

03

Framework Plan

The Framework Plan improves safety and mobility, and accommodates and encourages walking and biking across wide range of locations, abilities, uses, and activities.

The team worked collaboratively across dozens of interactive meetings and mapping sessions with GMTMA staff, regional stakeholders, and study partners to develop and refine the Framework Plan and hundreds of individual multimodal improvements designed to implement and advance the Plan Vision and Goals.

Development of the countywide network was guided by two essential resources: New Jersey's Complete Streets Design Guide (2017), and the Greater Mercer Trails Plan Pattern Book, developed as a standalone, companion piece to this study.



Mercer County Bicycle Master Plan

Mercer County completed its Bicycle Master Plan in 2019. This plan includes proposed improvements for county roads.

The Mercer County Bike Plan is aspirational in its approach and recommendations and may include some recommendations that exceed the guidelines reflected in the New Jersey Complete Streets Design Guide. In each case, Mercer County will examine these recommendation to assess feasibility of these concepts before advancing to design, funding, and construction.

The Greater Mercer Trails Plan complements the Mercer County Bike Plan with additional recommendations for trails, paths, and on-street facilities, gathered from previous studies, municipal plans and public input. Together, these two plans create a single, integrated, and interconnected network for multimodal travel across the Greater Mercer region

Design Options and Criteria

The proposed bicycle and trail facilities are based on the extensive base mapping and assessment processes detailed in the previous chapter and capitalizes on the many existing bicycle facilities already available.

A variety of facility types are proposed for the network, ranging from shared lane markings and designated bicycle boulevards, to on-road facilities and dedicated off-road trails.

Specific details, regulatory criteria, and examples are provided in the New Jersey Complete Streets Design Guide and Greater Mercer Trails Plan Pattern Book.

The table and maps on the following pages illustrate the types and number of miles of bike facilities, both existing and proposed.

Trails

Trails provide off-road connections, catering to cyclists and pedestrians, with access to safe and scenic routes for recreation and commuting trips. Due to the amount of open space in Mercer County, trails are the most frequently recommended facility type in the plan. Trails are typically made of natural surfaces, stone, or gravel.

Shared Use Path (Sidepath)

Shared-use paths are recommended along busy and high speed corridors where there is ample right-of-way for a dedicated facility. These facilities are consistent with the vision of “low stress, all ages, all abilities.” Sidepaths are recommended along Route 526, Sharon Rd and Gordon Rd in Robbinsville, Bakers Basin Rd in Hamilton, NJ 31 in Hopewell, US 130 in Hightstown.

Bicycle Boulevard

Bicycle boulevards use traffic calming measures to create low-speed, low-volume routes prioritizing bicycle mobility over vehicular through-traffic, frequently along residential streets. Posted speed are 25 mph and below.

Proposed bicycle boulevards include Prospect Ave, Tyson Ln and Leavitt Ln in Princeton, and Chestnut Ave and Riverside Dr in Trenton.

Buffered Bicycle Lane

Buffered bicycle lanes provide an enhanced buffer to increase separation between cyclists and motorists and reduce exposure to traffic stress; they are recommended for high-speed, busy, and wide roadways to provide more separation from moving traffic than a standard bike lane. Buffered bike lanes are recommended for Opossum Rd and Camp Meeting Rd in Montgomery.

Separated Bicycle Lane

Separated bikes lanes provide a physical barrier from traffic such as a traffic island or median separator, and most often utilized on streets with high traffic volumes and a high frequency of parking. There are no existing separated bike lanes in the study area.

Standard Bicycle Lane

Standard bicycle lanes provide dedicated space to cyclists by reallocating space from motorists, and typically on roads of up to 35 mph posted speed limits. Standard bicycle lane recommendations include Klockner Rd, Hughes Dr, and Hamilton Square-Whitehorse Rd in Hamilton, NJ 31 in Ewing, Denow Rd in Lawrence and Hopewell, and Pennington-Rocky Hill Rd in Princeton.

