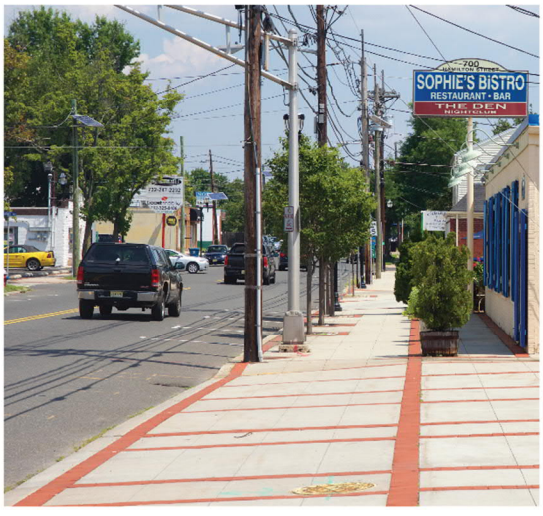
Franklin Township Circulation Element

2021

wsp



Contents

Figures

Tables

1. Introduction

Franklin Township sits in the east of Somerset County, bounded on the west by the Delaware & Raritan Canal and the Millstone River, the north and east by the Raritan River, and bordering NJ 27 on the south. Home to 65,374 residents as of 2016 (an increase of 4.93% from 2010), Franklin includes an array of different communities across its 47 square miles including the more densely settled suburban and urban portion of Somerset in the northeastern portion of the Township and down the Route 27 corridor, the more rural and spacious setting of the southerly and westerly portions of the Township, and the Township's historic areas including East Millstone, Middlebush and Kingston. Together, this collection of communities provides a population density of 1,417 people per square mile, slightly higher than the statewide average of 1,200 people per square mile.

This Circulation Element Plan replaces the 2006 Master Plan Circulation Element, examining and analyzing the Township's transportation resources, facilities and needs.

1.1 Vision, Goals and Objectives

Laying out a vision with goals and objectives is essential for guiding the development of the plan and assuring that changes and recommendations for the Circulation Plan reflect the community's ambitions.

1.1.1 Vision Statement

Franklin Township seeks to preserve and enhance both its urban and rural qualities and provide multimodal transportation choices that improve safety, mobility, resilience, and access to opportunity. The Circulation Element promotes collaboration between the township, county, and state agencies to mitigate the impacts of traffic and land development, offer more mobility options, and create a more resilient future.

1.1.2 Existing Goals

The following two goals and nine objectives were established in Franklin Township's 2006 Master Plan:

Establish a circulation system that recognizes the high level of through-Township traffic and minimizes its negative impact on Township residents

1. Support improvement of county and state roadways
2. Minimize through-traffic in residential areas by improving traffic flow on major roads
3. Discourage single-outlet design to enhance local circulation
4. Encourage connectivity between developments
5. Plan connector roads in strategic locations to improve circulation throughout the Township, to preserve existing neighborhoods and to improve safety

6. Improve traffic flow by limiting points of access on arterial roadways; explore the possibility of accessing existing and proposed commercial strip development via service roads
7. Encourage the use of alternate forms of transportation (transit, bikes) and continue to implement bikeway master plan

Promote safety

8. Support traffic calming measures
9. Enhance school bus, bicycle and pedestrian safety

1.1.3 Revised Goals

With the recommended changes, the Township's updated goals and objectives will be:

Establish a circulation system that recognizes the high level of through-Township traffic and minimizes its negative impact on Township residents

1. Support improvement of county and state roadways with tactical measures to improve safety and traffic flow while limiting widening projects to critical areas to minimize induced demand and unsafe conditions for motorists, transit riders, cyclists and pedestrians
2. Minimize through-traffic in low-speed residential areas by improving traffic flow on major roads and implementing traffic calming measures in residential areas to divert and slow traffic
3. Discourage single-outlet design to enhance local circulation
4. Encourage multimodal connectivity (vehicular, transit, bicyclist and pedestrian) between developments
5. Plan connector roads in strategic locations to improve circulation throughout the Township, to preserve existing neighborhoods and improve safety
6. Improve traffic flow by limiting points of access on arterial roadways; explore the possibility of accessing existing and proposed commercial strip development via service roads and assure there is ample space for acceleration, deceleration, and merging, as appropriate from such points of access
7. Improve the resilience of Franklin Township's transportation infrastructure while minimizing stormwater impacts

Provide a safe transportation network with several mobility options

8. Support Complete Streets measures to improve the safety of all roadway users (motorists, transit riders, cyclists, pedestrians, and micro mobility users)
9. Encourage the use of non-motorized transportation such as transit, biking and walking by improving connections and facilities throughout the Township for and between these uses for commuting, recreational, and shopping trips, consequently promoting the health of roadway users

10. Continue to implement the Bikeway Master Plan incorporating recommendations to the Township's bike network elaborated upon in this report, and consider developing school safety plans and a pedestrian network plan

These nine objectives have guided the recommendations laid out in chapter three of this plan.

2. Existing Conditions and Analysis

The existing conditions and analysis portion of this document provides a wide array of available information concerning present conditions and past work in Franklin Township. This includes the following sections:

- Previous Studies Review
- New Jersey Department of Transportation Management Systems Data
  - Pavement
  - Congestion
  - Bridge
  - Traffic Counts
  - Crash Analysis
- Multimodal Transportation Network Inventory and Analysis
  - Jurisdiction
  - Functional Class
  - Qualitative Assessment
  - Bicycle and Pedestrian Conditions
  - Public Transportation Conditions

2.1 Previous Studies Review

To build upon existing knowledge, the project team consulted several planning studies undertaken by various agencies concerning Franklin's multimodal transportation network in recent years. These resources provide valuable information and fuel for analysis. This synergy will produce a more comprehensive and expansive set of recommendations. Previous studies reviewed are shown in Table 1. Additional information about future development in the Township is elaborated upon on page 10.

Table 1: Previous Studies Reviewed

Title	Year	Jurisdiction
I-287 Mobility Plan	2005	Somerset County and Middlesex County Planning Boards
Franklin Township Master Plan	2006	Franklin Township
Connecting Franklin's Communities, Pathways & Trails Plan for Franklin Township	2008	Franklin Township

Millstone Valley Scenic Byway Corridor Management Plan	2008	Millstone Valley Preservation Council
Easton Avenue/Main Street Corridor Plan	2011	Somerset County
Making Connections, Somerset County's Circulation Plan Update	2011	North Jersey Transportation Planning Authority
Hamilton Street Corridor Master Plan Update	2015	Franklin Township
Franklin Township Reexamination of Master Plan & Development Regulations	2016	Franklin Township
Supporting Priority Investment in Somerset County Phase III Study	2017	North Jersey Transportation Planning Authority
Franklin Township Complete Streets Policy	2019	Franklin Township

I-287 Mobility Plan

This mobility plan investigates means of managing travel demand on Interstate 287 in Piscataway Township and Franklin Township. Recommendations include promoting financial incentives for businesses to utilize travel demand management strategies, enhancing the viability of alternative non-motorized transportation modes, and promoting smart growth and transit-friendly design.

A study of existing conditions discovered minimal sidewalk presence in Franklin Township near I-287. In response, the Plan's steering committee recommended adoption of a township-wide pedestrian plan, implementing pedestrian improvements at key intersections, requiring developers to construct new sidewalks, installing bike lanes on thru-streets near I-287, and investigating the construction of a pedestrian/bicycle bridge over the Raritan River and Delaware and Raritan Canal.

Franklin Township Master Plan

Franklin Township's 2006 Master Plan includes a circulation element aiming to recognize the high level of thru-Township traffic and minimize its negative impact on Township residents. The plan encourages use of non-motorized forms of transportation (such as walking and biking) and to continue implementing the Township's Bikeway Master plan. The master plan inventories recent municipal, county and state studies and improvements aimed at enhancing circulation in Franklin Township. Proposed recommendations in the Master Plan include:

- Supporting traffic calming measures
- Encouraging developers to plan for and implement pedestrian and bicycle routes to schools to decrease need for school busing
- Constructing sidewalks along NJ 27 as a priority given the number of retail establishments located in the corridor

The master plan references a Franklin Township Bikeway Master Plan, initially prepared in 2001. In addition to identifying existing bike routes, the plan makes several recommendations for routes separated by route type based on the ability to connect

traffic generators and destinations, and compatibility with New Jersey Department of Transportation Bicycle Compatibility Guidelines. Recommendations include, but are not limited to the following:

- Bike Lanes: Demott Lane, Hamilton Street, Amwell Road, South Middlebush Road
- Bike Paths: Six Mile Run Trail, Middlebush Connector, Van Cleef Road
- Trails: Connecting NJ 27 to the Delaware & Raritan Canal Park Trail and the Rockingham historic landmark

Connecting Franklin's Communities, Pathways & Trails Plan for Franklin Township

This municipal trails plan identifies existing trails in the township and offers strategies for an interconnected, township-wide trail system, connecting residential neighborhoods to local parks, schools, historic sites, cultural centers, shopping areas and the regional multimodal transit system. Numerous detailed recommendations are provided to install bike lanes, trails, and bridges to better connect pedestrian and bike infrastructure with residential areas, schools, and county and state parks.

Millstone Valley Scenic Byway Corridor Management Plan

This corridor management plan lays out the goals, strategies, and responsibilities for conserving and enhancing the Byway's historic and scenic landscape dating back to the Revolutionary War. The plan also serves as a means of determining whether the Byway meets the requirements for designation as a national scenic byway. After detailing exhaustive research into the Byway's existing conditions and resources, several recommendations were made including mowing and pruning existing vegetation and installing street lighting, wayfinding, and bike facilities where feasible. Additionally, the plan details a 2006 highway safety analysis of the Byway resulting in several recommendations:

- Reducing speed limits along Byway
- Maintaining existing width of Byway roads
- Considering reducing widths of intersections
- Regularly maintaining roadway surface

Easton Avenue / Main Street Corridor Plan

This corridor study examined the County Route 527 (Easton Avenue) corridor which travels through New Brunswick, Franklin, South Bound Brook and Bound Brook, operating as Easton Avenue in Franklin. The corridor is mainly utilized by single-occupant motor vehicles. The study's primary goal was to manage traffic congestion through low-cost roadway improvements, the enhancement of alternative transportation modes, and Smart Growth zoning and design initiatives.

The study recommends several strategies to promote active transportation. The Centers for Disease Control and Prevention define active transportation as "any self-propelled, human-powered mode of transportation, such as walking or bicycling." Recommendations intended to make walking and biking easier and safer include:

- Improving pedestrian signals
- Installing high-visibility crosswalks
- Upgrading street lighting
- Coordinating a maintenance plan for the corridor's bike lane with adjacent landowners
- Installing bike parking facilities at commercial centers and apartment buildings
- Improving access points to and overall attractiveness of the Delaware and Raritan Canal Park towpath
- Improving sidewalk conditions along the corridor
- Evaluating extension of bike path between John F. Kennedy Boulevard and Franklin Boulevard

Making Connections, Somerset County's Circulation Plan Update

This update to Somerset County's circulation plan aimed to improve mobility and safety. Most recommendations focused on expanding public transit and addressing road congestion. The plan assessed the presence of sidewalks in each of the county's municipalities; determining only 21% of Franklin Township's county roads have sidewalks. Additionally, though few county roads have bike facilities, many are deemed bike-compatible based on speed limit and road width. The NJTPA recommends improving bicycle accessibility by installing shared-lane markings, targeted shoulder improvements, off-road connectivity and speed limit reductions. Addressing gaps in sidewalk coverage is also recommended, particularly near public transit.

Hamilton Street Corridor Master Plan Update

This amendment of Franklin Township's master plan studied the Hamilton Street corridor. Preceding the development of the document was the establishment of the Hamilton Street Advisory Board in 2014, comprised of property and business owners along the corridor. The Board conducted a SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis of the Township's ability to revitalize the corridor through private investment. Fueled by the Advisory Board's work, this amendment outlines zoning amendments to encourage revitalization, redevelopment, and investment in the corridor.

The document states the desire for the corridor to operate as a mixed-use, pedestrian-friendly "Main Street." Though concluding that the existing zoning does not preclude development, changes to the zoning are recommended to further enhance the attractiveness of development.

Recommendations include:

- Rezoning several parcels of the Hamilton Street Business District
- Allowing buildings up to three or four stories, dependent on specific conditions
- Changing permitted uses to promote more commercial developing fronting Hamilton Street

- Allowing the approving board to reduce parking requirements upon certain conditions

2016 Franklin Township Reexamination of Master Plan & Development Regulations

In 2016, the Franklin Township Planning Board conducted the statutorily required review of the Township's Master Plan and land development ordinance. This review included the 2006 Master Plan and various Master Plan updates in the intervening years between 2006 and 2016. The 2016 Reexamination Report identified the following transportation-related improvements that were implemented after the adoption of the 2006 Master Plan:

- Installation of traffic signal at Amwell Road and South Middlebush Road and modification of the intersection
- Removal of traffic signal and left turns from World's Fair Drive to Easton Avenue
- Installation of traffic signal at I-287 and Weston Canal Road
- Implementation of bike lane on Cedar Grove Lane
- Implementation of traffic calming measures on NJ 27 in Kingston
- Painting of parking stalls throughout Hamilton Street Business District

The following proposals are still recommended:

- Realigning New Brunswick Road at Cedar Grove Lane
- Reconfiguring and realign I-287/Easton Avenue interchange
- Safety improvements at several intersections along NJ 27 including addressing crash hotspots along the corridor, and addressing congestion at Laurel Avenue
- Survey presence of sidewalks within walking distance of schools
- Continue implementing pieces of the 2001 Bikeway Master Plan
- Evaluating the availability of public transportation in and within proximity to Franklin Township

A more thorough evaluation of the status of these recommendations is provided on page 48.

Supporting Priority Investment in Somerset County Phase III Study

This economic planning study of Somerset County "presents a comprehensive program for strategic investment" in 17 key investment areas, pairing public action and regulatory changes with private investment, and achieving tactical alignment among local study partners, state and regional agencies, and a variety of funding mechanisms.

One of these investment areas is the Hamilton Street Business District in Franklin Township. A transportation analysis of the corridor and surrounding buffer area was conducted to determine existing active transportation and transit conditions. Utilizing the area's compact development, numerous detailed bicycle and pedestrian recommendations were provided including:

- Widening sidewalks in front of commercial properties and construct sidewalks where none exist
- Requiring bike parking in new developments
- Installing shared-lane markings along corridor extending to New Brunswick's existing markings
- Designating Lewis Street as a bike boulevard; install associated signage and lower the speed limit
- Lowering the speed limit and implement a road diet on Franklin Boulevard south of Hamilton Street

Franklin Township Complete Streets Policy

Franklin Township adopted a Complete Streets Policy in 2019 with the goal to create a comprehensive, integrated, connected multi-modal transportation network. The policy includes incorporating a checklist of pedestrian, bicycle and transit accommodations into all transportation projects, and making Complete Streets practices and principles a standard part of every operations for municipal staff and boards. Additionally, the policy requires all new construction and reconstruction roadways on rural roads with more than 1000 vehicles per day to include paved shoulders or a multi-use path.

2.1.1 Future Development

Franklin has experienced residential, commercial and industrial growth in recent years with the population increasing more than 20% from 2000 to 2010, and 5.4% from 2010 to 2019, according to the United States Census. Specific proposals for future development are not discussed in this Circulation Plan though general types of development should be discussed in order to help assure the roadway network and transportation system can adequately handle such growth. The following areas are slated for future growth:

- Hamilton Street Corridor: mixed-use development
- Renaissance Redevelopment Area along Somerset Street (between Churchill Avenue and New Brunswick border): multi-family and mixed-use development
- Interstate 287 and Veronica Avenue: warehousing and light manufacturing

2.2 New Jersey Department of Transportation Management Systems Data

The New Jersey Department of Transportation (NJDOT) provides several data management systems for review of existing datasets. The following datasets were reviewed for locations in Franklin Township:

1. Pavement Management System
2. Congestion Management System
3. Bridge Management System
4. Traffic Counts
5. Crashes

2.2.1 Pavement Management System

A review of Pavement Management System (PMS) data was conducted. The PMS data are only available for U.S. and State roadways and are collected annually by the State and recorded in 1/10 mile intervals. These data are for the 2016 analysis year, the most recent datasets available from NJDOT. Data was obtained for I-287 and NJ 27 in Franklin.

Two data indicators are provided through this system; international roughness index (IRI), and surface distress index (SDI). Pavement condition is evaluated using the surface distress index which measures cracking, rutting, and deterioration on a 0-5 scale (5 indicating perfect pavement with no distress). Portions of NJ 27 with significant surface distress (SDI <2) include:

- Northbound Roberts Street to School Avenue (5.2 miles)
- Southbound Roberts Street to Stanworth Road (0.9 miles)
- Southbound Clover Place to Parkside Drive (1.3 miles)

No portion of I-287 in Franklin exhibited significant surface distress.

Pavement roughness, or IRI, is measured as the deviation of the pavement surface from a perfectly flat condition. A larger IRI represents a rougher road surface. Data provided show that 1.1 northbound miles and 1.8 southbound miles of NJ 27 in Franklin were found to have deficient roughness, and 0.2 northbound miles of I-287 were found to have deficient roughness.

2.2.2 Congestion Management System

Peak hour volume/capacity (V/C) ratio data was obtained from NJDOT's Congestion Management System (CMS) for the three most traveled corridors in Franklin Township; Interstate 287, NJ 27, and CR 527 (Easton Avenue). Data was analyzed from 2015, the most recent dataset available.

The V/C ratio is an index measuring the congestion of a traffic network. A lower V/C indicates surplus capacity and a lack of congestion while a higher V/C can indicate gridlocked traffic conditions. The V/C ratio data is obtained from the CMS. The CMS classifies road segments based on V/C ratio into several more easily understandable categories, based on an overall score calculated using V/C ratio:

- Low (Total Score <4)
- Low-Medium (4.00-4.99)
- Medium (5.00-5.99)
- Medium-High (6.00-6.99)
- High (7.00+)

"Low" and "Low-Medium" are generally considered acceptable while "Medium" can indicate some issues present and "Medium-High" and "High" indicating severe congestion.

Interstate 287

Interstate 287 operates for two miles in the northern part of Franklin Township. The Raritan River curves around northern Franklin, and I-287 has two interchanges along either side of the river in Franklin; Exit 10 at Easton Avenue to the east and Exit 12 at Weston Canal Road to the west. The longer, central portion of I-287 detailed in the table below constitutes nearly all of the route within Franklin.

This two-mile portion operates with high congestion in both directions and ranks in the top 7% statewide for congestion.

Table 2 table below provides more detailed data about congestion along I-287.

Table 2: Congestion Management System and Rating on I-287

Begin Milepost	End Milepost	Cross Street	Cross Street	24 Hr Volume (Year 2015)		Function Class	Number of Lanes		Max Peak Hour V/C	Rating	System Top Percentile
				(NB/EB)	(SB/WB)		(NB/EB)	(SB/WB)			
9.95	10.27	Easton Avenue	Piscataway Township border	62682	69261	11	3	3	1.10	High	6
10.27	12.30	Easton Avenue	Canal Road	73032	72943	11	3	4	1.10	High	6
12.30	13.50	Weston Canal Road	Bridgewater Township border	71396	69540	11	3	3	1.08	High	7

NJ 27

NJ 27 operates for 12 miles along the Township's eastern border, serving as a primary corridor in the area. The corridor tends to operate with medium congestion, with some segments reaching low-medium or high. The most severely congested segments include those between Delar Parkway and Stewarts Avenue, and Thomas Avenue and Veronica Avenue, closer to New Brunswick. Each of these segments rank in the top 5% of congested segments in the State. Segments closer to Kingston rank in the Medium-Low category.

Table 3 below provides more detailed data about congestion along NJ 27.

Table 3: Congestion Management System and Rating on NJ 27

Begin Milepost	End Milepost	Cross Street	Cross Street	24 Hr Volume (Year 2015)		Number of Lanes		Max Peak Hour V/C	Rating	System Top Percentile
				(NB/EB)	(SB/WB)	(NB/EB)	(SB/WB)			
3.00	3.43	Princeton Town border	Laurel Avenue	5485	5631	2	1	0.80	Med - Low	61
3.43	3.68	Laurel Avenue	Fairfield Road	5349	5612	1	1	0.65	Med - Low	63
3.68	4.40	Fairfield Road	Promenade Boulevard	5592	5792	1	1	0.79	Med - Low	55
4.40	5.79	Promenade Boulevard	Andover Road	5947	6116	1	1	0.83	Med - Low	51
5.79	6.04	Andover Road	4117 NJ 27	6013	6222	1	1	0.77	Med - Low	49
6.04	6.70	4117 NJ 27	Washington Street	7781	7969	1	1	1.10	Med-High	31
6.70	7.14	Washington Street	Princeton Highlands Boulevard	9267	9552	2	2	0.44	Low	82
7.14	8.13	Princeton Highlands Boulevard	Goldstar Road	10502	10869	1	1	1.10	Med-High	29
8.13	8.40	Goldstar Road	South Middlebush Road	11252	11673	2	1	1.03	Medium	36
8.40	8.70	South Middlebush Road	Stillwell Drive	12158	12638	2	1	1.09	Medium	33
8.70	9.23	Stillwell Drive	Beekman Road	12231	12827	1	1	0.87	Medium	34
9.23	9.60	Beekman Road	Delar Parkway	13112	13330	2	1	0.92	Medium	44
9.60	10.00	Delar Parkway	Stewarts Avenue	13367	13314	1	1	1.50	High	5
10.00	10.41	Stewarts Avenue	Thomas Avenue	13265	12938	2	2	0.70	Med - Low	58
10.41	13.34	Thomas Avenue	Veronica Avenue	12726	12235	1	1	1.50	High	4
13.34	15.17	Veronica Avenue	New Brunswick city border	12716	12154	2	2	0.52	Low	71

County Route 527 (Easton Avenue)

County Route 527 (Easton Avenue) travels along the Raritan River on Franklin's eastern border between New Brunswick and South Bound Brook. The route provides an

alternate to NJ 18 in connecting New Brunswick with I-287 and Somerset County. Only the segment between Castleton Avenue and Willow Avenue, near New Brunswick, ranks Medium-High. Other segments closer to New Brunswick rank Medium or Medium-Low, while those closer to South Bound Brook rank as Low.

Table 4 below provides more detailed data about congestion along CR 527 (Easton Avenue).

Table 4: Congestion Management System and Rating on CR 527 (Easton Avenue)

Begin Milepost	End Milepost	Cross Street	Cross Street	24 Hr Volume (Year 2015)		Number of Lanes		Max Peak Hour V/C	Rating	System Top Percentile
				(NB/EB)	(SB/WB)	(NB/EB)	(SB/WB)			
48.10	48.84	New Brunswick city border	Castleton Avenue	17363	15441	2	2	0.86	Medium	44
48.84	50.49	Castleton Avenue	Willow Avenue	24013	20575	2	2	0.96	Med-High	27
50.49	51.21	Willow Avenue	Cedar Grove Lane	21306	18974	2	2	0.65	Med - Low	54
51.21	51.58	Cedar Grove Lane	Interstate 287	21069	19526	2	2	0.72	Medium	47
51.58	51.95	Interstate 287	Davidson Avenue	8122	8762	2	2	0.28	Low	94
51.95	52.44	Davidson Avenue	South Bound Brook boro border	6520	6804	1	1	0.49	Low	78

2.2.3 Bridge Management System

Bridge Management System (BMS) data was obtained from NJDOT to evaluate bridge conditions. A bridge is considered to be structurally deficient if the deck, superstructure, and/or substructure are deteriorated. A bridge is considered functionally obsolete if it contains substandard geometric features such as narrow lane widths, no shoulders, or inadequate vertical underclearance. A bridge that is classified as either structurally deficient or functionally obsolete does not mean it is unsafe for use.

This data is for the 2016 analysis year, the most recent dataset available A total of 37 bridges are included in the Franklin Township BMS data. Eight are functionally obsolete, four are structurally deficient and 25 are not deficient. The functionally obsolete bridges include seven county bridges and one state bridge. Structurally deficient bridges include two county and two state bridges.

