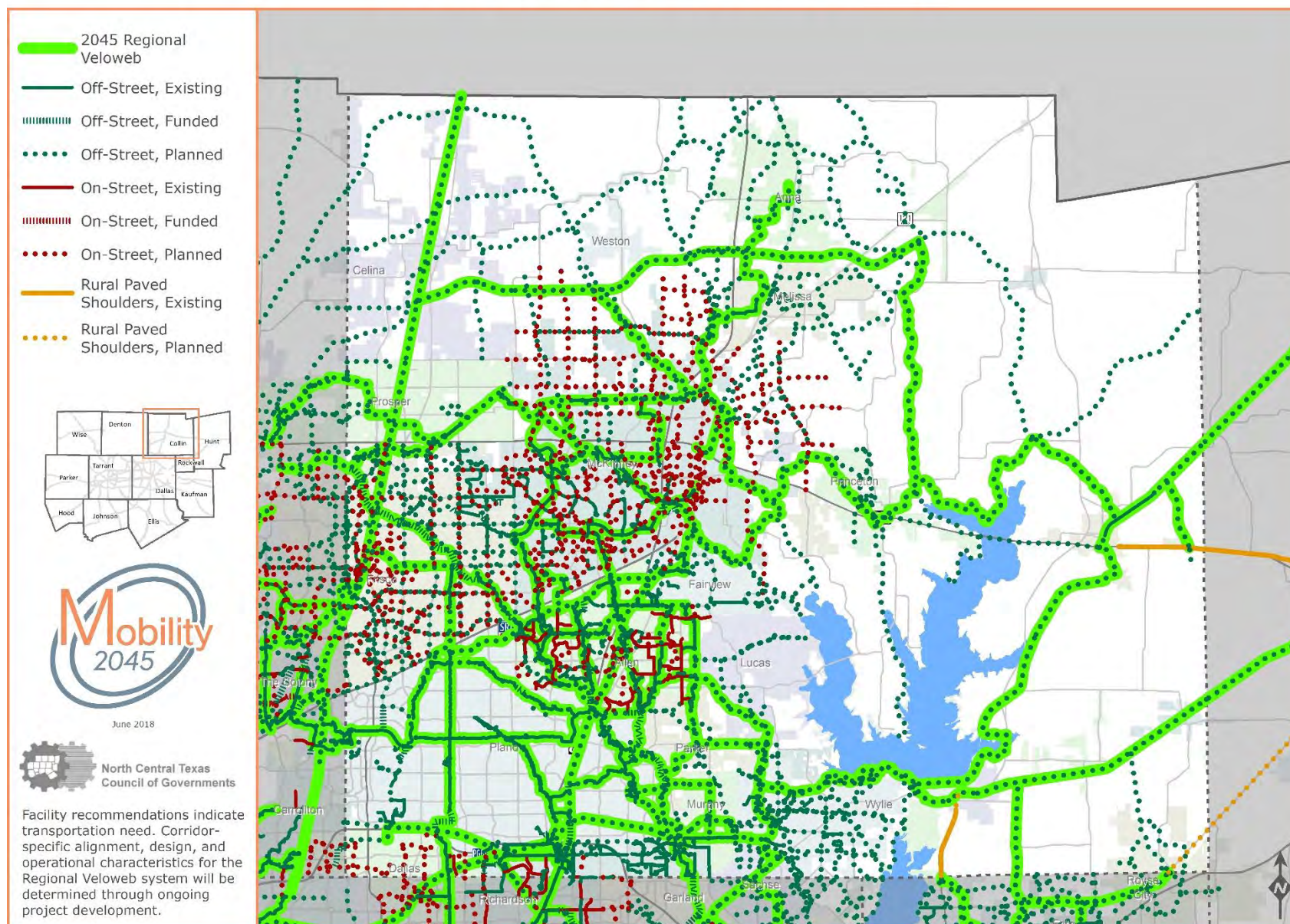
On-street bikeways in the urbanized area include: separated or protected bike lanes/cycle tracks, bike lanes, marked shared lanes, and marked bicycle boulevards. On-street bikeways in the urbanized area do not include: signed bike "routes", signed "share the road", unmarked wide outside lanes, or signed wide shoulders. The use of wide shoulders is included on various roadways linking rural communities outside of the urbanized area. Facility recommendations indicate transportation need. Corridor-specific alignment, design, and operational characteristics will be determined through ongoing project development.

