

Northwestern Middlesex County Transit Study

Prepared by the Edward J. Bloustein School of Planning and Public Policy for
New Jersey Transit and the Middlesex County Division of Planning

RUTGERS
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Table Of Contents

Executive Summary

I. Introduction	1
Methodologies	2
II. Background Information	3
Existing Bus Service	3
Demographics	4
Land Use	4
Employment Data	4
Workforce Origin-Destination Data	5
Stakeholder Interviews	5
III. Recommendations	8
Modifications to Existing Routes	9
New Routes	17
Fare Harmonization	31
Priorities, Phasing, and Costs	32
IV. Appendix	35



Executive Summary

The purpose of this document is to present our transit study findings of Northwestern Middlesex County. The study area includes the municipalities of Edison, Metuchen, Highland Park, New Brunswick, North Brunswick, Piscataway, Middlesex, Plainfield, South Plainfield, Dunellen, Bound Brook, Franklin, Manville and Hillsborough. Although the original study area was confined to Middlesex County, our research found that the travel demands of the study area necessitated service to the surrounding communities with significant transit markets and trip generators. We analyzed the demographics of the study area along with both employee and employer geographies. We augmented this research with interviews with stakeholders in the municipalities we were studying. From our research we noticed a few major trends:

- 1) Although the study area is suburban in nature, there are large concentrations of transit dependent populations particularly in Manville, Plainfield, and New Brunswick.
- 2) There is a dense employer concentration along Centennial Avenue in Piscataway Township that is currently not served by any transit service. In addition, there is no NJ Transit access to any Rutgers University campuses.
- 3) There is a high demand for train access from the Manville and Hillsborough areas to both the Raritan Valley Line and the Northeast Corridor, and also a high demand for transit service between the two NJ Transit rail lines.
- 4) Institutions of higher education such as Rutgers University and Middlesex County College are showing signs of high ridership growth.

Based on these trends, we made recommendations to modify existing routes, as well as create new routes to better serve Northwestern Middlesex County.

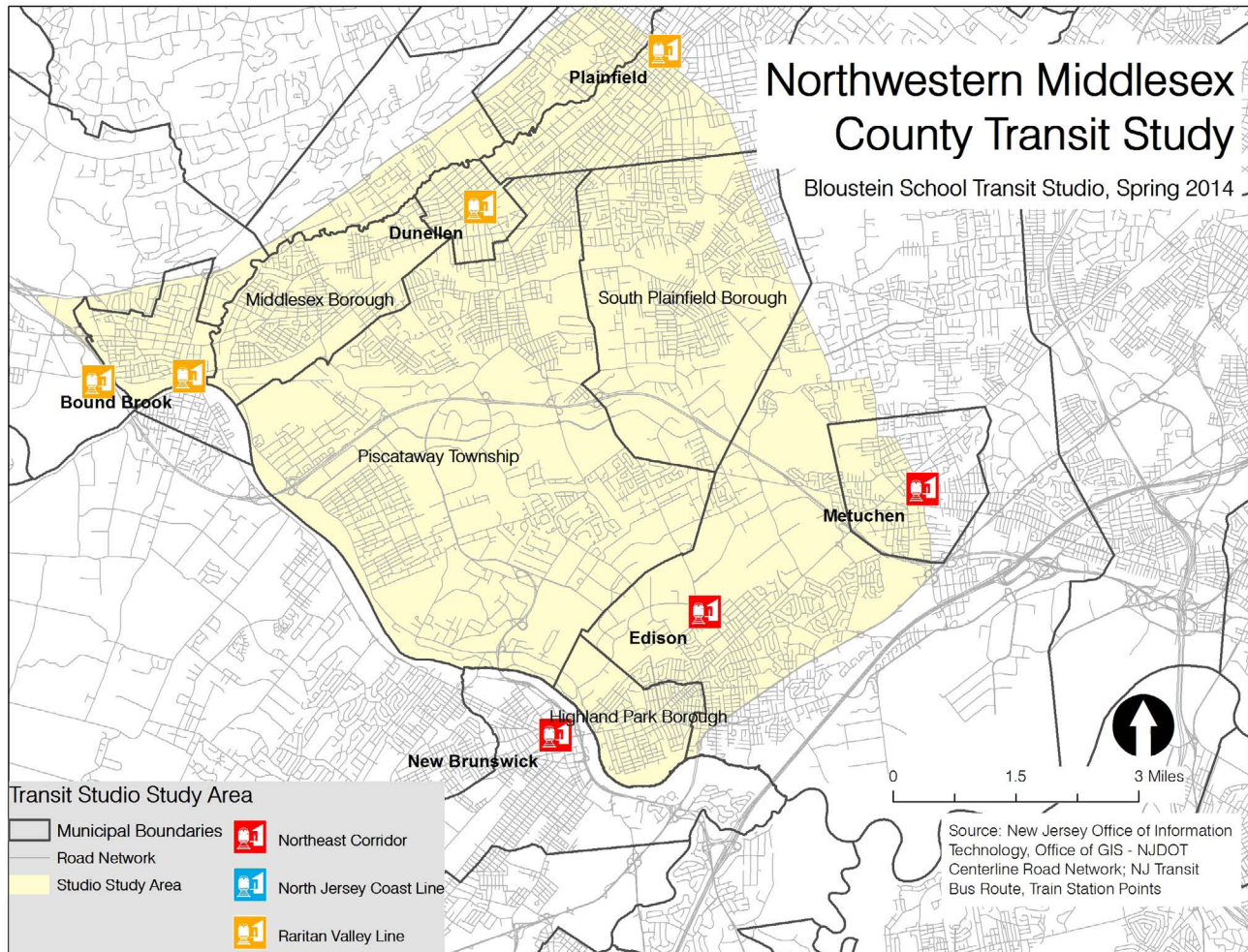
- A) Modifications to the 813, 819, 822, and a fusion of the Davidson Avenue Shuttle (DASH) 851 and 852 to accommodate increases in ridership
- B) Creation of 6 new intra-state routes to meet transit demand in the study area
- C) Creation of 3 peak shuttle services to serve Edison Train Station on the Northeast Corridor Line where there is currently no first mile/last mile connections
- D) Begin implementation of fare harmonization between NJ Transit and community transit providers in New Jersey



I. Introduction

In January 2014, NJ Transit, and the Middlesex County Division of Planning asked us to conduct a study on transit improvements in a currently underserved area we termed “Northwestern Middlesex County”. The original study area is bound by US Highway 1 and Route 22 to the east and the west respectively; by the Raritan River to the south; and a combination of Park Ave. and the Metuchen Train Station to the North (see map below). However, through our fact gathering and analysis of census data and employer/employee geographies, the boundaries of our study area grew to include areas south of the Raritan River; including New Brunswick, Franklin, Manville, and Hillsborough. In addition to demographic review and identification of trip generators and destinations, we also conducted stakeholder interviews with the various municipalities, conducted site visits of the locations and potential bus routes, and reviewed existing and historical service in the area for context and reference. All of these methodologies are described in detail in the Background Information section.

From the data, we made modifications to existing routes in the study area to better serve the communities in Northwestern Middlesex County. Furthermore, we designed 5 new routes as well as 3 new shuttle routes in order to provide transit service and access to residents and employers in the area that currently do not have access to any transit services. Additionally, we designed routes from a holistic approach; the system is unified and there are multiple transfer points in this new system. These modifications and new routing are described in detail in the Route Proposal section. Also included in this section are phasing of the proposed routes and a preliminary budget for these improvements and new services.



Methodologies

Before making any suggestions the Bloustein School Transit Studio conducted a comprehensive review of the study area. That review included detailed reporting and analysis of the following:

- Demographic review
- Stakeholder interviews
- Identification of trip generators and destinations
- Review of existing and historical service
- Site visits

Review of Existing and Historical Service

Middlesex County and NJ Transit provided the studio with ample data concerning the current and historical bus routes within the area. The studio took the opportunity to put all of the service on a map to better visualize where underserved areas may be. This involved combining the routes of various operators into a comprehensive map. In addition to the routes themselves the studio also analyzed the Ride Check data from NJ Transit to understand the ridership across all of the relevant services. Transfer data was also incorporated wherever possible.

Demographic review

The team began by performing a full demographic review of the study area. This included retrieving data from the American Community Survey; first at the municipality, and then at the census tract level. Pivot tables, charts and tables were created to get a full picture of the major differences between the municipalities. More detailed information at the census tract level was then mapped for numerous tables.

The studio looked for indicators of populations likely to adopt transit and areas currently underserved by transit. Key data included vehicles available, travel time to work, age, income, mode to work, age of housing development, educational attainment and density.

Identification of trip generators and destinations

Trip generators were primarily identified using census products combined with stakeholder interviews. The main census product used was the Longitudinal Employer-Household Dynamics (LEHD). Using data from the LEHD, we were able to identify the specific locations of employment hubs and then map them. The LEHD also provided the associated origins of these employees, which allowed us to see the flow of employee to employer within our study area.

Stakeholder interviews

Paul Larousse and Steve Fittante were instrumental in identifying key contacts within the study area. This allowed the studio to promptly conduct interviews to get a holistic view of the existing conditions by those who live and work in the area. The stakeholders included representatives from the planning departments of Middlesex County, the Somerset County Transportation Division, planners from the municipalities themselves, developers who currently operate private bus shuttles, Rutgers Department of Transportation and other transit operators. These interviews provide invaluable feedback and perspective for our later planning efforts.

Site visits

Before any discussion of modifying or adding service, members of the studio visited the major generators and destinations to observe the travel patterns and the relevant facilities. They also tried to observe private bus carriers, taxi activity and other ride share activities, especially around NJ Transit Rail Stations. After analyzing the data the studio undertook the task of improving the connectivity within the study area by either modifying existing service or adding new service. As new lines were proposed, studio members conducted trial runs in cars were performed to evaluate the feasibility of bus service along the corridors. Valuable information was gathered from these routes that impacted the final suggestions. Particularly noteworthy were the location of business entrances along major corridors .



II. Background Information

Existing Bus Service

Our study area is currently served by NJ Transit, Rutgers bus service, and by both Middlesex and Somerset County transit. There are nine existing NJ Transit routes, most of which operate on the northern or southern edges of the study area. Routes 59, 65/66, 114, and 117 all operate along the Route 22 Corridor at the northern edge of the study area, while the 810, 813 and 814 are all on the southern edge. The 819 and 822 are the only NJ Transit routes which enter into the study area in any significant way, and their routes, especially the 819's, are highly indirect. Because there are already several inter-state bus routes along with the NJ Transit Northeast Corridor and Raritan Valley rail services into New York City, our team primarily focused on intra-state services in the study area.

Of the Middlesex County Area Transit (MCAT) bus routes, our study area only interacts significantly with two, the M4 and the M5. These routes operate on the periphery of the study area, and providing

connections between these routes and the study area would be beneficial to riders. Similarly, Somerset County operates two routes between Bound Brook and New Brunswick, providing a connection between the Raritan Valley and the North East Corridor rail lines. However, the DASH 851 and 852 are only peak hour services, running from 6:00am to 9:40am in the morning peak and 3:20pm to 6:40pm in the evening. Due to the limited span of service, there is a significant drop between the number of AM riders and PM riders.

The Rutgers bus service provides a free service between the five campuses in the New Brunswick area, with the Busch and Livingston campuses in Piscataway being inside our study area. The Rutgers system only connects with rail service and other bus service at the New Brunswick Train Station, providing limited transfer opportunities for students, faculty, and staff who may be originating from areas that are not on the Northeast Corridor.

Existing Bus Service within the Study Area			
Provider	Route #	Description	
NJT	59	Plainfield - Newark	Commuter
NJT	65/66	Somerville – Mountainside - Newark	Commuter
NJT	114	Bridgewater – New York	Commuter
NJT	117	Somerville – New York Express	Commuter
NJT	810	New Brunswick – Woodbridge Center	Local
NJT	813	Perth Amboy – Middlesex County College	Local
NJT	814	North Brunswick – New Brunswick – Middlesex County College	Local
NJT	819	Piscataway – Plainfield – Metuchen – Middlesex Mall	Local
NJT	822	Plainfield – North Plainfield	Local
Middlesex County	M4	New Brunswick Station – Jersey Ave	Local
Middlesex County	M5	New Brunswick – North Brunswick	Local
Somerset County	DASH 851	Bound Brook to North Brunswick via Davidson Avenue & Cottontail Lane	Local

Demographic Information

Covering parts of Middlesex, Somerset and Union counties, the demographic characteristics of the study area show indications of immense opportunities for new transit service. Population density, and total employment, have changed in the area over the years. The population of Somerset County is 323,444 as of 2010, which is about 8.72% higher than it was in 2000. The population density of the county is 1,060.97 people per square mile. Non-Hispanic Whites make up the majority of people in Somerset County, representing 70.06% of the total population.