The bridge carrying CR 518 (Georgetown-Franklin Turnpike) over the Delaware and Raritan Canal was deemed functionally obsolete, and bridges carrying CR 527 (Easton Avenue) over the tributary to the Raritan River, and CR 514 (Amwell Road/Hamilton Street) over the Delaware and Raritan Canal are structurally deficient. Table 5 below provides more detailed information about the data.

Table 5: Bridge Management System Data

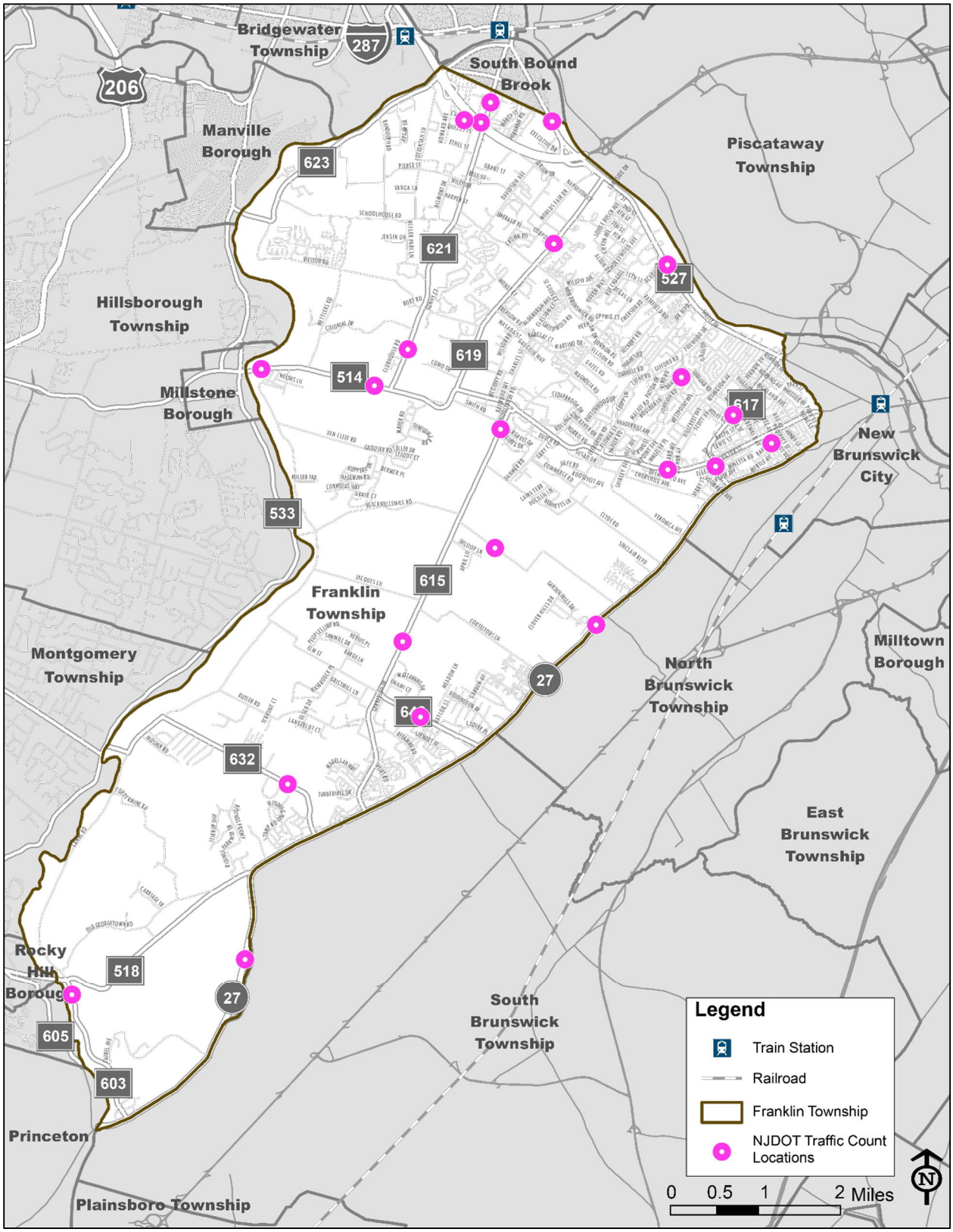
Maintaining Jurisdiction	Name	Milepost	Sufficiency Rating	BMS Rank 1 - 5	Total Score	Status
County	(G0608) Weston Canal Road (CR 623) Over Tributary Millstone River	0.873	65.1	5	73.1	Functionally Obsolete
County	(H0301) Claremont Road (CR 648) Over Nine Mile Run	0.765	82.3	5	34.8	Functionally Obsolete
County	(H0502) South Middlebush Road (CR 615) Over Tributary to Middle	4.320	76.1	5	58.85	Functionally Obsolete
County	(H0703) Weston Canal Road (CR 623) Over Randolph Brook	2.957	72.3	3	224.8	Functionally Obsolete
County	(K0701) Easton Avenue (CR 527) Over Tributary to Raritan River	52.093	65.5	3	249.75	Functionally Obsolete
County	Griggstown North Causeway (CR 632)/	3.280	69.3	5	85.55	Functionally Obsolete

Maintaining Jurisdiction	Name	Milepost	Sufficiency Rating	BMS Rank 1 - 5	Total Score	Status
	Millstone River					
County	South Middlebush Road (CR 615)/Six Mile Run	3.140	71.7	5	86.95	Functionally Obsolete
County	Aston Avenue CR 527 Over Al's Brook	51.040	63.0	4	103.5	Functionally Obsolete
County	Georgetown -Franklin Turnpike (CR518)/Millstone River	17.75	61.8	4	99.05	Functionally Obsolete
State	County Route 518 Over D&R Canal	17.830	56.5	5	88.55	Functionally Obsolete
State	Griggstown North Causeway Over D&R Canal	3.050	25.6	3	313.9	Structurally Deficient
State	Amwell Road (CR 514)/D&R Canal	16.720	6.0	1	357.75	Structurally Deficient

2.2.4 Traffic Counts

NJDOT routinely monitors locations for traffic counts throughout the state. Twenty NJDOT traffic count stations were sited in Franklin Township between 2014 and 2016, as shown in Figure 1.

Figure 1: NJDOT Traffic Count Locations



The highest volumes were found on Interstate and State routes:

- I-287 between CR 623 Weston Canal Road and CR 527 (Easton Avenue) (128,818) Average Annual Daily Traffic (AADT), 2014)
- CR 527 (Easton Avenue) between Academy Road and DeMott Lane (43,531 AADT, 2016)
- NJ 27 between Schmidt Lane and Cozzens Lane (22,215 AADT, 2016)

As Principal Urban Interstates and Arterials, these roads are expected to have the highest traffic volumes. The full list of available traffic counts for the period between 2014 and 2016 is found below in Table 6. Some locations had multiple counts (such as both Volume and Classification Counts) at different times.

Other routes with more than 15,000 AADT include CR 615 (South Middlebush Road), CR 514 (Amwell Road/Hamilton Street), and CR 617 (Franklin Boulevard).

Table 6: NJDOT Traffic Count Locations (2014-2016)

Designation	Street Name	From	To	AADT	Year
I-287	CPT Joseph Azzolina	Weston Canal Road	Easton Avenue	128,818	2014
NJ 27	NJ 27	CR 618 Old Road	Andover Road	13,536	2016
NJ 27	NJ 27	Schmidt Lane	Cozzens Lane	22,216	2016
CR 527	Easton Avenue	Academy Road	Demott Lane	43,531	2016
CR 527	Easton Avenue	Davidson Avenue	Reid Street	12,764	2016
CR 615	South Middlebush Road	Lenape Drive	Cortelyous Lane	16,047	2015
CR 621	Elizabeth Avenue	Colonial Drive	Spook Brook Road	7304	2015
CR 514	Amwell Road	Mettlers Road	CR 621 Elizabeth Avenue	11,872	2014
CR 514	Hamilton Street	Annapolis Street	Girard Avenue	16,884	2015
CR 514	Amwell Road	North River Street	Market Street	14,297	2016
CR 603	Kingston-Rocky Hill Road	Laurel Avenue	CR 518	10,256	2015
CR 615	South Middlebush Road	Buffa Drive	Railroad Avenue	15,336	2014
CR 615	South Middlebush Road	Lenape Drive	Cortelyous Lane	16,734	2016
CR 617	Franklin Boulevard	Viking Avenue	Belmar Street	15,190	2014
CR 617	Franklin Boulevard	Ellen Street	Davis Avenue	13,748	2015
CR 619	Cedar Grove Lane	Corporate Place	Pierce Street	19,412	2015
CR 621	Elizabeth Avenue	Hall Street	Adam Street	6244	2015
CR 632	Bunker Hill Road	Woodfield Court	Golf View Avenue	6006	2016
CR 646	Douglas Avenue	CR 514	NJ 27	3254	2014
CR 648	Claremont Road	Society Hill Boulevard	Mattawang Drive	6610	2016
CR 652	Campus Drive	Garfield Avenue	Equator Avenue	3930	2014
NA	Skillmans Lane	NJ 27	South Middlebush Road	3436	2016

2.2.5 Crash Analysis

The project team reviewed NJDOT reported crash data within Franklin Township from 2012 to 2016, the most recent five-year period for which complete data is available. The dataset includes all reported crashes.

The crash data was also analyzed to assess common crash characteristics and factors. Crashes were grouped by the roadway system on which they occurred (state, county, or municipal roadways) for each indicator and where available, compared to the statewide averages for the corresponding roadway system to identify any significant over-representations. The analysis is summarized in the following sections.

Overview

There were 10,935 crashes within Franklin Township from 2012-2016. This includes 94 pedestrian crashes and 69 bicyclist crashes each representing less than 0.1% of the total. The number of crashes between years did not significantly differ. The tables in the section below present crash data within Franklin Township (under the # and % columns) and comparisons to statewide averages (under Avg column).

Please note that the cumulative breakdown below of State, County, and Municipal crashes will not add up to the total of 10,935 crashes within the Township due to crashes on other roadway jurisdictions including Interstates and private property.

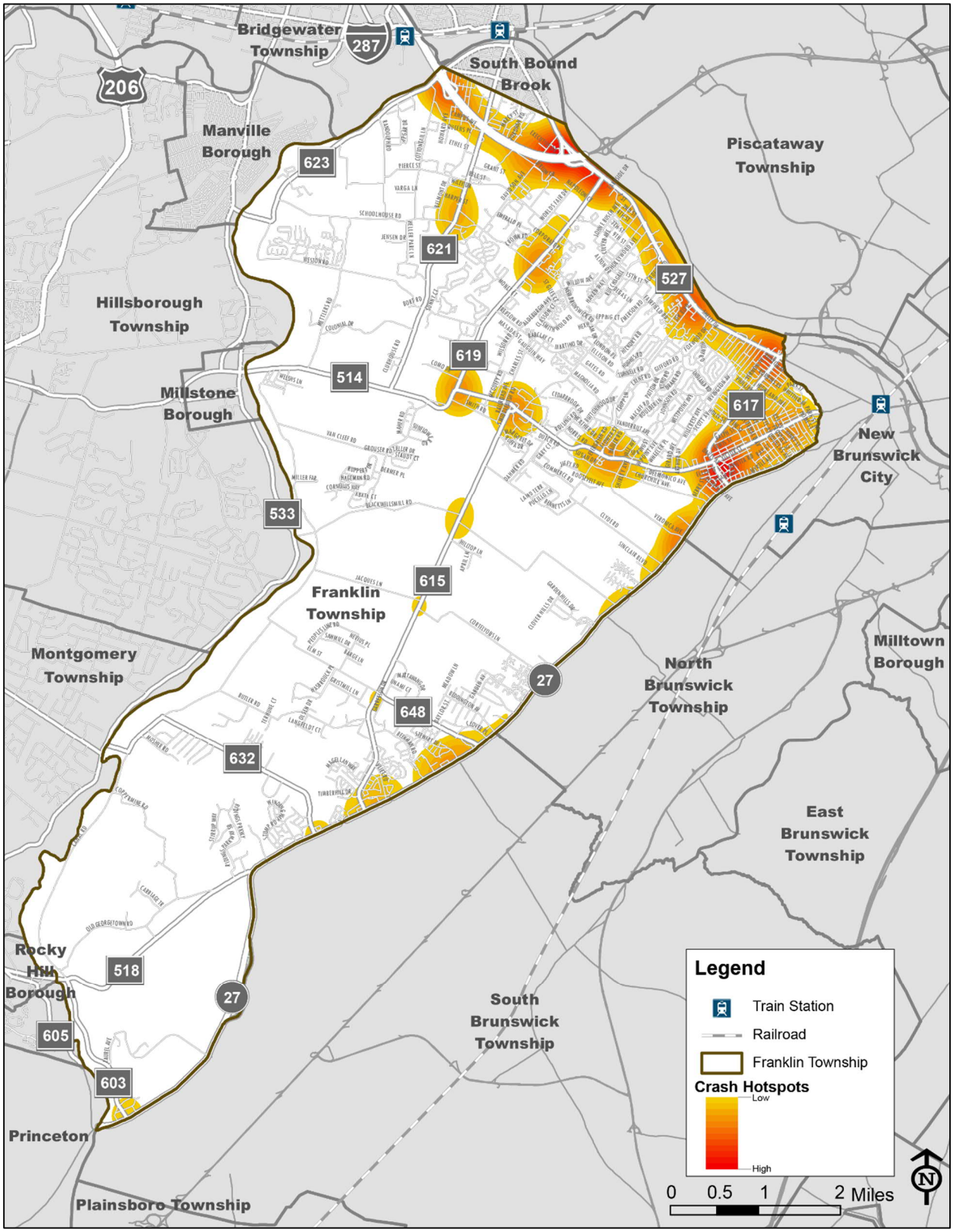
Locations

The distribution of crashes within Franklin Township is shown in Figure 2. This heat map illustrates crash "hotspots," where there was a greater frequency of crashes. Numerous corridors and intersections were determined to be hotspots with high numbers of crashes. State and county routes had more crashes than local roads. The most severe and largest hotspots are located along the north/eastern border with Piscataway and New Brunswick, along with a few smaller hotspots on interior County roads. Significant hotspot corridors and intersections are shown in Table 7 below.

Table 7: Intersection and Corridor Crashes, 2012-2016

Corridor	Intersection	Crashes
NJ 27		1504
Intersections	CR 603 (Heathcote Road/Laurel Avenue)	41
	CR 610 (Henderson Road/Stewarts Avenue)	70
CR 527 (Easton Avenue)		1456
Intersections	CR 619 (Cedar Grove Lane)	177
	Davidson Avenue	52
	Demott Lane	79
	John F. Kennedy Boulevard	130
	World's Fair Drive	66
CR 514 (Amwell Road/Hamilton Street)		1216
CR 615 (South Middlebush Road)		416
CR 619 (Cedar Grove Lane)		396
Intersection	New Brunswick Road	126
CR 617 (Franklin Boulevard)		363
CR 623 (Weston Canal Road)		197
Davidson Avenue		162

Figure 2: Crash Hotspots (2012-2016)



Severity

Of the 10,935 crashes between 2012-2016 for all types of roadways, 0.2% were fatal, 22.1% resulted in injury and 77.7% resulted in property damage. This distribution by road jurisdiction is similar to the statewide average. Of the 18 fatal crashes occurring on State, County or Municipal roadways, three involved a cyclist and three a pedestrian. Detailed data is shown in Table 8. The cyclist fatalities occurred at the perpendicular angle where Weston Rd meets Weston Canal Rd, the intersection of Amwell Rd and Elizabeth Ave, and Somerset Street (NJ 27) between Henry St and Douglas Ave. The pedestrian crashes occurred on NJ 27 west of Vliet Rd, NJ 27 west of Cortelyous Ln, and Hamilton St (CR 514) at Pershing Av.

Table 8: Crash Severity

Crash Severity	State Roadways			County Roadways			Municipal Roadways		
	#	%	Statewide Avg	#	%	Statewide Avg	#	%	Statewide Avg
Property Damage	1060	70.5%	71.9%	3062	73.9%	72.3%	2423	78.6%	78.8%
Injury	441	29.3%	27.9%	1071	25.9%	27.5%	652	21.2%	21%
Fatal	3	<.01%	0.29%	9	<.01%	0.20%	6	<.01%	0.13%
Note: bold indicates exceeds statewide average for same roadway system									

Lighting Conditions

Of the 10,935 crashes between 2012-2016 for all road types, 25% occurred during dark conditions, 72% in daylight, 2% during dusk and <1% at dawn. These values are similar to state averages. Detailed data is provided in Table 9.

Table 9: Lighting Conditions

Lighting Conditions	State Roadways			County Roadways			Municipal Roadways		
	#	%	Statewide Avg	#	%	Statewide Avg	#	%	Statewide Avg
Dark	404	26.9%	25.5%	1014	24.5%	25%	803	26.1%	27.8%
Daylight	1048	69.7%	70.4%	2982	72.0%	70.8%	2144	69.6%	67.1%
Dusk	39	2.6%	2.4%	96	2.3%	2.6%	81	2.6%	2.3%
Dawn	13	.09%	1.3%	48	1.2%	1.1%	27	0.9%	1.1%
Unknown	0	0%	0.4%	2	<.01%	0.5%	26	0.8%	1.8%
Note: bold indicates exceeds statewide average for same roadway system									

Crash Type

Throughout Franklin Township (all road types) the most common crash types during the analysis period were same direction rear-end crashes (32.3%), right-angle crashes (11.4%), same direction sideswipes (10.2%) and left/U turns (5.1%). Left/U turn and right-

angle crashes were overrepresented on state roadways, same direction rear-end crashes on county roadways, and same direction rear-end crashes and crashes caused by animals and fixed objects on municipal roadways.

The overrepresentation of left and right-angle crashes on state roadways (NJ 27) may be due to a lack of dedicated signal timing for turning vehicles. The overrepresentation of same direction rear-end crashes on County and municipal roads may be caused by queuing caused by recurring congestion or turning vehicles. The overrepresentation of crashes with animals and fixed objects on municipal roadways may be caused by inadequate animal crossing signage, and proximity of fixed objects near the roadways and intersections. Crash characteristics of focus intersections are detailed later in this document. Detailed data is provided in Table 10.

Table 10: Crash Type

Crash Type	State Roadways			County Roadways			Municipal Roadways		
	#	%	Statewide Avg	#	%	Statewide Avg	#	%	Statewide Avg
Animal	60	34%	3.5%	285	6.8%	4.6%	216	6.8%	1.9%
Backing	4	0.3%	0.8%	35	0.8%	2.2%	124	3.9%	7.7%
Encroachment	1	0.1%	0.3%	0	0%	0.4%	9	0.3%	0.4%
Fixed Object	91	6%	10%	327	7.8%	11%	623	19.6%	11.5%
Left Turn / U Turn	157	10.4%	2.5%	327	7.8%	4.4%	108	3.4%	2.1%
Non-fixed Object	10	0.7%	0.8%	6	0.1%	0.5%	27	0.9%	0.4%
Opposite Direction - Head On/Angular	15	1%	1.7%	33	0.8%	3.3%	33	1%	3%
Opposite Direction - Sideswipe	6	0.4%	n/a	36	0.9%	n/a	63	2%	n/a
Other	27	1.8%	0.7%	102	2.4%	0.8%	126	4%	0.7%
Overturned	2	0.1%	0.7%	15	0.4%	0.6%	19	0.6%	0.5%
Pedalcyclist	14	0.9%	0.5%	22	0.5%	1%	35	1.1%	1.1%
Pedestrian	22	1.5%	0.9%	27	0.7%	2%	27	0.9%	3%

Right-Angle	253	16.8%	10.3%	518	12.4%	18.6%	435	13.7%	17.8%
Same Direction - Rear End	677	44.9%	49.3%	1823	43.6%	32.9%	626	19.7%	15%
Same Direction - Sideswipe	168	11.1%	16.9%	555	13.3%	12.0%	279	8.8%	9.8%
Struck Parked Vehicle	2	0.1%	1.3%	70	1.7%	5.7%	436	13.7%	25%
Note: bold indicates exceeds statewide average for same roadway system									

Roadway Surface Conditions

Overall, approximately 79% of crashes over all road types throughout Franklin Township occurred under dry road surface conditions, while 16% occurred during wet conditions. These values fall in line with state averages. Detailed data is provided in Table 11.

Table 11: Roadway Surface Conditions

Surface Conditions	State Roadways			County Roadways			Municipal Roadways		
	#	%	Statewide Avg	#	%	Statewide Avg	#	%	Statewide Avg
Wet	266	17.7%	19.0%	718	17.3%	18.3%	460	14.9%	15%
Dry	1218	81%	79.2%	3271	79%	79.1%	2308	74.9%	81.4%
Icy	1	<1%	0.3%	42	1%	0.6%	99	3.2%	0.7%
Slush	1	<1%	n/a	27	<1%	n/a	33	1%	n/a
Snowy	16	1.1%	0.8%	80	1.9%	1.4%	175	5.7%	1.7%
Other	2	<1%	0.5%	4	<1%	0.4%	6	<1%	0.9%
Note: bold indicates exceeds statewide average for same roadway system									

Environmental Conditions

79% of crashes over all road types occurred in clear environmental conditions while 11% occurred in rain, 6% while overcast and 3% in snow. These trends were relatively consistent among all roadway types though slightly more crashes occurred on municipal roads in snowy conditions, likely due to the lower priority of plowing these local streets. Detailed data is provided in Table 12.

Table 12: Environmental Conditions

Environmental Conditions	State Roadways		County Roadways		Municipal Roadways	
	#	%	#	%	#	%
Clear	1201	80%	3220	77.7%	2347	76.2%

Overcast	97	6.4%	288	9.2%	193	6.3%
Rain	176	11.7%	489	11.8%	330	10.7%
Snow	24	1.6%	109	2.6%	167	5.4%
Other	6	<1%	36	<1%	44	1.4%

69% of pedestrian crashes and 64% of bicyclist crashes occurred on streets with a posted speed limit above 25 mph. 80% of all crashes occurred on these higher speed roads. Table 13 shows the distribution of crashes based on the location's speed limit. Due to the more limited ability to stop one's vehicle, crashes and more severe crashes are more likely to occur on higher-speed roads. "Higher speed roads" can include roads with higher speed limits as well as roadways with lower speed limits, but due to roadway conditions, cater to vehicle speeds significantly greater than the speed limit. These higher speed corridors would benefit from traffic calming to lower the speed at which motorists feel they can safely drive.

Figure 3 below expresses the stopping distance for a vehicle traveling at a variety of speeds.

Figure 3: Stopping Distance

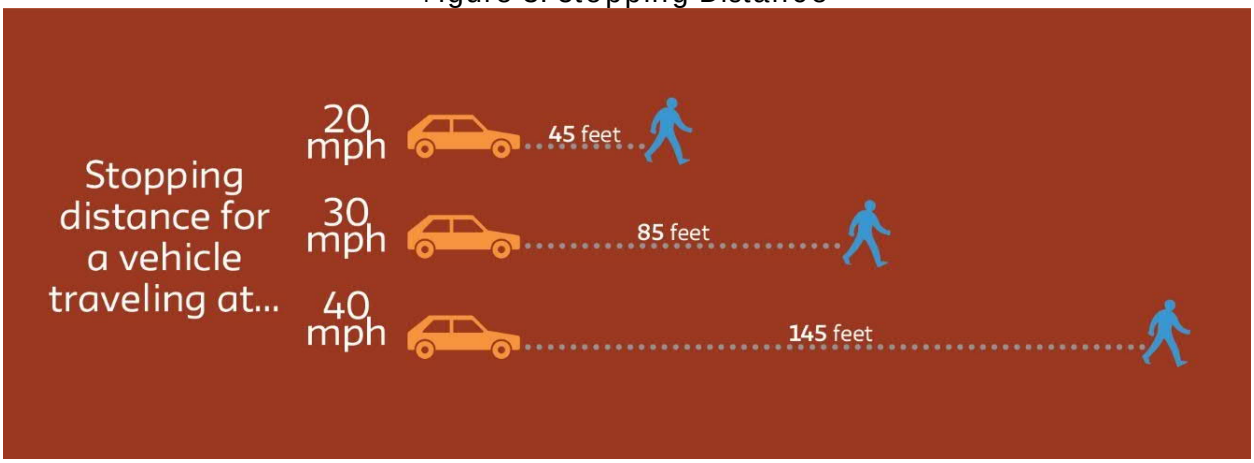


Table 13: Speed Limits and Crashes

Speed	Mileage	Crashes
<25	71.1%	19.8%
30	4.7%	3.1%
35	6.4%	12.1%
40	8.7%	27.5%
45	6.1%	22.3%
50	1.7%	5.3%
55+	1.4%	10.1%

Proximity to Intersection

Crashes in Franklin Township on all types of roadways disproportionately occurred away from intersections. 92% of pedestrian crashes and 59% of bicyclist crashes occurred away from an intersection. The high number of pedestrian crashes occurring away from an intersection indicate a need for improved pedestrian facilities including controlled mid-block crossings. There are large gaps present between signalized intersections/pedestrian crossings. This causes cyclists and pedestrians to cross mid-block. Crashes in between intersections are more likely to be severe due to the high vehicle speeds between traffic controls. Table 14 shows the breakdown of crashes proximity to intersections for all crash types.