June 2018

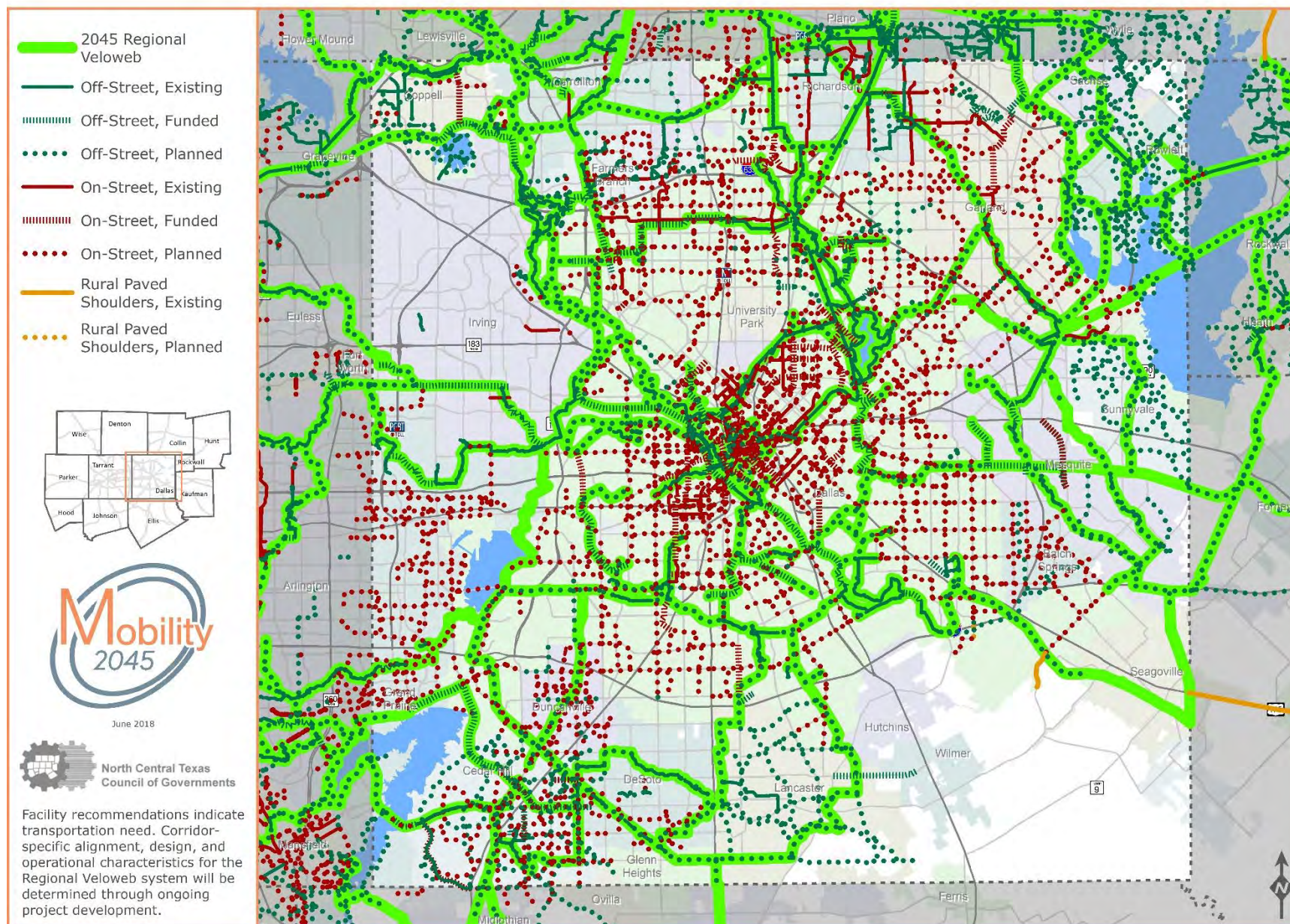


The following maps identify with additional detail the general alignment of existing, funded, and planned shared-use paths and on-street bikeways in each county in the region. Planned facilities are those that are included in locally adopted master plans.