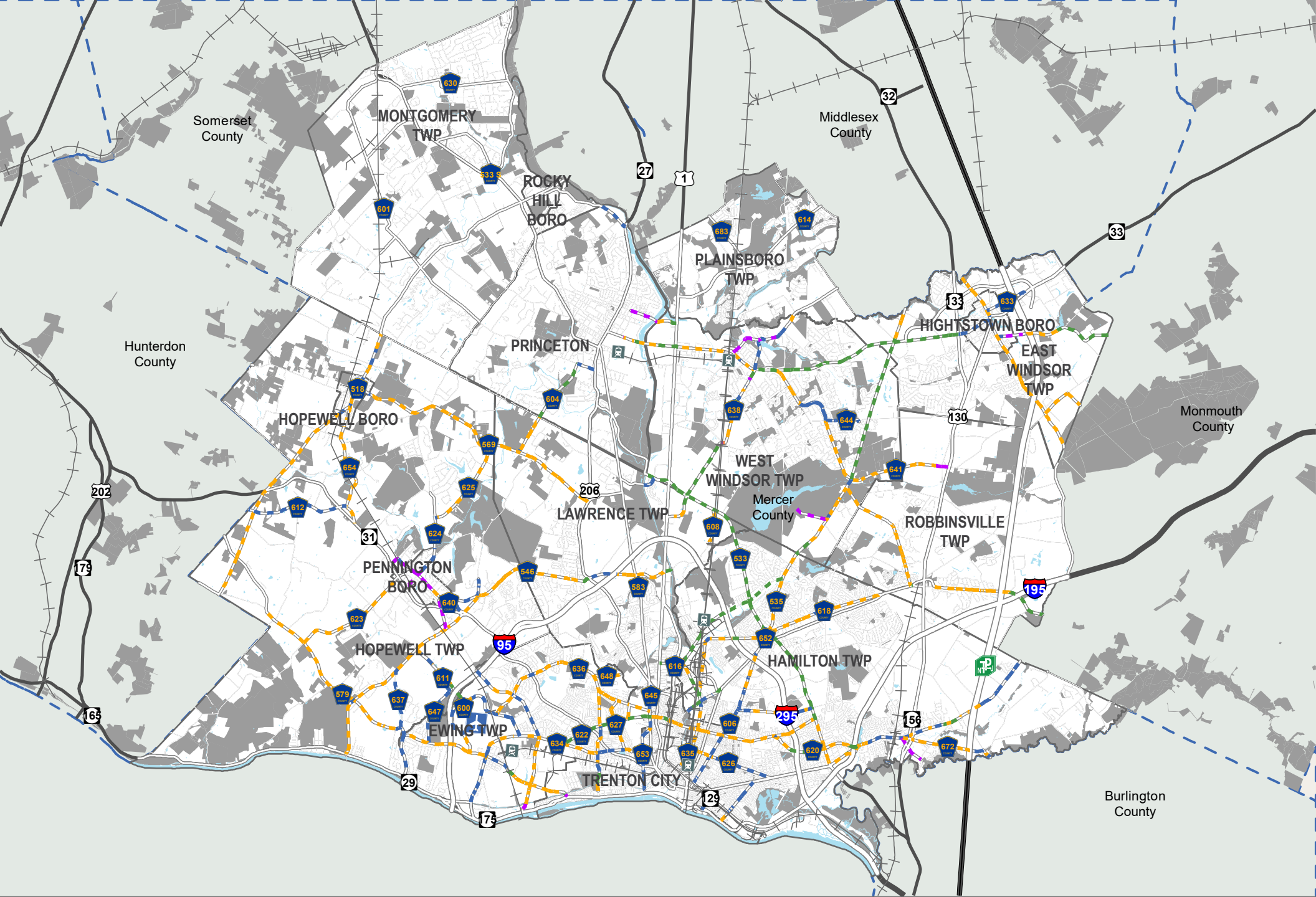
Shared-Lane Markings (Sharrows)

Shared-lane markings are intended to provide connections between dedicated bicycle facilities. Shared-lane markings are paired with traffic calming and primarily recommended for short stretches between other facilities, such as along Woodland Dr in Plainsboro, and Cambridge Way in East Windsor. One exception to this is a 2.6 mile portion of U.S. 206 in Trenton.