Table 14: Proximity to Intersection

Location	State Roadways			County Roadways			Municipal Roadways		
	#	%	Statewide Avg	#	%	Statewide Avg	#	%	Statewide Avg
At Intersection	317	21.1%	30.4%	1015	24.5%	40%	550	18.9%	34.4%
Not at Intersection	1187	78.9%	69.6%	3127	75.5%	60%	2531	81.1%	65.5%
Note: bold indicates exceeds statewide average for same roadway system									

Crash Rates on State Highways

Crash rates for NJ 27, the only state highway in Franklin Township, were obtained from NJDOT for 2014-2016, the most recent three-year dataset available. Crash rates are calculated for each segment of a corridor using data from roadways with similar cross sections to identify specific parts of a roadway with higher than average crash rates. Detailed crash rates are provided in Table 15. As seen in the table, crash rates vary greatly across the corridor and from year to year with an overall trend of rising numbers of crashes from year to year.

Table 15: Crash Rates on NJ 27

NJ 27									
Segment Start		Segment End		Segment Info		Comparison of Crash Rate to State Average			
MP	Cross Street	MP	Cross Street	Length	Cross Section	2014	2015	2016	3-Year Average
3.04		3.32	Church Street	0.28	3 Lanes With/Without Shoulder	1.78	2.67	8.01	4.15
3.32	Church Street	3.43	CR 603	0.11	2 Lanes Without Shoulder	18.13	22.66	24.92	21.90
3.43	CR 603	3.68	Fairfield Drive	0.25	2 Lanes With Shoulder	9.97	24.92	19.94	18.28

3.68		4.67	Promenade Boulevard	0.99	2 Lanes Without Shoulder	4.53	5.04	5.29	4.95
4.67	Promenade Boulevard	4.90	Jones Drive	0.23	2 Lanes With Shoulder	4.33	4.33	6.50	5.05
4.9	Jones Drive	5.06	CR 618	0.16	2 Lanes Without Shoulder	10.90	7.79	4.67	7.79
5.06	CR 616	5.79	Andover Drive	0.73	2 Lanes Without Shoulder	5.04	5.04	3.41	4.5
5.79		5.87		0.08	2 Lanes With Shoulder	3.76	4.44	3.12	3.77
5.87		6.04		0.17	2 Lanes With Shoulder	0.97	1.94	3.88	2.26
6.04		6.14		0.10	2 Lanes Without Shoulder	0.50	0.00	1.25	0.58
6.14		6.70		0.56	2 Lanes Without Shoulder	0.59	0.59	1.47	0.88
6.70		6.90		0.20	4 or More Lanes, No Median Without Shoulder	2.47	2.47	0.82	1.92
6.90		7.36		0.46	2 Lanes With Shoulder	3.22	5.01	3.22	3.82
7.36	Princeton Highlands Boulevard	8.27	Charleston Place	0.91	2 Lanes With Shoulder	7.24	6.88	6.23	6.78
8.27	Charleston Place	8.56	Cardinal Court	0.29	3 Lanes With/Without Shoulder	6.82	6.25	13.07	8.71
8.56		9.05		0.49	2 Lanes With Shoulder	5.72	8.07	6.39	6.73
9.05		9.06		0.01	2 Lanes With Shoulder	0.00	0.00	0.00	0.00
9.06		9.41		0.35	2 Lanes With Shoulder	8.56	11.29	8.56	9.47
9.41		9.67		0.26	3 Lanes With/Without Shoulder	9.67	7.83	10.60	9.37
9.67		10.00		0.33	2 Lanes With Shoulder	13.07	12.34	19.60	15.00
10.00		10.20		0.20	4 or More Lanes, No Median Without Shoulder	5.39	5.39	2.99	4.59
10.20		10.41		0.21	2 Lanes Without Shoulder	11.98	4.56	11.41	9.32
10.41		10.81		0.40	2 Lanes With Shoulder	4.49	2.70	4.79	3.99
10.81	Ambers Way	11.10	Cortelyous Lane	0.29	2 Lanes With Shoulder	2.89	1.24	0.83	1.65

11.10		11.50		0.40	2 Lanes With Shoulder	3.29	1.80	1.20	2.10
11.50		11.97		0.47	2 Lanes With Shoulder	3.24	2.97	4.32	3.51
11.97		12.57		0.60	2 Lanes With Shoulder	4.48	5.64	5.64	5.25
Corridor Yearly Average						5.82	6.20	6.70	6.24

Potential explanations for the increased crash rates along high-crash segments are extrapolated below. Recommendations for each of these sections is detailed in the following chapter beginning on page 51.

Church Street to CR 603 (Laurel Avenue)

- This segment in Kingston includes several local retail establishments, parallel parking on both sides and a 25 mph speed limit. There is a short segment on either end of this segment where the speed limit is 35 mph before increasing to 45 mph for most of the corridor. Crashes may be due to the sudden and for some, unexpected change in the speed limit as well as the maneuvering of parallel parked vehicles.

CR 603 (Laurel Avenue) to Fairfield Drive

- This 35 mph segment represents a transition area between the lower 25 mph speed limit to the south and 45 mph speed limit to the north. The higher than average crash rate may be due to the speed transition of motorists as well as backups at CR 603 (Laurel Avenue).
- Recommendations for this area are provided on page 54.

Princeton Highlands Boulevard to Charleston Place

- This segment includes uncontrolled commercial driveways and entrances to residential developments on either side, as well as the highly used Kendall Park park and ride. Many vehicles enter and exit at the uncontrolled intersections, and many others access the park and ride.

Charleston Place to Cardinal Court

- This short segment includes a wide (four lanes in each direction) intersection, as well as a driveway to/from the Franklin Township library with inadequate merging space to and from NJ 27. Along this segment, there are significant overrepresentations of backing (14.8% vs. 0.83%) and left/U-turn (21% vs 2.46%) compared to statewide averages on state roads such as this. The overrepresentation in left turn crashes may be due to there not being a significant gap between the protected left turn signal, and oncoming traffic, or the prevalence of u-turning vehicles on red lights. Backing crashes may occur if one of the two through-lanes is congested, vehicles may back up to maneuver to the other lane, causing a dangerous situation for themselves and oncoming vehicles.

2.3 Multimodal Transportation Network Inventory and Analysis

2.3.1 Jurisdiction

According to NJDOT's 2017 roadway network, 77% (216 miles) of Franklin Township's roads are locally owned and maintained. 15% (42 miles) fall under the jurisdiction of Somerset County, 4% (12 miles) under the State, and 3% (9 miles) are Interstate roads or ramps maintained by the State. Table 16 and Figure 4 display the breakdown of road type and jurisdiction.

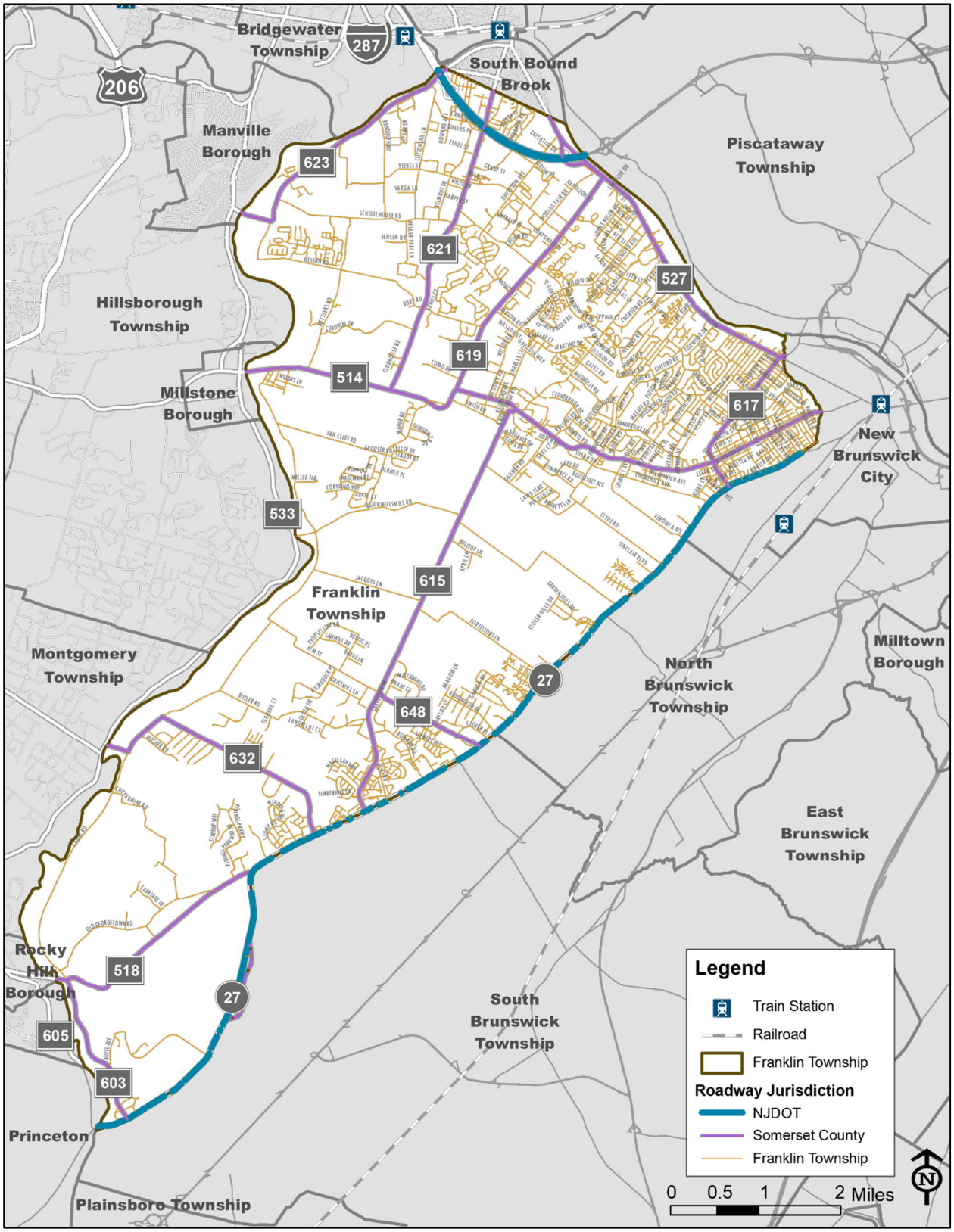
A variety of county and other major roads pass through Franklin. Some of the major county routes in the township include CR 514 (Amwell Road/Hamilton Street), CR 518 (Georgetown-Franklin Turnpike) and CR 527 (Easton Avenue). NJ 27, the township's only state route and a regional arterial runs along the border between New Brunswick, and the townships of South Brunswick and North Brunswick. Interstate 287 runs through the northern part of the township with two interchanges. County roads tend to connect residential and commercial areas, serving as collector routes within the township.

Though most of the roadways in Franklin are municipally maintained, most traffic and crashes occur on County, State and Interstate roads. Roadway jurisdiction is mapped in Figure 4.

Table 16: Roadway System Type

Jurisdiction	Distance	Percent
Interstate*	4 miles	1%
State Route	12 miles	4%
County Route	42 miles	15%
Ramp*	5 miles	2%
Interstate highways and their ramps are maintained by NJDOT		

Figure 4: Roadway Jurisdiction



2.3.2 Functional Classification

The Federal Highway Administration categorizes all roadways by functional classification. Functional classification is the systematic organization of highways and roadways into separate classes or groups, based upon their intended service function. Efficient and safe operation of the system requires that facilities be designed to serve a specific purpose within the street hierarchy. Municipalities can advocate to change the functional class of a roadway if travel patterns or a community's needs have changed. Roadway functional classifications applicable to Franklin Township are defined in Table 17 below.

Table 17: Functional Classification

Principal Arterials-Interstate	Limited or no access to abutting land uses. Access only from major streets at interchanges. Freeways supplement the capacity of the arterial street system and provide high speed mobility.
Principal Arterials-Other	Intended to provide a high degree of mobility and serve longer trips than minor arterials. Principal function is movement, not access. Should be excluded from residential areas.
Minor Arterials	Interconnects and augments the major arterial system. Operating speeds and service levels are lower than major arterials. Should be excluded from identifiable residential neighborhoods.
Collectors	Provide both land access and movement within residential, commercial and industrial areas. Enters, but should not continue, through residential areas.
Local Access	Provides land access and can exist in any land use setting. Movement is incidental and involves travel to and from a collector facility.

Source: Transportation and Land Development. Institute of Transportation Engineers, 1988.

Table 18 presents the width and lane specifications for functional classification of roadways and Table 19 lists the roads falling under each functional class. Figure 5 maps the roads by functional class.

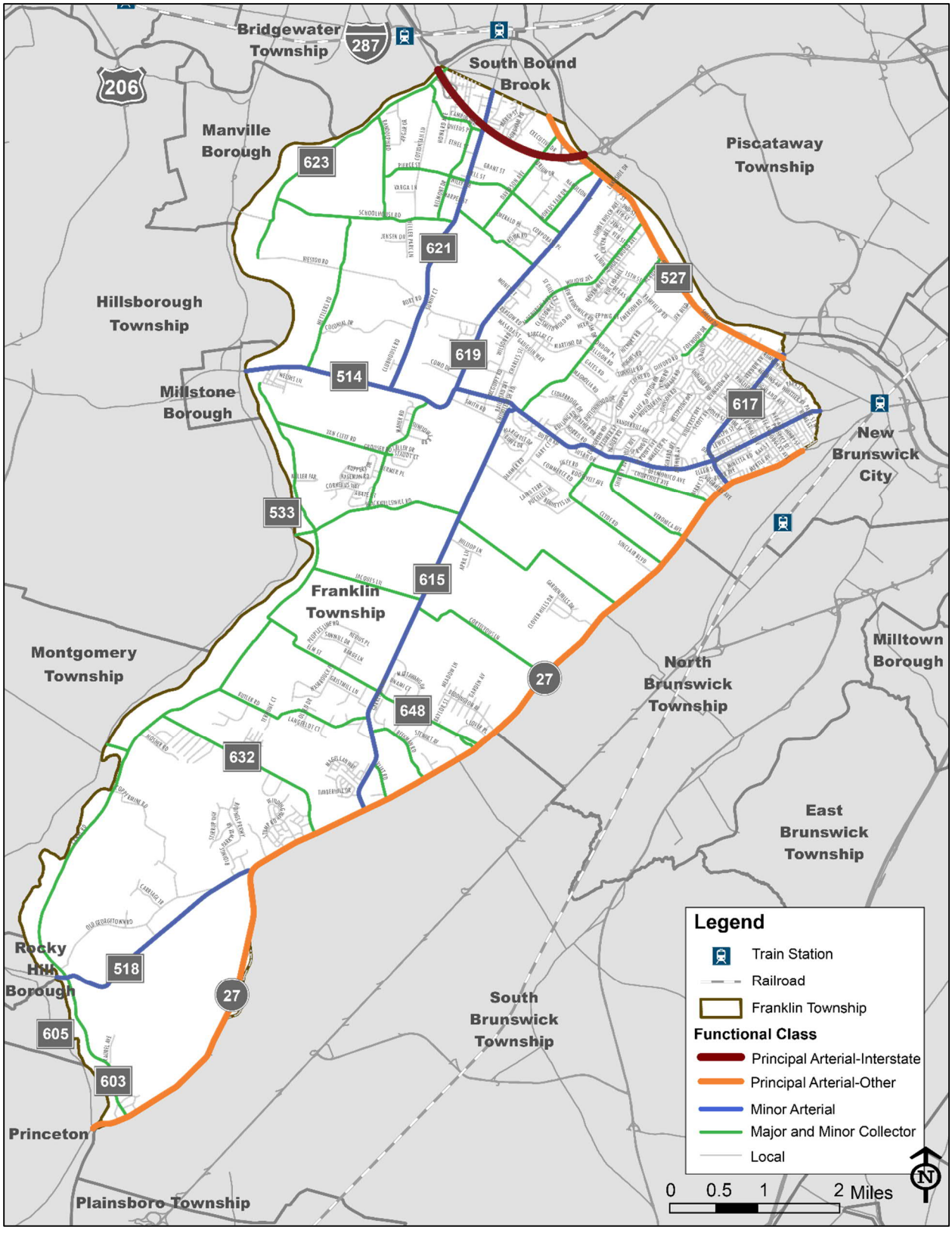
Table 18: Width and Lane Specifications

Classification	Right-of-Way Width	Cartway Width	# Lanes
Major Arterial	80 ft	58 ft	4
Minor Arterial	66 ft	46 ft	2-4
Major Collector	60 ft	40 ft	2
Minor Collector	50 ft	36 ft	2
Rural Collector	50 ft	28 ft	2
Local Roadway	50 ft	22-36 ft	2

Table 19: Roadways by Functional Classification

Principal Arterials-Interstate			
Interstate 287			
Principal Arterial-Other			
NJ 27		CR 527 (Easton Avenue) south of I-287	
Minor Arterials			
CR 514 (Amwell Road/Hamilton Street)	CR 518 (Georgetown and Franklin Turnpike)	CR 615 (South Middlebush Road)	CR 617 (Franklin Boulevard)
CR 619 (Cedar Grove Lane)	CR 621 (Elizabeth Avenue)	John F. Kennedy Boulevard	
Major Collector			
CR 603 (Kingston-Rocky Hill Road/Laurel Avenue)	Griggstown Causeway (Canal Road and CR 632, Bunker Hill Road)	Davidson Ave	DeMott Lane
New Brunswick Road	School House Road	Veronica Avenue	World's Fair Drive
Vliet Road			
Minor Collector			
Beekman Road	Campus Drive	Clyde Road / Bennett's Lane	Cottontail Lane
Belmont Drive	Churchill Avenue	Pleasant Plains Road	Pierce Street
Mettler's Road	Randolph Road	Weston Road (Elizabeth Avenue to Weston Canal Road)	
Rural Collector			
Blackwell's Mills Road	Bennett's Lane (west of Clyde Road)	Butler Road	Canal Road (Route 518 to Griggstown Causeway)
Cortelyous Lane	Grouser/Van Cleef Road	Foxwood Drive	Jacques Lane
Skillman's Lane	Suydam Road	Weston Road (Elizabeth Avenue to Cedar Grove Lane)	Willow Avenue (Easton Avenue to Dead End)
Local Access			
All remaining roads within the Township		Claremont Road	

Figure 5: Roadway Functional Classification



2.3.3 Bicycle and Pedestrian Conditions

Bicycle Infrastructure

Throughout this section of the Circulation Element, several types of bike facilities will be discussed. A brief description of each of these facilities and their distinguishing characteristics are provided below.

A comprehensive bicycle network benefits the larger transportation system by offering a safe and efficient alternative means of transport from a single-occupancy automobile. A well-designed bicycle network has many of the same traits as any other successful transportation network. The network should provide a hierarchy of facility types, from off-road trails to on-road shared lane markings for different kinds of riders, trips, and locations, similar to a roadway network that includes low-speed residential streets and high-speed highways. A successful bicycle network should also connect high-desirability locations and minimize the presence of bike facility gaps. An effective bicycle network will provide a means for recreational, commuting, and social trips throughout Franklin Township and its neighboring municipalities. In addition to providing purely transportation needs, a thorough bicycle network can promote the local economy, health and community.

Enhancing Franklin's bicycle network supports the Circulation Element's objectives to encourage multimodal connectivity, support Complete Streets measures, encourage non-motorized transportation, and continuing to implement the Bikeway Master Plan.

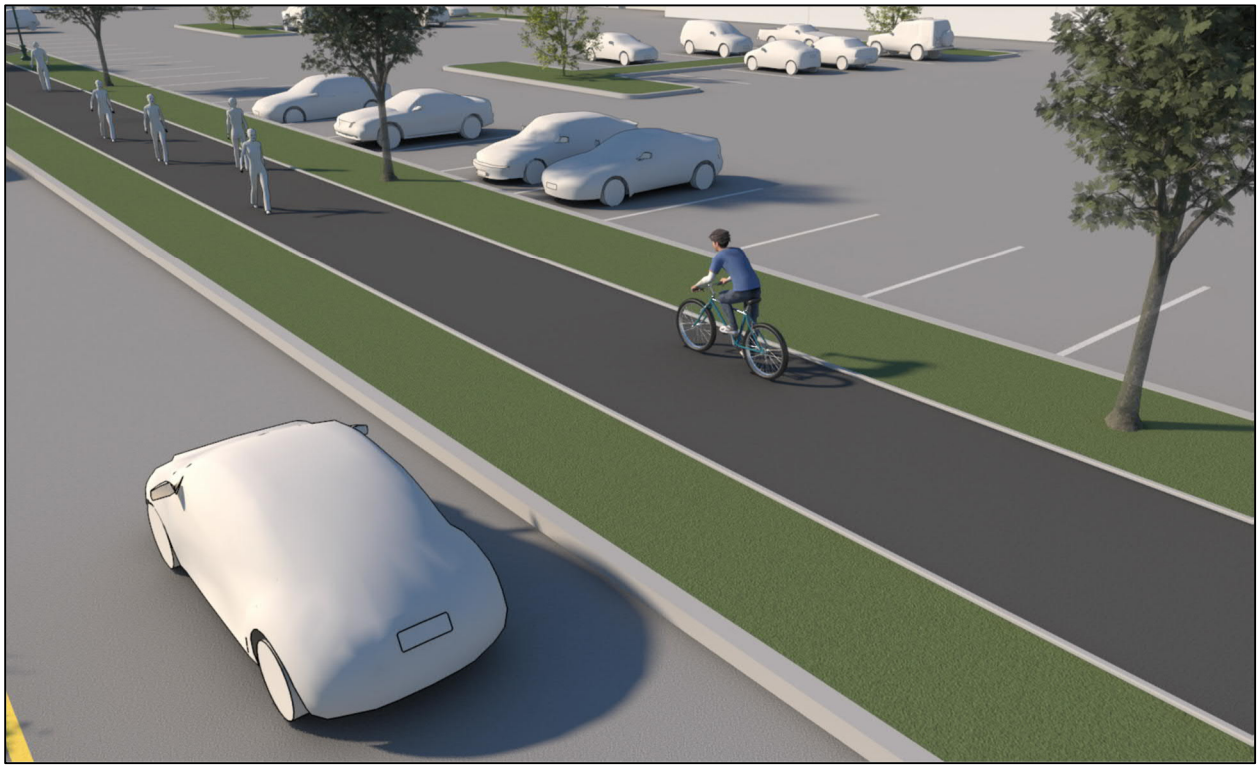
Shared-Use Path/Sidepath

Shared-use paths are bikeways that are distinctly separate from the roadway, separated physically from motorized traffic by either open space or a barrier. Shared-use paths are designed to facilitate both utilitarian and recreational trips. Intended users can include bicyclists, pedestrians, roller skaters, skateboarders, and other non-motorized users. Shared-use paths are typically designed for two-way travel and should be built as a system of off-road transportation routes that complement and enhance the on-road bicycle network. A shared-use path should be 10-14 feet wide.