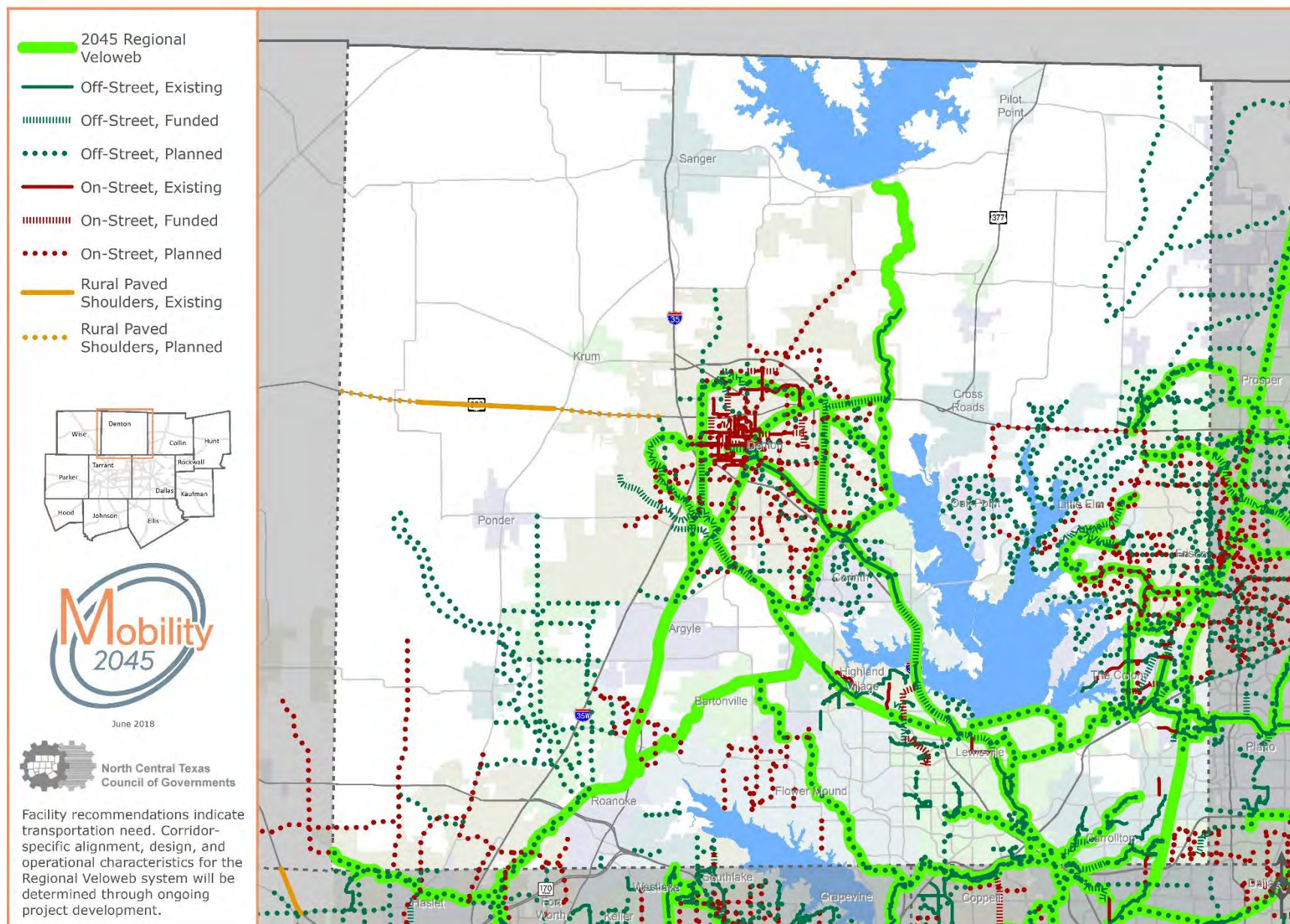
Bikeway Network in Collin County



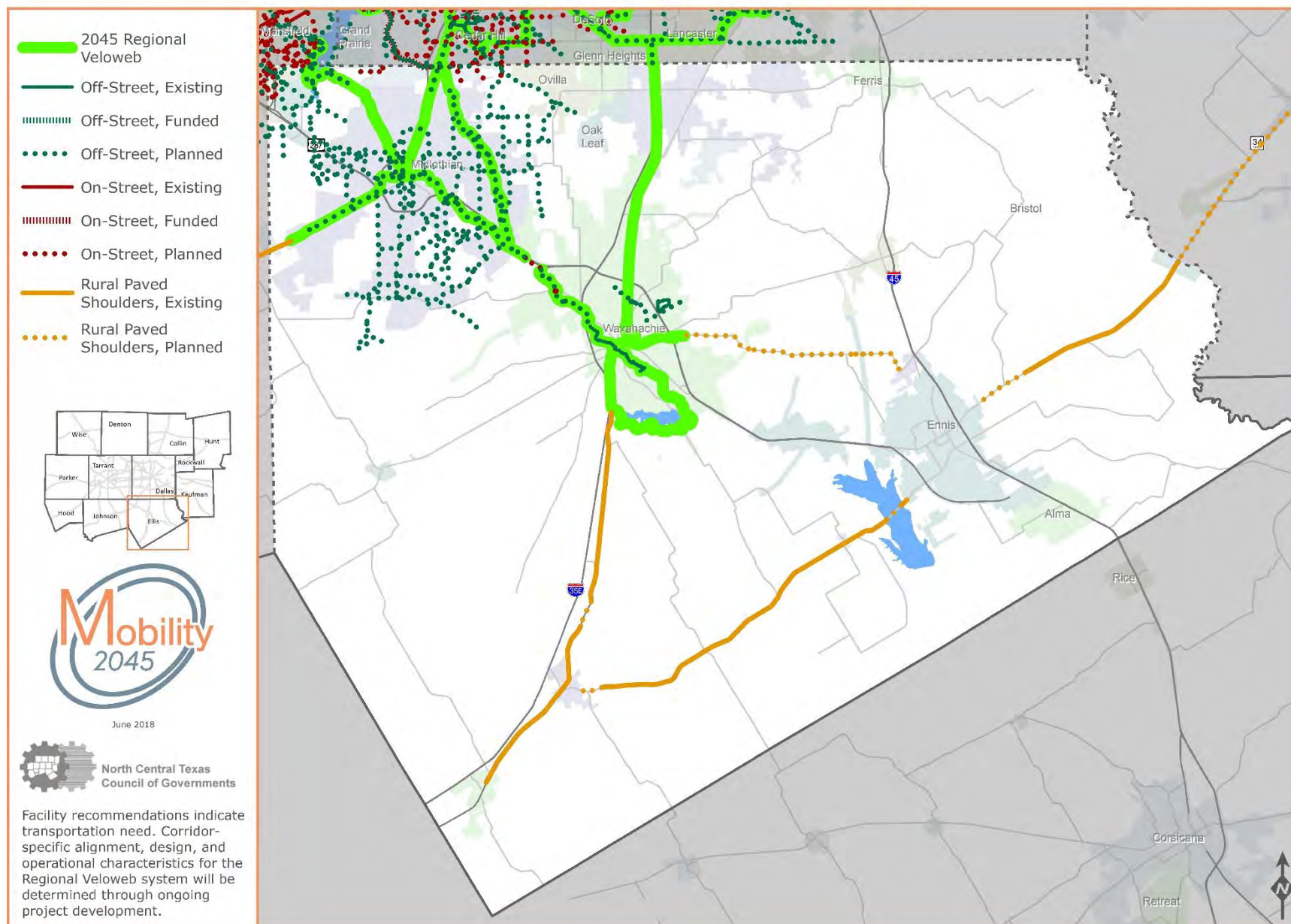
Bikeway Network in Dallas County



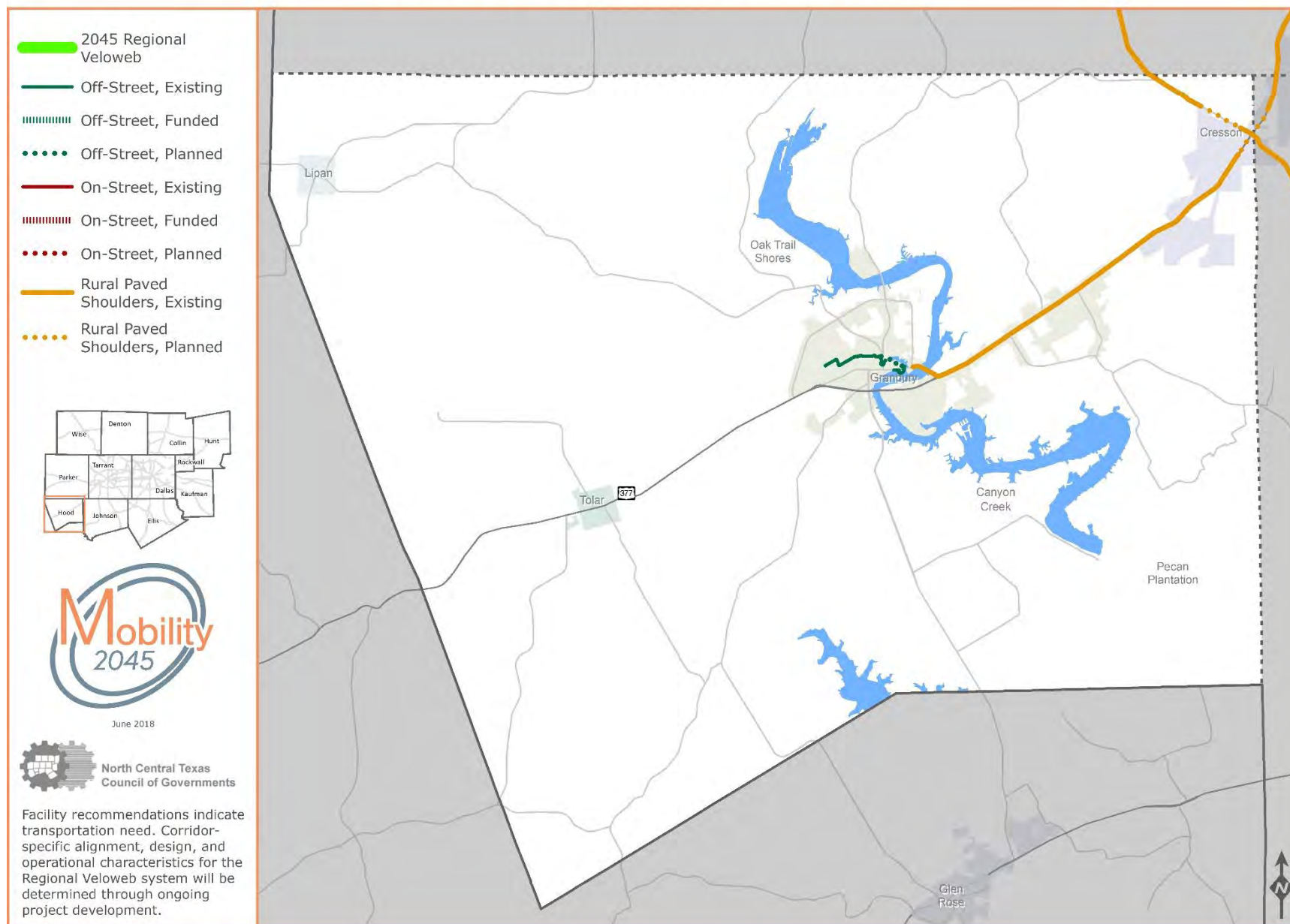
Bikeway Network in Denton County



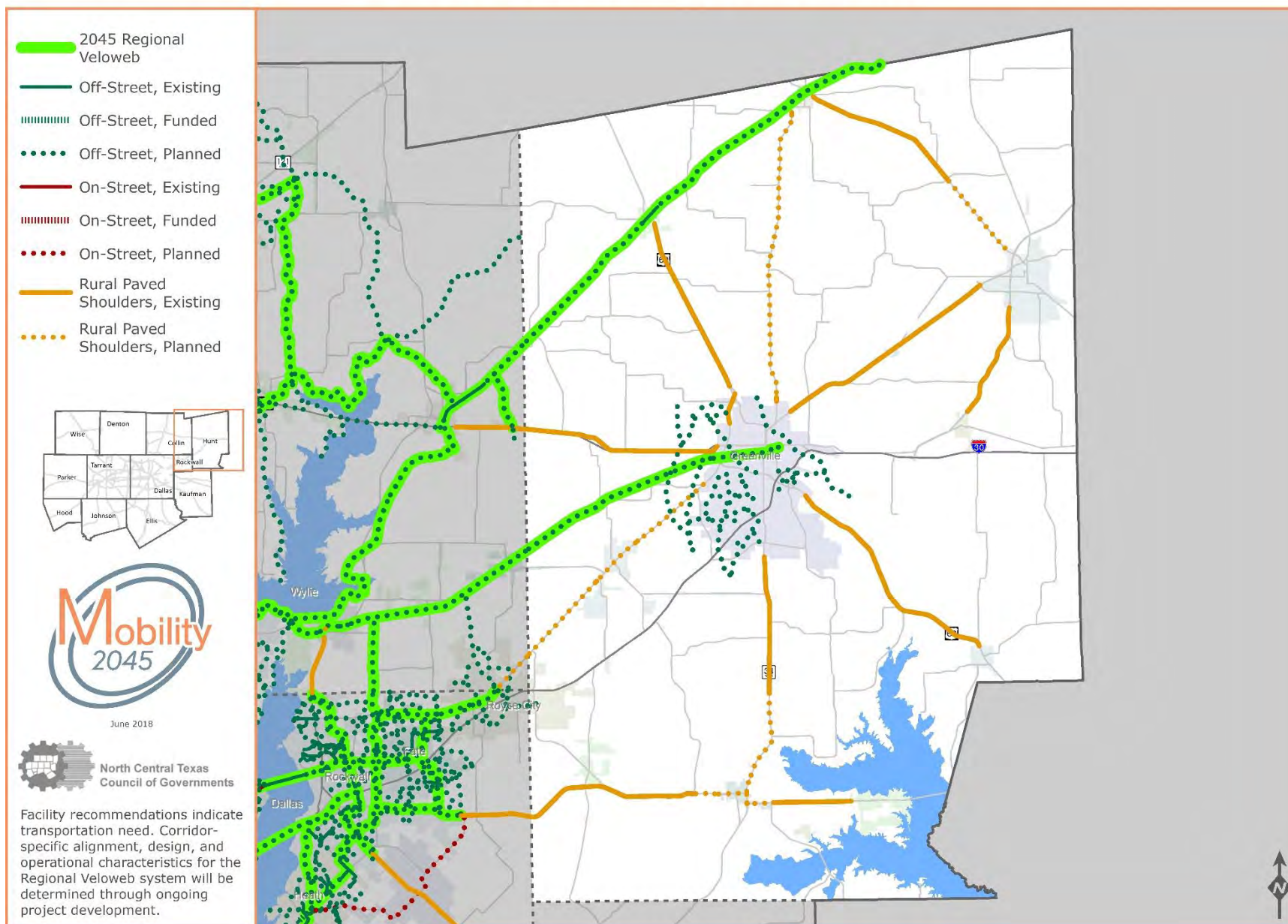
Bikeway Network in Ellis County



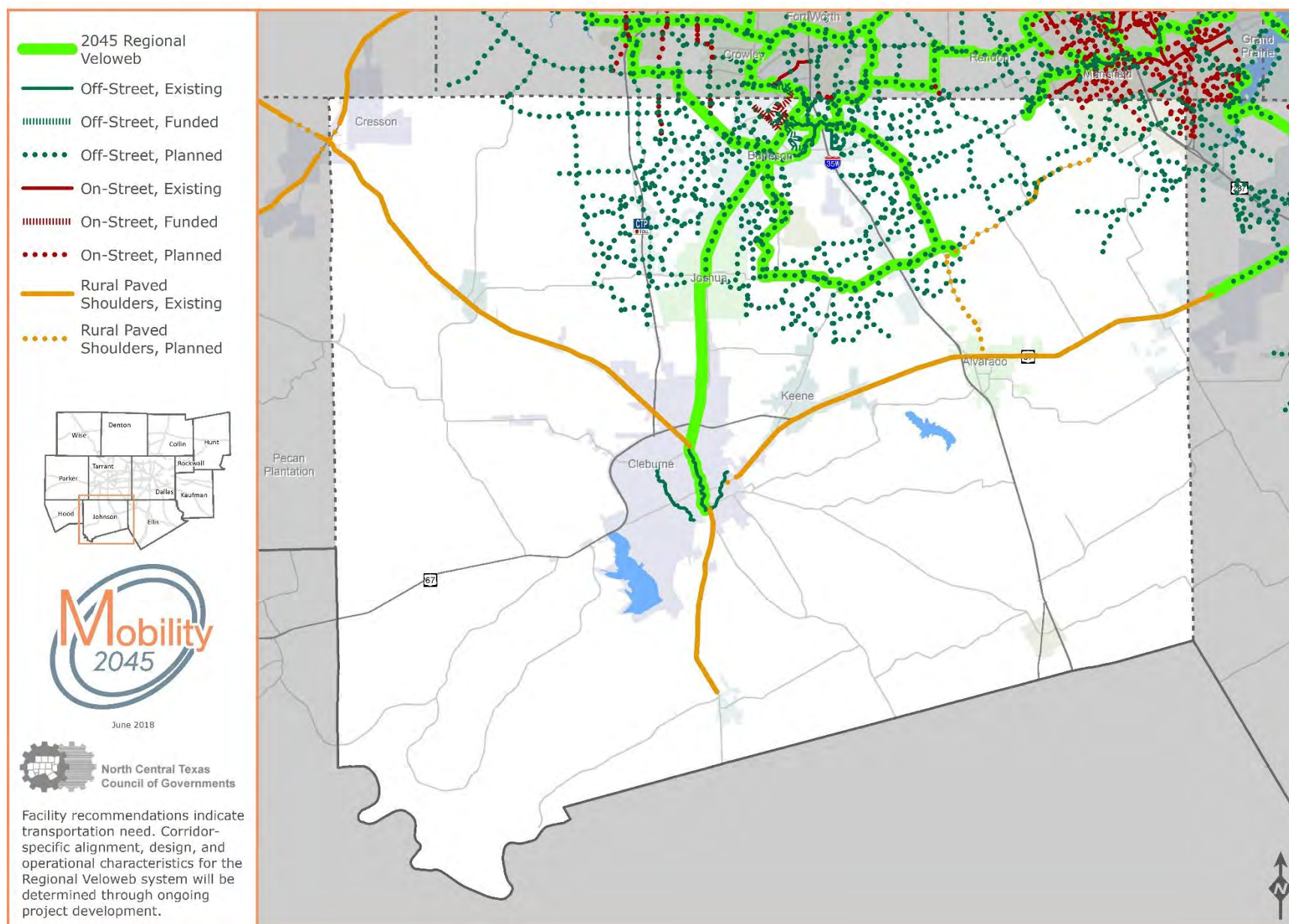
Bikeway Network in Hood County



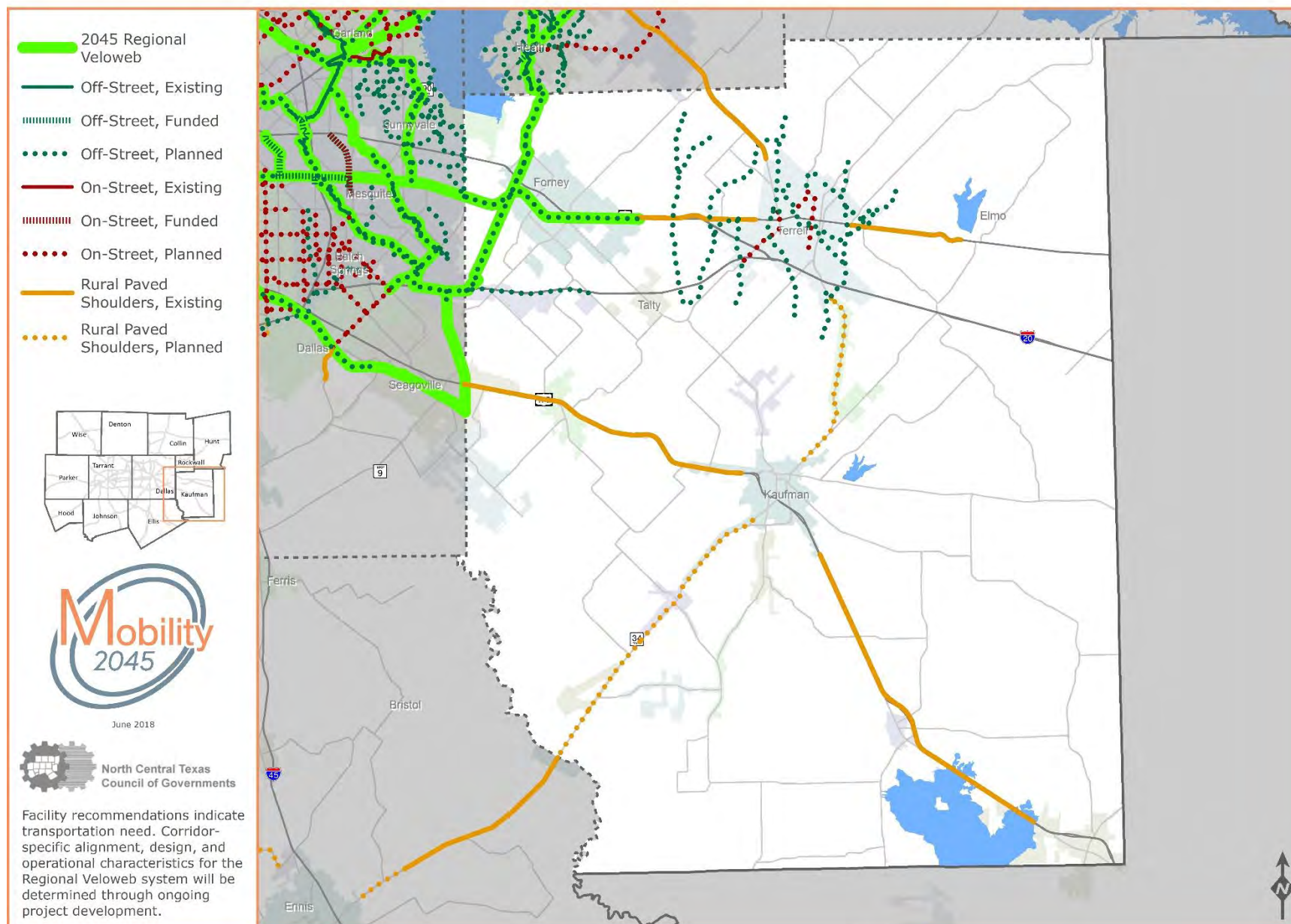
Bikeway Network in Hunt County



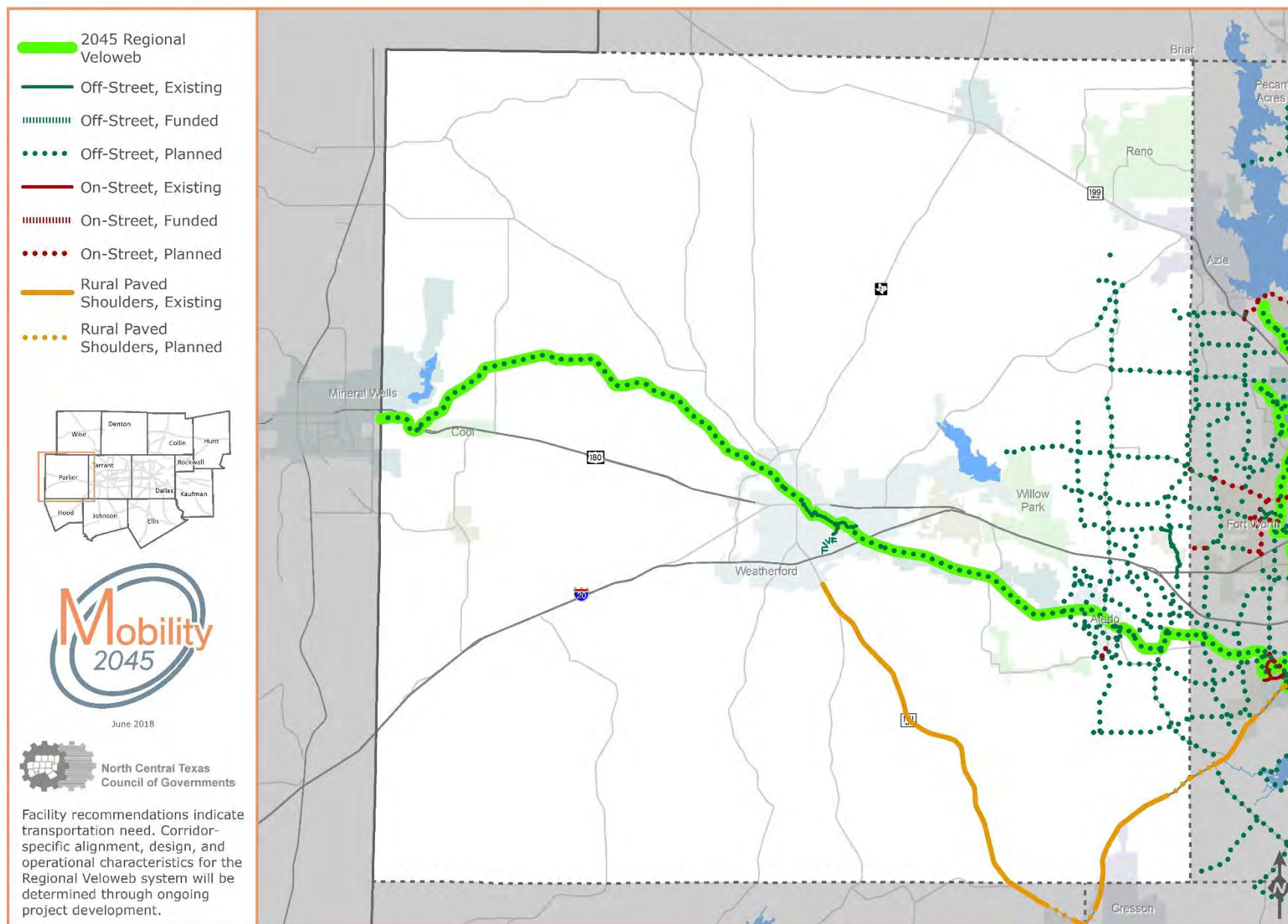
Bikeway Network in Johnson County



