

Middlesex County Transportation Plan

Proposed and Completed Projects: by Subregion and Municipality



November 2013

Table of Contents

PROJECTS SUMMARY..... 1

EAST SUBREGION 2

Carteret Borough.....3

Metuchen Borough3

Old Bridge Township3

Perth Amboy City4

Sayreville Borough.....5

South Amboy City.....6

Woodbridge Township6

Map 1: Proposed Projects East Subregion by Municipality.....8

Map 2: Accomplished Projects East Subregion by Municipality9

CENTRAL SUBREGION..... 10

Dunellen Borough11

East Brunswick Township11

Edison Township12

Helmetta Borough13

Highland Park Borough.....13

Middlesex Borough14

Milltown Borough14

New Brunswick City.....14

North Brunswick Township16

Piscataway Township17

South Plainfield Borough.....18

South River Borough18

Spotswood Borough18

Map 3: Proposed Projects Central Subregion by Municipality.....19

Map 4: Accomplished Projects Central Subregion by Municipality20

SOUTH SUBREGION..... 21

Cranbury Township22

Jamesburg Borough.....22

Monroe Township22

Plainsboro Township22

South Brunswick Township22

Map 5: Proposed Projects South Subregion by Municipality24

Map 6: Accomplished Projects South Subregion by Municipality.....25

COUNTYWIDE 26

All three Subregions27

Projects Summary

The information in this document is derived from the Middlesex County Transportation Plan *New Horizons in Mobility*, which was adopted by the Middlesex County Planning Board in September, 2013. The goals of the Updated Middlesex County Transportation Plan provide the essence and direction in the type of actions, strategies and investments that the Plan supports to improve the County's transportation system and make it more responsive to present and future needs. This document provides a table of these proposed projects and projects that were completed since the adoption of the prior Transportation Plan in 1999. All of these projects are listed by Subregion and municipality and are geographically displayed in maps that illustrate the project and its location by Subregion of the County and municipality.

East Subregion



East Subregion

<p>Carteret Borough</p> <p><u>Proposed projects in new Transportation Plan:</u> E1 – Carteret Ferry Service Terminal. E2 – Provide bicycle paths along Rahway River and Arthur Kill waterfronts.</p> <p><u>Accomplishments* from Prior Transportation Plan:</u> E1a – New Jersey Turnpike Exit 12 Toll Plaza Enhancements. E2a – CR 643, Peter J. Sica Industrial Highway/Middlesex Ave/Prologis Way from Roosevelt Avenue to Port Reading Avenue.</p>	<p>Transportation Plan Goal(s) being met</p> <ul style="list-style-type: none"> ✓ Promote public transportation and intermodal improvements. ✓ Promote an adequate and safe bicycle and pedestrian system that supports mobility and recreation.
<p>Metuchen Borough (see Note 1 on page 35)</p> <p><u>Proposed projects in new Transportation Plan:</u> E3 – I-287 / Route 27 Interchange Improvements. E4 – Provide new and/or expanded safe and secure/protected bike parking or bike station facilities at all train stations, major bus terminals, and activity centers.</p> <p><u>Accomplishments* from Prior Transportation Plan:</u> E3a – Route 27 Bridge Replacement over Reading Railroad (CSX). E4a – Middlesex Greenway and New Greenway Bridge over Route 1.</p>	<p>Transportation Plan Goal(s) being met</p> <ul style="list-style-type: none"> ✓ Improve mobility and reduce traffic congestion. ✓ Promote an adequate and safe bicycle and pedestrian system that supports mobility and recreation.
<p>Old Bridge Township</p> <p><u>Proposed projects in new Transportation Plan:</u> E5 – Route 18/CR 516/CR527 Interchange Improvements. E6 – Route 35 widening, drainage and safety improvements. E7 – Route 18, Naricon Place to US Route 9, pedestrian and bicycling enhancements. E8 – Route 34 – Amboy Avenue- Morristown Road. Intersection Safety and Operational Improvements. E9 – Provide park and ride facilities in strategic locations, as in the US-9 Corridor, including location such as the NJ TRANSIT proposed park</p>	<p>Transportation Plan Goal(s) being met</p> <ul style="list-style-type: none"> ✓ Improve mobility and reduce traffic congestion. ✓ Promote safety for motorists, pedestrians and bicyclists. ✓ Promote public transportation and intermodal improvements. ✓ Promote an adequate and safe bicycle and pedestrian system that supports mobility and recreation.

* “Accomplishments” are projects that have completion dates prior to the commencement of this Transportation Plan Update.

<p>and ride near Route 9 & Spring Valley Road. E10 – Route 18 Corridor Express Bus Service from Old Bridge to New Brunswick and New Park and Ride Facility in vicinity of Route 18 and Route 9. E11 – Route 18 Corridor traffic, bicycle –pedestrian access and to transit and related bus shelters and transit amenities. E12 – Improved bus connections between Route 9 Corridor buses and NJT 818 Bus in vicinity of Route 9 and Ticetown Road. Major bus facility includes Route 9 Ernston, Road Park and Ride.</p> <p><u>Accomplishments* from Prior Transportation Plan:</u> E5a – Route 18 Bridge Replacement E6a– Route 35 Bridge over Cheesequake Creek. E7a – CR 673, Ernston Road (CR 673) and Bordentown Avenue (CR 615) intersection, Widening and Operations improvements.</p>	
<p>Perth Amboy City</p> <p><u>Proposed projects in new Transportation Plan:</u> E13 – Route 440 – High Street Connector for access to Perth Amboy waterfront redevelopment area. E14 – Route 35 and Smith Street (CR 611), Route 35 is a wide street for pedestrians to cross. Enhanced highly visible crosswalks are needed as well as pedestrian countdown signal heads. E15 – Smith Street (CR 611) – State Street (CR 656) New Brunswick Avenue (CR 616) Five Corner Intersection: Turning movements are often confusing for motorists and pedestrians, Enhanced crosswalks needed, and Several bus routes (#s 813, 815, 817, 62,116) serve this area attracting high pedestrian traffic. E16 – Ferry/marine vessels crossing improvements to facilitate present and future marine crossings of the North Jersey Coast Line bridge structure at Raritan Bay between Perth Amboy and South Amboy. E17 – Study proposals for ferry and/or waterborne transportation services at points to be determined along the Raritan River for potential transportation and/or recreations purposes. E18 – Provide bicycle paths along Rahway River and Arthur Kill waterfronts.</p>	<p>Transportation Plan Goal(s) being met</p> <ul style="list-style-type: none"> ✓ Improve mobility and reduce traffic congestion. ✓ Promote safety for motorists, pedestrians and bicyclists. ✓ Promote public transportation and intermodal improvements. ✓ Promote an adequate and safe bicycle and pedestrian system that supports mobility and recreation.

* “Accomplishments” are projects that have completion dates prior to the commencement of this Transportation Plan Update.

<p>E19 – Perth Amboy High Level Platforms. E20 – Provide Middlesex Greenway Proposed Extensions. E21 – Provide new and/or expanded safe and secure/protected bike parking or bike station facilities at all train stations, major bus terminals, and activity centers.</p> <p><u>Accomplishments *from Prior Transportation Plan:</u> E8a – Route 35 Victory Bridge, Replacement.</p>	
<p>Sayreville Borough</p> <p><u>Proposed projects in new Transportation Plan:</u> E22 – US Route 9/35, Main Street Interchange Improvements. E23 – Garden State Parkway Interchange 125 Improvements. E24 – Main Street Bypass. E25 – US Route 9-Bordentown Avenue- Kenneth Avenue Safety and Operational Improvements. E26 – New/expanded local and regional transit services to proposed Sayreville Point Development. E27 – Support multimodal transportation improvements and transit service expansions near all proposed major developments such as the Point at Sayreville.</p> <p><u>Accomplishments *from Prior Transportation Plan:</u> E9a – Route 9 Edison Bridge, Reconstruction and widening. E10a – Route 35 Victory Bridge, Replacement. E11a – Route 35 Victory Circle, Reconstruction. E12a – Route 35 Bridge over Cheesequake Creek. E13a – Garden State Pkwy, Widening. E14a – CR 535, Washington Road New Transportation Enhancement Program, Sidewalks from vicinity of Johnson Lane to vicinity of Main Street. E15a – CR 673, Ernston Road (CR 673) and Bordentown Avenue (CR 615) intersection, Widening and Operations improvements.</p>	<p>Transportation Plan Goal(s) being met</p> <ul style="list-style-type: none"> ✓ Improve mobility and reduce traffic congestion. ✓ Promote safety for motorists, pedestrians and bicyclists. ✓ Promote public transportation and intermodal improvements. ✓ Promote integration of transportation and land use. ✓ Support freight transportation improvements.