A sidepath is a form of a shared-use path that operates alongside a road (see Figure 6).

Often used synonymously with "shared-use path", a trail is a form of a shared-use path that is typically unpaved.

Figure 6: Shared-Use Path/Sidepath



Bicycle Lane

A bicycle lane provides exclusive space for cyclists through the use of pavement markings and signage. Bicycle lanes are intended for one-way travel and are typically located on both sides of a two-way street to better facilitate mobility. Two-way bicycle facilities located on the same side of the street separated from vehicular traffic with a vertical buffer are known as two-way separated bicycle lanes. Bicycle lanes enable bicyclists to ride at their preferred speed, free from interference with motorists. Bicycle lanes help facilitate predictable behavior between bicyclists and motorists. Bicyclists may leave the bicycle lane to pass other bicyclists, make left turns, or avoid obstacles and conflicts. Motorists may pass through the bicycle lane to access parking or make other turning movements, but they may not stand or park in the lane. Bicycle lanes should be a minimum five feet wide. For maximum visibility, bicycle lanes of green paint should be considered, rather than mere parallel white stripes indicating the lanes.

Bicycle lanes can be standard, buffered or separated. Standard lanes consist of dedicated space adjacent to a travel lane. Buffered lanes are buffered from the travel lane by a painted buffer. Separated lanes have a physical separation (such as a flexible delineators) separating it from the travel lane. Standard bicycle lanes should be thought of when referring through the remainder of this plan to “bicycle lanes.” Separated and standard lanes are shown in Figure 7 and Figure 8.

Figure 7: Separated Bike Lane

Figure 8: Standard Bicycle Lane

Shared Lane

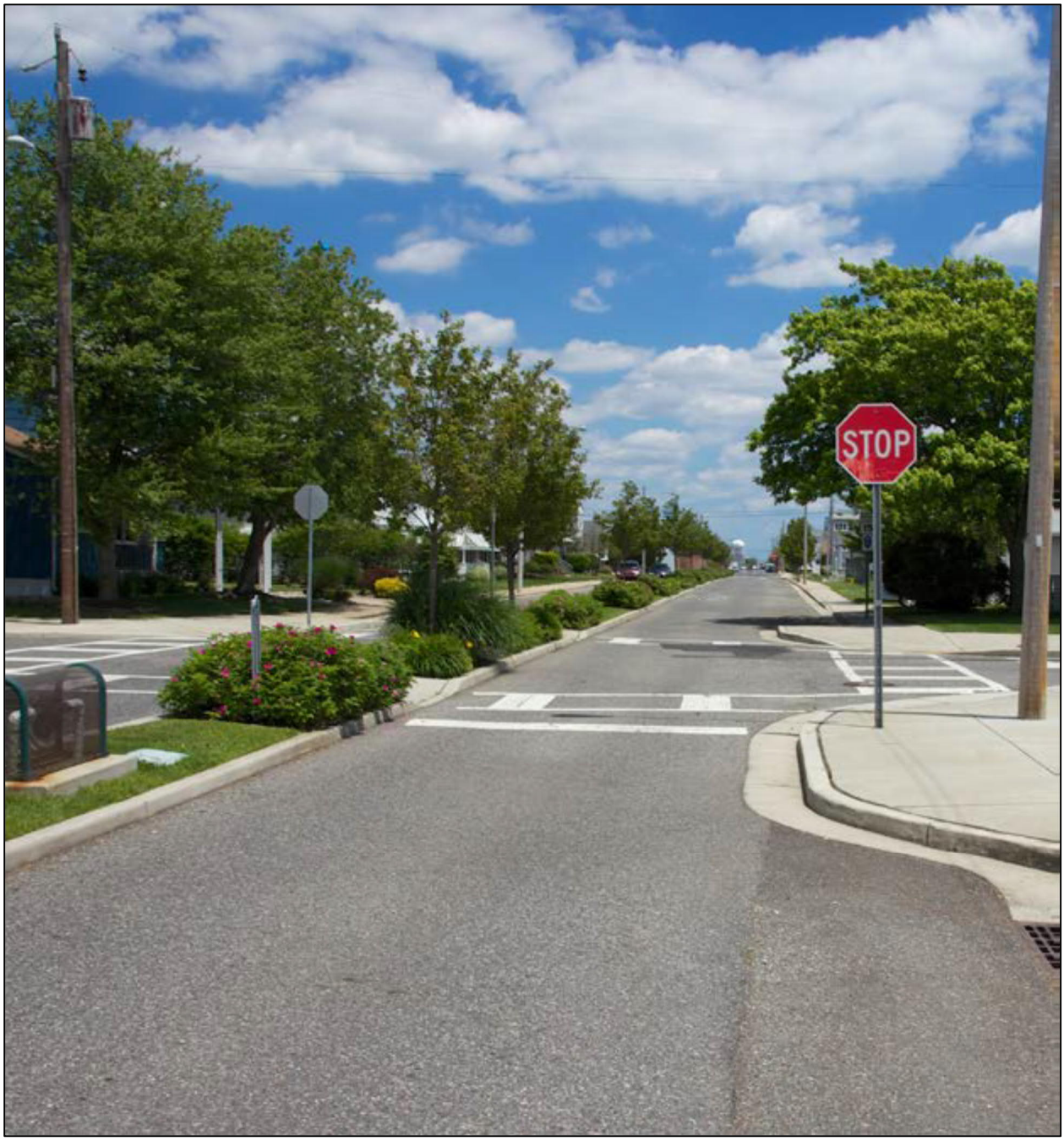
Shared-lane markings (also known as “sharrows”) are placed on roadways infeasible or inappropriate to provide dedicated bicycle facilities. Shared-lane markings indicate a shared environment for bicycles and automobiles. Shared-lane markings should be used to connect and provide a designated route to dedicate bicycle facilities. Shared-lane markings help direct bicyclists to ride in the most appropriate location on the roadway and provide motorists with visual cues to anticipate the presence of bicyclists. Shared-lane markings are ideally used on roadways with a speed limit of 25 mph or less. A shared-lane markings graphic is displayed in Figure 9 below.

Figure 9: Shared-Lane Markings

Bicycle Boulevard

Bicycle boulevards are linear corridors of interconnected traffic-calmed streets where bicyclists are afforded an enhanced level of safety and comfort. Many local streets that have existing low motorist travel speeds and volumes create the basic components of a safe and comfortable bicycling environment. These streets are enhanced by a variety of design treatments discouraging high vehicle speeds and volumes to create a bicycle boulevard. Many of these treatments benefit not only bicyclists, but all users of the street by creating a safe and quiet environment. Bicycle boulevards do not require painted dedicated space for cyclists but incorporate a range of horizontal and vertical deflecting traffic calming measures to slow motorists. An example bicycle boulevard is shown in Figure 10.

Figure 10: Bicycle Boulevard



Existing Bike Network

Franklin Township provides several on and off-road bike facilities. These facilities tend to be along corridors disconnected from the remainder of the bike network. The following sections provide a brief description of each bike facility, including its location and the type of facility. Existing bicycle facilities in Franklin are shown in Figure 11. Facilities connecting to Franklin but located in adjacent municipalities are shown, but not facilities located entirely within other municipalities.

Recommendations for each of the facilities begin on page 60.

On-Road Facilities

Old Stage Road

North of NJ 27 at South Middlebush Road, the 0.25 mile Old Stage Road has dedicated on-road bike facilities on either side of the street.

Amwell Road/Cedar Grove Lane/Weston Lane

An on-road dedicated bike facility exists along Amwell Road west from South Middlebush Road, and north along Cedar Grove Lane to Weston Road. At Weston Road, the facility becomes a sidepath along the south side of the corridor to Elizabeth Avenue.

Campus Drive

Running for 0.75 miles between Cottontail Lane and Elizabeth Avenue, Campus Drive provides access to several offices in the area. The eastern 0.5 mile includes bike lanes.

Off-Road Facilities

Trail from Old Vliet Road

This nearly mile long trail begins at the intersection of Old Vliet Road and South Middlebush Road. A combination of grass and dirt, the 1.75 mile trail skirts around two large open areas before becoming Brown Trail next to Bunker Hill Golf Course continuing south through the Bunker Hill Natural Area, terminating at a parking lot on Bunker Hill Road.

Trails near Franklin Park and Delar Park

Two disconnected shared-use paths travel east from the Beacon Hill at Somerset community at Franklin Park, and west from Stewarts Avenue and Delar Park. Together, the two trails span 0.65 miles.

Six Mile Run

The 11-mile Six Mile Run off-road trail runs west from a large parking lot with soccer fields to a parking lot on Jacques Lane. Toward its western end, near South Middlebush Road, there are also several small spur trails stemming from Six Mile Run, including one north to Blackwell's Mills Road and west to Canal Road. Together, the trail and its sub-routes are known as the Red, White, and Blue trails.

Van Cleef Road

A sidepath extends on the east side of Van Cleef Road for nearly one mile between Grouser Road and Amwell Road.

School House Road/New Brunswick Road

A sidepath exists along the south side of School House Road between Mettlers Road and Weston Canal Road. To the east, School House Road becomes New Brunswick Road, where there is a 0.5 mile span of on-road dedicated bike facilities between Crown Road and a New Brunswick Road spur on the north side.

Delaware and Raritan Canal Park Trail (D&R Trail)

The D&R Trail extends 70 miles from the Delaware River in Frenchtown, down along NJ 27 to Trenton, and north along the Raritan Canal to New Brunswick. This includes nearly 18 miles of trail in Franklin Township along the Delaware & Raritan Canal. The trail is a combination of crushed stone and pavement. Well-maintained, most road crossings of the trail have crosswalk markings and/or actuated flashing beacons.

John F. Kennedy Boulevard/Clyde Road

The entirety of John F. Kennedy Boulevard's 2.1 miles runs a sidepath along the west side. This paved path provides recreational opportunity along the corridor and connects locations along the corridor, including residential neighborhoods, a church and school.

Nearby Bike Facilities Outside of Franklin

A bike network consists of more than its individual parts. Trails and bike lanes strengthen one another. For this reason, the condition of existing bike facilities in the vicinity of Franklin Township, but not within the township were reviewed.

Promenade Boulevard

A 1.3 mile sidepath exists along Promenade Boulevard in South Brunswick from the Franklin Township border at NJ 27 to U.S. 1. This provides an important connection between these two highly trafficked corridors, but each end of the Promenade Boulevard facility terminates at a dead end.

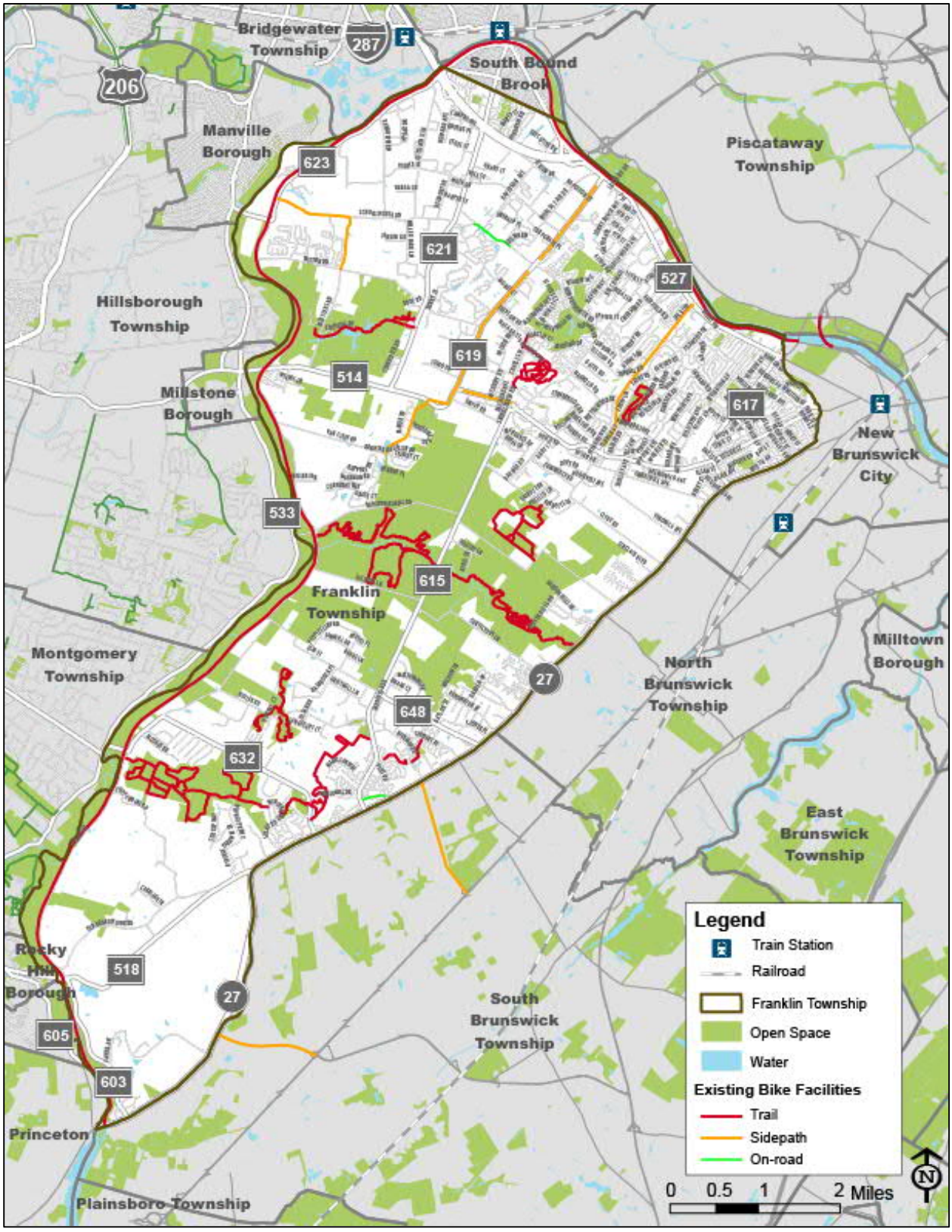
Beekman Road

A 1.4 mile sidepath exists along the west side of Beekman Road in South Brunswick between NJ 27 and U.S. 1, as well as a 0.4 mile sidepath along the east side of the corridor between Village Road and Village Park where a portion of the sidepath extends into the interior of the park.

NJ 18

NJ 18, roughly 0.5 mile east of Franklin Township, is a limited access highway running over the Raritan River between New Brunswick and Piscataway. The bridge includes a sidewalk used by pedestrians and cyclists accessed near the intersection of George Street and College Avenue. Though only 0.1 mile from the bridge, the Delaware & Raritan Canal Park Trail in Franklin does not connect to the bridge.

Figure 11: Existing Bicycle Facilities



Bicycle Level of Traffic Stress

Bicycle Level of Traffic Stress (LTS) evaluates a cyclist's comfort level given a roadway's conditions. Each bicyclist has a different tolerance for stress determined by volume, speed, and proximity of automobile traffic. The LTS metric is based on the Dutch concept of low-stress bicycle facilities and has proven influential in the advancement of bicycle planning in the United States.

In general, lower stress facilities have increased separation between cyclists and vehicular traffic and/or have lower speeds and lower traffic volumes. Higher stress environments generally involve cyclists riding in close proximity to traffic, multi-lane roadways, and higher speeds or traffic volumes.

LTS uses four levels of traffic stress to evaluate roadways:

- Level of Traffic Stress 1: tolerated by nearly all users, including children and seniors
- Level of Traffic Stress 2: tolerated by most adults
- Level of Traffic Stress 3: tolerated by only "enthusiastic" riders who may still prefer dedicated space
- Level of Traffic Stress 4: tolerated by only the most experienced riders

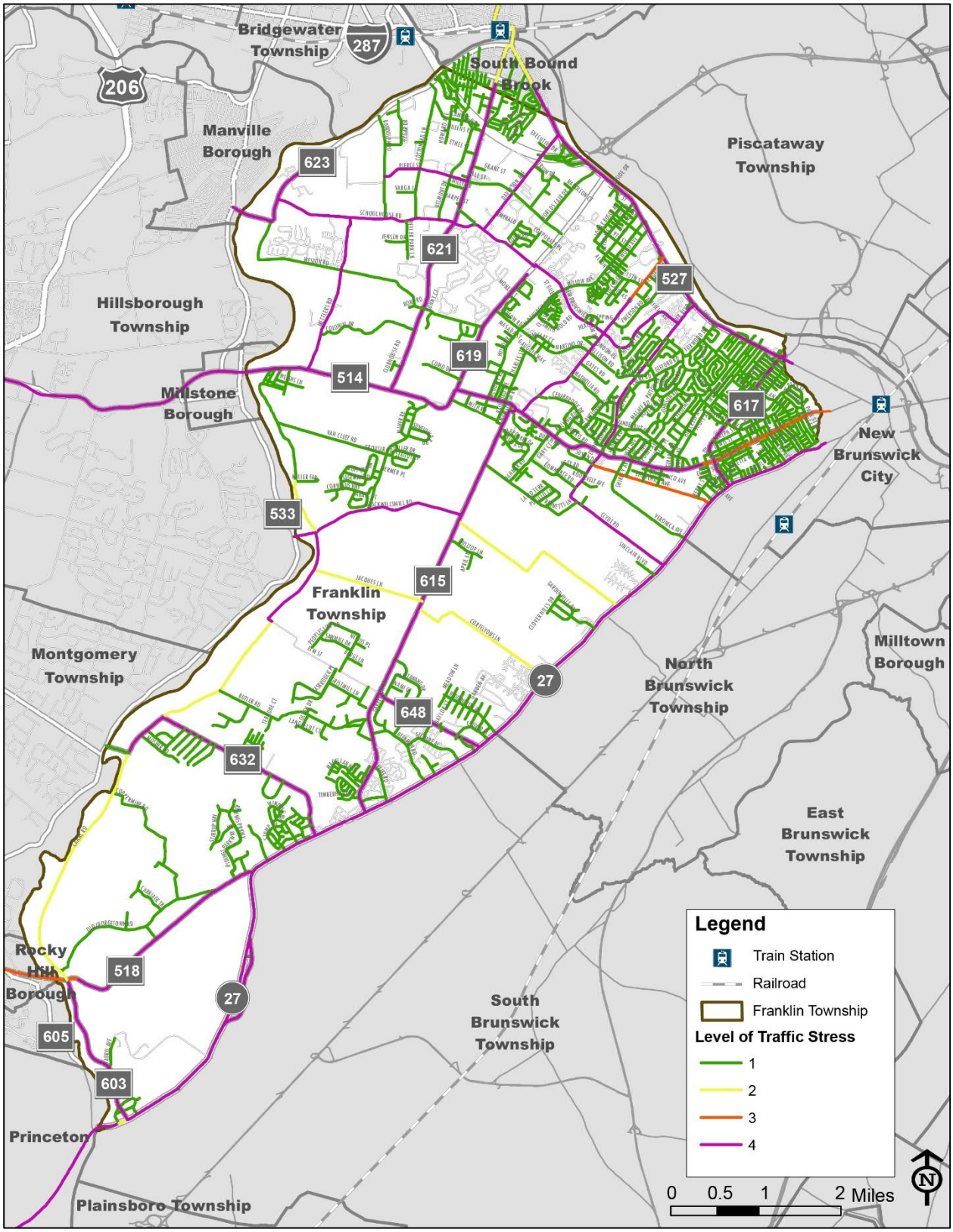
The LTS was evaluated for all roads in Franklin Township. The project team assessed major roadways and key minor roadways using a variety of data sources, including base mapping, GIS data files, NJDOT Straight Line Diagrams, and traffic data from NJDOT. For many of the local roads in the study area, basic assumptions were made of their typical characteristics. The majority of Franklin Township's local roads are LTS 1, but cyclists have great difficulty navigating between neighborhoods as the many LTS 4 high-speed roads, primarily County roadways, pose barriers to comfortable mobility for many users. Table lists LTS 2, 3, and 4 roadways while Figure 12 maps the LTS roadway network. High LTS roads should be further studied to determine the feasibility of measures to increase comfort for cyclists by taking actions such as lowering speed limits, implementing road diets, and installing bike facilities.

Though many of the arterials are designated LTS 4, and thus uncomfortable for most cyclists, several of these corridors are considered worse than others by cyclists due to their lack of shoulders and high speeds. NJ 27, CR 527 (Easton Avenue), CR 615 (South Middlebush Road), CR 514 (Amwell Road), and Demott Lane were identified as being particularly uncomfortable for cyclists.

Table 20: Bicycle Level of Traffic Stress Designation

LTS 4			
NJ 27	CR 514 (Amwell Road/Hamilton Street)	CR 518 (Georgetown-Franklin Turnpike)	CR 527 (Easton Avenue)
CR 603 (Kingston-Rocky Hill Road and Laurel Avenue)	CR 615 (South Middlebush Road)	CR 617 (Franklin Boulevard)	CR 618 (Old Road)
CR 619 (Cedar Grove Lane)	CR 621 (Elizabeth Avenue)	CR 623 (Weston Canal Road)	CR 632 (Bunker Hill Road)
CR 648 (Claremont Road)	Blackwell's Mill Road	Clyde Road	Davidson Avenue
Demott Lane	Elm Street	John F. Kennedy Boulevard	Mettlers Road
New Brunswick Road	Pierce Street	School House Road	
LTS 3			
Churchill Avenue			
LTS 2			
Canal Road	Cortelyous Lane	Elm Street	Jacques Lane
Skillmans Lane			

Figure 12: Bicycle Level of Traffic Stress in Franklin Township



2.3.4 Public Transportation Conditions

County Services

Somerset County operates three public transit shuttle services, each with multiple routes:

SCOOT-serves central Somerset County including the communities of Hillsborough, Manville, Somerville, Bridgewater, Bedminster, Bound Brook, and Manville

DASH-serves the Bound Brook and New Brunswick New Jersey Transit train stations, traveling through New Brunswick, Bound Brook and Franklin

CAT-provides access to Raritan Valley Community College in Branchburg with service in Franklin, Bound Brook, Somerville, Raritan, Branchburg, North Plainfield and Bridgewater

DASH Routes 851 and 852, and CAT's 1R route provide shuttle service through Franklin Township to the Bound Brook and New Brunswick train stations. DASH service offers six northbound shuttles between 7AM and 8PM each weekday, and eight southbound shuttles between 6AM and 7 PM. Service is primarily offered during the peak hours. Stops in Franklin include the following locations:

- Easton Avenue & John F. Kennedy Boulevard
- Pierce Street & Cedar Grove Lane
- 270 Davidson Avenue
- Doubletree
- Metlife
- Elizabeth Avenue & New Brunswick Road
- Pierce Street & Elizabeth Avenue
- Cottontail Lane & Pierce Street
- Campus Drive & Cottontail Lane
- Elizabeth Avenue & Campus Drive

CAT 1R service offers six shuttles per day between 6AM and 8PM each weekday. Service is primarily offered during the peak hours. Stops in Franklin include the following locations

- Value Center
- John F. Kennedy Boulevard & Amwell Road
- 360 Demott Lane
- Amwell Road & Cedar Grove Lane
- Weston Road & Cedar Grove Lane
- Renaissance at Raritan Valley
- Elizabeth Avenue & New Brunswick Road
- New Brunswick Road & Davidson Avenue

- Davidson Avenue & Atrium Drive
- Atrium Drive & Pierce Street
- Pierce Street & Elizabeth Avenue

New Jersey Transit

New Jersey Transit does not operate any bus or train routes through Franklin Township though multiple services are available within one mile of the township border. Less than one mile to the north are the Bound Brook and Bridgewater commuter rail stations along New Jersey Transit's Raritan Valley Line, and within a mile to the southeast are the Jersey Avenue and New Brunswick stations along New Jersey Transit's Northeast Corridor Line. Both routes provide frequent service to Newark and New York City with connections to Amtrak, and the Northeast Corridor Line provides connections to SEPTA service to Philadelphia, and River Line service to Camden via the Trenton Transit Center.