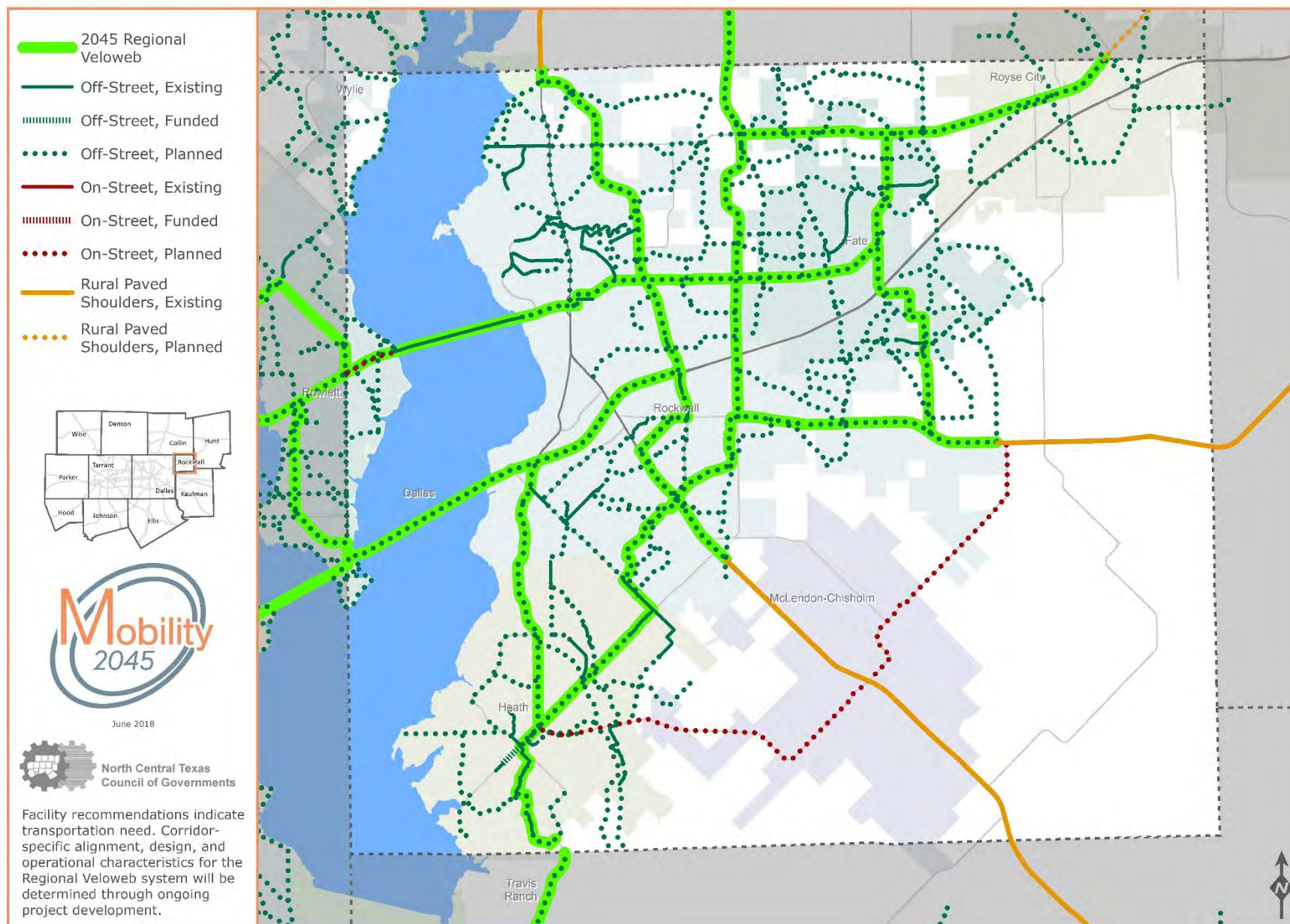
Bikeway Network in Kaufman County



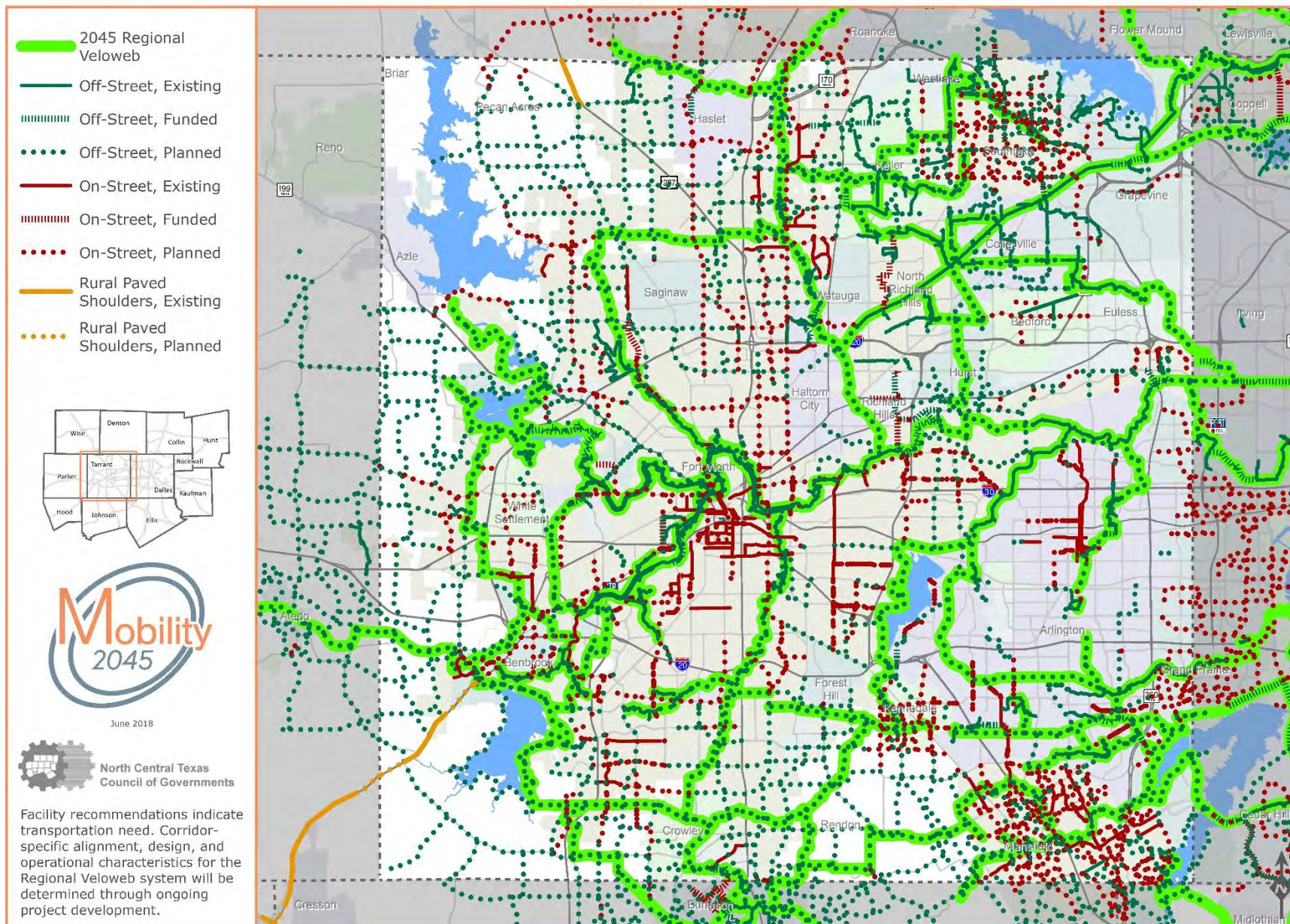
Bikeway Network in Parker County



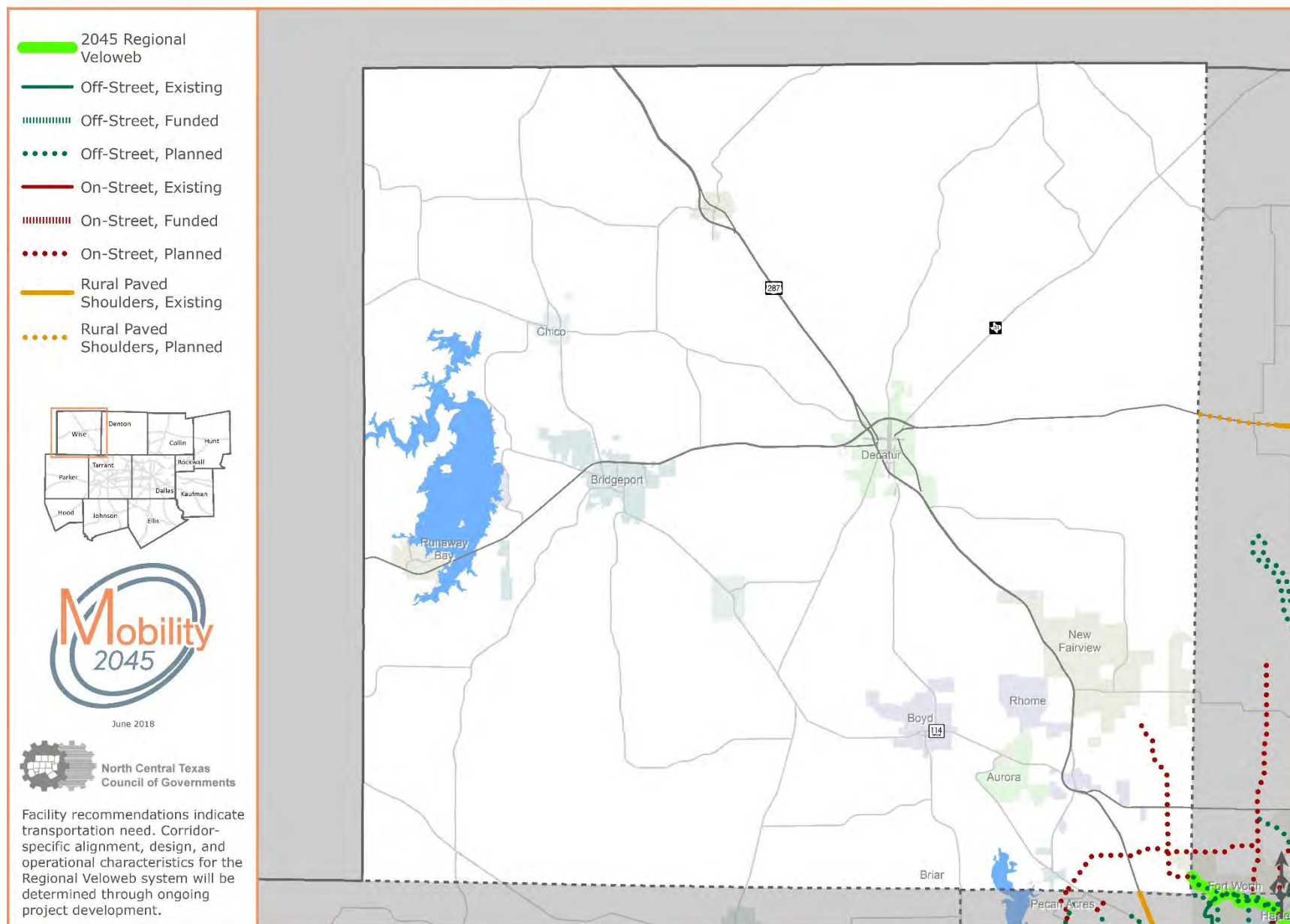
Bikeway Network in Rockwall County



Bikeway Network in Tarrant County



Bikeway Network in Wise County



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.

	TIGER ¹	TIFIA	FTA	ATI	CMAQ	HSIP	NHPP/NHS	STBG	TA	RTP	SRTS ³	PLAN	402	405	FLTP
Access Enhancements to Public Transportation	•	•	•	•	•		•	•	•						•