Union County has also experienced growth over the years. Growing about 2.6% since 2000, Union County had a population of 536,499 as of 2010. Median income of the Union County is \$69,347 in 2008-2012, growing by 25.3 % since 2000.

Middlesex County follows similar trend. As of 2010, the population of Middlesex County is 809,858, growing by 7.96% since 2000. Median household income in Middlesex County is \$79,442. Real estate values have also improved steadily since 2000. As of 2012, the median home value in Middlesex County is \$340,000, an increase of 101.78% since 2000.

Although the population has increased in the counties containing the study area, three municipalities in the study appear to have much lower population densities than average. These municipalities are South Plainfield Borough, Edison Township, and Piscataway Township. There are 8.32 people per square mile, 30.64 people per square mile in Edison and 18.95 people per square mile in Piscataway Township. Notwithstanding, the need for transit exists when examining population concentration spatially. The spatial pattern reveals pockets of dense, multifamily housing development in Piscataway near the Edison Train Station, and in South Plainfield along Brunswick Avenue. There is also a sign of significant improvement in housing units built as of 2010 or later across the study area. Particularly in Piscataway and South Plainfield, the data shows that 72 and 120 housing units, respectively, were built 2010 or later.

The demand for public transit usage has also improved over time. The exceptions are South Plainfield and Middlesex Borough, which could be due to a low population density in those areas. Covering a significant portion of Middlesex County, median household income in the study area is similar to Middlesex County as a whole (\$79,442).

Land Use

In order to propose a transit network for the study area that connects residents with key employment centers, the team conducted a land use analysis with the New Jersey Department of Environmental Protection's Land Use/Land Cover data (see appendix). Much of our study area consists of low-density urban and suburban housing. Key neighborhoods with higher population densities are located in Highland Park and New Brunswick; the southwest corner of Edison near the Highland Park border; and portions of Bound Brook, Plainfield, and North Plainfield.

Major commercial hubs in the study area are located in Piscataway along Centennial Avenue, Hadley Road, and Stelton Road; Routes 1 and 27 in New Brunswick, Highland Park, and Edison; Route 22 in Green Brook, North Plainfield, and Bridgewater; and downtown New Brunswick and Plainfield. The major industrial areas are along Interstate 287 in Piscataway, South Plainfield, and Edison; Raritan Center in Edison; South Clinton Avenue in South Plainfield; and along the Conrail freight tracks in Middlesex.

Employment Data

Employment data for the study area was obtained using the ReferenceUSA Business Database. The most significant cluster of employment that is currently not being served by transit is the Centennial Avenue corridor in Piscataway. The approximately 7 mile long corridor has over 10,000 employees within ¼ mile of Centennial Ave. Our proposal includes providing service to this corridor via three routes. First is the WM 1 route, which serves the length of the corridor, while the WM2

would run along the western half of Centennial Ave, and WM 3 would cross Centennial at Hoes Lane, providing a North-South connection.

Another employment cluster is the Davidson Avenue/Cottontail Lane area of Somerset. This area has over 11,000 employees according the Reference-USA, but is currently served by the Somerset County DASH route, which only runs during the AM and PM peak. Due to the high level of employment in this area, our proposal includes all-day service in this area, which may make transit more attractive to riders who work different shifts than the typical 9:00am to 5pm, or who need to use the service in the mid-day for any other reason.

The Piscataway Municipal complex which has roughly 4500 employees, would be served by the proposed WM 2 route on Hoes Lane. Other smaller clusters include Raritan Center (20,000 employees) which is served by the 813 route, and the Middlesex County College area (4000 employees) which is served by the existing 813 and 814 routes, and would be served by the proposed WM 4 route.

Workforce Origin Destination Data

Reviewing Census Longitudinal Employer-Household Dynamics (LEHD) data for the study area helped us determine the top worker origins to employers in our study area and thus possible bus routes to help the most people get to work. See Appendix for maps for origin-destination data. Overall, most of the people who work in our study area commute from places in Middlesex and Somerset Counties. The highest concentration of people who work along Centennial Ave. in Piscataway live in that town but also reside in South Plainfield, Franklin, Hillsborough, and Bridgewater. Unfortunately, these municipalities' sprawling land use patterns and many cul-de-sacs make it difficult to provide transit service to their residents. Employees who work in New Brunswick tend to commute from within the city, Highland Park, Piscataway, North Brunswick, and Franklin. As New Brunswick is the region's transit hub, there is already some transit service to the city from each of these municipalities. The operating hours and headways of

each service, and therefore their reliability for riders, vary. For example, Highland Park has two bus routes with an approximate combined peak headway of 30 minutes, while Piscataway only has infrequent AM peak service from the M1A. Moreover, this route's mission is to serve area employees coming from the New Brunswick Train Station rather than town residents.

Just east of our study area is Raritan Center, a multimodal freight warehouse and distribution center home to over 20,000 jobs. The highest concentrations of employees to Raritan Center live near the site in Edison and also Fords (a community in Woodbridge) and Perth Amboy. Both Fords and Perth Amboy both have direct bus service to Raritan Center with the 813 bus.

Stakeholder Interviews

Public outreach a critical piece of the transport planning process. From the Federal Highway Act of 1962 to Moving Ahead for Progress in the 21st Century Act (MAP-21), enabling legislation for transportation funding has required public outreach for over forty years. Title VI of the Civil Rights Act of 1964 even stipulated that minority and low-income populations need additional attention in the planning and decision making process. This engagement will occur pursuant to Federal Transit Administration (FTA) regulations and applicable laws subsequent to the presentation of this study to NJ Transit and its partners. If NJ Transit, implements any suggestions, it will follow its applicable Service Standards and Service Policies procedure process that are in compliance with NJDOT regulations, NJ State law, Federal law, and FTA regulations.

The *Middlesex County Bus Study* sets the groundwork for public outreach by engaging private developers, municipal officials, and transit managers in Middlesex County, Somerset County, and Union County. Other than NJ Transit staff, who provided a great deal of insight, critique, and data, two of the most prominent partners in this study have been Somerset County Transit and the Middlesex County Office of Planning. There is a complete list of contacts at the end of this section.

Middlesex County Advisory Contacts

Anthony Gambilonghi and Ryan Rapp of the Middlesex County Planning Department presented Middlesex County's transit network as one that had its network coverage and service frequency cut, but is ready for a more robust public transport network. They provided insight on various routes that were discontinued and what the County did to mitigate these cuts.

For instance, Stagecoach's Suburban Transit formerly operated the Route 100L which linked New Brunswick, Edison, and Dunellen. The operator decided to discontinue the route, as was the case in a few other bus routes. When NJ Transit discontinued the 980, MCAT replaced it with the M1A. This locally developed limited service route shows an investment on the behalf of the county in public transport and a demand for public transport. However, with only one trip per day in each direction, it is questionable if the M1A is a full commitment by the county, or if it is simply a humanitarian lifeline. Additionally, studies such as the I-287 Mobility Plan provided origin-destination pairings and employment trends.

In addition to informing our study with respect to past practice and studies, Middlesex County's planning officials provided information on a new high density development at Camp Kilmer in Edison Township. While Edison Township demographics have not changed heavily, Camp Kilmer's 2015 opening is anticipated to generate a shift in characteristics. The development will have 25% of its housing stock dedicated to low-income and homeless persons; demographics that are more likely to be transit dependent. Camp Kilmer was mentioned by these officials as a prime site for transit service. It is interesting to note that the site for the Camp Kilmer project currently has zero transit service. With the projected demographic of Camp Kilmer, there is enough transit demand to support any proposed routes in this area.

Township of Piscataway Administrator Joe Criscuolo was another contact that provided critical

information. He broadly mentioned that the highest demand for transportation improvements are feeder shuttles to NJ Transit Rail Stations, particularly to Bridgewater station due to its proximity to Interstate 287.

Somerset County Transportation

Yvonne Manfra from Somerset County Transportation described the difficulties that Somerset County has historically faced in providing transit services to its communities.

Somerset County provides all capital and operating funds for its fixed route bus services. It has identified various important trip generators, such as Raritan Valley Community College, Manville, and the Easton Avenue corridor. Somerset lacks the funds to meet capital expenditures for service expansion to better serve these trip generators.

Somerset paratransit services are a subrecipient of federal funds via NJ Transit. Thus Somerset County must comply with all FTA regulations for subrecipients. Somerset has lacked support on transport planning activities, such as Title VI compliance. We have learned that NJ Transit now mobilizing a support network for these kinds of activities, but providing information about what responsibilities subrecipients have and making the resources available to meet these responsibilities is a critical action item for NJ Transit.

Ridership data that Ms. Manfra provided and a follow-up phone conversation confirmed that the strongest performing Somerset County Transportation Routes are the DASH routes that run along Easton Ave from Bound Brook to New Brunswick, serving major employers such as hotels and corporate offices in the Franklin Township area. Yvonne said that additional service to this area would benefit transit dependent persons.

Based on Ms. Manfra's recommendations, the blueprints for a Hillsborough to Raritan Valley Community College route via Manville were developed.

Additionally our study tried to grapple with policy issues. Currently there is no agreement that allows a NJ Transit bus customer to transfer at a reduced rate to a Somerset County Transportation bus and vice versa.

Somerset County Municipal Contacts

Richard Phoenix, Administrator of North Plainfield, explained there are two NJ Transit commuter rail stations close that serve the Plainfield areas: Netherwood and North Plainfield. He described a great deal of momentum in the area about the midday Raritan Valley Line direct service to New York Penn Station. He also mentioned that there is an abundance of parking at and around the Netherwood train station.

The always-busy Route 22 traverses the Borough of North Plainfield. Of course, it is a major east-west artery, and there are bus shelters on and/or near the highway that allow for passenger service to the Port Authority bus station in midtown NYC. He explained that a paucity of a one or two seat rides to many work sites (i.e. Liberty Science Center) is frustrating for his constituents and is what convinces many North Plainfield residents, especially those who work in New Jersey, to drive to work. He also elucidated that many people who utilize the bus service walk or take taxis to bus stops on Route 22 due to the lack of Park-N-Ride locations.

The economic outlook for the Plainfields is dim. Muhlenberg Campus Hospital, a major employer, recently shut its doors. There is a glimmer of hope in the wholesale and retail industry as there has been some economic growth. Recently, a Costco on Route 22 replaced a long disused shopping center

Union County Municipal Contacts

The study also engaged Mr. William Nierstedt, a planner for the Union County municipality of Plainfield, NJ. Plainfield was recently designated a Transit Village by NJ Transit. Plainfield is excited about this and the advent of the one-seat train ride to New York Penn Station on weekdays at off peak hours. The city has numerous approved projects

located in the downtown, however very few have been built due to the city's lackluster economy. Many of the city's residents find employment outside of the city. The city sees an opportunity with the Union County Bus Rapid Transit – Sustainable Corridor Study for the area around 2nd and Grant Avenues as a catalyst for redevelopment in this area. There is a large parcel of land located at this intersection that could be used for the station and associated redevelopment. This would be one terminus of the new Bus Rapid Transit (BRT) line running from Elizabeth and Newark Airport. The new station could also be used as a transfer point for new bus lines going south into Northwestern Middlesex County.