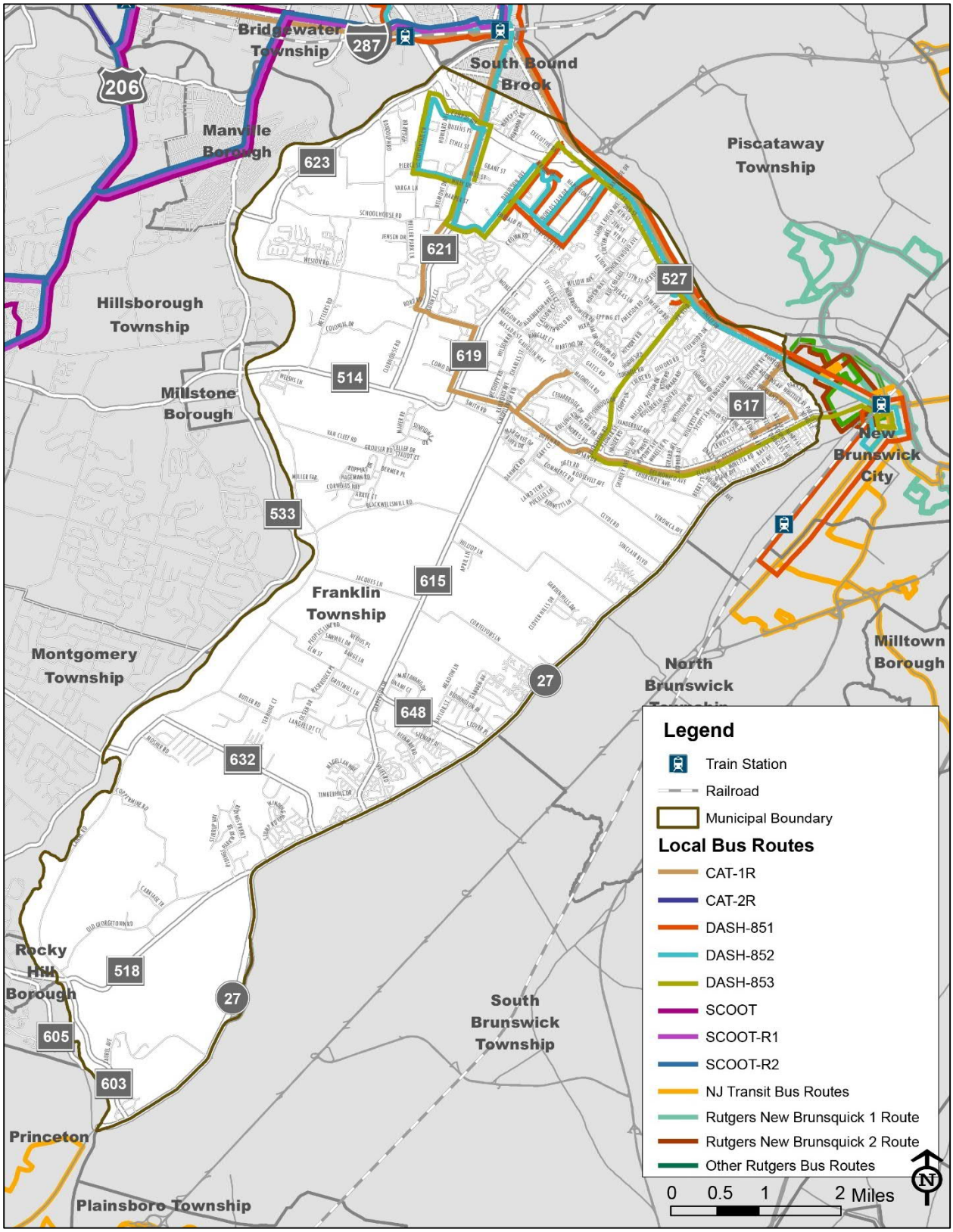
Other Services

OurBus operates a peak-hour commuter bus service from Franklin Township/South Brunswick to Midtown Manhattan making four stops on NJ 27 along the Franklin/South Brunswick line.

New Brunsquick shuttle service is provided along Louis Street (two blocks east of Franklin). The service operates as a partnership between Rutgers University, the City of New Brunswick, and the New Brunswick Parking Authority. This shuttle travels to the New Brunswick train station in addition to the Rutgers New Brunswick campus.

Figure 13 illustrates the public transit routes in and around Franklin Township.

Figure 13: Public Transit in Franklin Township



3. Recommendations and Strategies

3.1 Previous Recommendations

Franklin Township's 2016 Reexamination of Master Plan & Development Regulations (summarized on page 9) included a host of recommendations as part of updating the Township's Circulation Plan. These recommendations were reviewed to determine where any gaps remain and allow the improvements to work in tandem with subsequently recommended changes.

Middlebush Traffic Study

The Middlebush Traffic Study was completed in 2001 and revised in 2002. The report analyzed the area generally bounded by I-287 to the north, Elizabeth Avenue to the west, Demott Lane to the east, and Amwell Road and Blackwell's Mills Road to the south. The objective of the study was to recommend roadway improvements to support existing and future traffic volumes.

The following recommendations made in the study have been implemented.

- Install traffic signal at Amwell Road and South Middlebush Road and modify the intersection
- Improve intersection of Amwell Road and Cedar Grove Lane through creation of T-intersection
- Reconstruct Amwell Road between South Middlebush Road and Cedar Grove Lane
- Improve roadway along Blackwell's Mills Road between South Middlebush Road and Van Cleef Road
- Implement signal and intersection improvements at Elizabeth Avenue and Amwell Road
- Implement signal and intersection improvements at Amwell Road and Van Cleef Road
- Install traffic signal at Cedar Grove Lane and Weston Road
- Install traffic signal at Cedar Grove Lane and Treptow Road

The following recommendations made in the study had not been implemented at the time of Franklin's 2016 Master Plan reexamination:

- Realign New Brunswick Road at Cedar Grove Lane
- Implement signal and intersection improvements at Davidson Avenue and Atrium Drive
- Install left turn lanes along South Middlebush Road at Cortelyous Lane and Jacques Lane
- Align Blackwell's Mills Road and Skillman's Lane at South Middlebush Road and install a traffic signal

Additionally, the following recommendations were not included in the 2016 Master Plan Re- examination but recommended to improve volume and safety concerns in the Middlebush Traffic Study area:

- Widen Pierce Street to 40' between Elizabeth Avenue and Belmont Drive and install stop sign on Belmont Drive at Pierce Street
- Install traffic signal at Pierce Street and Cottontail Lane

I-287 Middlesex/Somerset Raritan River Crossings Needs Analysis

The I-287 Middlesex/Somerset Raritan River Crossing Needs Analysis conducted jointly by Somerset and Middlesex Counties completed in 2003 identified potential improvements to promote safety and mobility around Exits 9 and 10 of I-287.

The following recommendations made in the analysis were ultimately implemented:

- Reconfigure U-turn ramps from northbound I-287 exit ramp and Easton Avenue northbound
- Eliminate the traffic signal and left turns at Easton Avenue and World's Fair Drive
- Widen Easton Avenue northbound at Davidson Avenue and provide two left turn lanes on Easton Avenue

The following recommendations made in the study had not been implemented at the time of Franklin's 2016 Master Plan reexamination:

- Short Term
  - Eliminate the left/U-turn slot on Easton Avenue southbound
- Mid Term
  - Realign I-287 southbound Exit 9 ramp to intersect with Centennial Avenue
  - Reconfigure I-287 northbound Exit 9 ramp, eliminate the on-ramp and provide receiving lane for River Road southbound
  - Combine the entrance ramps from Easton Avenue onto I-287 northbound
  - Widen and lengthen the I-287 southbound exit ramp at Exit 10
- Long Term
  - Construct collector/distributor roads (service roads) in each direction of I-287
  - Improve the connections with Easton Avenue at Exit 10
  - Improve the connections with River Road at Exit 9

Several transportation demand management strategies were also recommended, including carpooling incentives, a trip reduction ordinance, and alternative work schedules.

Top Crash Locations

Using crash data, the following problem locations were identified in the 2016 Master Plan reexamination with input from the Township Traffic Safety Bureau at the request of the Delaware Valley Regional Planning Commission:

- Easton Avenue/I-287 Interchange (from both approaches)
- Weston Canal Road/I-287 Interchange
- South Middlebush Road intersection with Amwell Road and Blackwell's Mills Road
- NJ Route 27 at Franklin Boulevard, Veronica Avenue, Bennett's Lane, Cozzens Lane, Beekman Road, Princeton Highlands Boulevard, and South Middlebush Road
- Easton Avenue between Foxwood Drive and Franklin Boulevard, and between Willow Avenue and Cedar Grove Lane

Improvements were subsequently implemented at the intersections of South Middlebush Road and Amwell Road, South Middlebush Road and Blackwell's Mills Road, NJ 27 and Beekman Road, and I-287 at Weston Canal Road.

The 2016 Master Plan reexamination recommends that any further update should evaluate current safety conditions and determine whether these locations remain the top traffic safety problem areas. The recommendations beginning on page 51 of this document are based on a variety of factors including an analysis of crash patterns and characteristics.

Bikeway Master Plan

Franklin Township developed a Bikeway Master Plan in 2001 and a subsequent Pathways and Trails Plan which made similar recommendations. The 2016 reexamination recommends that both documents continue to be implemented as funding becomes available and that attention specifically be paid to the Hamilton Street corridor as planned developments are likely to increase the demand for biking. Both the Bikeway Master Plan and Pathways and Trails Plan were incorporated into development of new bicycle facility recommendations beginning on page 60.

Pedestrian Safety

Pedestrian safety patterns were reviewed in the 2006 Master Plan and continue to be a concern. The intersection and corridor recommendations beginning on page 51 of this document utilize pedestrian crash statistics and concern the need for safe pedestrian mobility.

Planning and Implementation Agenda for Kingston

The previous Master Plan incorporated a Planning and Implementation Agenda for Kingston which contained several transportation-related recommendations. The following recommendations from the document have been subsequently implemented:

- Installed crosswalks at major intersections and stanchions in regular rotation
- Completed NJDOT and KVAC Bicycle and Pedestrian Study for the Village
- Installed multi-use path between NJ 27 and CR 518 (Georgetown-Franklin Turnpike) over the former Rocky Hill Branch Railroad right-of-way

- Pursued bicycle access through the D&R Canal State Park and preserved areas of former Princeton Nurseries lands
- Bike lane Provided on Church Street in Kingston
- Constructed sidewalk between Village center and D&R Canal
- Implement traffic calming measures such as stanchions, crosswalk enhancements, and signage

Hamilton Street Parking and Circulation Improvements Study

The 2006 Master Plan recommends the Township encourage implementation of improvements in the Hamilton Street Business District including the following which have been implemented

- Paint parking stalls to better control parked vehicles along the corridor
- Implement an improvement program with textured crosswalks, curb extensions, and "Yield to Pedestrian" stanchions at key pedestrian crossings
    - Since the release of the 2006 Master Plan, the State law has changed from "Yield to Pedestrian" to "Stop for Pedestrian." Any existing or future signage should reflect the newer law.
- Remove several curb cuts, and create shared driveways/parking

The following recommendations for the Hamilton Street Business District had not been implemented at the time of the 2016 Master Plan reexamination:

- Install a signal at Douglas Avenue and Hamilton Street
- Install "Gateway" median islands at two entrances to the business district

Interest in the Hamilton Street corridor led to the 2015 Hamilton Street Corridor Master Plan Update summarized on page 8. Further recommendations for Hamilton Street are detailed beginning on page 63.

Public Transportation

The 2006 Master Plan Reexamination provided only brief descriptions of existing public transportation service with no recommendations. The 2016 Master Plan reexamination listed the following concerns when addressing public transportation needs in the future:

- Consider potential expansion of public transportation to address existing and/or future needs of Township's residents and workforce
- Consider progress toward achieving Township planning objectives (including revitalization of Hamilton Street)
- Consider potential need for public transportation in northwestern corner of Township as residential areas further develop

3.2 Intersections

A comprehensive assessment of intersections in Franklin Township was conducted for potential improvements to safety, efficiency, and mobility. The following sections details

several intersections that were selected for further analysis and development of recommendations based on crash characteristics, traffic volumes, and roadway geometry. Statewide averages for similar roadways (state vs. county, signalized vs. unsignalized) were used when comparing crash characteristics for the intersections.

In addition to the recommendations listed below, all existing crosswalks should be upgraded to continental style crossings (see Figure 14), all crosswalks should extend from ADA-accessible curb ramps, and all commercial driveways adjacent to a sidewalk should accommodate pedestrians (see Figure 15).

Figure 14: Crosswalk Treatments

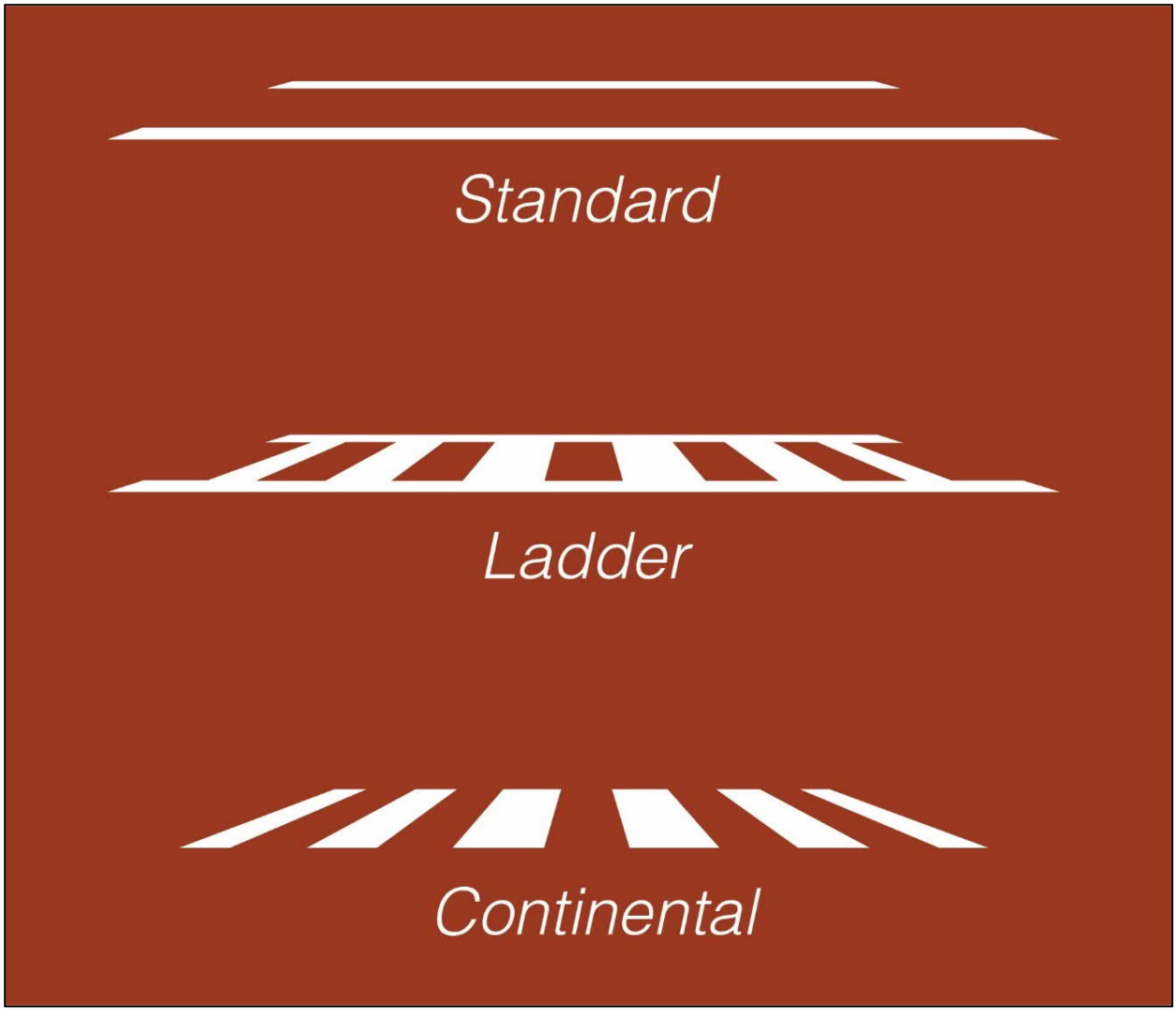
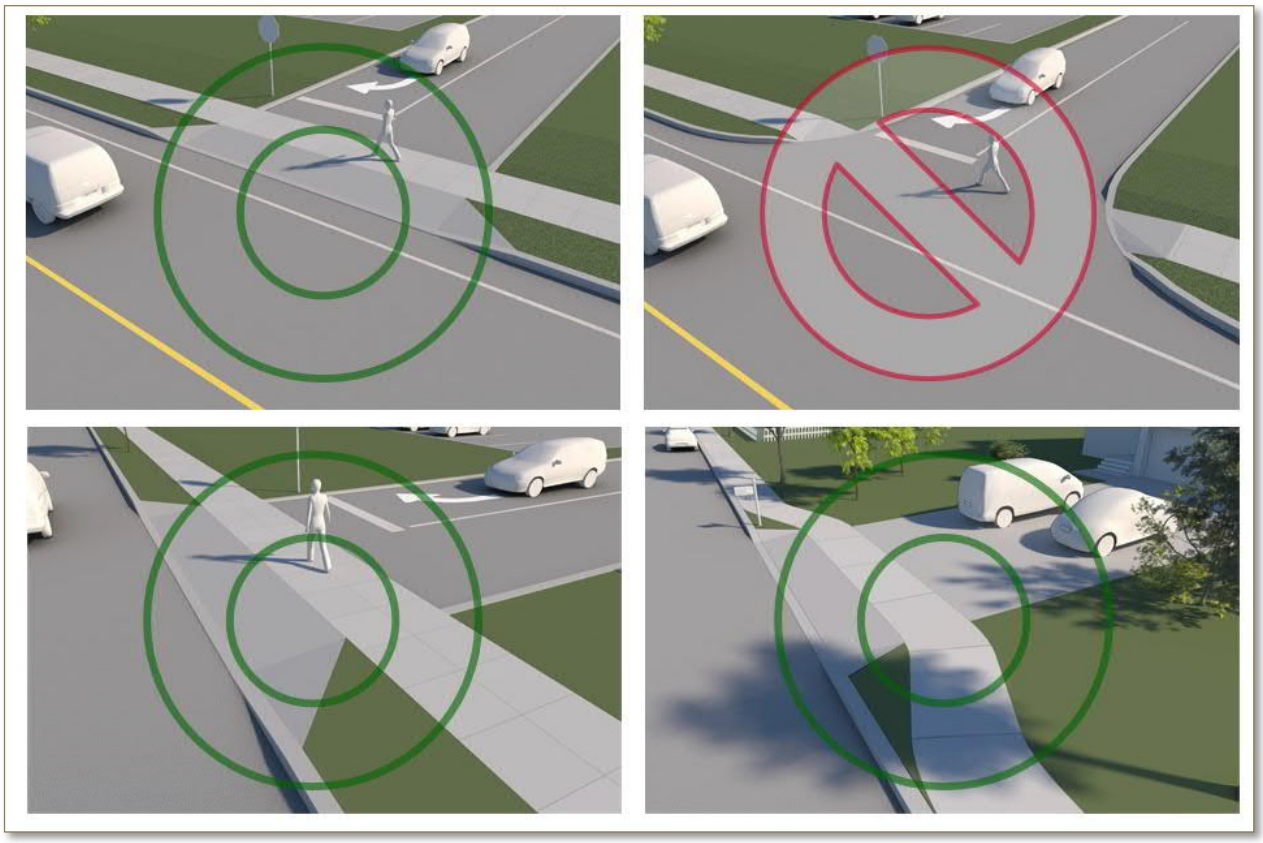


Figure 15: Driveway Guidelines



Source: New Jersey Department of Transportation Complete Streets Design Guide

NJ 27 and County Route 610 (Henderson Road/Stewarts Avenue)

The intersection of NJ 27 and CR 610 (Henderson Road/Stewarts Avenue) lies within the primary large-lot retail strip of the corridor with several large shopping centers nearby. An estimated 23,000 vehicles pass through this signalized intersection each day on NJ 27 alone.

Both signal approaches along NJ 27 have a dedicated left turn-lane with a protected left turn signal phase, before a permitted left turn phase. The side street, Henderson Road/Stewarts Avenue has a camera allowing for actuated signal timing based on real-time traffic conditions. This intersection's crash characteristics present an overrepresentation of left turn crashes compared to statewide averages. At this intersection 26.9% of crashes involved left turns, compared to 10.3% statewide.

Recommendations

- Conduct traffic analysis to evaluate feasibility of only allowing left turns during protected phase, instead of during both protected and permitted phases
  - Such treatment would result in significant decline in number of left turn crashes

    - To limit queuing for left turns, the amount of time dedicated to left turns and dedicated left turn space may need to be extended
- Upgrade western and southern leg crosswalks from standard style to high visibility, continental style
- Install crosswalk on eastern leg to existing ADA-accessible curb ramps

NJ 27 and County Route 603 (Heathcote Road/Laurel Avenue)

The intersection of NJ 27 and CR 603 (Heathcote Road/Laurel Avenue) sits in the southwest corner of Franklin Township, near the border with Princeton. The intersection acts as the crossroads of the historic community of Kingston, with pedestrian-friendly retail uses on each corner. The speed limit at this intersection is 25 mph, before increasing to 45 mph in either direction.

This intersection's crash characteristics present an overrepresentation of both same direction sideswipes (19.6% vs. 12.8%) and same direction rear-ends (58.7% vs. 30%).

Recommendations

- Consider feasibility of installing mini roundabout
    - Truck traffic must be considered in any design
- Lower speed limits approaching intersection to 35 mph
    - Rear-end crashes are often due to a change in vehicle speed from one vehicle to another which can be due to vehicles speeding or slowing down
- Mark high-visibility crosswalks along northern and eastern legs
- Install ADA-accessible curb ramps for all crosswalks

County Route 527 (Easton Avenue) and World's Fair Drive

The intersection of CR 527 (Easton Avenue) and World's Fair Drive is the first intersection along CR 527 (Easton Avenue) south of the interchange with Interstate 287. Approximately 40,000 vehicles travel through this unsignalized intersection on CR 527 (Easton Avenue) each day. World's Fair Drive provides access to several large office and lodging uses.

This intersection's crash characteristics present an overrepresentation of same direction sideswipes (19.8% vs. 11.4%) and same direction rear-ends (58% vs. 20.5%).

Recommendations

- Add an acceleration lane from World's Fair Drive to southbound CR 527 (Easton Avenue)
    - Presently there is no acceleration/merging lane for this movement. From a stop control, vehicles enter the two-lane 45 mph corridor, merging with many vehicles having just exiting from Interstate 287, providing no space for acceleration to a consistent and safe speed
    - Addition of an acceleration lane would require communication with the adjacent land use, Bank of America, which has a driveway less than 200 feet from World's Fair Drive

County Route 527 (Easton Avenue) and John F. Kennedy Boulevard

The intersection of CR 527 (Easton Avenue) and John F. Kennedy Blvd (John F. Kennedy Boulevard) sits in the northeastern portion of Franklin Township in the community of Somerset. More than 40,000 vehicles travel along this intersection along CR 527 (Easton Avenue) alone. Land uses along John F. Kennedy Boulevard are primarily residential, while either side of CR 527 (Easton Avenue) include large retail centers. Nearside jug-handles are present for vehicles traveling from CR 527 (Easton Avenue) to John F. Kennedy Boulevard. The jug-handle from Easton Avenue southbound to John F. Kennedy Boulevard is 600 feet while the northbound jug-handle presents a tight turning movement from Easton Avenue and is less than 300 feet.

This intersection's crash characteristics present an overrepresentation of rear-end crashes (62.2% vs 24.6%).