A series of tables and maps on the following pages depict the existing and proposed new candidate facilities.

The legends indicate the various facilities with a unique color scheme for each type; existing facilities are displayed with solid lines, and proposed facilities are dashed.

Facility Type	Existing (miles)	Proposed (miles)	Total (miles)
Trail	673	421	1,094
Shared-Use Path (Sidepath)	48	84	132
Bicycle Boulevard	1	15	16
Buffered Bicycle Lane	1	13	14
Standard Bicycle Lane	44	148	192
Shared Lane Markings (Sharrows)	7	17	24
Total	774	697	1,471



Proposed Facilities Mercer County Bike Plan 2019

Shared Use Path

Buff Bike Lane

Rail

Bike Boulevard

Bike Lane

Rail Station

Shared Lane Markings

Airport



Long Distance Corridors

The proposed network is intended to provide a variety of connections to link destinations and expand access and mobility options. Some offer significant opportunities for new regional connections over the short term. Others have significant potential but will require extensive collaboration, planning, and design to come to fruition. These regional connections are described below.

Crosswicks Creek (Greenway)

An 11.2 mile trail is proposed along Crosswicks Creek between Hamilton and Trenton. The trail will follow the creek in Hamilton, which separates Mercer and Burlington Counties, and parallels I-195 into Trenton. This trail will provide connections to other proposed facilities along Klockner Rd, a utility right-of-way in Hamilton, and the Camden-Amboy line, U.S. 206, the existing DVRPC Circuit Trail, and a proposed county route facility on CR 672.

Capital Loop (Utility Trail)

There is an 11.6 mile right-of-way arcing around Trenton in Ewing, Lawrence and Hamilton home to PSE&G power lines. A trail is recommended below the power lines to improve scenic connections between these communities. This route will provide connections to the existing trails in John A. Roebling Memorial Park, and the D&R

Canal Trail, as well as proposed routes on Independence Ave, U.S. 206, S Clinton Ave, Cypress Ln, Klockner Rd, the Capital to Coast Trail, Assunpink Greenway, Central Park, Nancy Ln, Federal City Rd, NJ 31, the West Trenton Line, and proposed County route facilities on CR 643, CR 649, CR 535, CR 606, CR 619, CR 622, and CR 620.

West Trenton Line (Rail with Trail)

A trail is recommended parallel to the 18.8 mile CXST-owned West Trenton Line in Ewing, Hopewell, Township, Pennington, Hopewell Borough, and Montgomery. This trail will provide an off-road connection between these communities in areas which are otherwise difficult to navigate due to high-speed roads and other barriers. This trail will connect to existing DVRPC Circuit Trails, and proposed trails along facilities including the Capital Loop, the RR Connection Over Rt 31 to the West Trenton Line, off-road trails in Montgomery, as well as proposed County route facilities on CR 518, CR 654, CR 640, CR 546, CR 611, CR 634, and CR 579.

Johnson Trolley Line (Rail Trail)

Building from the existing segments of the Johnson Trolley Line Trail trail, an off-road trail is proposed through residential neighborhoods in Lawrence to Carter Rd (CR 569) and then through farmland and the Bristol Myers Squibb campus to Elm Rd in

Princeton. In the southwesterly direction, the Johnson Trolley Line trail will continue as a shared-use path/standard bike lane along Fifth Ave in Ewing, and operate as a trail along Calhoun St in Trenton. The proposed trail will connect to existing facilities in Central Park, the LHT, and proposed facilities on Craven Ln, Denow Rd, the Capital Loop, Eggerts Crossing Rd, and Columbia Ave and proposed County routes on CR 648, CR 613, CR 622, and CR 653.

Dinky Line (Rail with Trail)

A trail is proposed along the 2.6 mile Dinky Rail Line in Princeton and West Windsor. This will improve connectivity across the Delaware and Raritan Canal and provide direct connections to the Princeton Junction train station. The trail will connect to the existing D&R Canal Trail, and proposed facilities along U.S. 1, and Vaughn Dr.