List of Contacts:

Middlesex County Office of Planning

Anthony Gambilonghi, Supervisor, Transportation

Middlesex County Area Transit (MCAT)

Beverly Briggs, Operations Manager

Borough of Metuchen

Chris Cosenza

Township of Piscataway

Joseph Criscuolo, Township Administrator

Weingarten Law-Villas Edison Transit Oriented Development Project

John Verlaque

RideWise

Donna Allison, Exec. Director

Somerset County Transportation

Yvonne Manfra, Director

Township of North Plainfield

Richard Phoenix, Administrator

City of Plainfield

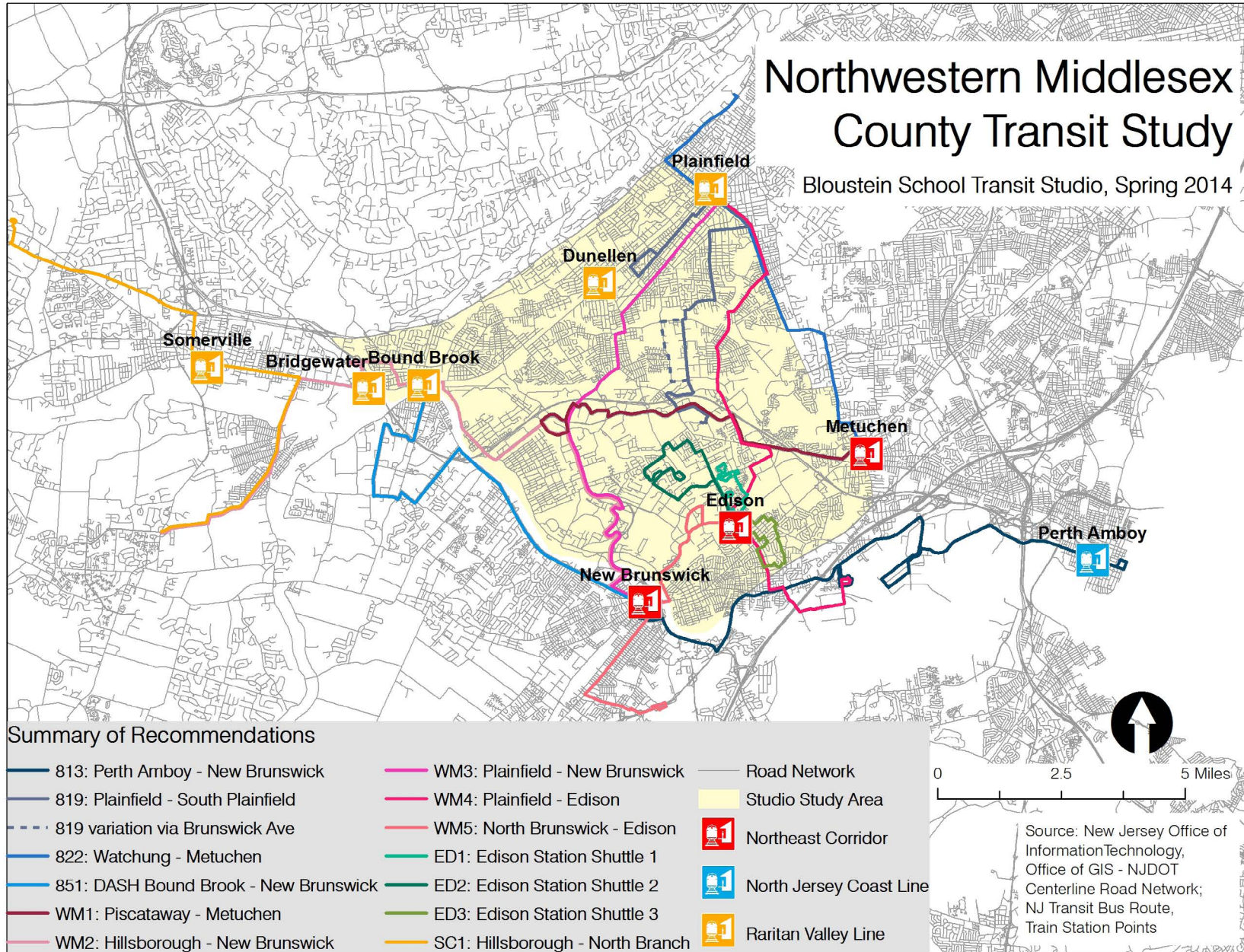
Bill Nierstedt, Planner

South Jersey Transportation Authority

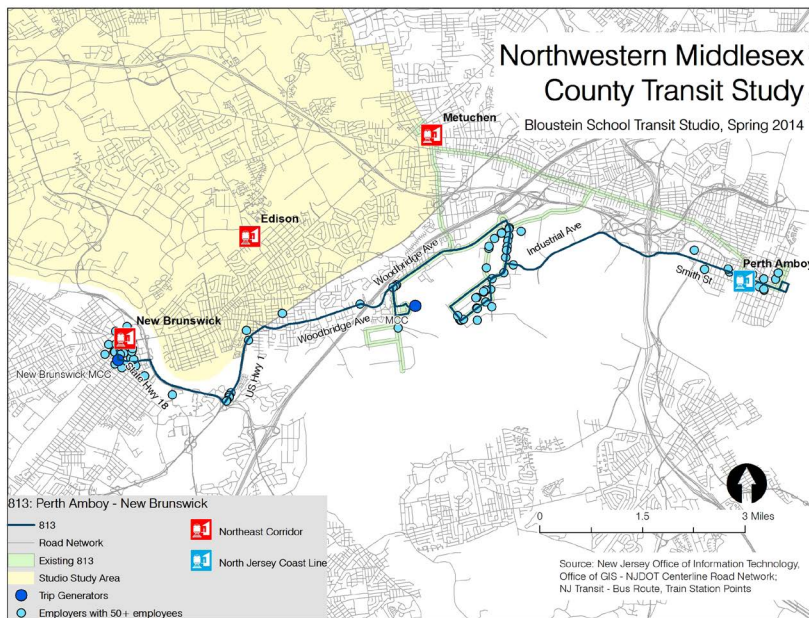
Greg Fidyk, Financial Systems Manager



III. Recommendations



Modifications to Existing Routes



813 - Perth Amboy to New Brunswick

Distance: 17 miles

Run Time: 65 Minutes

Service Hours: 6:00am to 10:00pm,
Monday to Friday

Projected Headways: 60 Minutes

Serving: North Brunswick, New Brunswick, Edison, Raritan Center, Middlesex County Community College, Perth Amboy

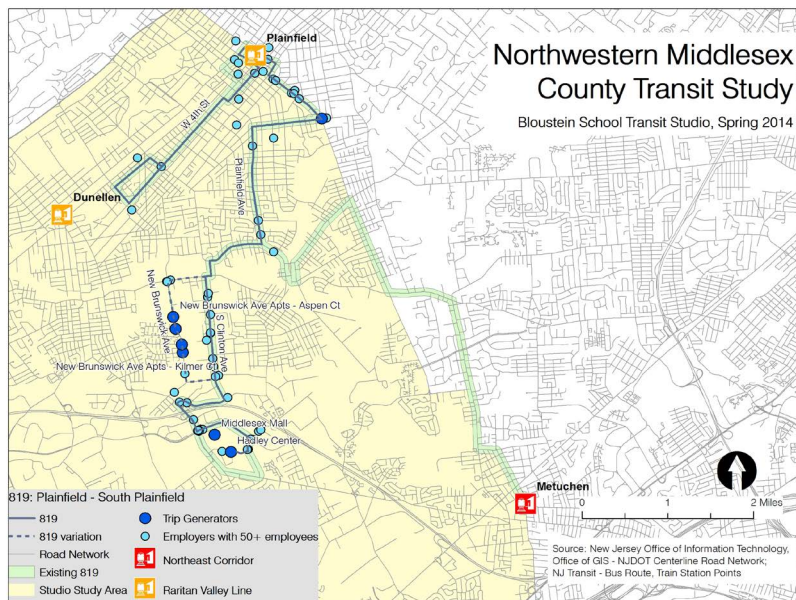
The 813 will provide one-seat service to connect the transit-dependent populations of New Brunswick and Perth Amboy with two major regional destinations: Raritan Center and Middlesex County College. To decrease the route's run time and make the trip shorter for passengers traveling the entire route, the bus runs closed-door along Riverside Drive and US Highway 1 and Route 18. At the New Brunswick terminus of the line, passengers can transfer to NJ Transit Northeast Corridor trains to New York and Trenton, NJ Transit bus routes 810, 814, and 818; Amtrak trains, Rutgers University buses, BrunsQuick, DASH, and MCAT shuttles. At the Perth Amboy terminus of the line, passengers can transfer to the North Jersey Coast trains to New York or Bay Head and NJ Transit bus routes 48, 116, 813, 815, and 817.

Communities Served

The 813 serves transit-dependent populations in Perth Amboy and New Brunswick. In Perth Amboy, the route primarily covers a dense residential area and the Perth Amboy Train Station. While the route does not directly serve residential areas in New Brunswick, the dense neighborhoods surrounding downtown and many bus connections at route's terminus ensure that the 813 is accessible to city residents. The New Brunswick Train Station bus stop at Somerset and George Streets is also within walking distance of major employers and destinations: Rutgers University, the Robert Wood Johnson Hospital, the Johnson and Johnson corporate headquarters, and the Middlesex County Courthouse. In addition, the route has a stop at Joyce Kilmer Avenue and New Street, where Middlesex County College has a satellite building. Consequently, the 813 will act as a shuttle between college facilities. The socioeconomic composition of students at the college means that some students will likely use the bus to school and between facilities: 46% of full-time students have an annual household income under \$30,000. More mass transit connections to Middlesex County College and Raritan Center are also important not only to provide one-seat rides to these destinations for people who rely on transit, but also for riders who choose to use transit instead of fighting traffic. With over 20,000 jobs at Raritan Center and 13,000 students and 500 employees at Middlesex County College, these destinations are large traffic generators.

Operation

The 813 would operate on weekdays between 6:00am and 10:00pm. Since this modification compliments existing service on the 813 and 814, only 60-minute headways are necessary. However, the 813 could also run direct service from New Brunswick to Perth Amboy with no intermediate stops if there is sufficient demand. This service might be practical on weekends when there is less demand for service to Middlesex County College and Raritan Center but riders still want to travel between Perth Amboy and New Brunswick. The regular 813 and 814 routes would still serve the college and Raritan Center.



819 - Plainfield to South Plainfield via Clinton Ave.

819A - Plainfield to South Plainfield via New Brunswick Ave.

Distance: 11 Miles

Run Time: 35 Minutes

Service Hours: 6:00am to 10:00pm,
Monday to Saturday

Projected Headways: 30 Minute Peak, 60
Minute Off-Peak

Serving: Plainfield, South Plainfield,
Piscataway, Middlesex Mall, Hadley
Center

This route is a modified route to the existing NJ Transit 819 bus route. The 819 currently has two major variations, one from Plainfield to Middlesex Mall / Hadley Center and one from Plainfield to the Metuchen Train Station. The modified 819 will run on the current Plainfield to Middlesex Mall / Hadley Center alignment with a new variation variation called 819A located along New Brunswick Road. The 819A runs during the peak periods only.

Communities Served

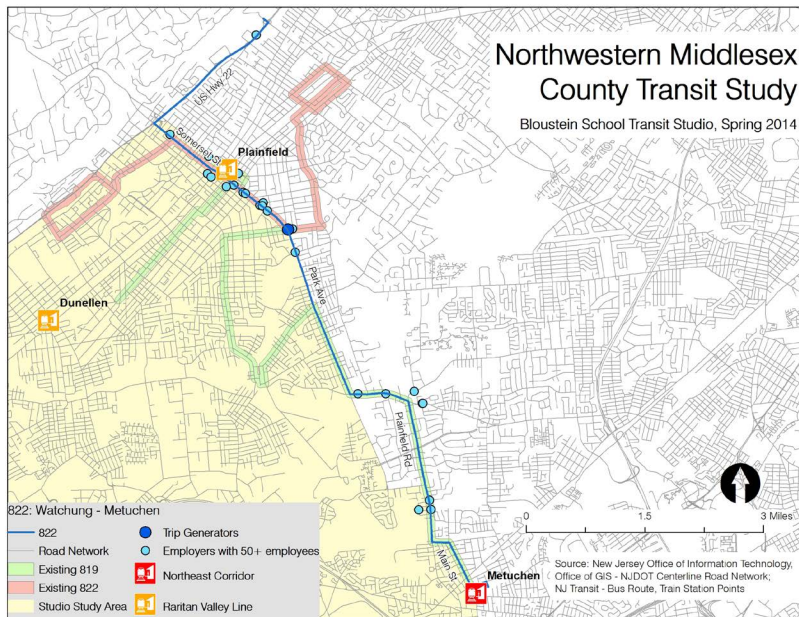
The new modified 819/819A covers the northern section of the studio study area, including parts of Plainfield and South Plainfield. The areas in Plainfield include the southwestern residential area and the downtown area, which includes the Plainfield Train Station on the Raritan Valley line. It continues south on Park Avenue, passing by the JFK Muhlenberg Hospital Site. The 819/819A then heads west on Randolph Rd, south on Plainfield Avenue, and west on Sampton Avenue through residential neighborhoods. After the route turns south on to Clinton Avenue, the 819A deviates off the 819 by heading west on New Market Avenue and south on New Brunswick Road serving a series of housing developments in South Plainfield and Piscataway whereas the 819 continues on S Clinton Ave serving the industrial employers. The 819A rejoins the 819 at Tyler Place and S Clinton Avenue and heads west on Hamilton Boulevard until the intersection with Stelton Road. Finally, it heads south on Stelton Rd to its' terminus Middlesex Mall. Before reaching the terminus, it will stop the proposed bus transfer point with the proposed routes WM1, 2, and 3.