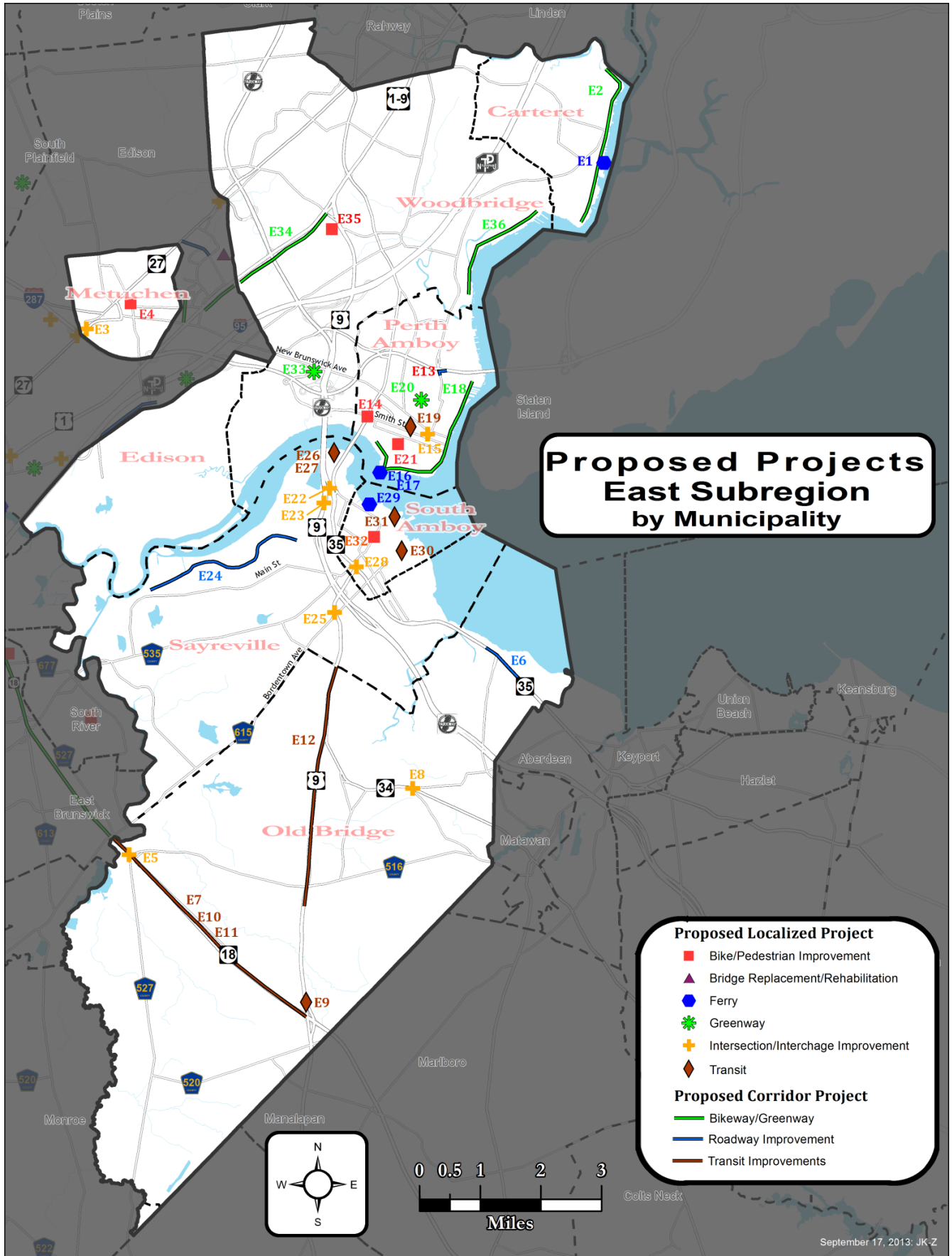
* “Accomplishments” are projects that have completion dates prior to the commencement of this Transportation Plan Update.

<p>South Amboy City</p> <p><i>Proposed projects in new Transportation Plan:</i> E28 – US Route 9/35, Main Street Interchange Improvements. E29 – Ferry/marine vessels crossing improvements to facilitate present and future marine crossings of the North Jersey Coast Line bridge structure at Raritan Bay between Perth Amboy and South Amboy. E30 – South Amboy Intermodal Center TIP project elements relating to improved access to rail, bus and proposed ferry facility. E31 – South Amboy Ferry Service implementation. E32 – Provide new and/or expanded safe and secure/protected bike parking or bike station facilities at all train stations, major bus terminals, and activity centers.</p> <p><i>Accomplishments* from Prior Transportation Plan:</i> E16a – South Amboy New Train Station and New High Level Platforms. E17a – CR 684, Lower Main Street Relocation and New Bridge over North Jersey Coast Line.</p>	<p>Transportation Plan Goal(s) being met</p> <ul style="list-style-type: none"> ✓ Improve mobility and reduce traffic congestion. ✓ Promote public transportation and intermodal improvements. ✓ Promote an adequate and safe bicycle and pedestrian system that supports mobility and recreation.
<p>Woodbridge Township</p> <p><i>Proposed projects in new Transportation Plan:</i> E33 – Advance East Coast Greenway Short Term and Long Term Proposed Facilities including ECG off street routes. E34 – Implementation of Route 1 Bicycle and Pedestrian Corridor Case Study NJDOT Report Recommendations. It is proposed that this include an alternative bikeway facility primarily on Route 1 South that would replace the former US Route 1 “Power Trail” proposal along the PSE&G power lines on Route 1 North; and that it provide bicycle access to Woodbridge Center Mall. E35 – Provide new and/or expanded safe and secure/protected bike parking or bike station facilities at all train stations, major bus terminals, and activity centers. E36 – Provide bicycle paths along Rahway River and Arthur Kill waterfronts.</p>	<p>Transportation Plan Goal(s) being met</p> <ul style="list-style-type: none"> ✓ Promote an adequate and safe bicycle and pedestrian system that supports mobility and recreation. ✓ Promote an adequate and safe bicycle and pedestrian system that supports mobility and recreation.

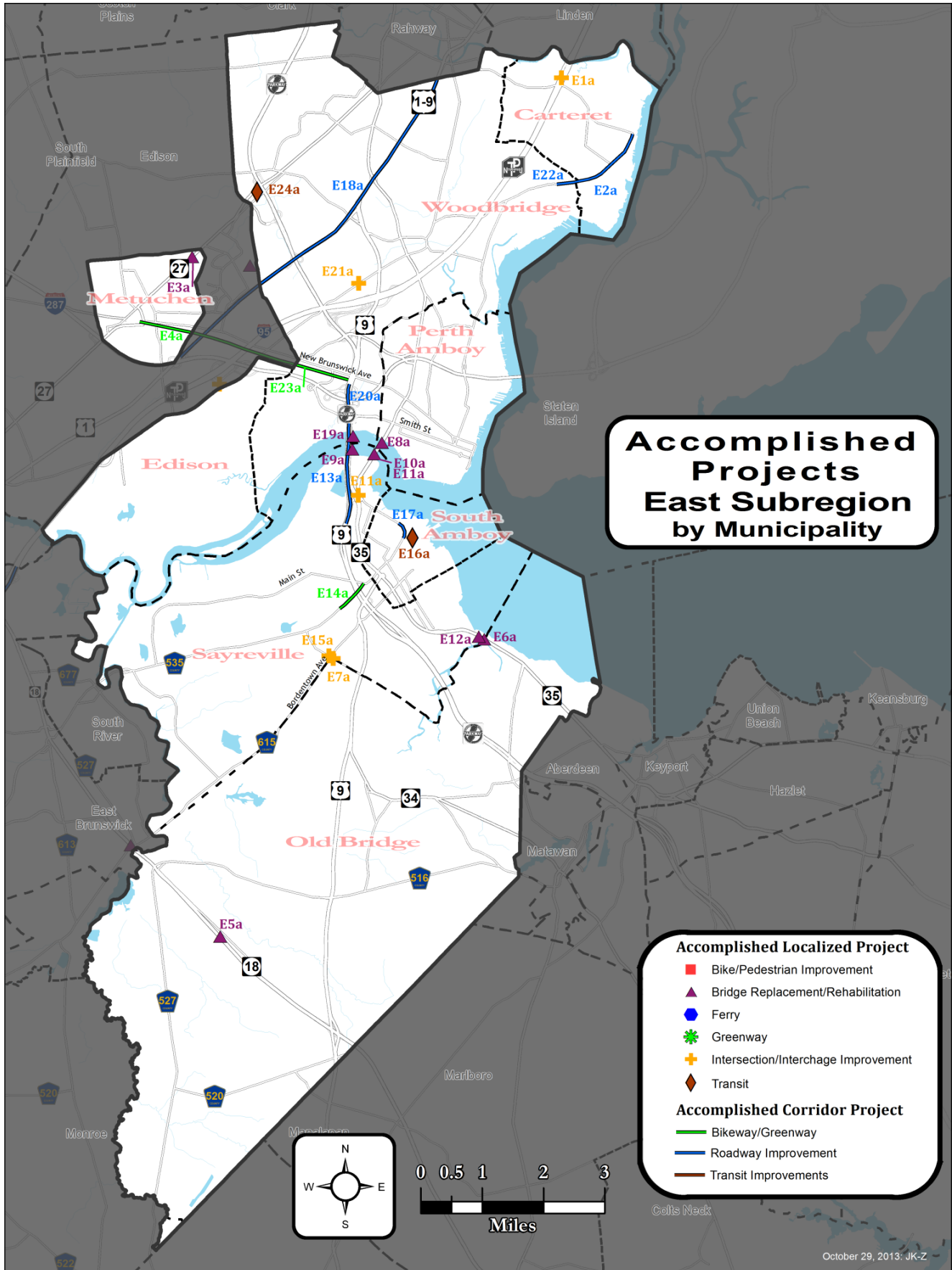
* “Accomplishments” are projects that have completion dates prior to the commencement of this Transportation Plan Update.