Union Transportation Trail (Rail Trail)

The Union Transportation Trail is a 9 mile off-road trail in Monmouth County, stopping short of the East Windsor border at CR 539. We propose extending the trail 2.9 miles in East Windsor where it will terminate at proposed facilities along Airport Rd at NJ 33. The trail will also connect to proposed facilities on Conover Rd and Woods Rd, and provide an off-road connection between Mercer and Monmouth Counties.

John Bull (Rail Trail)

The John Bull trail is named after the John Bull steam locomotive, which was the first in New Jersey, operating from 1831 – 1866 between Bordentown and Hightstown – it was rebuilt and still operable, now at the Smithsonian. A 9.9 mile abandoned rail right-of-way parallels U.S. 130 between Bordentown in Burlington County and CR 641 in Robbinsville. A trail is proposed along this right-of-way to connect to proposed routes along U.S. 206, the Crosswicks Creek, Yardville-Hamilton Square Rd, Kuser Rd, Estates Blvd, CR 526, Gordon Rd, and proposed County routes on CR 641, CR 524. North of CR 641, the trail will continue as a shared-use path along U.S. 130 where it intersects with proposed routes along Village Rd East, Conover Rd, Hickory Corner Rd, South Lane, CR 571, and Old Cranbury Rd.

Assunpink Creek (Greenway)

The Assunpink Creek is a 23 mile long tributary running through Mercer and Monmouth Counties, beginning in Trenton. 9.9 miles of trail are proposed along the creek in Trenton, Hamilton and West Windsor. The off-road trail will connect to the Delaware River Heritage Trail, the D&R Canal Trail, and proposed bike facilities on U.S. 206, Market St, Chestnut Ave, the Capital to Coast Trail, the Capital Loop, and the Station Road Sidepath, as well as linking Downtown

Trenton with Mercer County Park. The trail will overlap with a portion of the Capital to Coast Trail.

Capital to Coast (Greenway)

The Capital to Coast Trail is a proposed 55 mile network of trails from Trenton to Manasquan along the Jersey Shore. A significant portion of the network already exists, but this proposal details a connection of new trails and alternatives for the Capital to Coast route. The trail begins in Trenton near the Battle Monument and continues onto U.S. 206 and New York Ave before crossing U.S. 1 to Second Ave. The trail will then parallel a stream continuing east into County-owned land near Miry Run before turning southeast toward U.S. 130 and Sharon Rd. The route will then operate as a shared-use path along Sharon Rd before converting to a trail after crossing the New Jersey Turnpike and continuing into Monmouth County. The trail will intersect with the existing D&R Canal Trail and Mercer County Park trails and intersect with proposed facilities along U.S. 206, First Ave, Klockner Rd, the Capital Loop, Brookwood Rd, Paxson Ave, Hughes Dr, Pond Rd, and the Union Transportation Trail in addition to proposed County routes on CR 616 and CR 622. This corridor of proposed trails will add 14.9 miles to the system.

The College of New Jersey to Rider University (Utility Trail)

A shared-use path is proposed to connect The College of New Jersey in Ewing and Rider University in Lawrenceville. There are two potential alignments for the trail; one along Shabakunk Creek to Denow Rd and the Capital Loop, and an easterly option through Green Lane Fields past William L Antheil Elementary School to the Capital Loop. The trail would connect these two educational communities and provide recreational biking and hiking options for students, faculty, and local residents.

Shabakunk Creek (Greenway)

Colonial Lake and Colonial Lake Park lie in Lawrence between Brunswick Ave and U.S. 1. A shared-use path is proposed southwest from Colonial Park along Shabakunk Creek, southwest past The College of New Jersey, terminating at the Capital Loop Trail Crossing of Shabakunk Creek. This will improve access to the recreational opportunities of Colonial Lake and the Johnson Trolley Trail.