Rationale

The modified NJ Transit 819 bus route will benefit from increased frequency and better connection opportunities to retail and light industrial sectors as well as to the Plainfield Station. This will allow for employees, especially in retail and light industry, who are more likely to be transit dependent than the broader population, easier access to their workplace. Despite the Hadley Center being a major trip generator, the current 819 suffers from low ridership in this area because the current service hours and frequency do not meet the needs of these workers whose work shifts are outside of peak hours and the hours of service. The modified 819 will also have the availability of a transfer with the new proposed WM1 line at the Middlesex Mall.

Operation

The modified 819/819A route would operate Monday to Saturday between 6:00am and 10:00pm, with 30 minute headways in the peak period where the 819/819A runs concurrently, and 60 minute headways in the off peak period. The later running time will allow for commuters to travel home from the Plainfield Train Station and allow retail and shift workers to have a ride home.



822 - Watchung - Metuchen

Distance: 11 Miles

Run Time: 50 Minutes

Service Hours: 6:00am to 10:00pm,
Monday to Saturday

Projected Headways: 30 Minute Peak, 60
Minute Off-Peak

Serving: Watchung, Plainfield, JFK Medi-
cal Center-Muhlenberg Hospital complex,
Edison, Metuchen

The modified 822 bus route will replace the current NJ Transit 822 bus route and one of the variations of the current 819 bus route. The modified 822 will run between US Highway 22 in Watchung, serve the Plainfield Train Station on the Raritan Valley Line and then on to the Metuchen Train Station on the NJ Transit Northeast Corridor line.

Communities Served

The modified 822 covers the eastern section of the studio study area, including parts of Watchung, Plainfield, Edison and Metuchen. The area in Watchung is a retail corridor with a major trip generator at the Watchung Square Mall. The route passes through North Plainfield to another major trip generator at the Plainfield Train Station on the Raritan Valley Line, where transfers are available to the 59, 65, 113, 114, and 819 bus routes. The route continues south on Park Avenue with a stop at the JFK Muhlenberg Hospital Site. The modified 822 will then run on the eastern variant of the current 819 which will now become the 822. This includes the major retail area at the intersection of Oak Tree Road and Park Avenue. A residential area is served after the line turns south on to Plainfield Road and then enters downtown Metuchen where the route ends at Metuchen Train Station on the Northeast Corridor line. Transfers will be available here for the 810, 813, and some new bus lines proposed in this study.

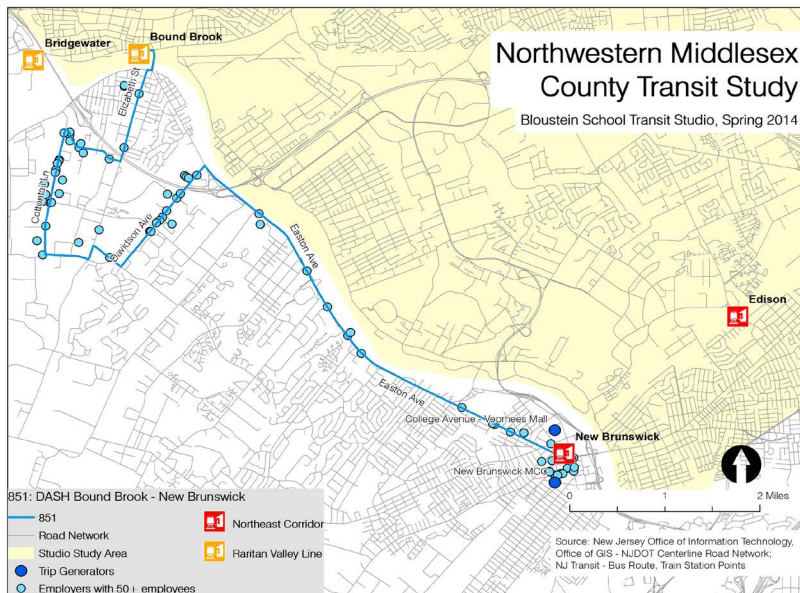
Rationale

The current 822 bus route runs from US Highway 22 in North Plainfield to the Plainfield Train Station and then to the JFK Muhlenberg Hospital Site and the Netherwood Train Station. According to the Ridecheck Plus ridership data this bus route has low ridership. The current 822 stops at a new Costco on US Highway 22 in North Plainfield. The new route proposes to serve at Sears on US Highway 22 and head west to stop at the Watchung Square Mall which contains a Walmart, Home Depot, Target and many small retail stores. The new route will provide access to more retail employment for residents in Plainfield. The new 822 will continue to serve the Plainfield Train Station and the JFK Muhlenberg Site. The current route from JFK Muhlenberg to the Netherwood Train Station will be discontinued due to very low ridership. Riders could still access the Muhlenberg site from the Plainfield Train Station using the new modified 819 or 822.

modified 819 or 822. The new route then follows the current 819 variant south on Park Ave to Metuchen. This would allow for faster and more frequent service between the Plainfield and Metuchen train stations. This route would also overlap with the Union County Rahway to Plainfield Shuttle that provides a connection from North Plainfield to Watchung Square. This new route would complement the shuttle by increasing the span of service for employees utilizing the Union County Shuttle.

Operation

The new 822 route would operate Monday to Saturday between 6:00am and 10:00pm, with 30 minute headways in the peak period, and 60 minute headways in the off peak period. The later running time will allow for commuters to get home from the two stations in the evening and allow retail workers a ride home from a later work shift. With improved headways and access to more major trip attractors, this new 822 should be more successful at serving residents and employers in the retail areas and will allow for more access to the two NJ Transit rail stations.

DASH Fusion 851 and 852**Distance:** 12 Miles**Run Time:** 55 Minutes**Service Hours:** 6:00am to 11:30pm,
Monday to Friday**Projected Headways:** 30 Minute Peak, 60
Minute Off-Peak**Serving:** New Brunswick, Somerset, and
South Bound Brook

DASH Fusion is a bus route being proposed by the Bloustein School Transit Studio for consideration by the Middlesex County Planning Board and NJ Transit. The DASH Fusion will replace part of the operation of DASH 851 and 852, which currently run between the New Brunswick Train Station, the Bound Brook Train Station and the Bridgewater Train Station. This route will merge parts of DASH 851 and 852 into a unique route to serve employers along Cottontail Lane and Davidson Avenue and providing continuous connectivity between the NJ Transit's Northeast Corridor and the Raritan Valley Line, by integrating DASH routes to NJ Transit regular services.

Communities Served

DASH Fusion will connect the New Brunswick and Bound Brook Train Stations. Starting at the New Brunswick Train Station, the area covered for this route includes the hospitals along Easton Avenue, the hotels in Franklin Township, along Cedar Grove Lane and Worlds Fair Drive; the commercial and industrial zones in South Bound Brook, including Davidson Avenue, Cottontail Lane, and Campus Drive; and the Bound Brook Train Station on the Raritan Valley Line.

This proposal is outside of the study area; but connectivity between the New Brunswick and Bound Brook Train Stations is in high demand. Furthermore, DASH Fusion plans to provide service to workers in the industrial and commercial areas of Somerset and Bound Brook whose shifts do not match with the traditional 9:00am to 5:00pm schedule. There are over 120 employment sites with more than 50 employees along the DASH route. Jobs at retailers such Shop Rite on Elizabeth Avenue or Kmart on Easton Avenue; hotels such as the Marriott Courtyard or Holiday Inn on Davidson Avenue, and hospitals such as St. Peter's University Hospital, among others, are jobs that not necessarily follow the conventional work schedule. Furthermore, workers with night shifts also need public transit and the current DASH only provides service during peak hours.

Rationale

Presently, the DASH routes only run during the peak periods. This proposal eradicates that issue by providing expanded service hours.

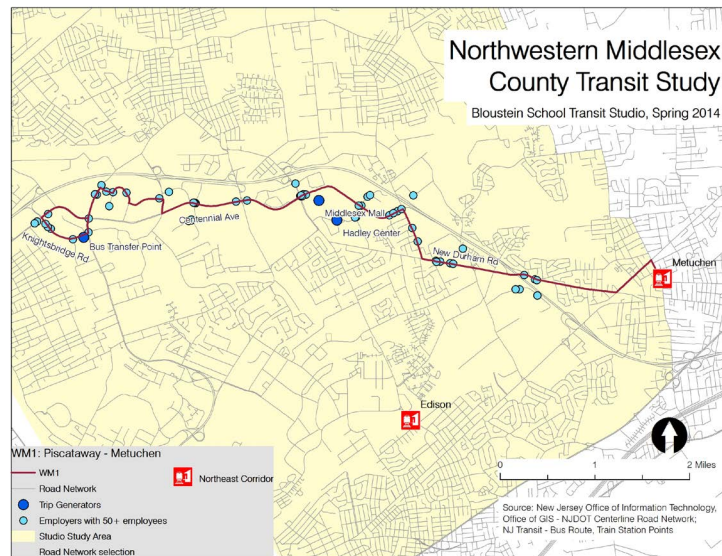
The current DASH operate only during peak hours on weekdays between 6:00am and 9:50 am and between 3:30pm and 7:50pm. During the morning and the afternoon, DASH only provides one cycle of service for its customers, which constrains ridership growth. Despite being anchored by high-powered trip generators, such as the New Brunswick Train Station and the Bound Brook Train Station, the existing DASH service does not seem to meet the ridership demands of the area due to its infrequent service. Currently, customers trying to make a transfer between the Northeast Corridor and the Raritan Valley Lines do not have a viable option. But with this route, customers will be able to make a connection between the New Brunswick and Bound Brook Train Stations even during off-peak hours.

DASH charge a fare of \$2.00 for trip; however, if New Jersey Transit integrates these routes into its regular services, the fare structure would change, starting at \$1.50 and gradually increasing according to distance. Additionally, we recommend a harmonized fare system between New Jersey Transit and other Somerset County transit services.

Operation

The DASH Fusion would operate on weekdays between 6:30am and 11:30pm, with 30 minute headways in the peak period, and 60 minute headways in the off peak period. With improved headways, the DASH Fusion should be more successful at serving commuters and employers in New Brunswick, Somerset, South Bound Brook, and Bound Brook than existing DASH service. It is reasonable to assume that ridership will increase in comparison with the existing service, inasmuch as it would operate not only during the peak hours, but also during off-peak periods. By replacing the Somerset County DASH services with expanded operation under NJ Transit, it would be easier to achieve an efficient coordination between the proposed WM5, which travels down Livingston Avenue to bring employees to jobs in Franklin Township, and the DASH Fusion. Employees and commuters can take advantage of the connectivity between the new services proposed by the studio and make customers' transfers more efficient and frequent.

New Route Proposals



WM1 - Metuchen to Piscataway

Distance: 8 Miles

Run Time: 45 Minutes

Service Hours: 6am to 10pm, Monday to Sunday

Projected Headways: 30 Minutes

Serving: Metuchen, South Plainfield, Piscataway

WM1 is a new bus route being proposed by the Bloustein School Transit Studio for consideration by the Middlesex County Planning Board and NJ Transit. WM1 will provide service between the Metuchen Train Station and the many jobs and businesses in the Centennial Ave corridor until Knightsbridge Road.

Communities served

WM1 runs east-west across the center of the study area. The route primarily serves commercial and industrial area with sizeable residential centers in Metuchen. Starting in the east, the route begins at the Metuchen Train Station travelling along main street before turning left on Middlesex Avenue and travelling through dense residential housing, before turning right on New Durham Road and travelling through lighter residential. After passing over Interstate 287, there is a section of commercial and industrial before a residential section on Durham Avenue. The route then travels along Hadley Road, passing by the Middlesex Mall before continuing onto Centennial Avenue. The route then leaves Centennial Avenue to travel through a dense cluster of employment centers along Colonial, New England and Springfield Avenues. After turning back onto Centennial Avenue, the route will turn left onto Knightsbridge Road where it will end at a transfer center for connections to other routes.

Rationale

The route primarily serves as a connection for commuters who travel on the Northeast Corridor access to employment opportunities along the Centennial Avenue corridor. It also provides workers and residents living in Metuchen to jobs and commercial opportunities along the corridor. Currently, there is infrequent transit service in this area, limiting access to the region for low and no car households.