<p><u>Accomplishments* from Prior Transportation Plan:</u> E18a – Route 1 Widening, I-287 to Union County. E19a – Route 9 Edison Bridge, Reconstruction and widening. E20a – Garden State Pkwy, Widening. E21a – CR 514, Main Street and Woodbridge Center Drive (CR 646) Grade Separated Interchange. E22a – CR 643, Peter J. Sica Industrial Highway/Middlesex Ave/Prologis Way from Roosevelt Avenue to Port Reading Avenue (road is county jurisdiction in Woodbridge only). E23a – Middlesex Greenway and New Greenway Bridge over Route 1. E24a – Metropark Train Station Improvements and Upgrades.</p>	
---	--

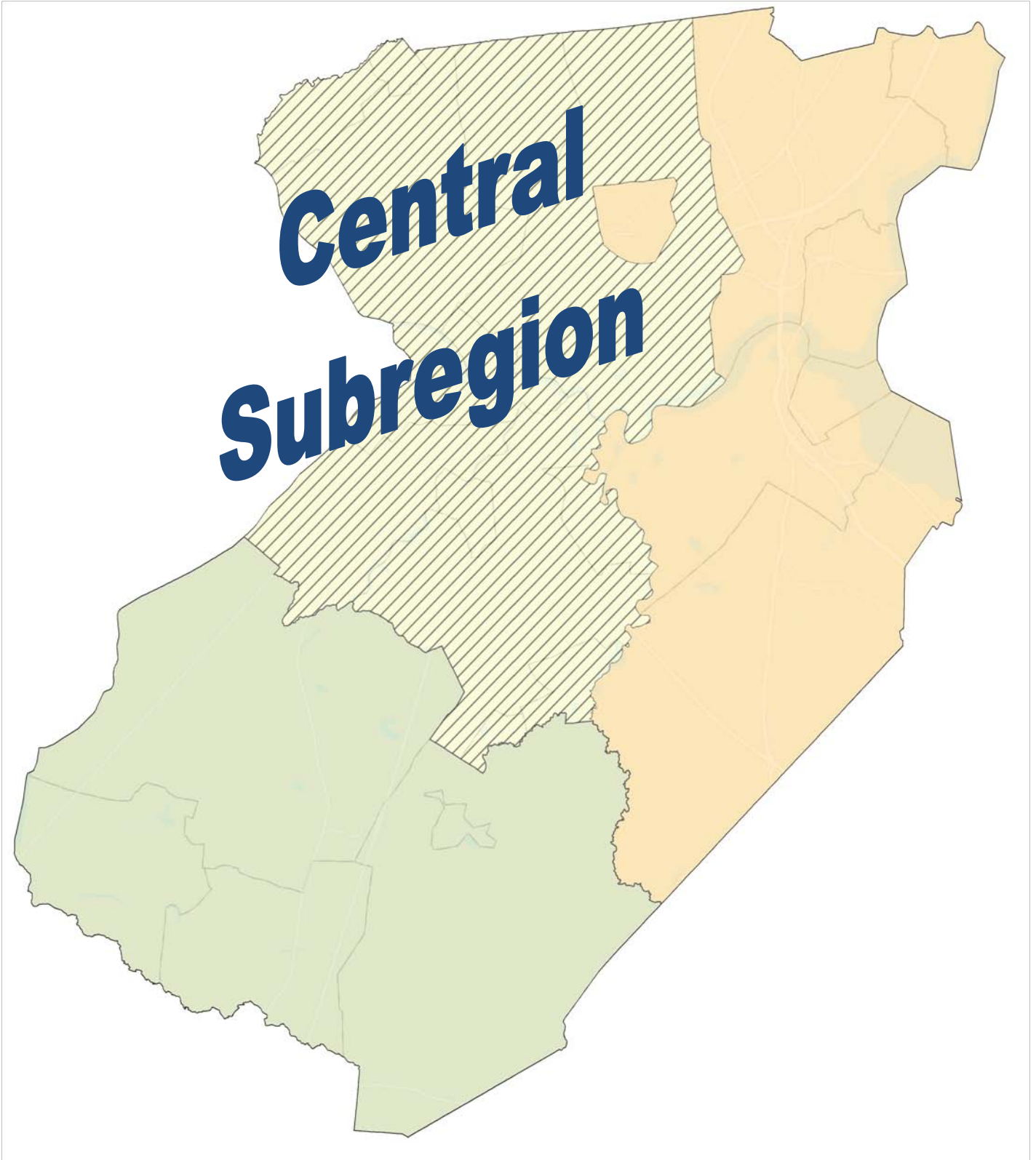
Map 1: Proposed Projects East Subregion by Municipality



Map 2: Accomplished Projects East Subregion by Municipality



Central Subregion



Central Subregion

<p>Dunellen Borough</p> <p><u>Proposed projects in new Transportation Plan:</u> C1 – Provide new and/or expanded safe and secure/protected bike parking or bike station facilities at all train stations, major bus terminals, and activity centers.</p>	<p>Transportation Plan Goal(s) being met</p> <ul style="list-style-type: none"> ✓ Promote an adequate and safe bicycle and pedestrian system that supports mobility and recreation.
<p>East Brunswick Township</p> <p><u>Proposed projects in new Transportation Plan:</u> C2 – Route 18/Edgeboro Road Intersection Improvements and long term grade separation. C3 – Route 18, Route 1 to NJ Turnpike operational and safety improvements. C4 – New Jersey Turnpike widening Exit 9 to 8A. C5 – Route 18 and Edgeboro Road. Pedestrian crosswalks and access improvements and bus shelter/waiting accommodations at bus stops on Route 18. C6 – Route 18, Naricon Place to US Route 9, pedestrian and bicycling enhancements. C7 – Advance Route 18-Edgeboro Road- grade separation. C8 – Rutgers University Cook/Douglass Campus Bikeway Extension to Ryders Lane in North Brunswick and future southerly bikeway extension to area institutions including DeVry and Silverline, and northerly extension to East Brunswick Transportation Center. C9 – Provide new and/or expanded safe and secure/protected bike parking or bike station facilities at all train stations, major bus terminals, and activity centers. Major bus facility includes East Brunswick Transportation Center. C10 – Route 18 Corridor traffic, bicycle –pedestrian access and to transit and related bus shelters and transit amenities.</p> <p><u>Accomplishments* from Prior Transportation Plan:</u> C1a – Route 18 Bridge Replacement over South River, Conrail and Main Street. C2a – NJ Turnpike Widening Exit 8A to Exit 9.</p>	<p>Transportation Plan Goal(s) being met</p> <ul style="list-style-type: none"> ✓ Improve mobility and reduce traffic congestion. ✓ Promote safety for motorists, pedestrians and bicyclists. ✓ Promote public transportation and intermodal improvements. ✓ Promote an adequate and safe bicycle and pedestrian system that supports mobility and recreation. ✓ Support freight transportation improvements.

* “Accomplishments” are projects that have completion dates prior to the commencement of this Transportation Plan Update.

<p>C3a – CR 617, Ryders Lane Widening from Tices Lane to Dunhams Corner Road. C4a – CR 617 Ryders Lane Bridge Replacement over Saw Mill Brook.</p>	
<p>Edison Township (see Note 2 on) <u>Proposed projects in new Transportation Plan:</u> C11 – US Route 1 / Plainfield Avenue Capacity and Operational Improvements. C12 – Route 27 / Wood Avenue intersection improvement. C13 – Route 27 / Plainfield Avenue Capacity and Operational Improvements. C14 – I-287 / Route 27 Interchange Improvements. C15 – I-287 New Southbound Ramp at National Road and Mack Road. C16 – Study proposals for ferry and/or waterborne transportation services at points to be determined along the Raritan River for potential transportation and/or recreations purposes. C17 – Northeast Corridor / Evergreen Road, widening of Evergreen Road underpass. C18 – Northeast Corridor and Conrail underpasses widening at Parsonage Road between Route 27 and Oakwood Avenue. C19 – Plainfield Avenue widening Kilmer Avenue to Ethel Road. C20 – Raritan Center Industrial Highway, Extension of Riverside Drive - Parkway Place Extension (CR656) from Raritan Center Parkway to Mill Road (CR 667). C21 – Edison Train Station surrounding area; improve pedestrian accommodations including Plainfield Avenue – Stelton Road (CR 529) approaches: Kilmer Road, Central Avenue. Railing and support wall approaching the underpass. Replace deteriorated railings and support walls at railroad underpass. Install sidewalk from the Metroplex complex to the railroad underpass. C22 – Woodbridge Avenue and Duclos Lane (CR676). Traffic signal, crosswalk enhancements, signage and sight distance improvements. C23 – Woodbridge Avenue and Gurley Road. Crosswalk enhancements, signage and sight distance improvements. C24 – Advance East Coast Greenway Short Term and Long Term Proposed Facilities including ECG off street routes. C25 – Provide Middlesex Greenway Proposed</p>	<p>Transportation Plan Goal(s) being met</p> <ul style="list-style-type: none"> ✓ Improve mobility and reduce traffic congestion. ✓ Promote safety for motorists, pedestrians and bicyclists. ✓ Promote public transportation and intermodal improvements. ✓ Promote an adequate and safe bicycle and pedestrian system that supports mobility and recreation.