Tatemy - Bear Brook (Greenway)

The Tatemy - Bear Brook Trail is a proposed off-road connection from the D&R Canal Path west along Duck Pond Run to connect to the Trolley Line 15 trail, then follow greenbelt open space to a shared use path along CR571, then along Bear Brook in West

Windsor, to connect to existing trail in East Windsor, terminating at the John Bull / Union Transportation Trail intersection.

Millstone River (Greenway)

The 1 mile Millstone River Greenway will run along Rocky Brook and the Millstone River in East Windsor connecting the residential neighborhoods north of NJ 133 with the commercial and residential neighborhoods along U.S. 130 south of NJ 133. The Greenway will connect with other trails proposed as part of the East Windsor Township Bicycle and Pedestrian Study.

Pennington to Baldpate Mountain (Utility Trail)

The Pennington to Baldpate Mountain Trail will connect the West Trenton Line and NJ 31 in Pennington Borough with the trails on Baldpate Mountain in Hopewell. The route will travel along Woolsey Brook to Hopewell Township's baseball fields and northwest under a power line right-of-way to Baldpate Mountain. This will connect Pennington Borough, which can otherwise be difficult to reach for low-stress cyclists with the many scenic trails at Baldpate Mountain.

Mercer Health (Utility Trail)

The Denow to Capital Health Trail will operate 3.5 miles along a power line right-of-way parallel to Denow Rd in Lawrence and

Hopewell, ultimately connecting to the West Trenton Line, north of Capital Health Medical Center.

Trolley Line 15 (Rail Trail)

The Elizabeth to Trenton Rail Trail will run along a power line right-of-way in Hamilton and West Windsor, passing through Mercer County Park. This trail will be an extension of the existing Trolley Line Trail. The trail will intersect with proposed bike facilities on Village Rd W, Lanark Dr, Paxson Ave, Klockner Rd, and the Tatemy-Bear Brook, Mercer Lake, Capital to Coast, Assunpink and Capital Loop long distance trails.

Delaware Bound Brook (Rail Trail)

The Delaware Bound Brook Rail Trail will run 3.5 miles between Downtown Trenton and the West Trenton train station in Ewing on an abandoned rail right-of-way. The trail will intersect with the proposed Johnson Trolley extension, proposed trails near the Heritage Court Apartments, and the West Trenton Rail with Trail.

Mercer Lake (Utility Trail)

A 6.26 mile trail is proposed between Mercer County Park in West Windsor and the proposed Union Transportation Trail extension in East Windsor, passing through Robbinsville. The trail would run along a power line right-of-way. The trail will connect

with proposed bike facilities along N Main St, and Woods Rd.

Hamilton Breezeway (Utility Trail)

The Hamilton Breezeway will be a utility trail connecting Crosswicks Creek at Yardville to Veterans Park to the Capital Loop Trail at Cypress/ I-295.