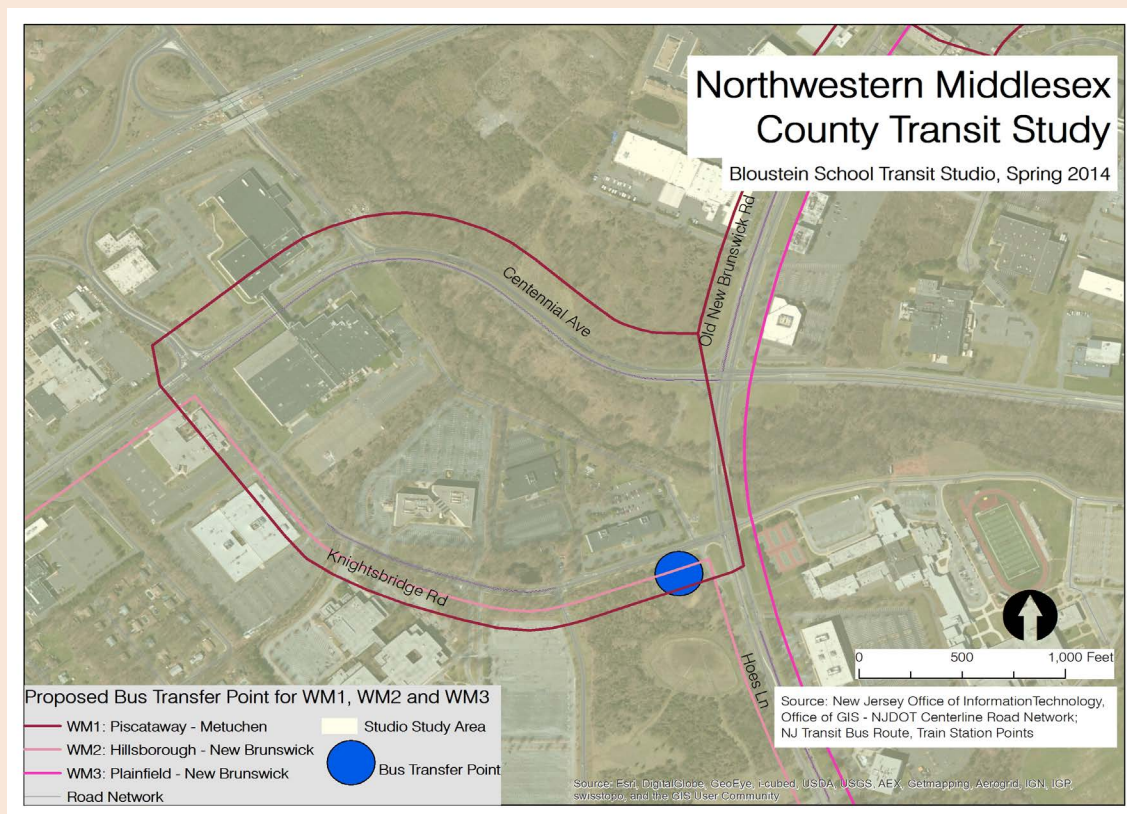
As a designated Transit Village, Metuchen's dense and walkable design make it an ideal transit node. In addition, connections to the transit station will provide job access for the hundreds of thousands of residents living near Northeast Corridor train stations. By linking with 3 other proposed new routes, the WM1 provides access to the corridor for a substantially larger number of people than those living on the route.

Additionally, this route serves as a link between the various WM routes as it overlaps with every WM Route. The proposed transfer center on Knightsbridge Road will connect the region for passengers coming on the Raritan Valley Line, by using the WM2 line. Passengers will also be able to connect using the WM3 and WM4 allowing access to the corridor for residents of Plainfield, South Plainfield and Dunellen.

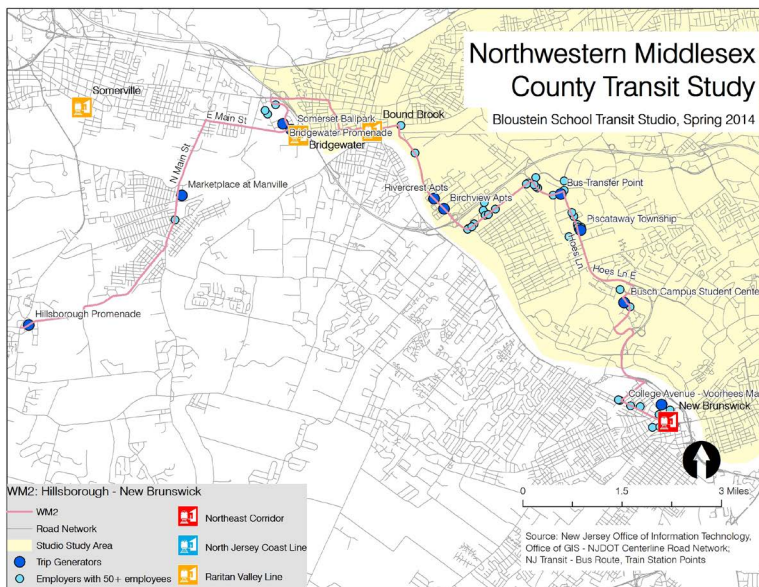
Operations

The WM1 will operate 7 days a week between 6:00am and 10:00pm, with 30 minute headways. Although many travelling to Centennial Avenue are commuting to jobs at peak period, there are many employees in the Centennial Avenue corridor working in non-traditional hour jobs such as retail. In particular, access to the mall for shopping and work is especially important on weekends. These factors combined with the need for regular connections with other transit lines requires the WM2 to run consistently during evening and weekends.

Knightsbridge Road Transfer Station



During the route development process, it was clear that there was an essential need for a main transfer point/transfer for the system to be holistic. The transfer point that is being proposed will be on Knightsbridge Road in Piscataway. The Knightsbridge Road Transfer Station will serve as the terminus of the WM1: Piscataway to Metuchen Route. The transfer point will also link with other WM routes travelling along Centennial Avenue.



WM2 - New Brunswick to Hillsborough

Distance: 16.9 miles southbound; 18.3 miles northbound

Run Time: 60 Minutes

Service Hours: 6:00am to 10:00pm, Monday to Saturday

Projected Headways: 30 Minutes

Serving: New Brunswick, Somerset, Bound Brook, Manville and Hillsborough

WM2 is a new bus route being proposed by the Bloustein School Transit Studio for consideration by the Middlesex County Planning Board and NJ Transit. WM2 will be a new service route, which runs between the New Brunswick Train Station in downtown New Brunswick and the Hillsborough Promenade in Hillsborough.

Communities served

WM2 covers the westernmost section of the studio study area, including parts of Piscataway, Bound Brook and Manville. In Piscataway, the WM2 will serve Centennial Avenue, which is primarily industrial, while also having a major trip generator at Rutgers University - Busch Campus. After stopping at the Busch Campus, the route continues along Route 18 North until Knightsbridge Road, which will house a major transfer point for every proposed WM route that runs along Centennial Avenue. The rationale for the transfer point on Knightbridge Road instead of Centennial Avenue is because Centennial Avenue does not have the necessary infrastructure capacity for a bus transfer station. The WM2 then continues along Centennial Ave and turns right onto River Road into Bound Brook. It then uses Main Street in Bound Brook and passes both the Bound Brook and Bridgewater Train Stations before turning toward Manville. Once this route passes through Manville it will continue onto a major trip destination/generator, the Hillsborough Promenade (the route's western terminus).

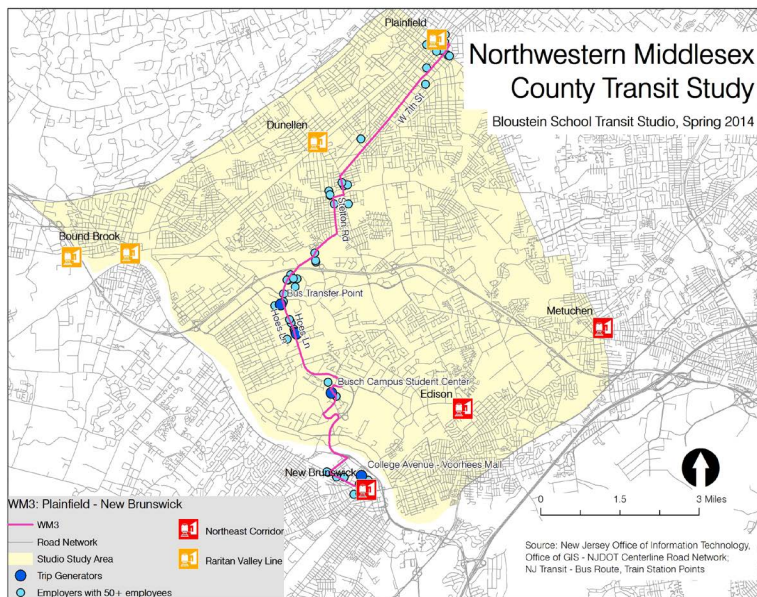
Rationale

The WM2 is a new route that will help connect residents and workers of Hillsborough and New Brunswick, while providing a connection to Rutgers Campus for both employees and students. This route passes many trip generators, including the New Brunswick Train Station, Rutgers University, office parks along Centennial Avenue, Birchview Apartments, Bound Brook Rail Station, Bridgewater Promenade, Bridgewater Rail Station, Somerset Patriots Ballpark, The Marketplace at Manville and Hillsborough Promenade.

Operation

The WM2 would operate 7 days a week between 6:00am and 10:00pm, with 30 minute headways all day,

with the possibility for longer headways on the weekend. The need for 30 minute headways, especially on the weekdays is due to the need to serve employees for various shift times at the major employment destinations of Rutgers University, the Centennial Avenue corridor and the Hillsborough Promenade. By operating 30 minute headways the WM2 can be assured that it will not lose trips to other forms of commuting, especially on the weekdays when ridership will be highest.



WM3 - North Brunswick to Plainfield

Distance: 16 Miles

Run Time: 40 Minutes

Service Hours: 6:00am to 10:00pm,
Monday to Saturday

Projected Headways: 30 Minutes

Serving: Plainfield, South Plainfield, New Brunswick, Piscataway, Rutgers University

WM3 is a bus route being proposed by the Bloustein School Transit Studio for consideration by the Middlesex County Planning Board and NJ Transit. WM3 will be a new service route, which runs between the Plainfield Train Station in the western end of downtown Plainfield and the New Brunswick Train Station in New Brunswick.

Communities served

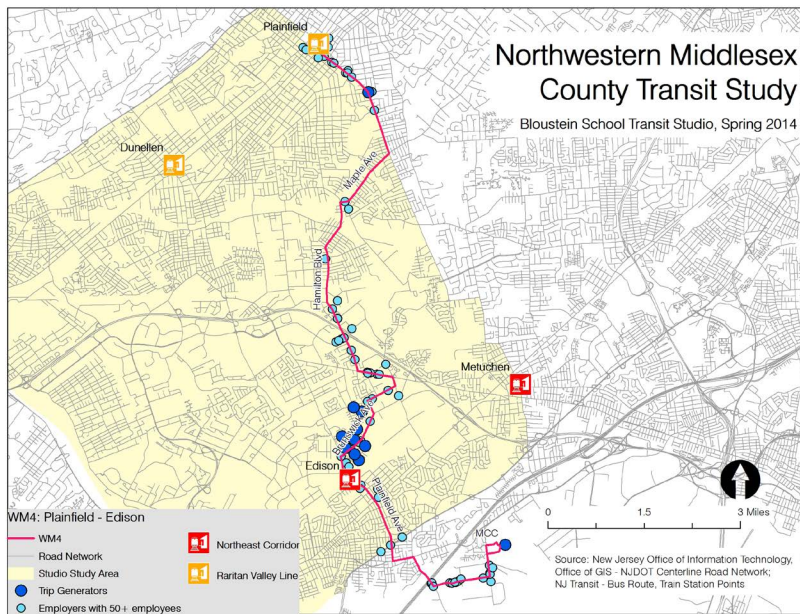
WM3 covers an area that is not currently served by any NJ Transit or county bus routes. Like the WM2, the WM3 will begin at the New Brunswick Train Station at its southern terminus and will have a northern terminus at the Plainfield Train Station. The route will make a stop at the proposed bus transfer point on Knightsbridge Road in Piscataway to facilitate connections with the other WM Routes. As with the WM2, the WM3 will also stop at Rutgers University - Busch Campus. After stopping at Rutgers University, the route continues along Route 18 North until Route 18 North becomes Old New Brunswick Road near the border of Piscataway and South Plainfield. The WM3 then travels down Stelton Road for a short period before turning on Lakeview Avenue. After turning onto South Washington Avenue, the route then turns right onto West 7th Street, entering into Plainfield. Once in Plainfield the route will turn onto Watchung Avenue before it pulls into the Plainfield Train Station.