<p>Extensions to Raritan Center.</p> <p>C26 – Develop Middlesex Greenway extension to Roosevelt Park along Amtrak easement from Pierson Avenue to Northeast Corridor near Roosevelt Park.</p> <p>C27 – Implementation of Route 1 Bicycle and Pedestrian Corridor Case Study NJDOT Report Recommendations. It is proposed that this include an alternative bikeway facility primarily on Route 1 South that would replace the former US Route 1 “Power Trail” proposal along the PSE&G power lines on Route 1 North; and that it provide bicycle access to nearby residential facilities, Menlo Park Mall and Roosevelt Park.</p> <p>C28 – Provide new and/or expanded safe and secure/protected bike parking or bike station facilities at all train stations, major bus terminals, and activity centers.</p> <p><i>Accomplishments* from Prior Transportation Plan:</i></p> <p>C5a – Route 1 Widening, I-287 to Union County.</p> <p>C6a – CR 514, Woodbridge Avenue (CR 514) and Raritan Center Parkway Grade Separation.</p> <p>C7a – CR 657, Evergreen Road, Widening and Northeast Corridor Bridge Replacement.</p> <p>C8a – Middlesex Greenway and New Greenway Bridge over Route 1.</p>	
<p>Helmetta Borough</p>	<p>Transportation Plan Goal(s) being met</p>
<p>Highland Park Borough</p> <p><i>Proposed projects in new Transportation Plan:</i></p> <p>C29 – Woodbridge Avenue and Duclos Lane (CR676). Traffic signal, crosswalk enhancements, signage and sight distance improvements.</p> <p>C30 – Advance East Coast Greenway Short Term and Long Term Proposed Facilities including ECG off street routes.</p> <p>C31 – Improve bikeway / sidewalks along River Road from Hoes Lane to Route 27.</p> <p><i>Accomplishments* from Prior Transportation Plan:</i></p> <p>C9a – CR 692, Cedar Lane Bikeway.</p>	<p>Transportation Plan Goal(s) being met</p> <ul style="list-style-type: none"> ✓ Promote safety for motorists, pedestrians and bicyclists. ✓ Promote an adequate and safe bicycle and pedestrian system that supports mobility and recreation.

* “Accomplishments” are projects that have completion dates prior to the commencement of this Transportation Plan Update.

<p>Middlesex Borough</p> <p><i>Accomplishments* from Prior Transportation Plan:</i> C10a – Route 28 Bridge Replacement over Green Brook from Middlesex Borough to Bound Brook, Somerset County.</p>	<p>Transportation Plan Goal(s) being met</p>
<p>Milltown Borough</p> <p><i>Accomplishments* from Prior Transportation Plan:</i> C11a – New Jersey Turnpike Widening Exit 8A to Exit 9. C12a – CR 617 Ryders Lane Bridge Replacement over Saw Mill Brook.</p>	<p>Transportation Plan Goal(s) being met</p>
<p>New Brunswick City</p> <p><i>Proposed projects in new Transportation Plan:</i> C32 – Route 18, Route 1 to NJ Turnpike operational and safety improvements. C33 – Route 18/Route 1 - Interchange Improvements. C34 – Route 27 and Easton Avenue; reduce potential conflicts between high volumes of pedestrians crossing Route 27 to and from train station and vehicular traffic. C35 – George Street near Buccleugh Park and the Route 18 Trench entrance/exit. Need marked crosswalk and signs alerting motorists of pedestrian crossing. C36 – Consider improvements on Livingston Avenue and New Street intersection; including traffic countdown timers and more effective controls for turning vehicles to avoid potential conflicts with pedestrians in view of heavy pedestrian traffic generated by such facilities as the nearby Bloustein School of Planning and Public Policy, the Heldrich Work Force Development Center, the New Brunswick Public Library, and the Middlesex County Planning Board offices. C37 – Livingston Avenue Corridor in New Brunswick (CR 691), improve safety conditions along corridor with complete streets design principles for better accommodation of pedestrians, bicyclists and school age children. C38 – Greater New Brunswick Area BRT service.</p>	<p>Transportation Plan Goal(s) being met</p> <ul style="list-style-type: none"> ✓ Improve mobility and reduce traffic congestion. ✓ Promote safety for motorists, pedestrians and bicyclists. ✓ Promote public transportation and intermodal improvements. ✓ Promote an adequate and safe bicycle and pedestrian system that supports mobility and recreation.

* “Accomplishments” are projects that have completion dates prior to the commencement of this Transportation Plan Update.

<p>C39 – Route 1 Corridor BRT and proposed NJ Transit Route 653 bus route between New Brunswick and Princessville, Mercer County serving New Brunswick, North Brunswick, South Brunswick and Plainsboro in Middlesex County.</p> <p>C40 – Expand Amtrak service in New Brunswick, the County Seat and a major urban center.</p> <p>C41 – Advance East Coast Greenway Short Term and Long Term Proposed Facilities including ECG off street routes.</p> <p>C42 – Implementation of Route 1 Bicycle and Pedestrian Corridor Case Study NJDOT Report Recommendations. It is proposed that this include an alternative bikeway facility primarily on Route 1 South that would replace the former US Route 1 “Power Trail” proposal along the PSE&G power lines on Route 1 North.</p> <p>C43 – Upon completion of Route 18 Extension to I-287 in Piscataway designate the Route 18 Corridor Bikeway/multipurpose facility from I-287 vicinity in Piscataway to Route 18 at Paulus Boulevard, New Brunswick; and provide signs for motorists to use caution in the presence of pedestrians and bicyclists along Route 18 between Route 27 and Paulus Boulevard.</p> <p>C44 – Provide a designated bikeway connection from the D& R Canal Towpath terminal point at Landing Lane to the New Brunswick Bikeway terminal point at College Avenue and Lafayette near Buccleugh Park.</p> <p>C45 – Rutgers University Cook/Douglass Campus Bikeway Extension to Ryders Lane in North Brunswick and future southerly bikeway extension to area institutions including DeVry and Silverline, and northerly extension to Rutgers Village in New Brunswick.</p> <p>C46 – Provide new and/or expanded safe and secure/protected bike parking or bike station facilities at all train stations, major bus terminals, and activity centers. Major bus facilities include: NJ Turnpike Exit 9 Park and Ride, New Brunswick.</p> <p>C47 – Advance Robert Wood Johnson Hospital Parking Facility with provisions to accommodate vehicle and bike parking for access to train and nearby regional and local bus facilities.</p> <p>C48 – Route 18 Corridor traffic, bicycle –pedestrian access and to transit and related bus shelters and transit amenities.</p>	
--	--

<p><i>Accomplishments* from Prior Transportation Plan:</i></p> <p>C13a – Route 18 widening from Route 27 to Paulus Blvd.</p> <p>C14a – New Jersey Turnpike Widening Exit 8A to Exit 9.</p> <p>C15a – New Brunswick Station, Gateway Project Access from Somerset Street to South Bound Platform and Station.</p> <p>C16a – New Brunswick Bikeway from George Street and Bishop Place to College Avenue and Lafayette Street. Development of Federal Aid Project through Feasibility, Scoping, Final Design and Construction Stage.</p> <p>C17a – New BrunsQuick Shuttle, 5th and 6th Ward to Train Station.</p>	
<p>North Brunswick Township</p> <p><i>Proposed projects in new Transportation Plan:</i></p> <p>C49 – US Route 1 improvements capacity and operational improvements from Aaron Road, to Forrestal Road.</p> <p>C50 – Short term improvements and long-term grade separations at Route 1 and Finnegan’s Lane, Commerce Blvd., and Cozzens Lane/Adams Lane.</p> <p>C51 – Route 1 Corridor BRT and proposed NJ Transit Route 653 bus route between New Brunswick and Princessville, Mercer County serving New Brunswick, North Brunswick, South Brunswick and Plainsboro in Middlesex County.</p> <p>C52 – North Brunswick Transit Village Short Term Bus service improvements.</p> <p>C53 – North Brunswick Transit Village <u>New Train Station</u> on Northeast Corridor.</p> <p>C54 – Northeast Corridor Train Turnaround Facility south of new North Brunswick Train Station to serve NJ TRANSIT Trains and provide cost savings for rail operations on the Northeast Corridor.</p> <p>C55 – Support multimodal transportation improvements and transit service expansions near all proposed major developments such as the North Brunswick Transit Village.</p> <p>C56 – Advance major road improvements that can improve the flow of truck traffic and/or access to nearby truck destination points: Route 1 corridor improvements and widening from Aaron Road to</p>	<p>Transportation Plan Goal(s) being met</p> <ul style="list-style-type: none"> ✓ Improve mobility and reduce traffic congestion. ✓ Promote public transportation and intermodal improvements. ✓ Promote integration of transportation and land use. ✓ Support freight transportation improvements.

* “Accomplishments” are projects that have completion dates prior to the commencement of this Transportation Plan Update.