ADA/504 Self Evaluation/Transition Plan								•	•	•		•			•
Bicycle and/or Pedestrian Plans			•					•	•		•	•			•
Bicycle Helmets (project or training related)								•	• ^S		•		•		
Bicycle Helmets (safety promotion)								•	• ^S		•				
Bicycle Lanes on Road	•	•	•	•	•	•	•	•	•		•				•
Bicycle Parking	• [*]	• [*]	•	•	•		•	•	•	•	•				•
Bicycle Racks on Transit	•	•	•	•	•			•	•						•
Bicycle Share (capital and equipment; not operations)	•	•	•	•	•		•	•	•						•
Bicycle Storage or Service Centers	• [*]	• [*]	•	•	•			•	•						•
Bridges/Overcrossings for Bicyclists and/or Pedestrians	•		•	•	• [*]	•	•	•	•	•	•				•
Bus Shelters & Benches	•		•	•	•			•	•						•
Coordinator Positions (state or local)					• ^L			•	• ^S		•				
Crosswalks (new or retrofit)	•		•	•	• [*]	•	•	•	•	•	•				•
Curb Cuts and Ramps	•		•	•	• [*]	•	•	•	•	•	•				•
Counting Equipment	• ^P		•	•		•	•	•	•	•	•	• [*]			•
Data Collection and Monitoring for Bicyclists and/or Pedestrians	• ^P		•	•		•	•	•	•	•	•	• [*]			•
Helmet Promotion (for bicyclists)								•	• ^S		•		•		
Historic Preservation (bicycle and pedestrian and transit facilities)	•		•	•				•	•						•
Landscaping, Streetscaping (bicycle and/or pedestrian route; transit access)	• [*]		•	•				•	•						•
Lighting (pedestrian and bicyclist scale associated with pedestrian/bicyclist project)	•		•	•		•	•	•	•	•	•				•
Maps (for bicyclists and/or pedestrians)			•	•	•			•	•		•	• [*]			
Paved Shoulders for Bicyclist and/or Pedestrian Use	•				• [*]	•	•	•	•		•				•
Police Patrols (safety enforcement)								• ^S	• ^S		•		• [*]	• [*]	
Recreational Trails	• [*]							•	•	•					•