Rationale

The WM3 is a new route that will help connect workers of Plainfield with destinations in and around New Brunswick. The town planner of Plainfield, William (Bill) Nierstedt, advised the studio team to come to the Plainfield Train Station during the morning peak to witness the flow of commuters. Upon doing the fieldwork, the team found that many of those boarding the train were heading westbound, toward either Bound Brook or Somerville. Mr. Nierstedt mentioned how many of these riders are workers who have no direct connection between Plainfield and New Brunswick, so they are taking the train Westbound before getting on a county bus to get down to their jobs in New Brunswick and Piscataway. With the knowledge, the team found it to be imperative to provide these riders with a one seat ride and at a lower fare than offered on the train to DASH.

Operation

The WM3 would operate 7 days a week between 6:00am and 10:00pm, with 30 minute headways in all day, with the possibility for longer headways on the weekend. Much like the WM2, the need for 30 minute headways, especially on the weekdays is due to the need to serve employees for various shift times at the major employment destinations in and around the study area. By operating on 30 minute headways and providing a one seat ride to the Plainfield-New Brunswick commuters the WM3 can expect strong ridership from the outset.



WM4 - Plainfield to Edison

Distance: 15 Miles

Run Time: 40 Minutes

Service Hours: 6:00am to 10:00pm,
Monday to Saturday

Projected Headways: 30 Minutes

Serving: Plainfield, South Plainfield,
Metuchen, Highland Park, Middlesex
Community College

WM4 is a bus route being proposed by the Bloustein School Transit Studio for consideration by the Middlesex County Planning Board and NJ Transit. The WM4 will be a new service route, running between the Plainfield Train Station in the Western end of downtown Plainfield (same terminus as WM3) and Middlesex County College in Edison.

Communities served

WM4 serves the towns of Plainfield, South Plainfield and Edison. Starting in Downtown Plainfield, the route begins at the Plainfield Train Station where there are a plethora of transfer opportunities to NJ Transit buses and a significant number of trip generators from various businesses. The route travels southeasterly on Park Avenue by several schools and businesses in Plainfield and South Plainfield. This routing mirrors the current infrequent NJ Transit 819 route. At the junction with Maple Avenue, it bears right towards Downtown South Plainfield. At the Lakeview Avenue junction, the WM4 will turn left and continue south, servicing the industrial businesses alongside of I-287. At New Durham Road, the WM4 bears left and providing a transfer opportunity with the WM1. It leaves the WM1 by heading south on Talmadge Road and making another right on Brunswick Avenue. This section of Edison is a mixture of industrial, strip malls and apartment complexes. At the end of the road, the WM4 will bear left on to Plainfield Avenue, passing through the Edison Train station and the transfer point with the Edison Shuttles as well as WM5. The WM4 will continue on Plainfield Ave passing by the Wick Shopping Plaza at the junction with Route 1. At the end of Plainfield Ave, the WM4 will turn left onto Woodbridge Avenue with a right turn on to Meadow Road a few blocks ahead. After passing over the New Jersey Turnpike, the route turns left on to Executive Avenue passing through the major Industrial complex. At the end of the road, the WM4 will turn left on to Mill Road. The route will then turn right on to College Drive East, ending at the main campus building with the 813 and 814 routes.

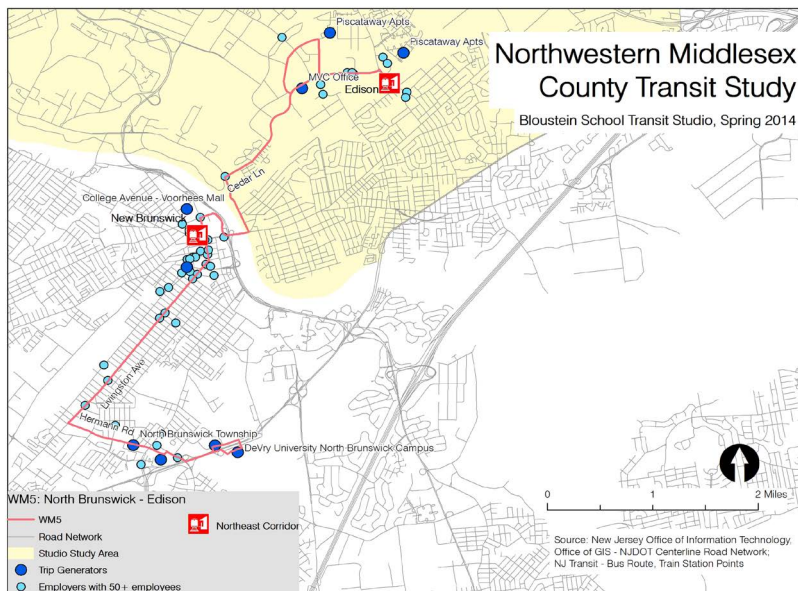
Rationale

The WM4 is a new route that will help connect workers of Plainfield with destinations in and around Edison and Metuchen and also to provide a north-south link between the Raritan Valley and Northeast Corridor Lines that is not currently served by a NJ Transit route. The route will also serve transit dependent commuters who, are currently underserved by existing transit options. This route provides opportunities for

residents of Plainfield to have better access to jobs as it passes through numerous employers that has more than 50 employees. Additionally, this route passes many trip generators including: Plainfield Train Station, Downtown Plainfield, numerous industrial parks, Blueberry/Edison Village Apartments, Edison Train Station, Wick Shopping Plaza and Middlesex County College.

Operation

The WM4 would operate 7 days a week between 6:00am and 10:00pm, with 30 minute headways all day. With service headway of 30 minutes all day, it is easy for riders to remember when the bus arrives as well as making it more marketable compared to the hourly service present in most of the study area. Having too frequent service such as every 10 to 20 minutes is not suitable for an area with low densities and having service beyond the 30 minute mark keep potential riders from using the service. This will be a two-fare zone route with I-287 being the fare-zone border.



WM5 - North Brunswick to Edison

Distance: 8 Miles

Run Time: 50 Minutes

Service Hours: 6:00am to 9:00pm,
Monday to Saturday

Projected Headways: 30 Minute Peak; 60
Minute Off-peak

Serving: North Brunswick, New
Brunswick, Highland Park, Edison

WM5 is a bus route being proposed by the Bloustein School Transit Studio for consideration by the Middlesex County Planning Board and NJTransit. WM5 will replace one of the variations of the existing NJ Transit 814 bus service, which runs between the New Brunswick Train Station in downtown New Brunswick and the DeVry North Brunswick Campus located on US Highway 1. This route will then be extended to serve the Cedar Lane/Kilmer Road corridor in Highland Park and Edison en route to the Edison Train Station.

Communities served

WM5 covers the southernmost section of the studio study area, including parts of Highland Park and Edison. The area in Edison, along Kilmer Road, is primarily industrial in nature, with two additional trip generators: the Edison Train Station, which sees frequent NJ Transit Northeast Corridor train service, and the Edison New Jersey Motor Vehicle Commission (MVC) offices, which handles road tests for all of northern Middlesex County. After stopping at the MVC, the route will turn onto Truman Drive and Road 2 to serve the Camp Kilmer residential development, which will set aside 25% of its units for low-income tenants. The WM5 returns to Kilmer Road and continues into Highland Park, along Cedar Lane and River Road, passing the homes of nearly 2,500 residents. WM5 uses the Albany Street Bridge to enter New Brunswick, leaving the study area to stop outside the Johnson & Johnson corporate headquarters at the New Brunswick Train Station, where transfers are available to the 810, 811, 813, 814 and 815 bus routes, along with several of the routes proposed by the studio. From the station, the WM5 travels on George Street through downtown New Brunswick and Livingston Avenue, past the homes of 10,000 residents in New Brunswick. The WM5 then enters North Brunswick, and serves destinations on Hermann Road and US Highway 1, including the North Brunswick municipal buildings, the Brunswick Shopping Center and the DeVry campus.

Rationale

The WM5 is a fusion of a former bus route (the Rutgers L route) and a variation of existing service (the 814). River Road and Cedar Lane were previously served by the L bus route, which operated between the College Avenue Campus (the primary Rutgers University campus) and the Livingston Campus in Piscataway; the L was operated by Rutgers University Department of Transportation Services (RUDOTS). In 2010, citing

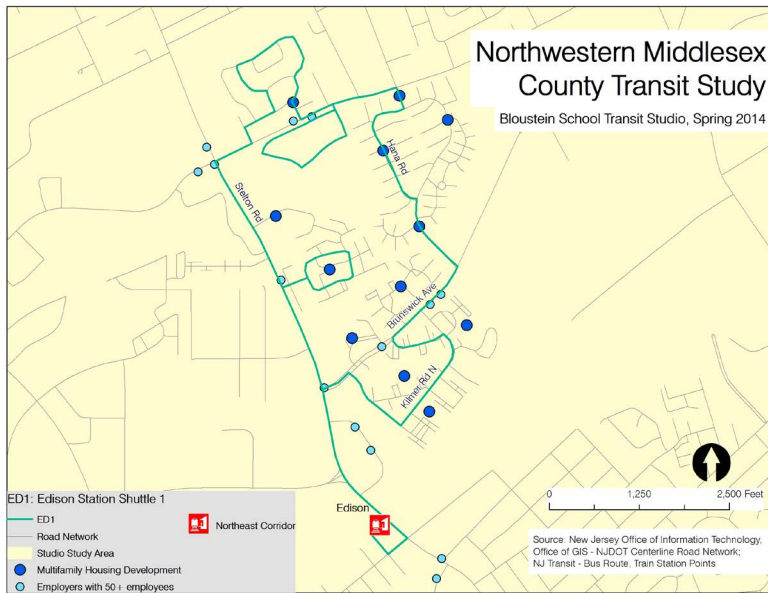
budget cuts, RUDOTS announced the discontinuation of the L, connecting the campuses instead with the LX route, which runs along Route 18 instead of local roads. The WM5 restores service on River Road and Cedar Lane, an area not served by transit since 2010.

The current 814 variation operating between New Brunswick and the DeVry North Brunswick campus operates on weekdays between 6:30am and 10:00pm, with significant variation based on the direction of travel and time of day. Between 9:00am and 7:00pm, the 814 variation operates with consistent 60 minute headways. Despite being anchored by a high-powered trip generator, the current 814 variation suffers from low ridership, which justifies the infrequent headways. According to RideCheck Plus reports provided by NJ Transit, fewer than 10 riders a day board or alight at the DeVry campus or the Brunswick Shopping Center.

In order to justify the retention of the 814 variation, the studio recommends the extension of an 814 variation to cover the route formerly covered by RUDOTS L route. By restoring service and increasing frequency, the studio believes that this route can better serve the communities and attractions along the route. This route also provides an alternative to the estimated 100 daily riders who travel on the Northeast Corridor between Edison and New Brunswick Train Stations. The present fare for trips between the two stations is \$2.25; bus fare between the two stations would likely be \$1.50. This represents an opportunity to provide a cheaper ride to customers, which might help to boost the ridership along the proposed route.

Operation

The WM5 would operate Monday to Saturday between 6:00am and 10:00pm, with 30 minute headways in the peak period, and 60 minute headways in the off peak period. With improved headways, the WM5 route should be more successful at serving residents and employers in New Brunswick than previous services, and should increase ridership with the restoration of service to dense residential communities in Highland Park and Edison. By operating earlier and reducing headways, the WM5 will link well with the proposed DASH Fusion. With the proposed operations, current riders can use the WM5 to get to Downtown New Brunswick and transfer to the DASH Fusion.



ED1 - Edison Shuttle 1

Distance: 9 Miles

Run Time: 25 Minutes

Service Hours: 6:00am to 9:00am; 5:30pm to 9pm, Monday to Friday

Projected Headways: 15 Minute Peak

Serving: Multi-family developments around Edison Train Station

ED1 is a shuttle service being proposed by the Bloustein School Transit Studio for consideration by the Middlesex County Planning Board and NJ Transit. ED1 will provide new service for the residents who travel to and from the Edison train station. No other current service exists in the area, save for some limited private development run, peak-hour shuttles.

Communities served

The primary purpose of this route is to connect these residents with NJ Transit Northeast Corridor trains at the Edison station. The daily commuters who live within a few miles of the train station often drive, carpool or are dropped off at the station. This part of the study area features dense single and attached family housing on curvilinear streets.

Rationale

Northeast Corridor trains see heavy use by the residents of these subdivisions. However, due to parking shortfalls many who would normally drive to the station are looking for alternative means. Some residents have reported driving to a station further from their home due to the lack of parking. A frequent shuttle service is a cost effective way of bridging the divide. The proposed route gets to, or close to, the front door of many daily train riders. For those who do not take the train this shuttle also connects riders to the Edison Train Station, which connects them to additional bus service like the proposed WM5.