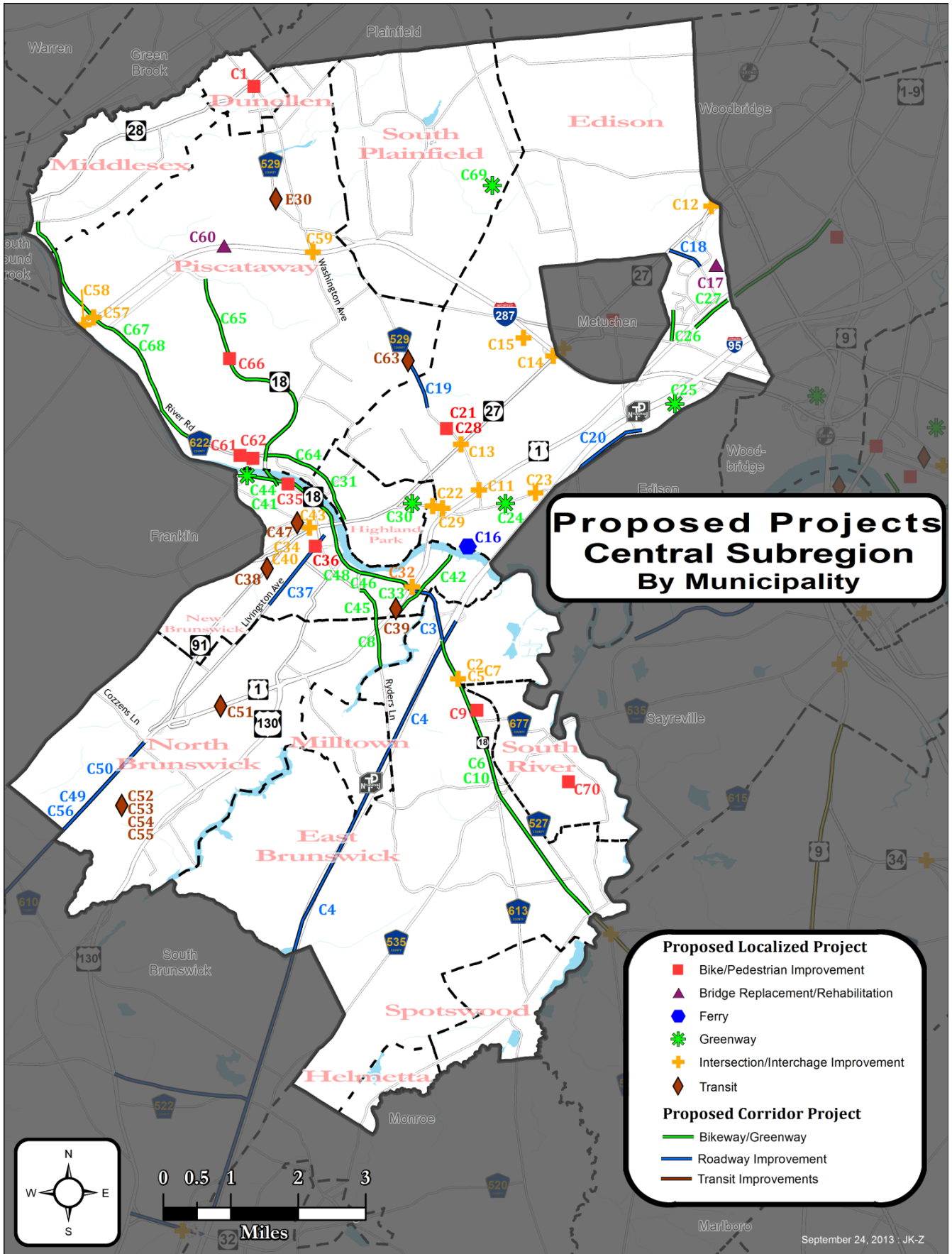
<p>Forrestal in North Brunswick.</p> <p><i>Accomplishments* from Prior Transportation Plan:</i> C18a – Route 1 and 130 Grade Separated Interchange.</p>	
<p>Piscataway Township</p> <p><i>Proposed projects in new Transportation Plan:</i> C57 – I-287 and River Road (CR 622) Interchange Improvements. C58 – I-287 and Interchange 10 Improvements. C59 – I-287 and South Washington Ave Interchange Improvements. C60 – Old New Brunswick Road Bridge widening over I-287. C61 – River Road near Rutgers Stadium: Mid block crosswalk for pedestrian crossings during Stadium events. C62 – Landing Lane and Johnson Drive signage for pedestrian crossings generated by nearby Rutgers Stadium and other activities. C63 – Piscataway Transit Village: advance proposal for transit village along Route 529 Corridor near Edison Train Station. C64 – Improve the Route 18 Bikeway section know as the “Trench or Route 18-Raritan River Trail” from Route 27 to John Lynch Bridge connection to Route 18 Bikeway. C65 – Upon completion of Route 18 Extension to I-287 in Piscataway designate the Route 18 Corridor Bikeway/multipurpose facility from I-287 vicinity in Piscataway to Route 18 at Paulus Boulevard. Provide a designated bikeway connection from the D& R Canal Towpath terminal point at Landing Lane to the New Brunswick Bikeway terminal point at College Avenue and Lafayette near Buccleugh Park and to the Johnson Park Bikeway in Piscataway. C66 – Route 18 Corridor traffic, bicycle –pedestrian access and to transit and related bus shelters and transit amenities. C67 – Provide a bikeway along the River Road Corridor from Hoes Lane to Bound Brook Train Station. C68 – Improve bikeway / sidewalks along River Road from Hoes Lane to Route 27.</p>	<p>Transportation Plan Goal(s) being met</p> <ul style="list-style-type: none"> ✓ Improve mobility and reduce traffic congestion. ✓ Promote safety for motorists, pedestrians and bicyclists. ✓ Promote public transportation and intermodal improvements. ✓ Promote an adequate and safe bicycle and pedestrian system that supports mobility and recreation. ✓ Support freight transportation improvements.

* “Accomplishments” are projects that have completion dates prior to the commencement of this Transportation Plan Update.

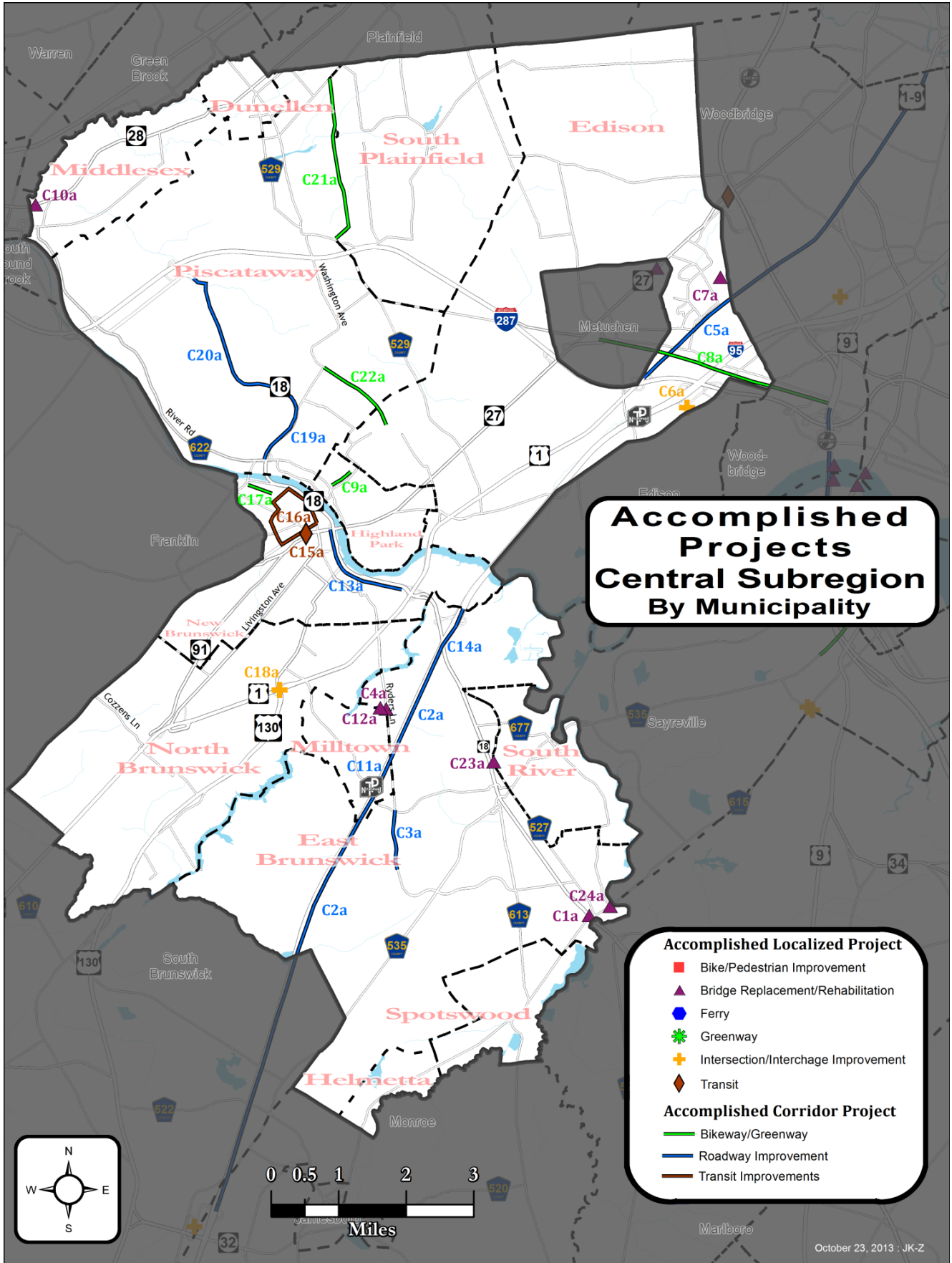
<p><u>Accomplishments* from Prior Transportation Plan:</u> C19a – Route 18 Extension Section 2A from River Road to Davidson Ave. C20a – Route 18 Extension Section 3A from Davidson Ave to I-287. C21a – CR 647, New Brunswick Avenue Bikeway from Stelton Road to West 7th Street. C22a – Suttons Lane Bikeway, from Metlars Lane to Kilmer Road.</p>	
<p>South Plainfield Borough</p> <p><u>Proposed projects in new Transportation Plan:</u> C69 – Provide Middlesex Greenway Proposed Extension.</p>	<p>Transportation Plan Goal(s) being met</p> <ul style="list-style-type: none"> ✓ Promote an adequate and safe bicycle and pedestrian system that supports mobility and recreation.
<p>South River Borough</p> <p><u>Proposed projects in new Transportation Plan:</u> C70 –Advance Veterans Field Pedestrian Walkway / Bike Path.</p> <p><u>Accomplishments* from Prior Transportation Plan:</u> C23a – Route 18 Bridge Replacement. C24a – CR 615, Bordentown Avenue Bridge Replacement.</p>	<p>Transportation Plan Goal(s) being met</p> <ul style="list-style-type: none"> ✓ Promote an adequate and safe bicycle and pedestrian system that supports mobility and recreation.
<p>Spotswood Borough</p>	<p>Transportation Plan Goal(s) being met</p>

* “Accomplishments” are projects that have completion dates prior to the commencement of this Transportation Plan Update.