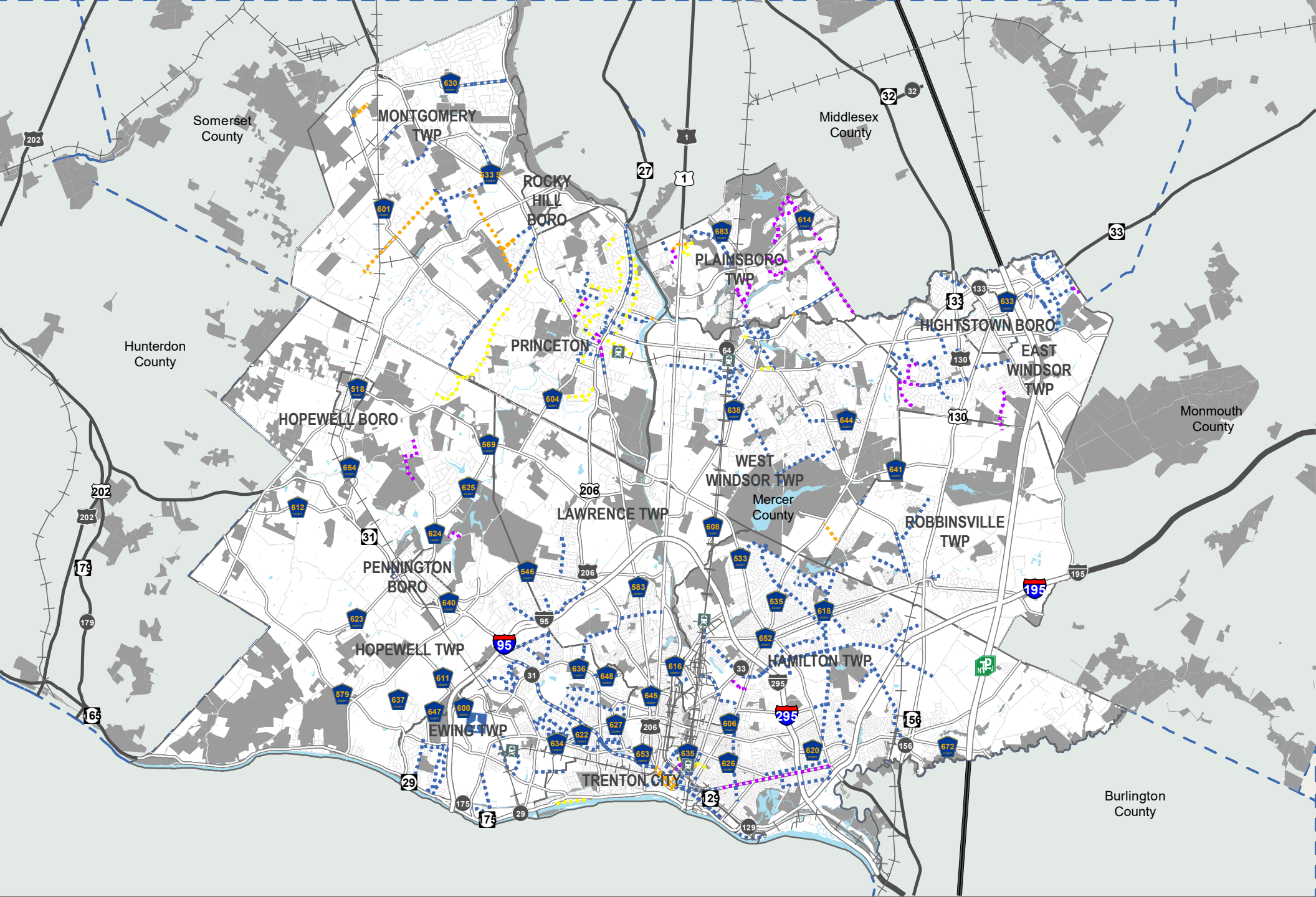
D&R Trail Connections

The existing 15.6 mile Delaware and Raritan Canal Trail provides scenic biking and walking parallel to its namesake canal in Trenton, Lawrence and Princeton. Bisected by several high-speed roadways without bike facilities of their own, the trail requires many visitors to travel by car. Bike facilities are recommended for the following intersecting corridors:

- Princeton-Mercer County 629, a path north of the Dinky Line, and the Dinky Line
- Lawrence-a path north of Nassau Park Blvd, Bakers Basin Rd, a path south of Bakers Basin Rd, and Whitehead Rd
- Trenton-Mulberry St, a trail north of Southard St, U.S. 206 and Winter St
- Ewing-Mercer County 643, the West Trenton Line, Wilburtha Rd, Scenic Dr, and Willis Dr in Ewing.

The maps on the subsequent pages illustrate the existing and proposed long distance corridors, the on-road connections, the off-road connections, and the combined on and off road network.