Recommendations

- Reduce speed limit from 45 to 40 mph on northbound Easton Avenue approaching the jug-handle to match the speed limit south of the intersection
  - Rear-end crashes are often caused by changes in speeds and a close following distance; with no deceleration lane and a short and tightly angled jug handle, vehicles entering the jug-handle must preemptively slow down within the same lane as vehicles traveling through the intersection
- Alternatively, the approach lane for the jug-handle may be able to be extended south toward Wendy's; this may require a right-of-way acquisition
- Extend existing medians along John F. Kennedy Boulevard and southern leg of Easton Avenue into crosswalks as median refuge islands
- Install ADA-accessible curb ramps for all crosswalks

County Route 527 (Easton Avenue) and County Route 519 (Cedar Grove Lane)

This signalized intersection of CR 527 (Easton Avenue) and CR 519 lies near Interstate 287, 600 feet south of the unsignalized intersection with World's Fair Drive. This is the first signalized intersection for motorists entering CR 527 (Easton Avenue) from Interstate 287 and is the first signalized intersection for 0.71 miles northbound. CR 519 mainly provides access to residential uses and provides substantial connectivity to other roads in northern Franklin Township.

This intersection's crash characteristics present an overrepresentation of rear-end crashes (55.9% vs. 24.6%).

Recommendations

- Lower speed limit from 45 to 40 mph along either side of CR 527 (Easton Avenue)
- Extend existing medians along Cedar Grove Lane and southern leg of Easton Avenue into crosswalks to act as median refuge islands
- Install ADA-accessible curb ramps for all crosswalks

County Route 527 (Easton Avenue) and Davidson Avenue

The intersection of CR 527 (Easton Avenue) and Davidson Avenue lies along Franklin Township's northern border with South Bound Brook, north of the interchange with Interstate 287. The off-ramp from westbound/northbound Interstate 287 merges with CR 527 (Easton Avenue) 300 feet south of the intersection, requiring some vehicles to quickly weave to the right lane to avoid the left turn-only lane at Davidson Avenue. Davidson Avenue provides access to many nearby large office and lodging uses.

This intersection's crash characteristics present an overrepresentation of same direction sideswipes (47.1% vs. 12.5%) and rear-end crashes (43.1% vs. 24.6%).

Recommendations

- Consider reorienting exit ramp from Interstate 287 to enter CR 527 (Easton Avenue) northbound sooner, potentially as a yield control to allow for more space for merging
  - The high rate of sideswipes (more than three times the proportion on similar roads) is likely due to the short amount of space for vehicles exiting Interstate 287 westbound/northbound at a high speed to move to the right lane to avoid the left turn-only lane at Davidson Avenue
- Lower speed limit south of intersection on CR 527 (Easton Avenue) to 40 mph to slow traffic
- Mark lane lines along the portion of wide roadbed west of the intersection along eastbound Davidson Avenue

County Route 527 (Easton Avenue) and Demott Lane

The intersection of CR 527 (Easton Avenue) and Demott Lane is a signalized intersection along the center of CR 527 (Easton Avenue). Demott Lane travels through the center of Franklin Township, providing access to several residential neighborhoods and connectivity to other highly trafficked corridors. 43,000 vehicles daily travel through the intersection on CR 527 (Easton Avenue). Vehicles traveling southbound can access a forward jug-handle while motorists traveling northbound from Easton Avenue to Demott Lane have a dedicated left turn-lane. The eastern side of the intersection presents a continuation of Demott Lane providing access to the Van Wickle House, closed since 2014, and pedestrian and cycling connections to the Delaware and Raritan Canal State Park Trail.

This intersection's crash characteristics present an overrepresentation of rear-end crashes (66.7% vs. 24.6%).

Recommendations

- Lower speed limit from 45 mph to 40 mph
  - Rear-end crashes are often caused by changes in speed, particularly at higher speed limits

- Consider construction of forward jug-handle from northbound Easton Avenue to Demott Lane on Van Wickle House property
  - Consideration would need to be given to access and preservation of the house and its property as well as if feasible, enhancing bike and pedestrian access to the Delaware and Raritan Canal State Park Trail
- Extend existing medians along Demott Lane and northern leg of Easton Avenue into crosswalks to act as median refuge islands
- Install ADA-accessible curb ramps for all crosswalks

County Route 619 (Cedar Grove Lane) and New Brunswick Road

CR 619 (Cedar Grove Lane) connects to the northeast to Easton Avenue, and travels southwest becoming Amwell Road, traveling through the community of Millstone. Each of the two roads provide local access to residential access, and wider connectivity to Franklin Township's road network. New Brunswick Road continues west, eventually becoming School House Road, and serving an industrial area. New Brunswick Road skews at this intersection, requiring a slight turn onto CR 619 (Cedar Grove Lane) before continuing along the corridor. Nearly 20,000 vehicles travel along this portion of CR 619 (Cedar Grove Lane) each day.

This intersection's crash characteristics present an overrepresentation of rear-end crashes (55% vs. 24.6%).

Recommendations

- Remove one right turn-lane from northwest bound New Brunswick Road
  - Replace with curb extension or median refuge island
  - Each leg of the intersection has one travel lane but present more dedicated lanes at the intersection before quickly reverting to one; this configuration can cause confusion and sudden merging by drivers, resulting in rear-end crashes
- Remove one through-lane from northeast bound CR 619 (Cedar Grove Lane)
  - Replace with curb extension or median refuge island
  - Each leg of the intersection has one travel lane but present more dedicated lanes at the intersection before quickly reverting to one; this configuration can cause confusion and sudden merging by drivers, resulting in rear-end crashes
- Lower speed limit on CR 619 (Cedar Grove Lane) from 45 mph to 40 mph
  - Rear-end crashes can be caused by changes in speed by motorists
- Construct sidewalk along west side of Cedar Grove Lane from New Brunswick Road to Easton Avenue
- Install ADA-accessible curb ramps for all crosswalks
- The skewed nature of this intersection presents a form of traffic calming by slowing thru-traffic. Realigning the intersection has been proposed in several previous studies. Such realignment will only occur if the Township allows

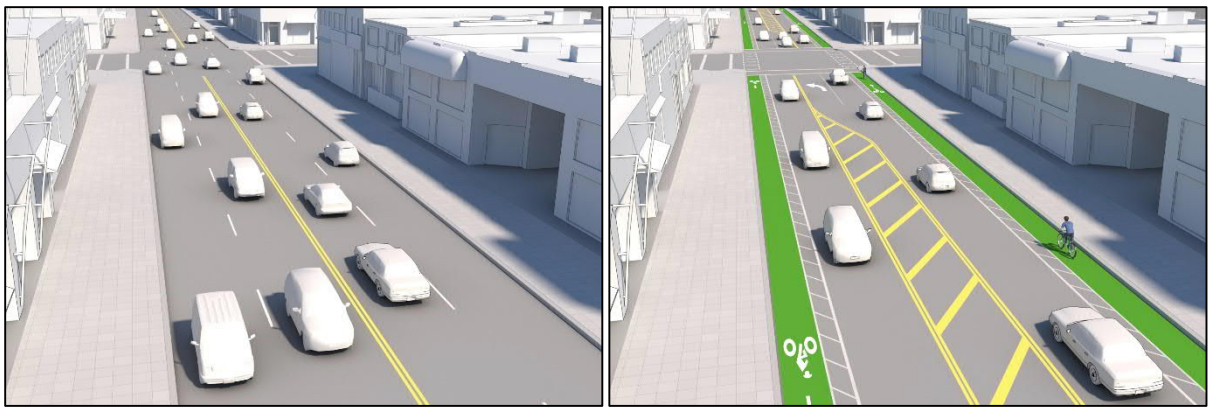
commercial development on the northwest corner. If such development and realignment occurs, the need for traffic calming should be considered.

3.3 Corridors

Several corridors were selected for review for recommendations based on connectivity, crash trends, and functional class. Recommendations include corridor-wide recommendations as well as minor intersection improvements.

A road diet is recommended as a traffic calming measure for several corridors. A road diet is a reduction in the number of lanes on a roadway. Space previously dedicated to standard travel lanes can be reallocated as a shared center turn lane, painted channelization, or painted bike lanes, dependent on the context and need of the corridor. Figure 16 illustrates a four-lane roadway converted to a three-lane roadway including a center turning lane at intersections and the addition of buffered bicycle lanes. A longer corridor-wide shared center turn lane can also be implemented where there are frequent turning movements. Removing a travel lane through a road diet reduces speeding while improving turning movements where turn lanes are present. At turns where two travel lanes in each direction are present, backups can be caused by a vehicle waiting to make a left turn, causing potentially unsafe conditions for motorists traveling at high speeds behind them. Road diets also reduce crash rates, improve pedestrian safety, and allow for opportunities to provide for other road users, such as cyclists. Road diets should only be implemented where there is excess road capacity.

Figure 16: Road Diet



In addition, better network connectivity may be achieved at targeted locations where adjacent streets do not currently connect. Completing connections of disconnected adjacent roadways throughout Franklin for improved connectivity should be investigated and considered where such connection would not unduly impact the character of the roadway and adjacent land uses

NJ 27

NJ 27 provides the primary north-south connectivity within Franklin Township and serves as a highly traveled route through central New Jersey, extending from Princeton

(Mercer County) to Newark (Essex County). Within Franklin, AADT along NJ 27 ranges from 10,000 to 24,000, with higher volumes in the east entering New Brunswick. The corridor's speed limit generally ranges from 40 to 50 mph, with a lower limit to the west in Kingston.

Apart from small segments, NJ 27 operates with one lane in each direction. At several intersections, additional turning and through lanes are provided to process traffic through a signal. Though these widened intersections can lead to minor bottlenecks and higher crash locations as vehicles merge past the signal, they also increase capacity and allow traffic to pass slower vehicles. Traffic analysis of the corridor should consider widening NJ 27 to two lanes in each direction between Finnegan's Lane and Beekman Road, and Bennetts Lane to Veronica Avenue/How Lane. The addition of multi-modal facilities should be also be considered during the traffic analysis to form a continuous, multimodal network and safe crossing options.

NJ 27 also caters to significant pedestrian volumes along portions of the corridor in Franklin. The feasibility of constructing a sidewalk along NJ 27 between Beekman Road and Whitehall Manor (just south of Cortelyous Lane) should be investigated.

County Route 527 (Easton Avenue)

- Consider a traffic study that analyzes alternatives, including restriping the third lane to act as auxiliary lane for multiple driveways

County Route 514 (Amwell Road/Hamilton Street)

- The northbound segment at CR 514 (Amwell Road/Hamilton Street) and Cedar Grove Lane has one through-lane, and one receiving lane for traffic entering from the right-turn slip lane on Amwell Road; a yield sign is present more than 150 feet north of the intersection
  - Convert to a single receiving lane along CR 514 (Amwell Road/Hamilton Street) to reduce crashes and confusion caused by merging; traffic turning right in the slip lane from Amwell Road would be required to yield at the slip lane rather than further north
- Mark crosswalks where there are existing sidewalks
- Consider road diet along Hamilton Street
  - Volumes have decreased along Hamilton Street; road diet would improve comfort for pedestrians
- Mark crossing at Annette Court to enhance pedestrian access to Hawthorne Park

County Route 518 (Georgetown Franklin Turnpike)

- Install lane markings on CR 518 (Georgetown-Franklin Turnpike) eastbound approaching NJ 27

County Route 615 (South Middlebush Road)

- Stripe missing shoulder at Buffa Road

- Install exclusive left turn lanes on South Middlebush Road southbound at Cortelyous Lane and northbound at Jacques Lane

County Route 619 (Cedar Grove Lane)

- Northbound and southbound Cedar Grove Lane at Pierce Street operates with a dedicated left turn-lane, a dedicated thru-lane and a shared thru/right turn-lane
    - Conduct corridor traffic analysis to determine feasibility of reducing to one lane in each direction to improve safety

County Route 621 (Elizabeth Avenue)

- Install yield pavement markings to the current yield control at School House Road

John F. Kennedy Boulevard

- Conduct corridor traffic analysis to determine feasibility of reducing to one lane in each direction with select left turn lanes to improve safety

County Route 617 (Franklin Boulevard)

- CR 617 (Franklin Boulevard) operates with two lanes in each direction south of Hamilton Street, and one lane elsewhere
    - This two lane portion has lower traffic volumes than the remainder of the corridor; conduct traffic study to consider feasibility of removing one lane of travel to improve safety

Pierce Street

- Mark shoulder along corridor to slow speeds and calm traffic

Mettler's Road

- Mark shoulder along northbound side north of Weston Road to slow speeds and calm traffic

Weston Road

- East of Mettlers Road, the corridor maintains a 20 ft of right-of-way and no double-yellow centerline; consider lowering speed limit from 40 mph

Cottontail Lane

- Mark shoulder along corridor to slow speeds and calm traffic

Randolph Road

- Mark shoulder along corridor to slow speeds and calm traffic

Demott Lane

- Lower speed limit along entire corridor to 35 mph except the short segment near Easton Avenue where the speed limit is currently 30 mph

3.4 Bicycle Facility Recommendations

The following recommendations were formulated based on Franklin Township's existing bike infrastructure. The recommendations aim to connect and expand existing facilities

to create a broader and more comprehensive bike network layered with on and off-road facilities. Franklin Township should incorporate these recommendations into its Pathways & Trails Plan and continue to implement the plan. All existing and future facilities should be well-maintained to assure safe access by all facility users.

Trail from Old Vliet Road

Recommendations

- Pave facility

Old Stage Road

Recommendations

- Install intersection markings
- Extend path to the east off-road
- Add path connections into nearby shopping centers
- Construct pedestrian-friendly sidewalk across driveways (see Figure 15 for example)

Trails near Franklin Park and Delar Park

Recommendations

- Extend Delar Park facility northeast along Society Hill Boulevard and/or off-road to Franklin Park School
- Extend facility west through open space over Nine Mile Run/Franklin Park Brook to the Claremont Avenue School
- Connect the two facilities (Delar Park facility and facility from Edward Dr) on-road
- Extend facility southwest to baseball/cricket field at Vliet Lane and South Middlebush Road

Six Mile Run

Recommendations

- Mark crossing of South Middlebush Road
- Support efforts to extend trail east to U.S. 1 through North Brunswick
- Connect off-road to Cortelyous Lane
- Expand trail network west of South Middlebush Road

Van Cleef Road

Recommendations

- Mark crosswalk
- Construct sidepath on west side
- Extend sidepath south to connect to Six Mile Run
    - The Township's long-term plan is to continue the facility from the mountain bike trail at Six Mile Run to Jacques Lane, across Township open space to South Middlebush Road/Suydam Road, and along

South Middlebush Road to the trail at Old Vliet Road, discussed earlier

- Extend sidepath north to Cedar Grove Lane path

Amwell Road/Cedar Grove Lane/Weston Lane

Recommendations

- Connect facilities with markings at intersection of Cedar Grove Lane and Weston Road
- Make facility more visible by adding paint to facility, particularly on Amwell Road

School House Road/New Brunswick Road

Recommendations

- Extend New Brunswick Road bike facility west to meet School House Road facility and east to John F. Kennedy Boulevard
- Consider marking matching on-road facility on south side of New Brunswick Road and/or constructing sidepath along New Brunswick Road

Delaware and Raritan Canal Park Trail (D&R Trail)

Recommendations

- Make effort to connect trails throughout Township to D&R Trail
- Emphasize presence of D&R Trail in marketing and cycling materials

Campus Drive

Recommendations

- Extend bike lane along entire corridor
- Consider feasibility of installing sidepath

John F. Kennedy Boulevard/Clyde Road

Recommendations

- Connect sidepath to nearby paths and proximal destinations such as nearby schools/parks
- Mark crosswalks at all crossings along path

The following recommendations are made for existing bike routes outside of, but near Franklin. They would need to be led by the adjacent municipality in cooperation with Franklin Township.

Promenade Boulevard

Recommendations

- Extend sidepath to Princeton Gate Boulevard

Beekman Road

Recommendations

- Extend sidepath north to Franklin Park/Delar Park paths

3.5 Focus Areas

Based on stakeholder input, ongoing projects, previous studies, and data analysis, a series of priority multi-modal transportation improvements were developed for two focus areas to enhance multimodal mobility in Franklin Township.

3.5.1 Hamilton Street

Multimodal Transportation Improvements

The strategies subsequently laid out for Hamilton Street seek to strengthen Hamilton Street as a neighborhood commercial corridor, improve access to major destinations and employment and transit hubs in New Brunswick, and enhance safety for all roadway users in the area. Existing localized conditions for transit are illustrated in Figure 17 and existing conditions for bicycle and pedestrian infrastructure are illustrated in Figure 18. Improvement strategies are outlined below and illustrated in Figure 19 and Figure 20.

Recommendations

Traffic Calming

The Hamilton Street corridor is a neighborhood commercial district in Franklin Township with access to employment, university, and transportation facilities in neighboring New Brunswick. Experiencing recent development, a significant number of additional residential units are expected, especially in the northern end near New Brunswick. Traffic calming recommendations in this area include:

- Investigating traffic calming elements along high crash corridors on Hamilton Street, Franklin Boulevard, Pine Street, and Highland Avenue
- Investigating gateway treatments at the intersections of Franklin Boulevard and Hamilton Street and at Highland Avenue and Hamilton Street
- Improving pedestrian access and completing the sidewalk network between Hamilton Street and NJ 27 between Franklin Boulevard and Main Street
- Investigating lowering the speed limit on Hamilton Street between Girard Avenue and Franklin Boulevard to 25 mph (currently a combination of 45 mph and 35 mph). This would provide a better speed limit transition into the residential and commercial areas along Hamilton Street. This area is home to a school and has high crash concentrations. A speed limit reduction would improve safety and aid in traffic calming.
- Investigating lowering the speed limit to 35 mph (currently 45 mph) on Hamilton Street between Girard Avenue to Clyde Road/John F. Kennedy Boulevard for a smoother transition into the 25 mph residential/commercial area

Figure 17: Existing Transit Conditions

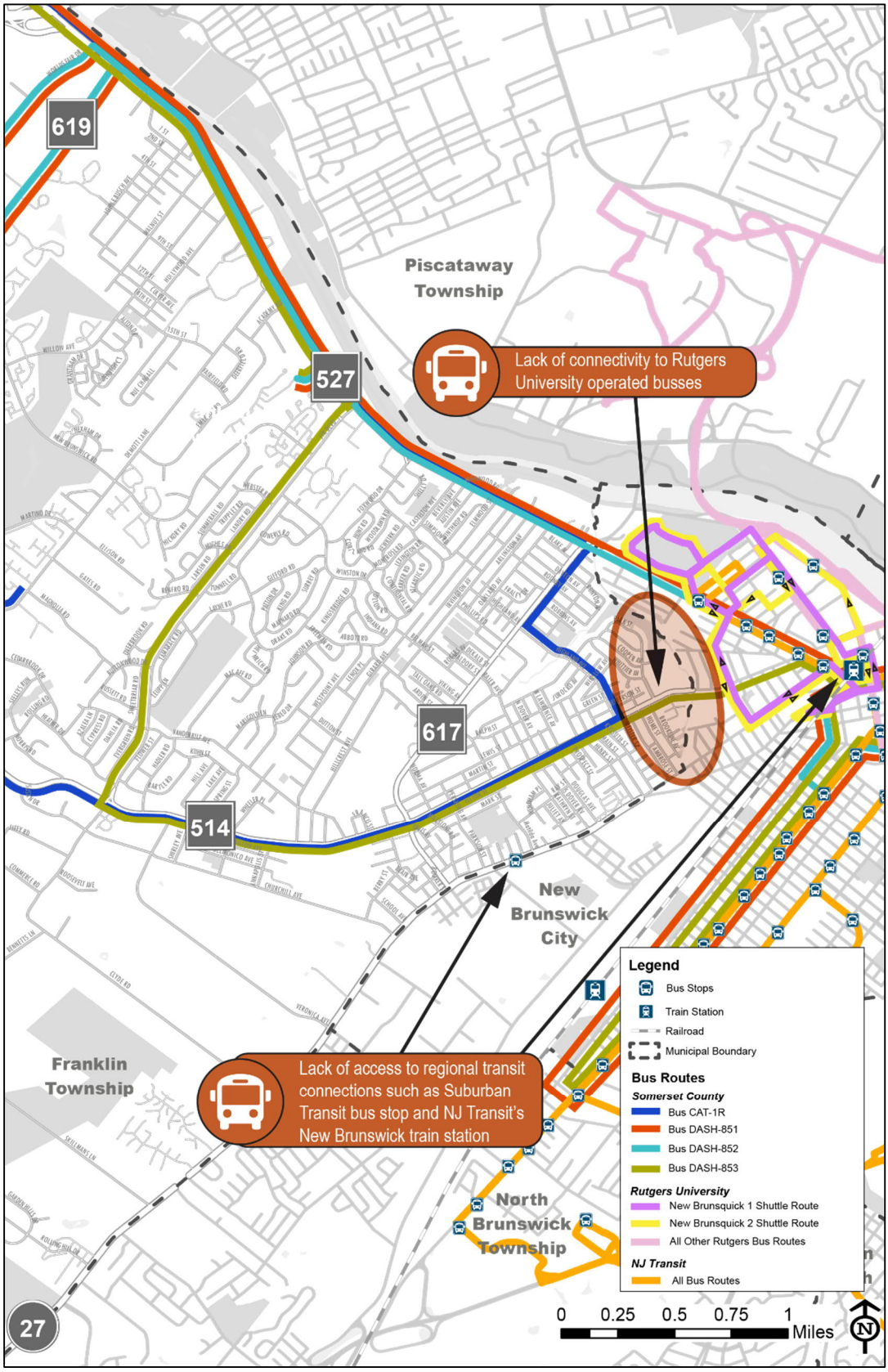
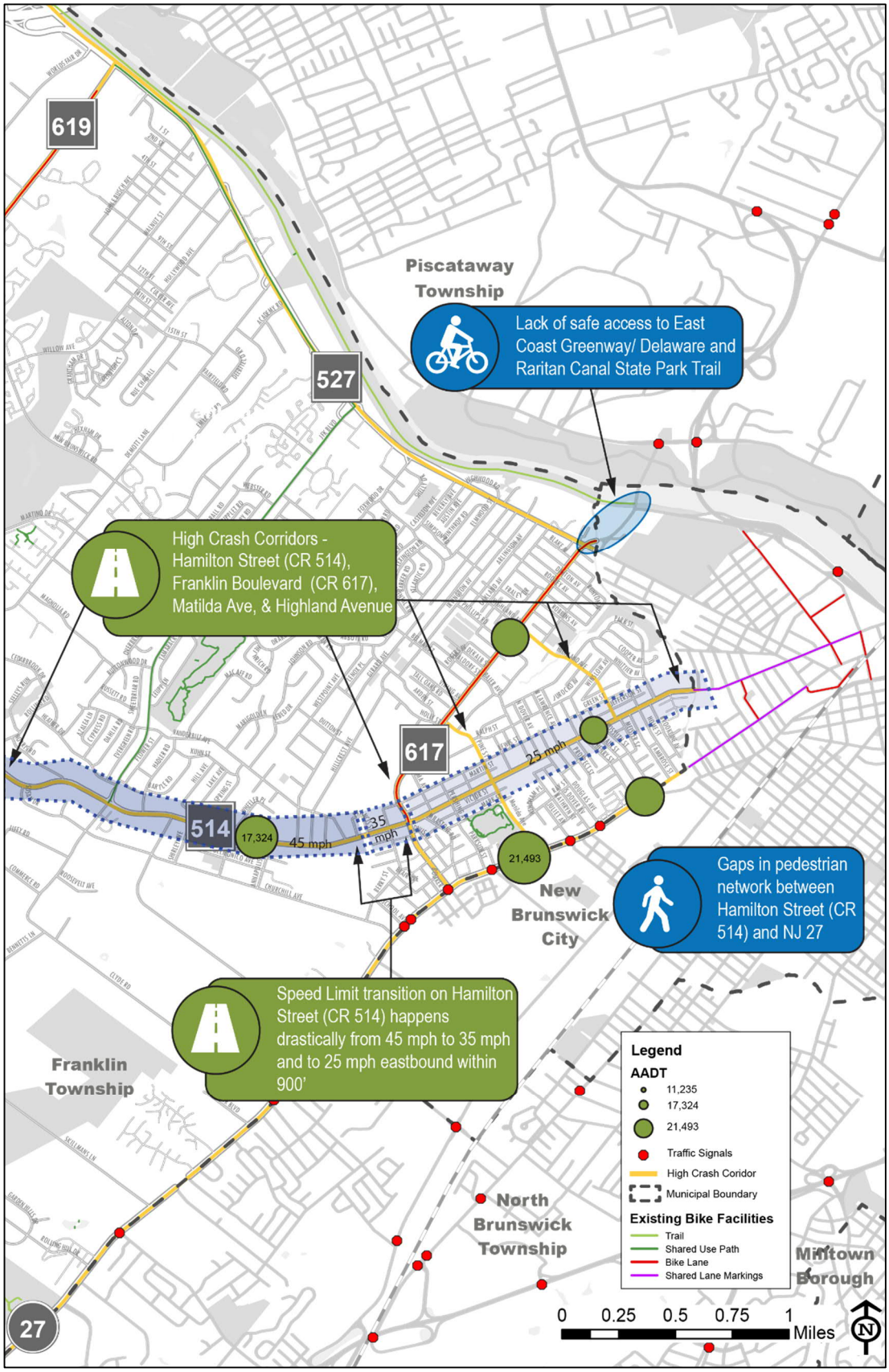


Figure 18: Existing Conditions for Bicyclist and Pedestrians



Enhance Transit Access and Connectivity

Two Rutgers University shuttle bus routes (New Brunsquick 1& 2), run along Louis Street in New Brunswick near the Franklin and New Brunswick border. Several new residential, student housing and mixed-use developments are planned along the Hamilton Street corridor. If an extension of the bus routes is completed, it would benefit both Rutgers University and Franklin Township. The Rutgers University bus route extension into Franklin would improve transit access to NJ Transit's New Brunswick station and Coach USA bus stop in New Brunswick.