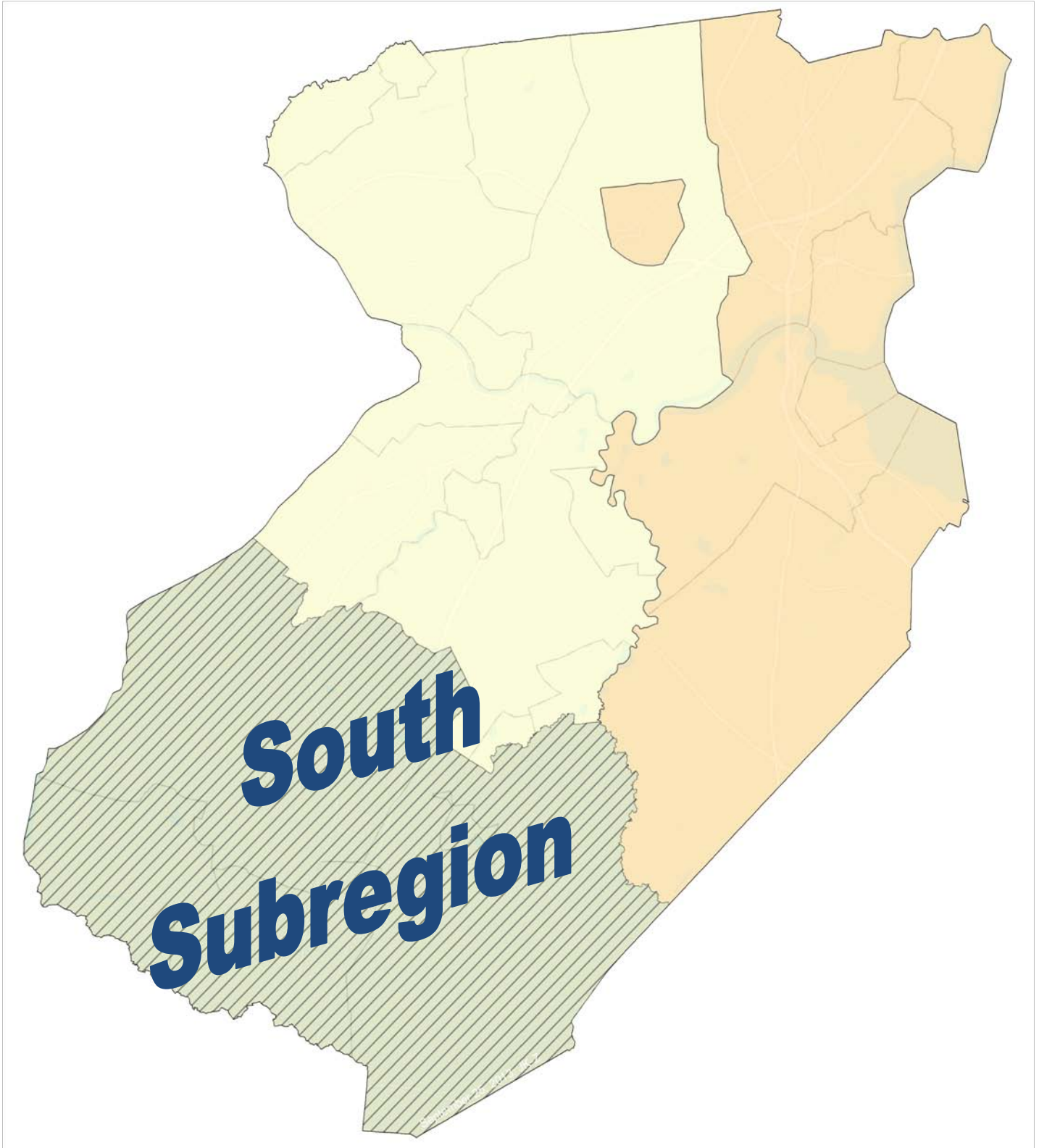
Map 3: Proposed Projects Central Subregion by Municipality



Map 4: Accomplished Projects Central Subregion by Municipality



South Subregion



South Subregion

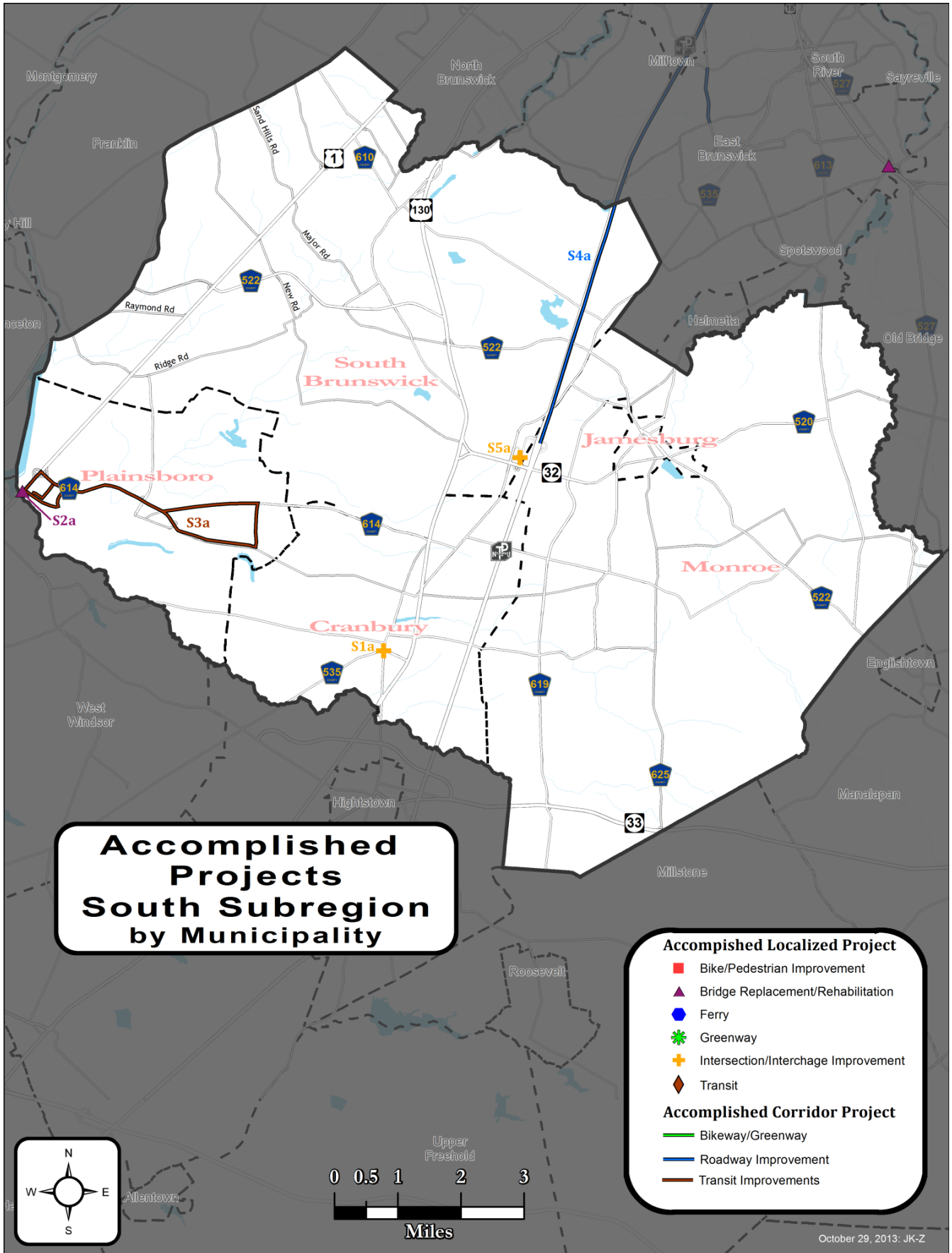
<p>Cranbury Township</p> <p><i>Accomplishments* from Prior Transportation Plan:</i> S1a– CR 685, Old Trenton Road / South Main (CR535) Street Intersection Reconstruction and Widening.</p>	<p>Transportation Plan Goal(s) being met</p>
<p>Jamesburg Borough</p>	<p>Transportation Plan Goal(s) being met</p>
<p>Monroe Township</p>	<p>Transportation Plan Goal(s) being met</p>
<p>Plainsboro Township</p> <p><i>Proposed projects in new Transportation Plan:</i> S1 – US Route 1 improvements capacity and operational improvements from Aaron Road, to Forrestal Road. S2 – Route 1 Corridor BRT and proposed NJTransit Route 653 bus route between New Brunswick and Princessville, Mercer County serving New Brunswick, North Brunswick, South Brunswick and Plainsboro in Middlesex County. S3 – Route 1 corridor improvements and widening from Aaron Road to Forrestal.</p> <p><i>Accomplishments* from Prior Transportation Plan:</i> S2a –Route 1 Bridge over Millstone River, Replacement. S3a –NJ Transit 655, Creation of New Bus Route from Plainsboro to Princeton.</p>	<p>Transportation Plan Goal(s) being met</p> <ul style="list-style-type: none"> ✓ Improve mobility and reduce traffic congestion. ✓ Promote public transportation and intermodal improvements. ✓ Support freight transportation improvements.
<p>South Brunswick Township</p> <p><i>Proposed projects in new Transportation Plan:</i> S4 – US Route 1 improvements capacity and operational improvements from Aaron Road, to Forrestal Road.</p>	<p>Transportation Plan Goal(s) being met</p> <ul style="list-style-type: none"> ✓ Improve mobility and reduce traffic congestion.