Operation

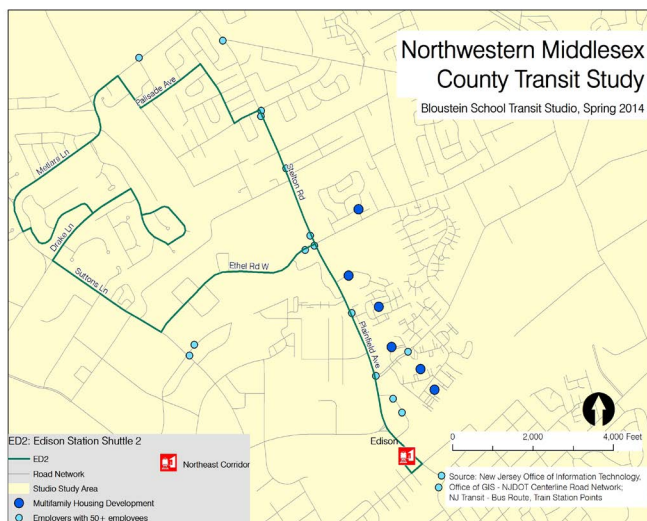
ED1 (and any subsequent shuttle route) would operate five days a week, four times an hour between 6:00am and 9:00am and then again from 5:30pm to 9:00pm with 15 minute headways. The shuttles will be running counter clockwise, and clockwise simultaneously during operation. The service is designed to sync with the ridership peaks at the surrounding Northeast Corridor train stations.

This service will be run on shuttles and not full-length buses. The nature of the route requires small turning radii, and with frequent service will likely see less than full busload demand.

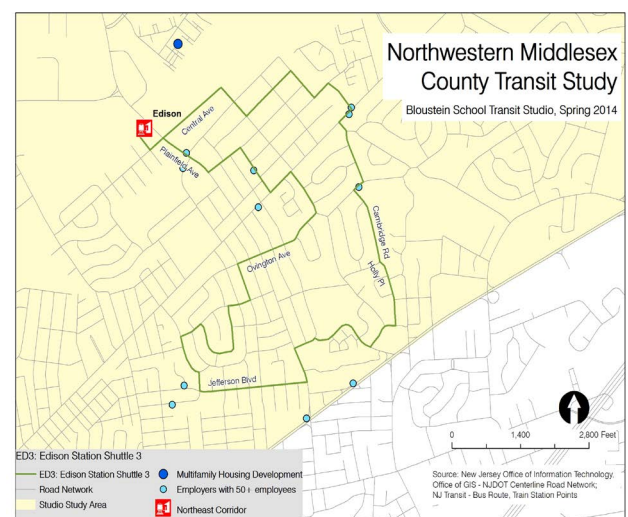
Possible Expansion

If ED1 proves successful the studio recommends looking at expanding shuttle service west of Stelton Road (ED2) and south of the Edison Train Station (ED3). Each would provide an additional 20 to 30 minute loop connecting more Northeast Corridor riders who are looking for alternate means to get to and from the station.

ED2

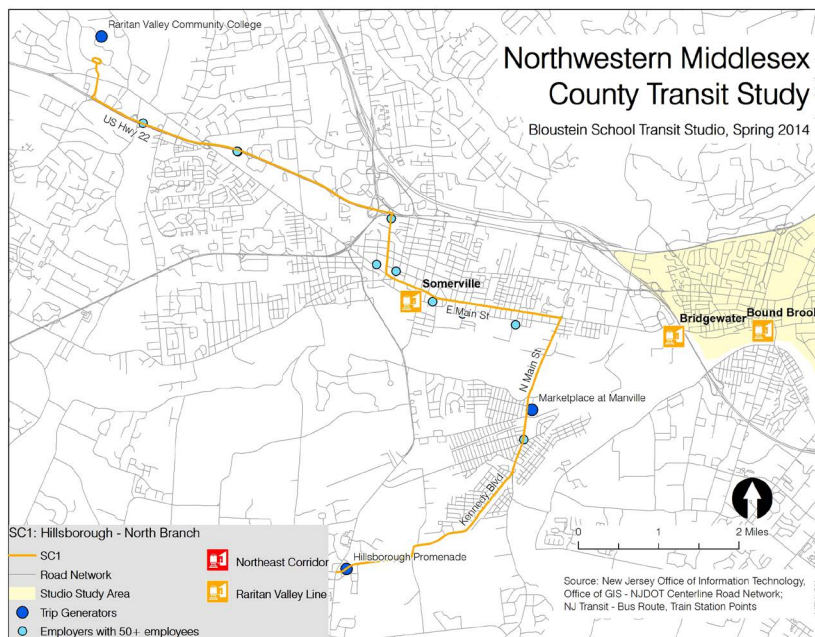


ED3



ED2 provides service west of Stelton Road in Edison. There is significantly less housing than in the other two shuttles. The main purpose of this route is to connect employees who are using, or considering using the Northeast Corridor to get to their place of employment in Edison.

ED3 provides service south of Edison station. This area is predominately single family homes, but in slightly lower density than some of the development north of the station. The nature of the street grid also makes walking to the station a more realistic possibility.



SC1 – Local Intrastate- Hillsborough – Raritan Valley Community College via Manville

Distance: 12 Miles

Run Time: 40 Minutes

Service Hours: 6:00am to 10:00pm, Monday to Friday

Projected Headways: 15 Minute Peak

Serving: Hillsborough Promenade, Hillsborough, Manville, Somerville, Bridgewater, Branchburg, Raritan Valley Community College

SC1 is a bus route being proposed by the Bloustein School Transit Studio for consideration by NJ Transit. SC1 will provide new service for transit dependent students or for those seeking an alternative form of transportation, to travel to and from Raritan Valley Community College (RVCC)

Communities served

The route starts at the Hillsborough Promenade in Hillsborough. It then operates through Manville where there is a Walmart, a movie theater, and an assortment of high density housing. After meandering through Manville and across the Raritan River, the route passes through Somerville, serving its Raritan Valley Line train station. The route then enters Bridgewater, serving the Suburban Park and Mall at Bridgewater Commons. After serving employers along US Highway 22, the route then makes a right into RVCC. The route serves approximately 21 employers with 50 or more employees.

Rationale

The SC1 originated with a request from Somerset County Transportation Director Yvonne Manfra: bring students from the Manville area to RVCC, where parking was at such a premium that the college recently built new lots. As the college population expands and the county changes its policies of subsidizing parking, Ms. Manfra believes that there is a propensity for transit service amongst the student population. The route proposal was extended further west in order to connect the route with public parking and retail jobs in Hillsborough.

Operation

The SC1 is low cost solution providing public transport to high volume trip generators. The SC1 serves an area that deserves public transport service no less than other suburbanized locations in New Jersey but currently has few or no options other than community transit solutions (i.e. SCOOT in Manville).

The route's proposed schedule is timed to provide transfer opportunities from Hillsborough and Manville to the two express trains in the morning. Although the headways are approximately 30 minutes in the peak

period at the Somerville Train Station, there are various short turns that allow the train station to be served at the right points in the evening. This way there is a guaranteed connection without interfering with the base hourly headway trips.

In the morning there are also trips that meet trains that are coming from points east and points west to actually take people to jobs in Hillsborough and Manville or to RVCC. During the midday, a low impact approach is taken. Trains generally arrive at Somerville Train Station 50 minutes past the hour. In order to serve both the people coming from points east and points west and to collect riders from the train station somewhat equitably, the SC1 serves the rail station :44 after the hour southbound and :38 after the hour northbound. The route makes frequent connections to NJ Transit interstate bus operations.

Intrastate bus connections are available to Plainfield, New Brunswick (under Phase 1 improvements), and Piscataway (under Phase 1 improvements). Connections are also available to interstate commuter buses in Somerville. The route also serves the Raritan Valley Line, which provides access to Raritan, with limited service to points west. The Raritan Valley Line also provides one-seat midday service to New York Penn Station and full time service to Plainfield and Newark Penn Station. Transfers would also be available to other various Somerset County Transportation routes.

Fare Harmonization

A core facet to providing low income, transit dependent, and transit choice riders with accessibility is to make a transportation network integrated and seamless to the customer. Over the past 20 years the New York Metropolitan Area has slowly advanced towards an integrated network.

Issue

Northwestern Middlesex County has no tariff coordination amongst transit providers. Middlesex County Area Transit (MCAT), NJ Transit, and Somerset County Transportation (SCT) share some corridors but do not cross honor fares or allow transfers. One of the proposed improvements of this study would involve NJ Transit taking over the DASH 851 and DASH 852 and running a more robust service on it. This transfer of operation would mean that SCT passengers who currently ride DASH would need to pay a full fare to transfer to another SCT route.

NJ Transit Regional Network Connectivity

New Jersey Transit is New Jersey's Statewide bus and rail operator. The policymakers at NJ Transit have done a lot of great work for coordinating tariffs in a multimodal environment; NJ Transit is responsible for the operation of New Jersey's bus, light rail, and commuter rail. Monthly rail passes and bus passes allow riders a great degree of flexibility to transfer between modes.

In Hudson County, under an agreement with NY Waterways, NJ Transit monthly pass customers can ride NY Waterway ferries from Port Imperial in the evenings. This pilot program adds flexibility for commuters who have a mode choice and NJ Transit who get additional capacity on its bus network.

In Burlington County, NJ Transit monthly pass riders are permitted to pay a \$.50 transfer fee to ride on BurLink, the county's bus network. In addition, for \$.50 a BurLink customer can purchase a transfer good for a one zone ride on NJ Transit bus or rail.

This is a model for growing transit ridership both among transit captive and transit dependent market segments. It offers people an affordable and sensible way to access a region by public transport.

Intermodal Integration in New York (Impacts on Ridership)

The Metropolitan Transportation Authority (MTA) integrated its subway and the bus network fare structure with MetroCard. As a result, daily ridership increased from 5,288,000 rides a day in 1996 to 7,147,000 rides a day by 2000. After Westchester County's bus operator, Bee Line, brought MetroCard in 2007 to its system, a 6.5% increase in ridership occurred by the next year. MetroCard's portfolio includes 8 New York and 2 New Jersey counties.

Recommendation

Integrate the fare structure of MCAT, NJ Transit, and SCT to enhance accessibility for residents and workers who travel in Middlesex and Somerset Counties. Other NJ Transit customers who transfer between rail and bus at a discounted rate already enjoy this perk. The model provided by BurLink sets a precedent for the provision of transfers amongst operators. The MTA's MetroCard story provides an excellent business case for tariff harmonization in terms of ridership gains.

Priorities, Phasing and Costs

Priorities

After thorough analysis of the demographics of Northwestern Middlesex County, we are recommending that the modified routes and new routes be implemented in phases. There are three phases to complete our vision, Phase 1 has the highest priority and Phase 3 has the lowest priority. Phase 1 of the implementation process includes some modified routes and some new routes, including: modified 819, modified 822, WM1, WM2, WM3, and WM5. Ridership data and data on trip generators for the existing routes 819 and 822 showed that there was significant demand for expanded service on these routes and the new routes WM1, WM2, WM3 and WM5 were created to fill in the gaps where we noticed that there was data supporting the existence of 0-1 car households, low income households and a significant amount of employment sites, like shopping malls and hotels. Phase 2 of the recommended implementation process includes: modified 813, ED1, ED2, ED3, and WM4. The 813 would be an express service serving a dense residential area and a large transit dependent population. This route serves part of our service area, but connects the Northeast Corridor with the NJ Transit's North Jersey Coast Line. The Edison Shuttle lines would also be divided into sub-phases. We are recommending that New Jersey Transit start off with the implementation of ED1 and if ridership shows this route successful, then we would suggest that ED2 then ED3 be implemented. WM4 is an important route to create because it connects workers, students and other transit dependent populations to employment sites of more than 50 employees, including Rutgers University. Phase 3 of the recommended implementation process includes: DASH Fusion and SC1. The DASH and SC1 are both outside of our study area, but there is a need for expanded service along this route, especially since they would serve many residential neighborhoods and train stations.