Transit recommendations are shown in Figure 19.

Rutgers University bus route expansion recommendations:

- Extending either New Brunsquick 1 or 2 Shuttle routes a few blocks west into Franklin Township from Louis Street in New Brunswick to Highland Avenue or Meister Street and loop back around to Louis Street to continue the existing route in New Brunswick
- Prioritizing locations for potential stops and develop a design concept for integrating bus pull-outs
- Installing bus stop signage
- Installing new bicycle and pedestrian crossing at Somerset Street (NJ 27) and Matilda Avenue to provide safe access to and from the Suburban Transit bus terminus on the south side of Somerset Street (NJ 27).

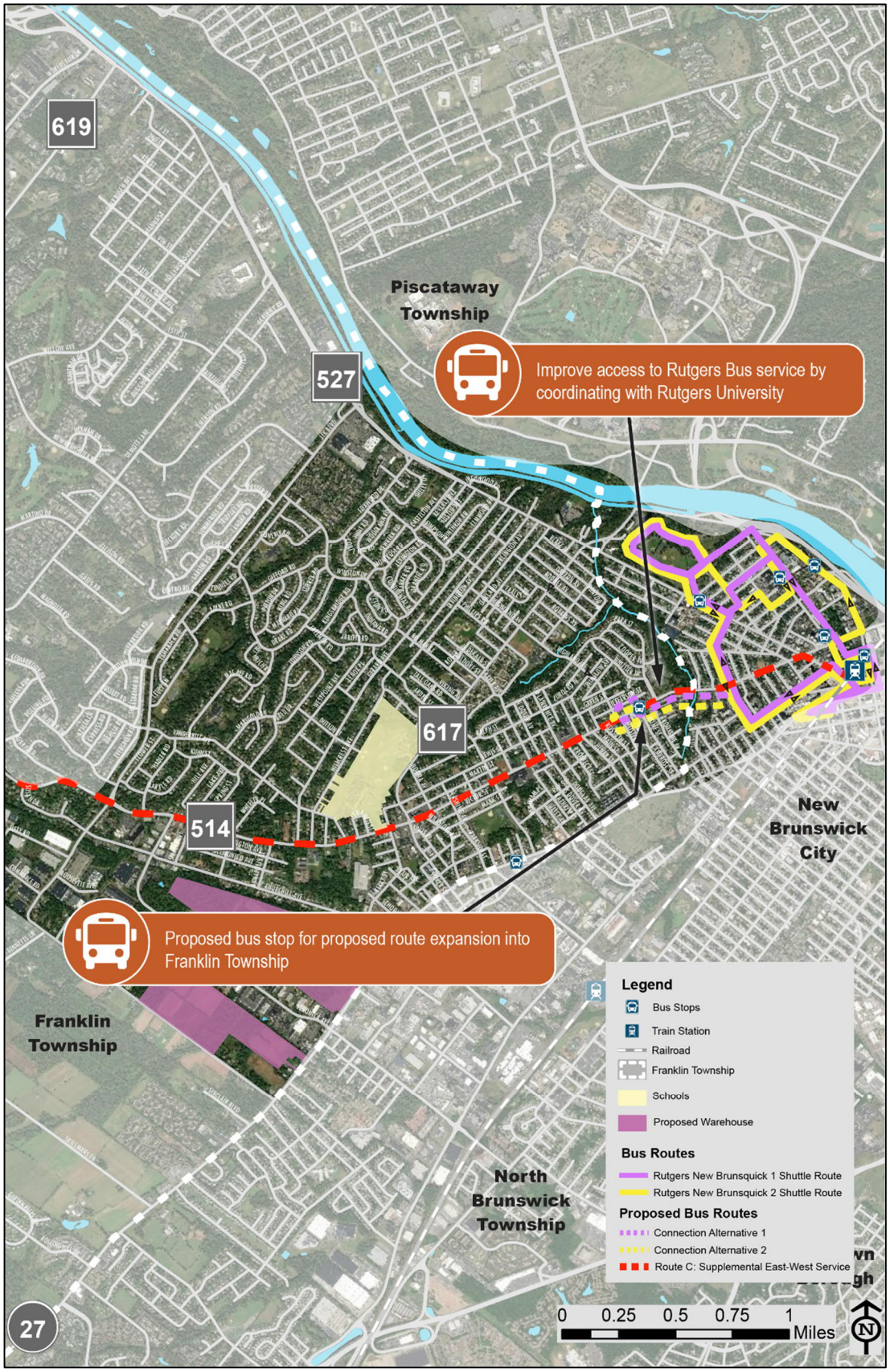
Additionally, the following transit-focused recommendations were laid out in the 2016 Somerset County Public Bus Transit Strategic Plan:

- A bus route is proposed to operate two-way service between the Bound Brook NJ Transit station and New Brunswick NJ Transit Station via Elizabeth Avenue, Weston Avenue, Amwell Road, Hamilton Street, and Easton Avenue. This route would be a continuation of the current DASH Franklin loop (Route 853)
- As Hamilton Street continues to undergo redevelopment and an increase in density, the Township should continue to coordinate with NJ TRANSIT, Somerset County, and Rutgers University to explore opportunities for bus transit services along the corridor. Bus service would enhance the multimodal aspect of the corridor and increase transportation options for accessing Rutgers University, employment hubs, nearby train stations, and downtown New Brunswick.
- Provision of bus services would require minor alterations to the roadway and streetscape to better accommodate bus stops and transit passengers at key destinations along the corridor
- At each stop, on-street parking would be prohibited in order to provide bus pull-outs. Bus pull-outs facilitate convenient, curbside boarding/alighting for passengers while still enabling thru-traffic to pass relatively unimpeded. Depending on the unique characteristics of a stop's location, bus stops may be

sited midblock or on the near-side or far-side of an intersection. Stops at intersections would require removal of approximately three parking spaces, while midblock stops would require removal of approximately five spaces.

- Each stop should include signage and lighting. Additional passenger amenities, such as seating, transit shelter, and traveler information are also preferred though would not be necessary at every stop, dependent on demand. The sidewalk should be wider at bus stop locations in order to accommodate transit passenger activity and amenities while maintaining a minimum five-foot wide thru-travel zone for pedestrians.

Figure 19: Transit Improvement Recommendations



Enhance Multimodal Connectivity

The following recommendations are intended to enhance multimodal connectivity along and around the Hamilton Street corridor. These recommendations align with the County's Complete Streets policy, which aims to create street corridors that safely accommodates users of all ages and abilities. They are mapped in Figure 20.

Somerset Street (NJ 27)

- Investigate shared-lane markings on Somerset Street, connecting to existing shared-lane markings on NJ 27 in New Brunswick and add signage to emphasize use of the roadway by bicyclists.

Kossuth Street

Kossuth Street provides a continuous route to Somerset Street from Hamilton Street which connects to the proposed shared-lane markings along Somerset Street and avoids the skewed four-legged intersection at Somerset Street, French Street, and Main Street. Designating and designing the route as a bicycle boulevard will prioritize bicycle movement, create a bicycle route comfortable for most bicyclists, and provide convenient access to commercial destinations along French Street/Somerset Street, Hamilton Street, and connections to New Brunswick.

Design considerations include:

- Consider reducing speed limit from 25 mph to 20 mph
- Install wayfinding signage and mark bicycle boulevard pavement markings
- Introduce traffic calming elements to reinforce low traffic speeds
- Provide crossing improvements on Hamilton Street and Somerset Street, such as marked crossings, Rectangular Rapid Flashing Beacons (RRFBs), and median islands to slow traffic speeds

Franklin Boulevard

- Investigate bicycle facilities on Landing Lane for a safe connection to the Delaware and Raritan Canal State Park Trail/East Coast Greenway from the existing bicycle lane on Franklin Boulevard; effort should be led by Piscataway Twp and the City of New Brunswick

Additionally, the following recommendations were detailed in the North Jersey Transportation Planning Authority's 2017 report, "Supporting Priority Investment in Somerset County Phase III Study."

Hamilton Street Corridor

- Investigate shared-lane markings on Hamilton Street, connecting to existing shared-lane markings in New Brunswick and add signage to emphasize use of the roadway by bicyclists
- Repair deteriorating and/or heaved sidewalk sections along Hamilton Street

- Widen sidewalk (to minimum ten feet) along Hamilton Street in front of commercial properties (e.g. Nora Shopping Center) to encourage pedestrian activity and accommodate street furniture, kiosks, and other amenities
- Enhance pedestrian crossings along Hamilton Street with curb extensions to improve visibility, shorten crossings, and slow traffic. Integrate green stormwater features into curb extensions, where feasible.
- Upgrade traffic signal equipment along Hamilton Street to include pedestrian signal heads with countdown timers
- Build upon recent streetscape improvements along Hamilton Street by installing high-visibility, continental crosswalks and ADA-compliant curb ramps at unmarked crossings along the corridor
- Incorporate bicycle parking into the streetscape along Hamilton Street
- Require bicycle parking with new development along Hamilton Street through a bicycle parking ordinance
- Relocate improperly sited street trees and plant additional street trees along the Hamilton Street corridor, particularly along the westbound side where there are fewer utility conflicts
- Consider infrastructure to enable the use of micromobility (e-bikes, e-scooters, scooters, etc) along the corridor as a first mile/last mile solution to connect with public transit and as a way to alleviate traffic congestion

Franklin Boulevard

- Investigate lowering the speed limit to 25 mph between NJ 27 and Lewis Avenue (currently 40 mph). This section has denser development patterns and development closer to the roadway than the section north of Lewis Avenue
- Investigate a road diet between Hamilton Street and NJ 27, as discussed in the following section
- Fill sidewalk gaps between Ellen Street and Frank Street, south of Field Street, and between Fuller Street and NJ 27

Lewis Street Bicycle Boulevard

Lewis Street is a parallel route to Hamilton Street and can be used as an alternate bike connection. Designating Lewis Street as a bicycle boulevard will prioritize bicycle movement, create a safer bicycle connection for most bicyclists, and provide convenient access to commercial destinations along Hamilton Street, Franklin Middle School, and connections into New Brunswick.

Design considerations include:

- Consider speed limit reduction from 25 mph to 20 mph
- Install wayfinding signage and bicycle boulevard pavement markings
- Introduce traffic calming elements to reinforce low traffic speeds
- Provide crossing improvements on Franklin Boulevard, such as marked crossings, Rectangular Rapid Flashing Beacons (RRFBs), and median island to slow traffic speeds

- Install a multi-use path between Frederick Street and Berry Street, to provide direct access to Franklin Middle School
- Install contra-flow bicycle lane on Lewis Street between Franklin Boulevard and Norma Avenue, connecting the bicycle boulevard through a one-block, one-way segment between Franklin Boulevard and Norma Avenue
- Mark and sign the crossings of Matilda Avenue, Baier Avenue, and Highland Avenue

Other Multimodal Improvements

- Provide bicycle/pedestrian-only linkages at the following locations to enhance network connectivity:
  - Burns Street between Jurocko Avenue and North Lawrence Avenue
  - Between Winslow Avenue and Miller Avenue
- Provide bicycle/pedestrian-only connection from Eugene Avenue and Victor Street to the rear and side, respectively, of the Hamilton Street Center shopping plaza. These connections would require cooperation from property owners and/or could be incorporated into future development activity to provide more direct bicycle/pedestrian access from the surrounding neighborhoods.
- Fill gaps in sidewalk network in the surrounding residential neighborhoods along the Hamilton Street corridor
- Investigate opportunities to utilize the Mile Run Creek as a greenway to support recreation, mobility, and conservation. The corridor links New Brunswick, residential neighborhoods along Hamilton Street, either side of the Mile Run Creek, and several schools. Opportunities are somewhat limited due to rugged terrain with steep cliffs.
- Investigate opportunities to enhance bicycle/pedestrian connectivity between Franklin and New Brunswick with a bicycle/pedestrian-only prefabricated bridge to cross Mile Run Creek

The following recommendations were made in the 2019 Somerset County Walk Bike Hike Plan:

- Install bicycle lane on New Brunswick Road/School House Road from John F. Kennedy Boulevard to Mettlers Road
- Install bicycle lane on Demott Lane from Fairfield Road to Amwell Road (CR 514)

Figure 20: Bicycle and Pedestrian Connectivity and Access Recommendations

3.5.2 I-287 Commercial Area (World's Fair Drive focus)

World's Fair Drive was selected as a typical roadway operating through a commercial office district. Other roads in Franklin feature similar features and constraints. Tools and strategies recommended for World's Fair Drive should be applied to similar areas of the Township. The recommendations below provide some examples that could be applied to other commercial areas within the Township.

The strategies laid out in this plan for World's Fair Drive seek to strengthen the street as a neighborhood commercial corridor, improve access to major destinations including hotels and other employment locations, and enhance safety for all roadway users in the area. Existing conditions for bicycle and pedestrian infrastructure are illustrated in Figure 21. Improvement strategies are outlined below and illustrated in Figure 22. Adoption of a Complete Streets policy by the Township would also support these efforts.

Existing Conditions

Sidewalk Access

- Sidewalk missing on both sides of World's Fair Drive from Easton Avenue to Pierce Street

Driveways

- Redundant driveways along the World's Fair Drive corridor at the following locations
  - Buckeye Fire Equipment
  - 37 World's Fair Drive properties on either side
  - Trivantage
  - Walther Electric
- Missing sidewalk/crosswalk treatment over driveways as per New Jersey Complete Streets Design Guide along World's Fair Drive corridor (see Figure 15 for preferred treatment)

Intersections

- Crosswalk missing on western leg of the intersection between World's Fair Drive and Pierce Street
- Missing pedestrian and bicycle crossing opportunities along the World's Fair Drive corridor and along Pierce Street between World's Fair Drive and Atrium Drive

Transit

- Somerset County bus routes, DASH-851/2/3 operate through World's Fair Drive, Pierce Street, and Cedar Grove Lane (CR 619)
- Bus stop shelters are missing along the World's Fair Drive corridor

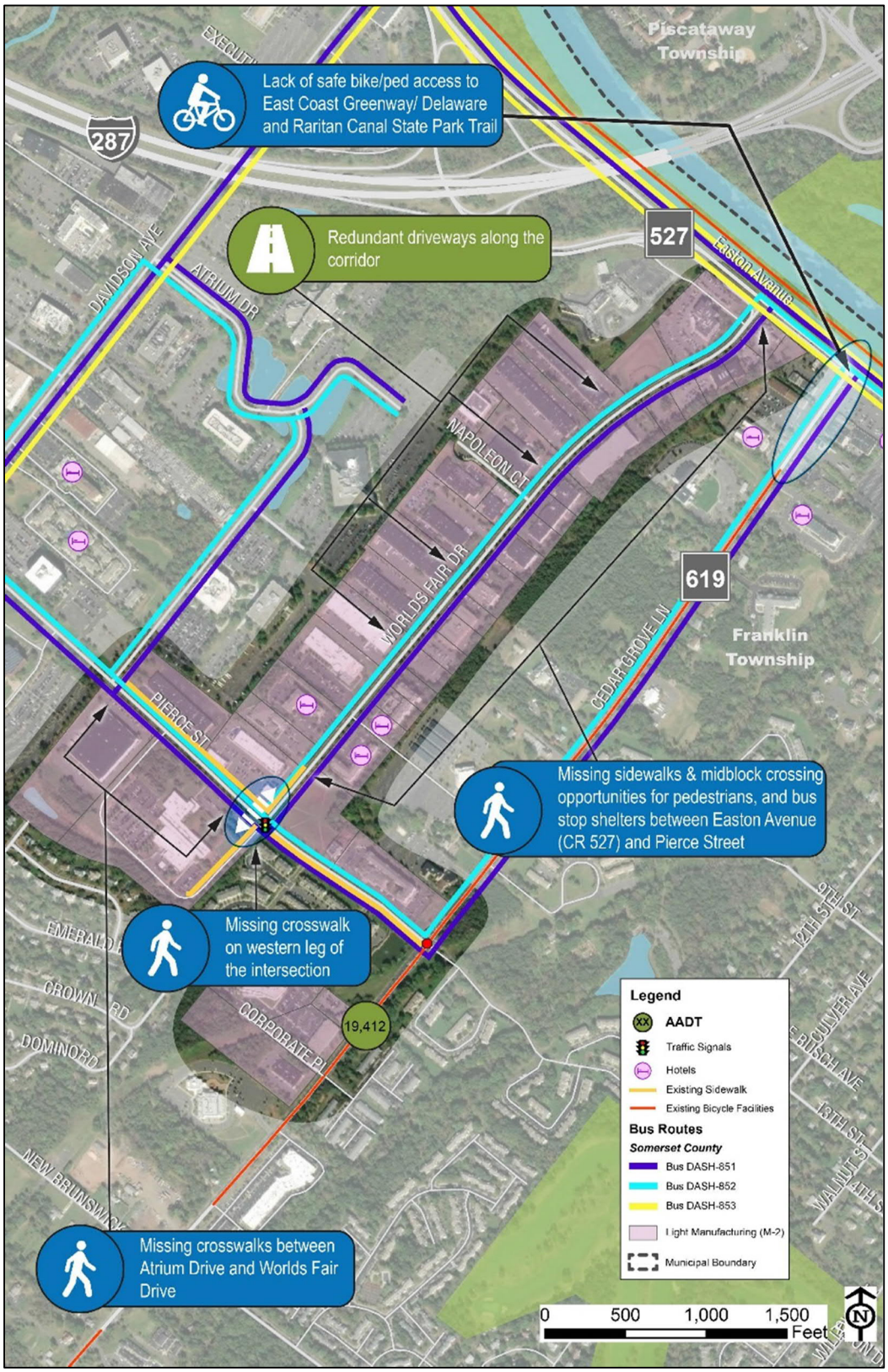
Bicycle Facilities

- Lacking bicycle facilities on World's Fair Drive and Pierce Street

Safety

Cedar Grove Lane is a high crash corridor (290 crashes between Easton Avenue and New Brunswick Road).

Figure 21: I-287 Commercial Area (World's Fair Drive) Existing Conditions



Recommendations (see Figure 22)

Traffic Calming

World's Fair Drive is a combination of light industrial and commercial land uses in Franklin Township with access to employment, and public transit facilities in neighboring New Brunswick. This area has experienced recent development and new warehousing and industrial development is expected in the near future.

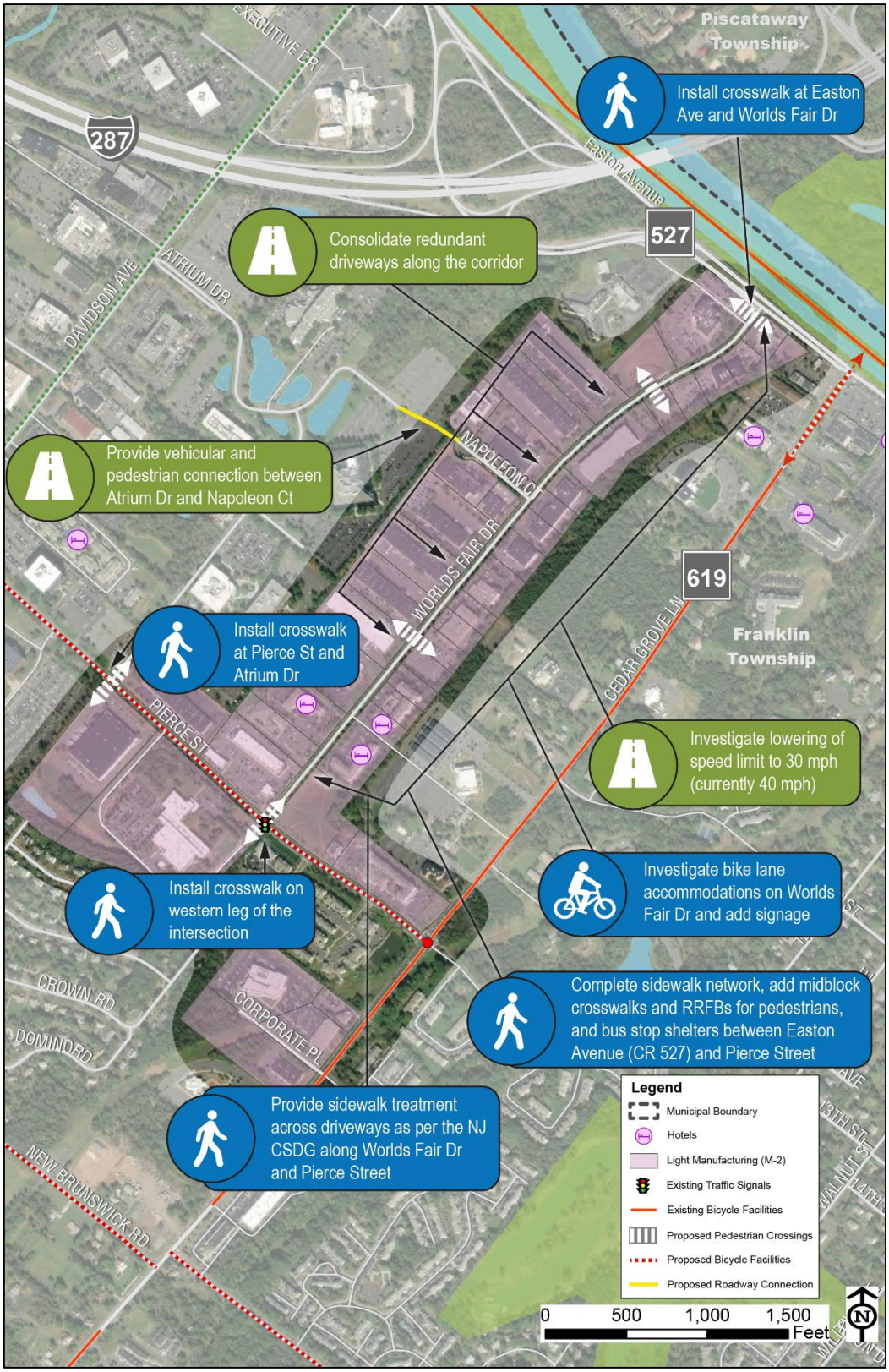
Traffic calming recommendations for this area include:

- Consolidating redundant driveways and investigating consolidating driveways between adjacent properties if feasible considering a quarter of all crashes on World's Fair Drive occurred while backing out of driveways
- Investigating lowering the speed limit on World's Fair Drive between Easton Avenue and Pierce Street to 30 mph (currently 40 mph) to improve safety and comfort levels for all roadway users

Multimodal Connectivity

- Installing pedestrian crossing across World's Fair Drive at Easton Avenue
- Improving pedestrian access and complete sidewalk network between Easton Avenue and Pierce Street
- Providing sidewalk treatment across driveways as per the New Jersey Complete Streets Design Guide along World's Fair Drive and Pierce Street (see Figure 15 for preferred treatment)
- Investigating adding a standard bike lane on World's Fair Drive between Easton Avenue and Pierce Street, connecting to the proposed bike lane on Pierce Street and add signage to emphasize use of the roadway by bicyclists
- Providing pedestrian crossing improvements and bus stop shelters on World's Fair Drive and Pierce Street, such as marked crosswalks, Rectangular Rapid Flashing Beacons (RRFBs), and median islands to slow traffic speeds
- Provide vehicular and pedestrian connection between Atrium Drive and Napoleon Court
    - Connecting other disconnected adjacent roadways throughout Franklin for improved connectivity should be investigated and considered where such connection would not unduly impact the character of the roadway and adjacent land uses

Figure 22: I-287 Commercial Area (World's Fair Drive) Recommendations



Additionally, the following recommendations were made for the area in Somerset County's 2019 Walk, Bike, Hike Plan:

- Installing bike lane on Pierce Street from Cedar Grove Lane (CR 619) to Randolph Road
- Investigating bicycle-pedestrian connections between Cedar Grove Lane and World's Fair Drive (paper street between Candlewood Suites Somerset and Residence Inn) and between World's Fair Drive and Atrium Drive (potentially along Napoleon Court)

4. Implementation Matrix

The below implementation matrix is intended to help Franklin Township prioritize and track improvements. The table includes those improvements newly recommended in this document as well as those initially recommended in previous studies and reinforced in the document. As applicable, the "Location/Study" column provides either the location of improvements or the study in which the recommendation was previously made. "The "Type" column mainly refers to the mode and location type of the improvement. Some improvements may also provide benefits for mode types not included in the respective cell. "Types" are divided into the following categories:

- Roadway –improvements where changes are made to the roadway mainly with the aim of improving traffic flow or operations; i.e. realigning of ramps or intersections
- Traffic –improvements to traffic operations that do not require a physical change to the roadway; i.e. lowering of speed limits
- Transit – improvements focused on public transit; i.e. extending shuttle service
- Cyclist – improvements focused on promoting cycling; i.e. the installation of an on-road bike lane
- Pedestrian – improvements focused on promoting walking; i.e. extending a sidewalk
- Bike/Ped – improvements focused on promoting both walking and biking; i.e. constructing a shared-use path

For each improvement, the lead agency and cost are also provided. For most improvements, the lead agency is determined by the jurisdiction (state road, county road, etc.) of the location though in all instances, the Township should be involved. For example, recommendations along Hamilton Avenue may require multi-jurisdictional cooperation and agreements. Unless otherwise noted, "County" refers to Somerset County. As needed on a case-by-case basis, Franklin Township should consider reaching out to Somerset County, the North Jersey Transportation Planning Authority, the New Jersey Department of Transportation, and RideWise (the local Transportation Management Association) for subject matter expertise and resources. Costs are provided as "Low," "Medium," and "High." These do not refer to specific dollar amounts but convey a consideration of cost relative to other improvements included in the implementation matrix.