* “Accomplishments” are projects that have completion dates prior to the commencement of this Transportation Plan Update.

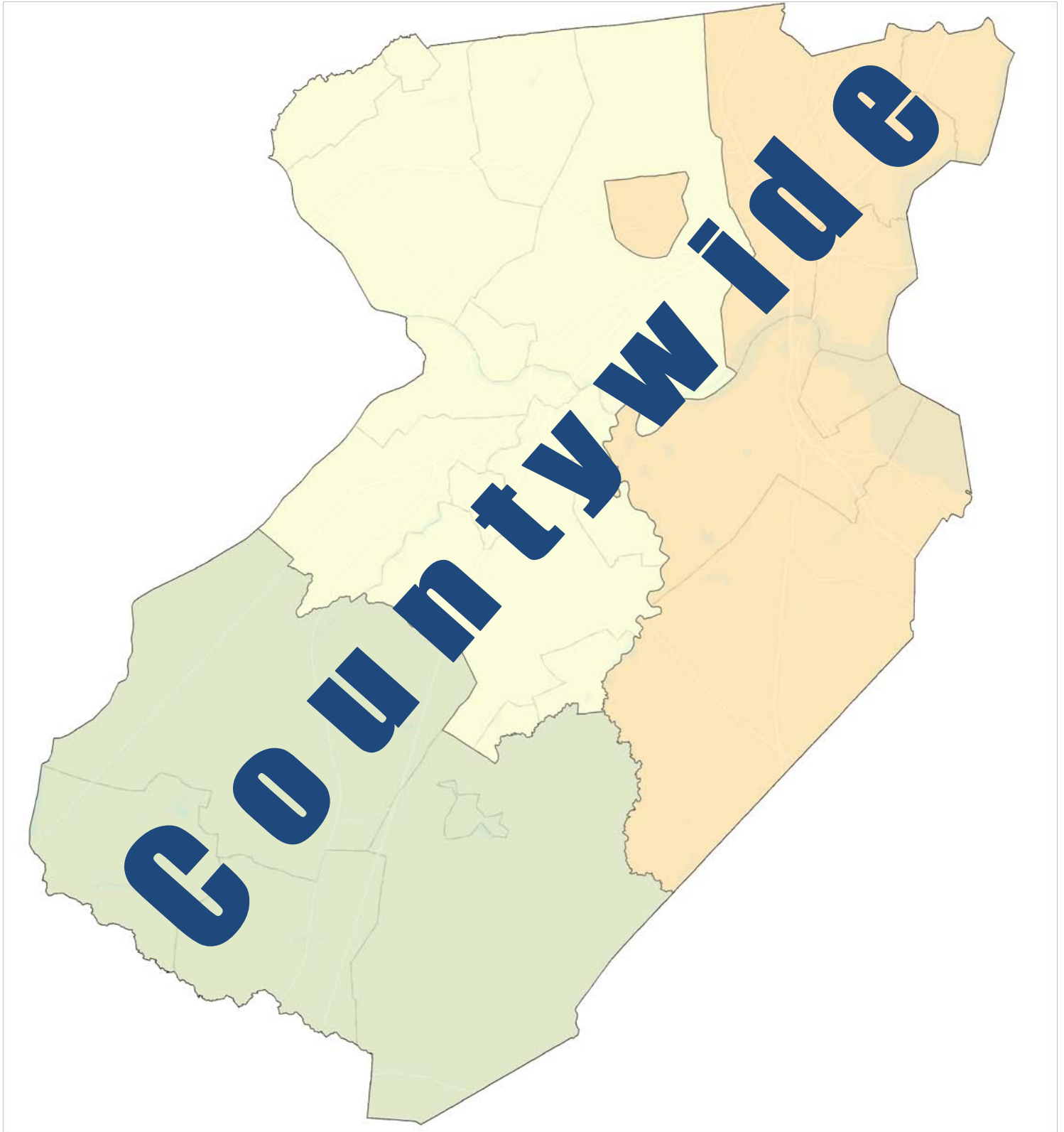
<p>S5 – Route 1 and Ridge Road, operations and drainage improvements.</p> <p>S6 – Route 1 and Ridge Road, operations and drainage improvements.</p> <p>S7 – Route 1 Major Road / Sand Hills Road operational improvements.</p> <p>S8 – Widening of Route 1 through South Brunswick.</p> <p>S9 – Route 32 and CR 535 Grade Separation.</p> <p>S10 – New Jersey Turnpike widening Exit 9 to 8A.</p> <p>S11 – Route 522 Realignment Extension from Route 130 to NJ Turnpike.</p> <p>S12 – Route 1 Corridor BRT and proposed NJ Transit Route 653 bus route between New Brunswick and Princessville, Mercer County serving New Brunswick, North Brunswick, South Brunswick and Plainsboro in Middlesex County.</p> <p>S13 – The Route 32 alignment and connector road improvements from the New Jersey.</p> <p>S14 – Advance major road improvements that can improve the flow of truck traffic and/or access to nearby truck destination points: Route 1 corridor improvements and widening from Aaron Road to Forrestal.</p> <p><u>Accomplishments* from Prior Transportation Plan:</u></p> <p>S4a –New Jersey Turnpike Widening Exit 8A to Exit 9.</p> <p>S5a –NJ Turnpike Exit 8A Ramp to Cranbury Road (CR 535).</p>	<ul style="list-style-type: none"> ✓ Promote public transportation and intermodal improvements. ✓ Support freight transportation improvements.
--	--

* “Accomplishments” are projects that have completion dates prior to the commencement of this Transportation Plan Update.

Map 6: Accomplished Projects South Subregion by Municipality



Countywide



Countywide

All three Subregions

Proposed projects in new Transportation Plan:

1. Raritan River additional Crossing between I-287 and Landing Lane, explore long term potential to accommodate traffic growth and reduce congestion between Somerset and Middlesex Counties.
2. Signal coordination/improvements along major arterials such as Routes 1, 18, 27, 35, and 130, countywide.
3. Advance complete streets design policies to include safe and adequate accommodations for users, including bicyclists, pedestrians, transit riders and the mobility-impaired on roadway improvements throughout the County.
4. Restrict and discourage pedestrian illegal crossings of major arterial highways such as Routes 1, 9, 18, 35, 130 at uncontrolled locations, Countywide.
5. Improve structurally deficient and functionally obsolete bridges throughout the County.
6. Enhance transit security measures at all train and bus facilities to improve sense of personal comfort and safety among transit users.
7. Improve safety conditions of physical structures at all train stations such as platforms, stairwells and seek compliance with ADA standards.
8. Support Federal and State programs that promote further study and development of technology for the enhancement of vehicles with the option of self-driving technology autopilot functions. This, along with related infrastructure improvements on certain freeways and other appropriate principal arterials could make roads safer and less congested. A number of carmakers have been working on autonomous vehicle technology for years and it is expected that commercial vehicles could feature “autopilot” functions within the next decade. Self driving vehicles have been tested in

Transportation Plan Goal(s) being met

- ✓ Improve mobility and reduce traffic congestion.
- ✓ Promote safety for motorists, pedestrians and bicyclists.
- ✓ Promote public transportation and intermodal improvements.
- ✓ Maintain a state of good repair.
- ✓ Promote an adequate and safe bicycle and pedestrian system that supports mobility and recreation.
- ✓ Promote integration of transportation and land use.
- ✓ Support freight transportation improvements.
- ✓ Protect the environment and address energy conservation and climate change impacts on transportation.
- ✓ Improve economic vitality, access to jobs and business appeal.
- ✓ Promote public and private sector partnerships on transportation projects and program.