Proposed On-Road Facilities on Municipal Roads

- Bike Boulevard
 ---- Bike Lane
- Buffered Bike Lane
 ---- Shared Roadway

- Rail
- Rail Station
- Airport

- Open Space
- Water



Proposed Off-Road Facilities



Rail



Open Space



Trail

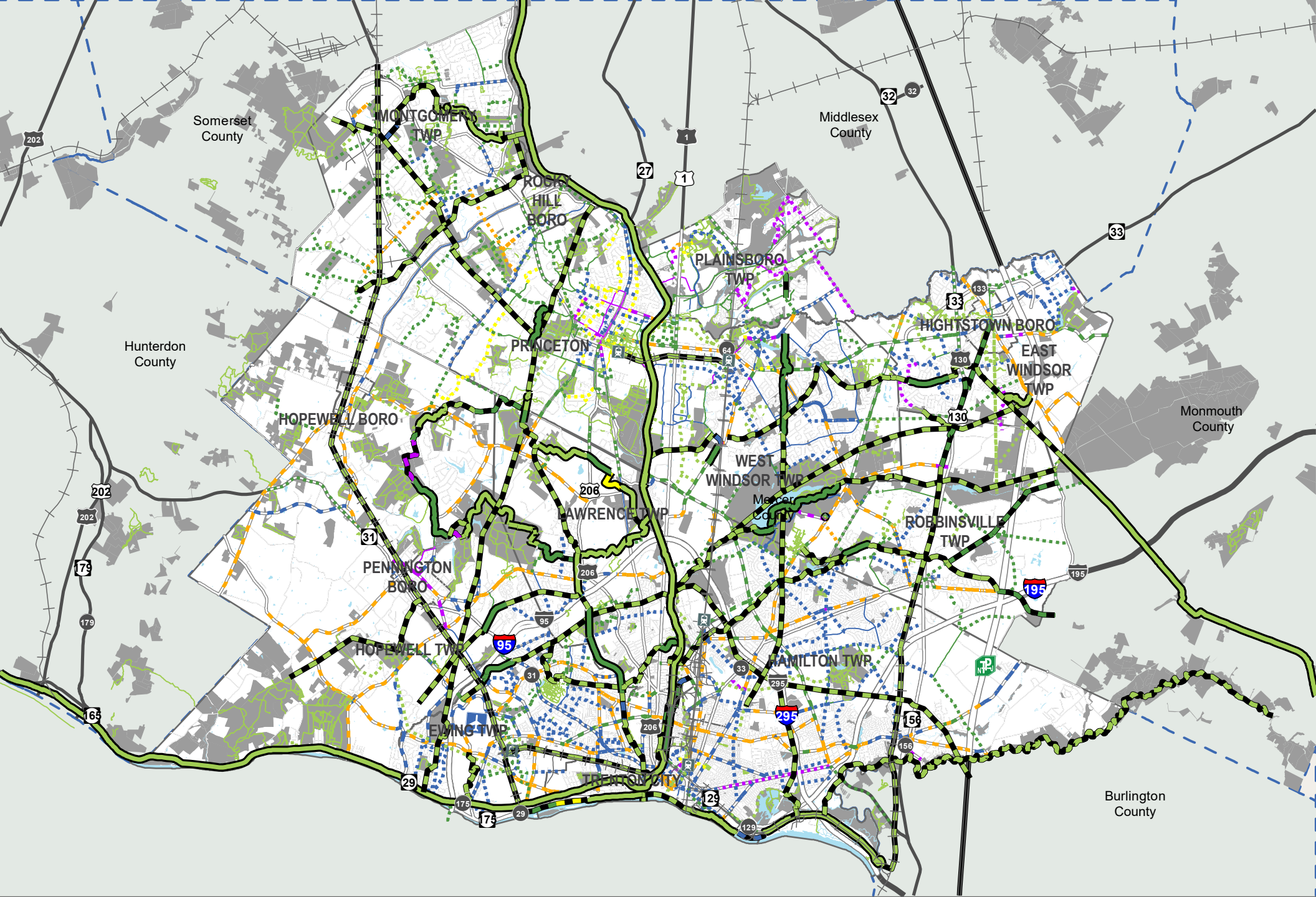


Rail Station



Water





Existing and Proposed Facilities - Study Area Long Distance Corridors

Existing

- Trail
- Shared Use Path
- Bike Boulevard
- Shared Roadways

Proposed

- Trail
- Shared Use Path
- Bike Lane
- Shared Roadways

Existing / Proposed Facilities

- Trail
- Shared Use Path
- Bike Lane
- Bike Boulevard
- Buffered Bike Lane
- Bike Lane
- Shared Roadway