Location/Study	ID	Improvement	Type	Lead Agency	Cost
Middlebush Traffic Study	1	Realign New Brunswick Rd at Cedar Grove Ln	Roadway	Township	High
	2	Implement signal and intersection improvements at Davidson Ave and Atrium Dr	Roadway Traffic	County	High
	3	Install left turn lanes along S Middlebush Rd at Cortelyous Ln and Jacques Ln	Roadway	County	High
	4	Align Blackwell's Mills Road and Skillman's Ln at S Middlebush Rd and install a traffic signal	Roadway Traffic	County	High
	5	Widen Pierce St to 40' between Elizabeth Ave and Belmont Dr and install stop sign on Belmont Dr at Pierce St	Roadway Traffic	Township	High
	6	Install traffic signal at Pierce St and Cottontail Ln	Traffic	Township	Medium
I-287 Middlesex/Somerset Raritan River Crossing Needs Analysis	7	Eliminate the left/U-turn slot on Easton Ave southbound at World's Fair Dr	Roadway	County	Low
	8	Realign I-287 southbound Exit 9 ramp to intersect with Centennial Ave	Roadway	State	High
	9	Reconfigure I-287 northbound Exit 9 ramp, eliminate the on-ramp and provide receiving lane for River Road southbound	Roadway	State	High
	10	Combine the entrance ramps from Easton Ave onto I-287 northbound	Roadway	State	Medium
	11	Widen and lengthen the I-287 southbound exit ramp at Exit 10	Roadway	State	High
	12	Construct collector/distributor roads (service roads) in each direction of I-287	Roadway	State	High
	13	Improve the connections with Easton Ave at Exit 10	Roadway	State	High
	14	Improve the connections with River Road at Exit 9	Roadway	State	High
Hamilton Street Parking and Circulation Improvements Study	15	Install a traffic signal at Douglas Ave and Hamilton St	Traffic	County	Medium
	16	Install "Gateway" median islands at two entrances to the business district	Roadway	County	Medium

Township-wide	17	All existing crosswalks should be updated to and new crosswalks implemented as continental style crossings (see Figure 11)	Pedestrian	Township	Low
	18	All crosswalks should extend from ADA-accessible curb ramps	Pedestrian	Township	Medium
	19	All commercial driveways adjacent to a sidewalk should accommodate pedestrians (see Figure 15)	Pedestrian Roadway	Township	Medium
NJ 27 and CR 610 (Henderson Rd/Stewarts Ave)	20	Conduct traffic analysis to evaluate feasibility of only allowing left turns during protected phase, instead of during both protected and permitted phases	Traffic	State	Low
	21	Upgrade western and southern leg crosswalks from standard style to high visibility, continental style	Pedestrian	State	Low
	22	Install crosswalk on eastern leg to existing ADA-accessible curb ramps	Pedestrian	State	Low
NJ 27 and CR 603 (Heathcote Rd/Laurel Ave)	23	Consider feasibility of installing mini roundabout	Roadway	State	Medium
	24	Lower speed limits approaching intersection to 35 mph	Traffic	State	Low
	25	Mark high-visibility crosswalks along northern and eastern legs	Pedestrian	State	Low
	26	Install ADA-accessible curb ramps for all crosswalks	Pedestrian	State	Medium
CR 527 (Easton Ave) and World's Fair Dr	27	Add an acceleration lane from World's Fair Dr to southbound CR 527	Roadway	County	Medium
CR 527 (Easton Ave) and JFK Blvd	28	Reduce speed limit from 45 to 40 mph on northbound Easton Ave approaching jug-handle to match the speed limit south of the intersection; alternatively, the approach lane for the jug-handle may be able to be extended south toward Wendy's, requiring a right-of-way acquisition	Traffic	County	Low/Medium
	29	Extend existing medians along JFK Blvd and southern leg of Easton Ave into crosswalks as median refuge islands	Pedestrian	County	Medium
	30	Install ADA-accessible curb ramps for all crosswalks	Pedestrian	County	Medium
	31	Lower speed limit from 45 to 40 mph along either side of CR 527	Traffic	County	Low

CR 527 (Easton Ave) and CR 519 (Cedar Grove Ln)	32	Extend existing medians along Cedar Grove Ln and southern leg of Easton Ave into crosswalks to act as median refuge islands	Pedestrian	County	Medium
	33	Install ADA-accessible curb ramps for all crosswalks	Pedestrian	County	Medium
CR 527 (Easton Ave) and Davidson Ave	34	Consider reorienting exit ramp from Interstate 287 to enter CR 527 northbound sooner, potentially as a yield control to allow for more space for merging	Roadway	State	High
	35	Lower speed limit south of intersection on CR 527 to 40 mph to slow traffic	Traffic	County	Low
	36	Mark lane lines along the portion of wide roadbed west of the intersection along eastbound Davidson Ave	Roadway	County	Low
CR 527 (Easton Ave) and Demott Ln	37	Lower speed limit from 45 mph to 40 mph	Traffic	County	Low
	38	Consider construction of forward jug-handle from northbound Easton Ave to Demott Ln on Van Wickle House property	Roadway	County	High
	39	Extend existing medians along Demott Ln and northern leg of Easton Ave into crosswalks to act as median refuge islands	Pedestrian	County	Medium
	40	Install ADA-accessible curb ramps for all crosswalks	Pedestrian	County	Medium
CR 619 (Cedar Grove Ln) and New Brunswick Rd	41	Remove one right turn-lane from northwest bound New Brunswick Rd and replace with curb extension or median refuge island	Roadway Pedestrian	County	Medium
	42	Remove one through-lane from northeast bound CR 619 and replace with curb extension or median refuge island	Roadway Pedestrian	County	Medium
	43	Lower speed limit on CR 619 from 45 mph to 40 mph	Traffic	County	Low
	44	Construct sidewalk along west side of Cedar Grove Ln connecting existing crosswalks	Pedestrian	County	Medium
	45	Install ADA-accessible curb ramps for all crosswalks	Pedestrian	County	Medium
	46	If the intersection is realigned, consider the need for traffic calming	Roadway Bike/Ped	County	Low
NJ 27	47	Consider widening corridor to two lanes in each direction between Finnegan's Ln and Beekman Rd, and Bennetts Ln and Veronica Ave/How Ln; also	Roadway Bike/Ped	State	High

		consider the addition of multi-modal facilities during any traffic analysis of the corridor			
	48	Investigate feasibility of constructing a sidewalk between Beekman Rd and Whitehall Manor (just south of Cortelyous Ln)	Pedestrian	State	Low
CR 527 (Easton Ave)	49	Consider a traffic study that analyzes alternatives, including restriping the third lane to act as auxiliary lane for multiple driveways	Roadway Traffic	County	Low
CR 514 (Amwell Rd/Hamilton St)	50	Convert northbound segment to a single receiving lane along CR 514; implement yield for right turning vehicles from Amwell Rd	Roadway Traffic	County	Low
	51	Mark crosswalks where there are existing sidewalks	Pedestrian	County	Low
	52	Consider road diet along Hamilton St	Roadway	County	Medium
	53	Mark crossing at Annette Court	Pedestrian	County	Low
CR 518 (Georgetown Franklin Turnpike)	54	Install lane markings on CR 518 eastbound approaching NJ 27	Roadway	County	Low
CR 615 (S Middlebush Rd)	55	Stripe missing shoulder at Buffa Rd	Roadway	County	Low
	56	Install exclusive left turn lanes on S Middlebush Rd southbound at Cortelyous Ln and northbound at Jacques Ln	Roadway	County	High
CR 619 (Cedar Grove Ln)	57	Conduct corridor traffic analysis to determine feasibility of reducing Cedar Grove Ln at Pierce St to one lane in each direction	Roadway	County	Medium
CR 621 (Elizabeth Ave)	58	Install yield pavement markings to the current yield control at School House Rd	Roadway	County	Low
JFK Blvd	59	Conduct corridor traffic analysis to determine feasibility of reducing to one lane in each direction with select left turn lanes	Roadway	Township	Medium
CR 617 (Franklin Blvd)	60	Conduct traffic study along two-lane portion of corridor south of Hamilton St to consider feasibility of removing one lane of travel	Roadway	County	Medium
Pierce St	61	Mark shoulder along corridor	Roadway	Township	Low
Mettler's Road	62	Mark shoulder along northbound side north of Weston Rd	Roadway	Township	Low

Weston Rd	63	Consider lowering speed limit from 40 mph east of Mettlers Rd	Traffic	Township	Low
Cottontail Ln	64	Mark shoulder along corridor	Roadway	Township	Low
Randolph Rd	65	Mark shoulder along corridor	Roadway	Township	Low
Demott Ln	66	Lower speed limit along entire corridor to 35 mph except the short segment near Easton Ave where speed limit is currently 30 mph	Traffic	Township	Low
Trail from Old Vliet Rd	67	Pave facility	Bike/Ped	Township	Medium
Old Stage Rd	68	Install intersection markings for cyclists	Bike/Ped	Township	Low
	69	Extend path to the east off-road	Bike/Ped	Township	Medium
	70	Add path connections into nearby shopping centers	Bike/Ped	Township	Medium
	71	Construct pedestrian-friendly sidewalk across driveways (see Figure 15 for example)	Pedestrian	Township	Medium
Trails near Franklin Park and Delar Park	72	Extend Delar Park facility northeast along Society Hill Boulevard and/or off-road to Franklin Park School	Bike/Ped	Township	Medium
	73	Extend facility west through open space over Nine Mile Run/Franklin Park Brook to the Claremont Avenue School	Bike/Ped	Township	Medium
	74	Connect the two facilities (Delar Park facility and facility from Edward Dr) on-road	Bike/Ped	Township	Low
	75	Extend facility southwest to baseball/cricket field at Vliet Ln and S Middlebush Rd	Bike/Ped	Township	Medium
Six Mile Run	76	Mark crossing of S Middlebush Rd	Bike/Ped	Township	Low
	77	Support efforts to extend trail east to U.S. 1 through North Brunswick	Bike/Ped	Township	Low
	78	Connect off-road to Cortelyous Lane	Bike/Ped	Township	Medium
	79	Expand trail network west of S Middlebush Rd	Bike/Ped	Township	Medium
Van Cleef Rd	80	Mark crosswalk	Pedestrian	Township	Low
	81	Construct sidepath on west side	Bike/Ped	Township	Medium
	82	Extend sidepath south to connect to Six Mile Run	Bike/Ped	Township	Medium
	83	Extend sidepath north to Cedar Grove Ln path	Bike/Ped	Township	Medium

Amwell Rd/Cedar Grove Ln/Weston Ln	84	Connect facilities with markings at intersection of Cedar Grove Ln and Weston Rd	Bike/Ped	Township	Low
	85	Make facility more visible by adding paint to facility, particularly on Amwell Rd	Bike/Ped	Township	Low
School House Rd/New Brunswick Rd	86	Extend New Brunswick Rd bike facility west to meet School House Rd facility and east of JFK Blvd	Bike/Ped	Township	Medium
	87	Consider marking matching on-road facility on south side of New Brunswick Rd and/or constructing sidepath along New Brunswick Rd	Bike/Ped	Township	Medium
Delaware and Raritan Canal Park Trail (D&R Trail)	88	Make effort to connect trails throughout Township to D&R Trail	Bike/Ped	Township	Medium
	89	Emphasize presence of D&R Trail in marketing and cycling materials	Bike/Ped	Township	Low
Campus Dr	90	Extend bike lane along entire corridor	Cyclist	Township	Medium
	91	Consider feasibility of installing sidepath	Bike/Ped	Township	Medium
JFK Blvd/Clyde Rd	92	Connect sidepath to nearby paths and proximal destinations such as nearby schools/parks	Bike/Ped	Township	Medium
	93	Mark crosswalks at all crossings along path	Pedestrian	Township	Low
Promenade Blvd	94	Extend sidepath to Princeton Gate Blvd	Bike/Ped	Township	Medium
Beekman Rd	95	Extend sidepath north to Franklin Park/Delar Park paths	Bike/Ped	Township	Medium
Hamilton Street Focus Area	96	Investigate traffic calming elements along high crash corridors on Hamilton St, Franklin Blvd, Pine St and Highland Ave	Roadway Bike/Ped	County	Medium
	97	Investigate gateway treatments at the intersections of Franklin Blvd and Hamilton St, and at Highland Ave	Roadway	County	Medium
	98	Improve pedestrian access and complete the sidewalk network between Hamilton St and NJ 27 between Franklin Blvd and Main St	Pedestrian	County	Medium
	99	Investigate lowering the speed limit on Hamilton St between Girard Ave and Franklin Blvd to 25 mph	Traffic	County	Low
	100	Investigate lowering the speed limit to 35 mph on Hamilton St between Girard Ave and Clyde Rd/JFK Blvd	Traffic	County	Low

	101	Extend either New Brunsquick 1 or 2 Shuttle routes a few blocks west into Franklin Township from Louis St in New Brunswick to Highland Ave or Meister St and loop back around to Louis St to continue the existing route in New Brunswick	Transit	Rutgers	Low
	102	Prioritize locations for potential shuttle stops and develop a design concept for integrating bus pull-outs	Transit Roadway	Township	Medium
	103	Install bus stop signage	Transit	Township	Low
	104	Install new bicycle and pedestrian crossing at Somerset St (NJ 27) and Matilda Ave	Transit Bike/Ped	State	Low
	105	Operate two-way bus service between Bound Brook NJ Transit station and New Brunswick NJ Transit station via Elizabeth Ave, Weston Ave, Amwell Rd, Hamilton St, and Easton Ave; would be continuation of current DASH Franklin loop (Route 853)	Transit	NJ Transit	Medium
	106	Continue to coordinate with NJ Transit, Somerset County, and Rutgers University to explore opportunities for us transit services along Hamilton St corridor	Transit	NJ Transit County Rutgers	Low
	107	Accommodate bus service through minor spot roadway alterations at key destinations along corridor	Transit Roadway	Various	Medium
	108	Remove parking for new bus stops as needed	Transit Roadway	Various	Low
	109	Provide signage and lighting at each bus stop and consider installing seating, transit shelters and/or traveler information based on demand	Transit	Township	Medium
	110	Provide sufficiently wide sidewalks at bus stops while maintaining five-foot wide thru-travel zone for pedestrians	Transit	Township	Medium
	111	Investigate shared-lane markings on Somerset St, connecting to existing shared-lane markings on NJ 27 in New Brunswick and add signage to emphasize use of the roadway by bicyclists	Cyclists	State	Low

	112	Implement bicycle boulevard treatment along Kossuth St	Cyclist	Township	Medium
	113	On Kossuth St, consider reducing speed limit from 25 mph to 20 mph	Traffic	Township	Low
	114	On Kossuth St, install wayfinding signage and mark bicycle boulevard pavement markings	Cyclist	Township	Low
	115	On Kossuth St, introduce traffic calming elements to reinforce low traffic speeds	Roadway Bike/Ped	Township	Medium
	116	Provide crossing improvements on Hamilton St and Somerset St, such as marked crossings, Rectangular Rapid Flashing Beacons (RRFBs), and median islands to slow traffic speeds	Pedestrian	State	Medium
	117	Investigate bicycle facilities on Landing Ln for a safe connection to the Delaware and Raritan Canal State Park Trail/East Coast Greenway from the existing bicycle lane on Franklin Blvd	Cyclist	Middlesex County	Medium
Hamilton Street Focus Area/Supporting Priority Investment in Somerset County Phase III Study	118	Investigate shared-lane markings on Hamilton St, connecting to existing shared-lane markings in New Brunswick and add signage to emphasize use of the roadway by bicyclists	Cyclist	County	Low
	119	Repair deteriorating and/or heaved sidewalk sections along Hamilton St	Pedestrian	County	Low
	120	Widen sidewalk (to minimum ten feet) along Hamilton St in front of commercial properties to encourage pedestrian activity and accommodate street furniture, kiosks, and other amenities	Pedestrian	County	Medium
	121	Enhance pedestrian crossings along Hamilton St with curb extensions; integrate green stormwater features into curb extensions, where feasible	Pedestrian	County	Medium
	122	Upgrade traffic signal equipment along Hamilton St to include pedestrian signal heads with countdown timers	Traffic	County	Low
	123	Build upon recent streetscape improvements along Hamilton St by installing high-visibility, continental crosswalks and ADA-compliant curb ramps at unmarked crossings along the corridor	Pedestrian	County	Medium

	124	Incorporate bicycle parking into the streetscape along Hamilton St	Cyclist	Township	Low
	125	Require bicycle parking with new development along Hamilton St through a bicycle parking ordinance	Cyclist	Township	Low
	126	Relocate improperly sited street trees and plant additional street trees along the Hamilton St corridor, particularly along the westbound side where there are fewer utility conflicts	Roadway	Township	Medium
Hamilton Street Focus Area (Franklin Boulevard)	127	Investigate lowering the speed limit to 25 mph between NJ 27 and Lewis Ave	Traffic	County	Low
	128	Investigate a road diet between Hamilton St and NJ 27	Roadway	County	Medium
	129	Fill sidewalk gaps between Ellen St and Frank St, south of Field St, and between Fuller St and NJ 27	Pedestrian	County	Low
Hamilton Street Focus Area (Lewis Street)	130	Consider reducing speed limit from 25 mph to 20 mph	Traffic	County	Low
	131	Install wayfinding signage and bicycle boulevard pavement markings	Roadway Bike/Ped	County	Low
	132	Introduce traffic calming elements to reinforce low traffic speeds	Roadway Bike/Ped	County	Medium
	133	Provide crossing improvements on Franklin Blvd, such as marked crossings, Rectangular Rapid Flashing Beacons (RRFBs), and median island to slow traffic speeds	Pedestrian	County	Medium
	134	Install a multi-use path between Frederick St and Berry St, to provide direct access to Franklin Middle School	Bike/Ped	County	Medium
	135	Install contra-flow bicycle lane between Franklin Blvd and Norma Ave, connecting the bicycle boulevard through a one-block, one-way segment between Franklin Blvd and Norma Ave	Cyclist	County	Low
	136	Mark and sign crossings of Matilda Ave, Baier Ave, and Highland Ave	Pedestrian	County	Low

Hamilton Street Focus Area	137	Provide bicycle/pedestrian-only linkages on Burns St between Jurocko Ave and N Lawrence Ave, and between Winslow Ave and Miller Ave	Bike/Ped	County	Medium
	138	Provide bicycle/pedestrian-only connection from Eugene Ave and Victor St to the rear and side, respectively, of the Hamilton Street Center shopping plaza	Bike/Ped	County	Medium
	139	Fill gaps in sidewalk network in surrounding residential neighborhoods along the Hamilton St corridor	Pedestrian	County	Low
	140	Investigate opportunities to utilize the Mile Run Creek as a greenway to support recreation, mobility, and conservation	Bike/Ped	County	Medium
	141	Investigate opportunities to enhance bicycle/pedestrian connectivity between Franklin and New Brunswick with a bicycle/pedestrian-only prefabricated bridge to cross Mile Run Creek	Bike/Ped	County	High
2019 Somerset County Walk Bike Hike Plan	142	Install bicycle lane on New Brunswick Rd/School House Rd from JFK Blvd to Mettlers Rd	Cyclist	County	Low
	143	Install bicycle lane on Demott Ln from Fairfield Rd to Amwell Rd	Cyclist	County	Low
I-287 Commercial Area (World's Fair Drive Focus Area)	144	Consolidate redundant driveways and investigate consolidating driveways between adjacent properties if feasible	Roadway	Township/ Businesses	Medium
	145	Investigate lowering the speed limit on World's Fair Dr between Easton Ave and Pierce St to 30 mph	Traffic	Township	Low
	146	Install pedestrian crossing across World's Fair Dr at Easton Ave	Pedestrian	Township	Low
	147	Improve pedestrian access and complete sidewalk network between Easton Ave and Pierce St	Pedestrian	Township	Medium
	148	Provide sidewalk treatment across driveways along World's Fair Dr and Pierce St (see Figure 15)	Pedestrian	Township	Medium
	149	Investigate adding a standard bike lane on World's Fair Dr between Easton Ave and Pierce St, connecting to the proposed bike lane on Pierce St	Cyclist	Township	Low

		and add signage to emphasize the use of the roadway by bicyclists			
	150	Provide pedestrian crossing improvements and bus stop shelters on World's Fair Dr and Pierce St, such as marked crosswalks, Rectangular Rapid Flashing Beacons (RRFBs), and median islands to slow traffic speeds	Pedestrian Transit	Township	Medium
	151	Provide vehicular and pedestrian connection between Atrium Dr and Napoleon Court; consider connecting other disconnected adjacent roadways throughout Franklin	Roadway Pedestrian	Township	Medium
I-287 Commercial Area (World's Fair Drive Focus Area)/2019 Somerset County Walk Bike Hike Plan	152	Install bicycle lane on Pierce St from Cedar Grove Ln to Randolph Rd	Cyclist	Township	Low
	153	Investigate bicycle-pedestrian connections between Cedar Grove Ln and World's Fair Dr (paper street between Candlewood Suites Somerset and Residence Inn) and between World's Fair Dr and Atrium Dr (potentially along Napoleon Court)	Bike/Ped	Township	Medium