<p>California roadways and it is noted that those that have been tested with more than 300,000 miles of self driving have not had any accidents.</p> <ol style="list-style-type: none">9. Support Amtrak Gateway Program and Next Generation High Speed Rail Service between New York City and Washington DC.10. Coordinate transit services, facilitating transfers among transit providers, and creating intercepts.11. Coordinate schedules for different bus routes of same and different carriers to improve travel time.12. Expand accessible community transportation services to meet daily living needs of persons without access to automobiles.13. Expand paratransit and fixed route bus service to growing areas of the County. Extend lines to cover gaps in service.14. Invest in newer and state of the art equipment.15. Expand communication / marketing and outreach to major employers, welfare programs, students, seniors, and others to inform them of available transit services.16. Invest in infrastructure improvements, including bus shelter installation at more locations, bus stop signage and markings, priority traffic signals, and bus pull-offs, thereby enhancing both attractiveness and safety for users.17. Enhance the existing NJ TRANSIT “Mybus” system schedule information to real time operations information and expand its application to all bus routes and providers in the County.18. Develop a one stop transit information source covering all transit operations in the County.19. Promote Safe Routes to Transit.20. Improve travel options for the aging population, senior citizens and people with disabilities and low income groups.21. Explore all viable linkages from one mode to another.22. Support expansion of transportation centers where feasible.23. Promote expansion of paratransit/demand	
--	--

<p>responsive services and their connection and integration to fixed route transit services.</p> <ol style="list-style-type: none">24. Promote complete streets design policies to include safe accommodations and bus stop access improvements for transit riders and the mobility-impaired on roadway improvements throughout the County.25. Expand county and municipal shuttle routes providing weekend and evening service.26. Expand the use of the County website to promote all community transit provider services through website links to other websites.27. Include on Google Transit Private Carrier operations and MCAT shuttle services in Middlesex County to promote more integrated use of these services with NJ Transit.28. Identify potential for County operation/coordination of municipal community transportation services (Similar to Woodbridge, Sayreville, Old Bridge services).29. Expand vehicle-to-vehicle transfers for Access Link passengers going to common site destinations.30. Expand pilot program for purchase of NJ TRANSIT bus and rail tickets for distribution to MCAT customers who can use transit.31. Develop travel training program for senior citizens and disabled residents to promote use of transit by traditional community transit customers.32. Expand program of identifying MCAT and municipal shuttles that serve NJ TRANSIT bus stops by developing uniform and highly visible route number/name information on bus stop signs and bus shelters.33. Expand the acquisition and installation of bus shelters with user friendly bus route information at legally designated bus stops throughout the County to enhance comfort and convenience of transit users.34. Work with key agency recipients of transportation services to identify the	
---	--

<p>potential for agency and/or customer co-payments to provide funding for expanded transportation services.</p> <ol style="list-style-type: none">35. Expand the pilot on-bus advertising program by making referrals to the County advertising broker and exploring higher revenue forms of advertising media (e.g., bus wraps).36. Identify foundation and private sector funding for community transit and potential public/private partnerships.37. Expand out-of County transportation for MCAT services, particularly addressing destinations within 5 miles of the Middlesex border with contiguous counties.38. Expand availability of group ride (charter) transportation services on weekends and evenings.39. Develop effective schedule coordination between community shuttles operated by the County and municipalities.40. Expand evening and weekend service beyond the special (charter) trips and community shuttle pilot efforts.41. Work towards an integrated fare structure between the County and NJ TRANSIT to encourage passenger transfer activity between community transit and traditional rail and bus transit systems.42. Encourage new employer transportation services addressing unmet off-peak needs.43. Expand senior municipal transportation services to persons with disabilities.44. Address non-English language barriers to obtaining community transportation services beyond bi-lingual customer reservations.45. Improve the coordination of vehicle trips between Access Link and MCAT to address areas outside Access Link $\frac{3}{4}$ mile band around fixed route system.46. Develop and apply improved technology tools such as improved routing/scheduling, GPS and billing software to move toward a more integrated dispatching, billing and reporting system involving a broader set of community transportation providers.47. Expand bus shuttle connections between underserved major residential areas with	
---	--

<p>train stations and major bus corridors.</p> <ol style="list-style-type: none">48. Consider potential heliport facilities and access linkages at appropriate locations to be developed in coordination with affected municipalities and public input.49. Promote TMA goals for transportation demand management strategies and promote use of TMA ridesharing (Ride Match) software where possible.50. Periodic inspections of highway and bridge infrastructure for assessing structural deficiencies, obsolescence related repairs, needed upgrades and new improvements.51. Use of long lasting and high quality pavement material more resilient to winter conditions and to salting and plowing than conventional asphalt requiring more frequent maintenance and repairs.52. Use of state of the art porous pavement material on large surface parking facilities and along sections of roadways prone to flooding.53. Apply quick fix solutions as interim measures for problem areas to avoid interruption of service while long term solutions are being implemented.54. Maintain adequate redundancy on transit infrastructure and bus and rail rolling stock to prepare for unanticipated events and breakdowns.55. Implement recommendations of the Route 18 Pedestrian Crossing Study to Enhance Safety and Public Transit Use completed by the Middlesex County Department of Planning in September, 2005 as a NJTPA sponsored Subregional Planning Study.56. Implement recommendations of the Route One Corridor Bicycle & Pedestrian Case Study for Middlesex and Mercer Counties, prepared for NJDOT in December, 1997.57. Address common urban area problems hindering pedestrian mobility based on various walk able community workshops.58. Faded crosswalks, poorly designated crosswalks, and narrow stop bars at intersections create poor visibility and confusion to where drivers should stop. These should be replaced with high visibility ladder style markings.	
---	--

<ol style="list-style-type: none">59. Lack of continuous sidewalks on one or both sides of a street or urban highway.60. Broken sidewalk along significant long stretches on sidewalks along major routes. Residential property owners often do not have the financial means for needed sidewalk replacements/repairs.61. Encroachment of trees and vegetation into pedestrian space.62. Poor and unattractive lighting especially along side streets leading to activity areas.63. Poor or nonexistent way finding signage and signage for transit facilities.64. Unaligned curb ramps with crosswalks.65. Lack of pedestrian walk signals and countdown timers at wide intersections especially at street crossings of more than two lanes of traffic.66. Excess lane widths which may contribute to speeding problems. Poor sight distance at intersections that cause vehicles to pull into crosswalk area to view cross street traffic.67. Promote and encourage Middlesex County municipalities to adopt and advance “Complete Streets” design that accommodates bicyclists and pedestrians.68. Support development that allows higher densities, mixed uses, is near transit facilities, includes plans for providing new or expanded transit services, and provides accommodations for pedestrians and bicyclists.69. Encourage existing apartment developments to provide shuttle services to nearby train stations and/or major bus terminals/stations.70. Support Transit Oriented Developments and improvements at Transit Villages and other activity centers.71. Utilize the Middlesex County Site Plan and Subdivision resolution recommendations for installing appropriate pedestrian, bicycling, and transit accommodations at new development proposals subject to County review.72. Invest on freight access improvements to areas of the County with rail and truck access in place and in conformance to surrounding land uses such as Raritan	
---	--

<p>Center and NJ Turnpike Exit 8A.</p> <ol style="list-style-type: none">73. Support improvements on rail freight lines that upgrade substandard rails to the national 286,000 weight standard.74. Provide appropriate signage and trailblazers to encourage truck drivers to use existing truck routes and routings that involve use of principal arterial roads and avoid residential areas where possible.75. Improve truck connection routes to regional and local ports.76. Encourage programs, incentives and strategies to reduce vehicle miles traveled (VMT) to reduce Greenhouse Gas (GHG).77. Improve design standards to make roadways and other transportation infrastructure more adaptive to flooding and impacts from climate change.78. Encourage use of alternate fuel vehicles, utilization of cleaner fuels and conversion of fleet vehicles to electric, hybrid and compressed natural gas to reduce pollution and as a fossil fuel energy conservation measure.79. Develop a network of charging stations to support the growing number of electric vehicles and plug in hybrids as a means to encourage consumer use of electric vehicles to reduce greenhouse and gas emissions and improve air quality.80. Include risk assessments into the project selection and design process to account for mitigation against extreme weather conditions.81. Promote incentives for low polluting – energy efficient vehicles and transportation options.82. Support Federal and State programs that promote further study and development of technology for the enhancement of vehicles with the option of self-driving technology autopilot functions. This, along with related infrastructure improvements on certain freeways and other appropriate principal arterials could make roads safer and less congested. A number of carmakers have been working on autonomous vehicle technology for years and it is expected that commercial vehicles could feature “autopilot”	
---	--

<p>functions within the next decade. Self driving vehicles have been tested in California roadways and it is noted that those that have been tested with more than 300,000 miles of self driving have not had any accidents.</p> <p>83. Explore with the Port Authority of New York and New Jersey and affected municipalities the feasibility of intermodal ferry operations and expansion of marine freight facilities for Middlesex County coastal areas as ways of attracting new business investment, jobs and other economic / trade opportunities in Middlesex County.</p> <p>84. Promote partnerships on transportation improvements and funding participation on projects that benefit the public interest. Encourage partnerships with private sector entities in funding of transportation improvement projects that are in the public interest. An example of transportation related improvements secured through public – private sector cooperation includes approximately 45 linear miles of new sidewalks and almost 32 linear miles curbing from private developers between 2002 and 2012. The Middlesex County Office of Planning secured these improvements as part of the land development review process on developments affecting County roads or drainage facilities.</p> <p>85. Encourage existing apartment developments to provide shuttle services to nearby train stations and/or major bus terminals/stations.</p> <p><u>Accomplishments* from Prior Transportation Plan:</u></p> <ol style="list-style-type: none"> 1. Middlesex County Area Transit, Creation of Seven Bus Shuttle Routes, Countywide. 2. NJ Transit 800 Routes–Acquisition of State of the Art New Buses for NJ Local Routes 	
--	--

* “Accomplishments” are projects that have completion dates prior to the commencement of this Transportation Plan Update.

- Note 1: *Despite being surrounded by Edison Township, of the Central Subregion, Metuchen is included in the East Subregion consistent with the existing formal organizational structure of the Middlesex County Transportation Coordinating Committee (“T.C.C”).*
- Note 2: *All summations, tables and graphs by subregion, include all of Edison as situated entirely in the Central Subregion; however, for display on many of the thematic maps, the U.S. Census tract that is split by the municipal boundary with Woodbridge Township that runs through Raritan Center is displayed within the view extent of the East Subregion (for cartographic display purposes only).*