	TIGER ¹	TIFIA	FTA	ATI	CMAQ	HSIP	NHPP/NHS	STBG	TA	RTP	SRTS ³	PLAN	402	405	FLTPP
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)								• ^S	• ^S		•	•*	•*	•*	
Safety Education Positions								• ^S	• ^S		•		•*		
Safety Program Technical Assessment (for bicyclists and pedestrians)								• ^S	• ^S		•	•*	•		
Separated Bicycle Lanes	•		•	•	•	•	•	•	•		•				•
Shared-Use Paths/Transportation Trails	•		•	•	•*	•	•	•	•	•	•				•
Sidewalks (new or retrofit)	•		•	•	•	•	•	•	•	•	•				•
Signs/Signals/Signal Improvements	•		•	•	•	•	•	•	•		•				•
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								• ^R	• ^R	•					
Trail/Highway Intersections	•				•*	•	•	•	•	•	•				•
Trailside and Trailhead Facilities (restrooms and water)	•*	•*						•*	•*	•*					•
Training					•	•		•	•	•	•	•*	•*		
Training for Law Enforcement on Bicyclist and Pedestrian Safety Laws								• ^S	• ^S		•				
Tunnels/Undercrossings for Bicyclists and/or Pedestrians	•		•	•	•*	•	•	•	•	•	•				•

Source: Federal Highway Administration, Revised August 12, 2016

402	State and Community Highway Safety Grant Program
405	National Priority Safety Programs (Nonmotorized Safety)
ATI	Associated Transit Improvement (1% set-aside of Federal Transit Administration)
CMAQ	Congestion Mitigation and Air Quality Improvement Program
FLTPP	Federal Lands and Tribal Transportation Programs (Federal Lands Access Program, Federal Lands Transportation Program, Tribal Transportation Program)
FTA	Federal Transit Administration Capital Funds
HSIP	Highway Safety Improvement Program
MM	Metropolitan Mobility
NHPP/NHS	National Highway Performance Program/National Highway System
PLAN	Statewide or Metropolitan Planning
RTP	Recreational Trails Program
SRTS	Safe Routes to School Program
STP	Surface Transportation Program
TAP/TE	Transportation Alternatives Program/Transportation Enhancement Activities
TIFIA	Transportation Infrastructure Finance and Innovation Act (loans)
TIGER	Transportation Investment Generating Economic Recovery Discretionary Grant Program

Key:

- = Funds may be used for this activity.
- * = Eligible, but not competitive unless part of a larger project.
- ^P = Eligible for TIGER planning funds.
- ^L = Limit one per state.
- ^S = As SRTS.
- ^R = as RTP

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	▪ Improve the availability of transportation options for people and goods. ▪ Support travel efficiency measures and system enhancements targeted at congestion reduction and management. ▪ Ensure all communities are provided access to the regional transportation system and planning process. ▪ Preserve and enhance the natural environment, improve air quality, and promote active lifestyles. ▪ Encourage livable communities which support sustainability and economic vitality. ▪ Ensure adequate maintenance and enhance the safety and reliability of the existing transportation system. ▪ Develop cost-effective projects and programs aimed at reducing the costs associated with constructing, operating, and maintaining the regional transportation system.
Related Policies	BP3-001
Implementation	▪ Multimodal Transportation Plans: 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. ▪ Complete Streets: Facilitate and support the adoption of local policies and the implementation of Complete Streets projects with bicycle and pedestrian facilities as routine accommodations for new roadway construction and reconstruction projects. ▪ Context-Sensitive Design: Incorporate bicycle and pedestrian modes in all transportation corridor studies, support the adoption of local policies, implement Complete Streets projects and roadway projects that are sensitive in design to the context of their surroundings. ▪ Corridor Studies: 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. ▪ Americans with Disabilities Act Transition Plans: Encourage local agencies to adopt and implement Americans with Disabilities Act transition plans. ▪ Local Regulations: Encourage local jurisdictions to adopt ordinances, zoning standards, engineering standards, and guidelines that accommodate bicycle and pedestrian modes of travel through such means as Complete Streets policies, thoroughfare technical specifications, right-of-way and easement preservation, bicycle parking ordinances, bicycle passing ordinances, and end-of-trip facilities. ▪ Data Collection and Analysis: 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 non-motorized travel surveys, and publishing findings. ▪ Technical Support/Resources/Research: Collect relevant research materials regarding bicycle and pedestrian transportation to utilize in regional initiatives and provide as resources to local governments and area stakeholders.
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	▪ Improve the availability of transportation options for people and goods. ▪ Support travel efficiency measures and system enhancements targeted at congestion reduction and management. ▪ Ensure all communities are provided access to the regional transportation system and planning process. ▪ Preserve and enhance the natural environment, improve air quality, and promote active lifestyles. ▪ Encourage livable communities which support sustainability and economic vitality. ▪ Ensure adequate maintenance and enhance the safety and reliability of the existing transportation system. ▪ Develop cost-effective projects and programs aimed at reducing the costs associated with constructing, operating, and maintaining the regional transportation system.
Related Policies	BP3-002
Implementation	▪ Complete the Regional Active Transportation Network: 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, Congestion Mitigation and Air Quality, the Transportation Alternatives Program, and other available funding sources. ▪ Close Gaps and Improve Connectivity in the Regional Veloweb, On-Street Bikeway Network, and Pedestrian Network: Eliminate major gaps in the regional network and complete connections to address major barriers such as freeways, railroads, and waterways. ▪ Linkages to Transit and Major Destinations: 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. ▪ Environmental Justice Areas and Transit-Dependent Populations: Improve accommodations for pedestrians and bicyclists in environmental justice areas and improve connections for transit-dependent populations. ▪ Regional Pedestrian Network: 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. ▪ Safe Routes to School: 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. ▪ Safety Improvements: 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. ▪ Americans with Disabilities Compliance: Support efforts to identify Americans with Disabilities accessibility needs and incorporate improvements into the overall transportation network.
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	▪ Improve the availability of transportation options for people and goods. ▪ Ensure all communities are provided access to the regional transportation system and planning process. ▪ Preserve and enhance the natural environment, improve air quality, and promote active lifestyles. ▪ Encourage livable communities which support sustainability and economic vitality. ▪ Ensure adequate maintenance and enhance the safety and reliability of the existing transportation system.
Related Policies	BP3-003
Implementation	▪ Safety Education Programs and Campaigns: 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. ▪ Healthy and Livable Communities: 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. ▪ Enforcement: 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. ▪ Technical Training and Education: Provide pertinent training to transportation-related professionals. ▪ Mapping Facilities and Plans: Maintain a regional database and provide information regarding existing and planned active transportation facilities and related amenities throughout the region.
Cost Estimate	N/A – Program costs associated with planning elements only