Cost

The phases of our recommendations are not organized by the cost associated with them, but rather by order of priority and need for service. Our recommended modifications to four existing bus routes and the creation of eight new bus routes in Northwestern Middlesex County will cost \$15,929,609.50 to operate annually. The total annual operating cost of the modified existing bus routes and the new bus routes is \$14,174,314.50. This was calculated at \$90 per revenue hour per day by each route. The \$90 per revenue hour includes the bus operator's hourly wage and the use of a 45-passenger conventional bus. The total annual operating cost of the modified DASH route and the new Edison shuttles is \$1,755,295.00. This was calculated at \$65 per revenue hour per day by each route. The \$65 per revenue hour includes the shuttle bus operator's hourly wage and the use of 28-passenger shuttle bus. We are suggesting that the DASH shuttle and the new Edison shuttles be contracted out, as opposed to being operated and administered by New Jersey Transit. The new services, WM1, WM2, WM3, WM4, and WM5 will be administered and operated by New Jersey Transit. Individual route costs can be found in the route details section of the Appendix

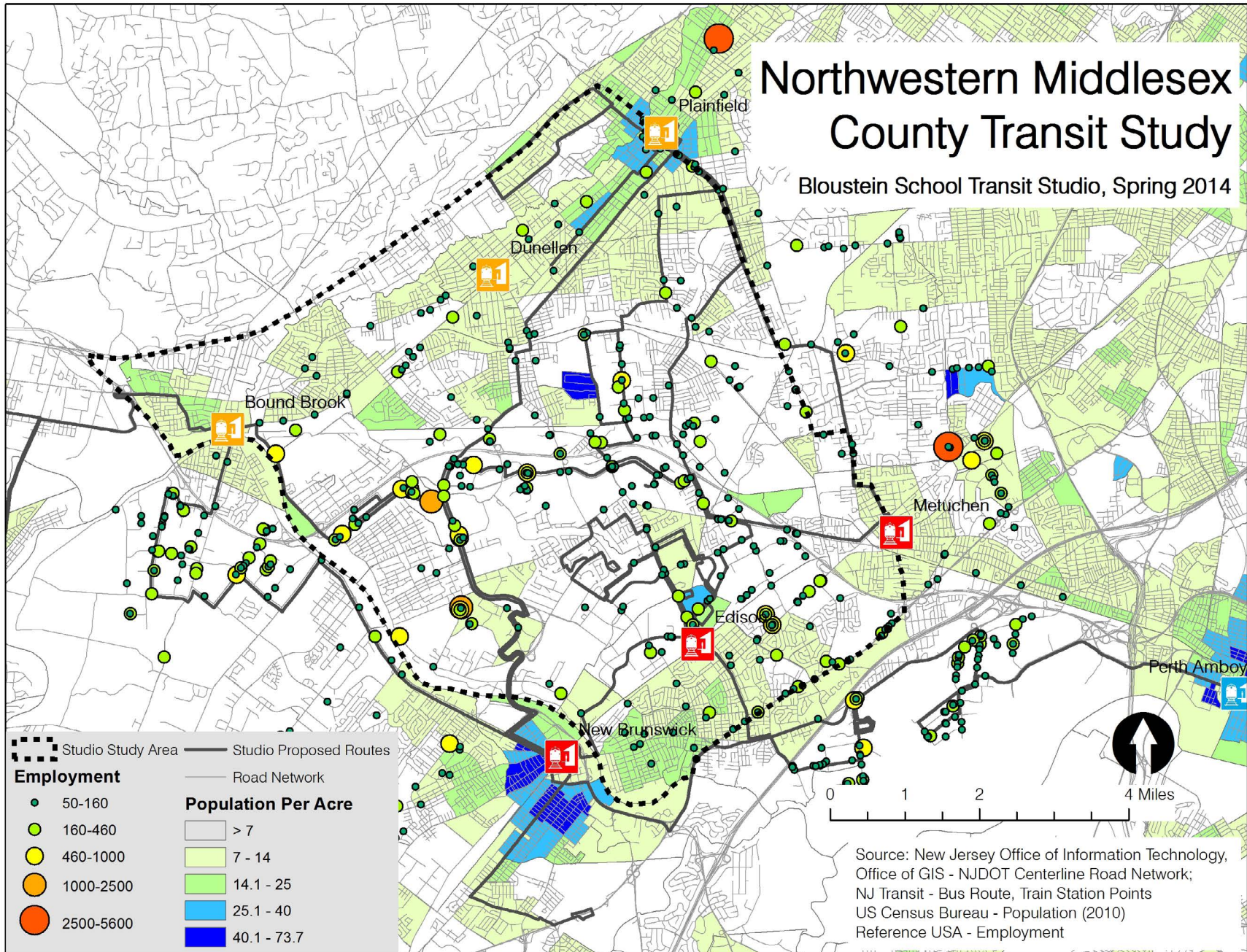
Phase 1		
Route	Vehicle Type	Cost
819 (modified)	Conventional Bus	\$1,406,152.50
822 (modified)	Conventional Bus	\$1,159,195.50
WM1	Conventional Bus	\$1,261,440.00
WM2	Conventional Bus	\$2,582,557.50
WM3	Conventional Bus	\$2,295,120.00
WM5	Conventional Bus	\$994,846.50
	Total Operating Cost of Phase 1	\$9,699,312.00
Phase 2		
Route	Vehicle Type	Cost
813 (modified)	Conventional Bus	\$824,670
ED1	Shuttle	\$262,992.50
ED2	Shuttle	\$453,050.00
ED3	Shuttle	\$372,108.75
WM4	Conventional Bus	\$2,777,467.50
	Total Operating Cost of Phase 2	\$4,690,288.75
Phase 3		
Route	Vehicle Type	Cost
851 and 852 (modified)	Shuttle	\$667,143.75
SC1	Conventional Bus	\$872,865.00
	Total Operating Cost of Phase 3	\$1,540,008.75



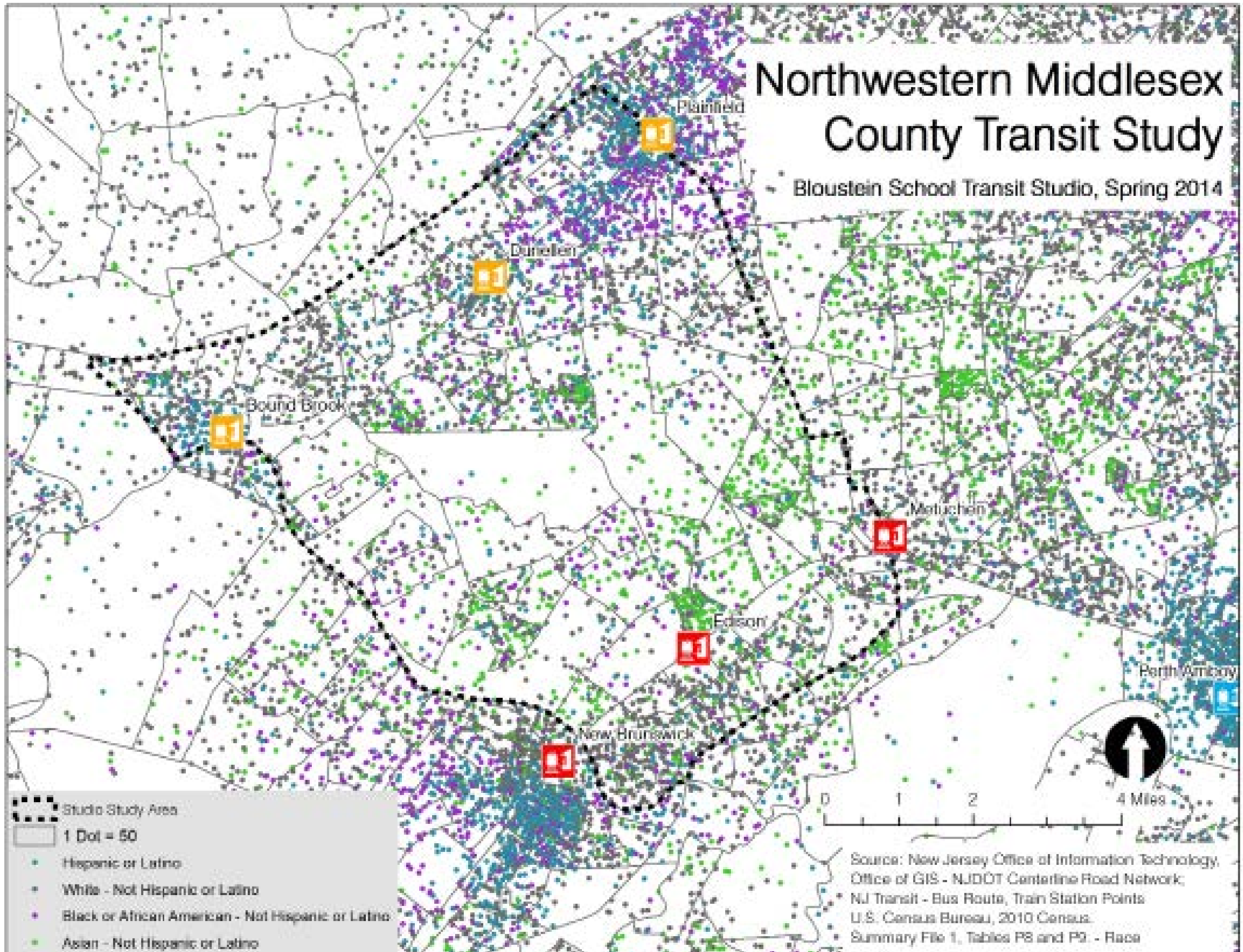
IV. Appendix

Demography	37
Employment	43
Route Details	51

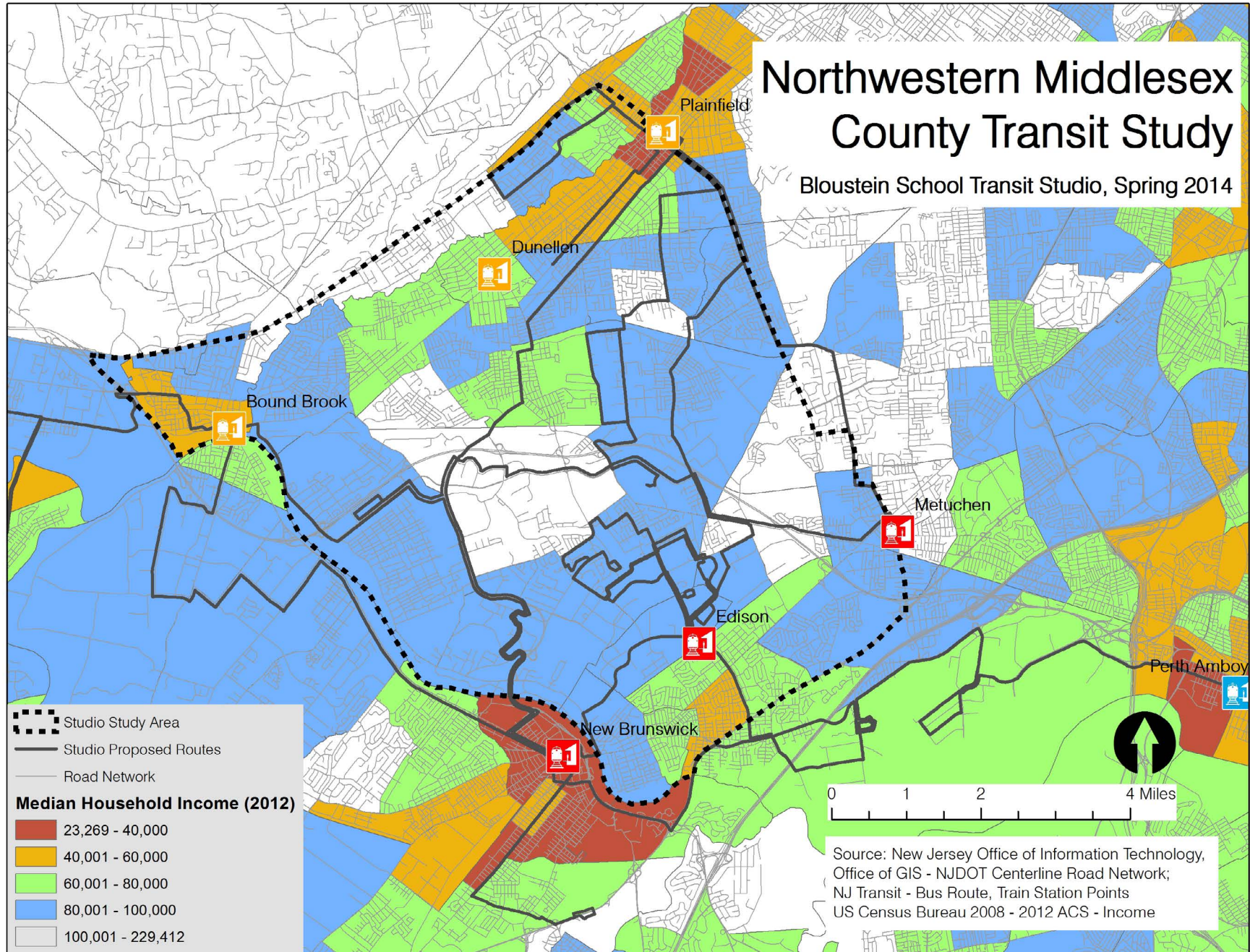
Population and Employment Density



Population Density by Race

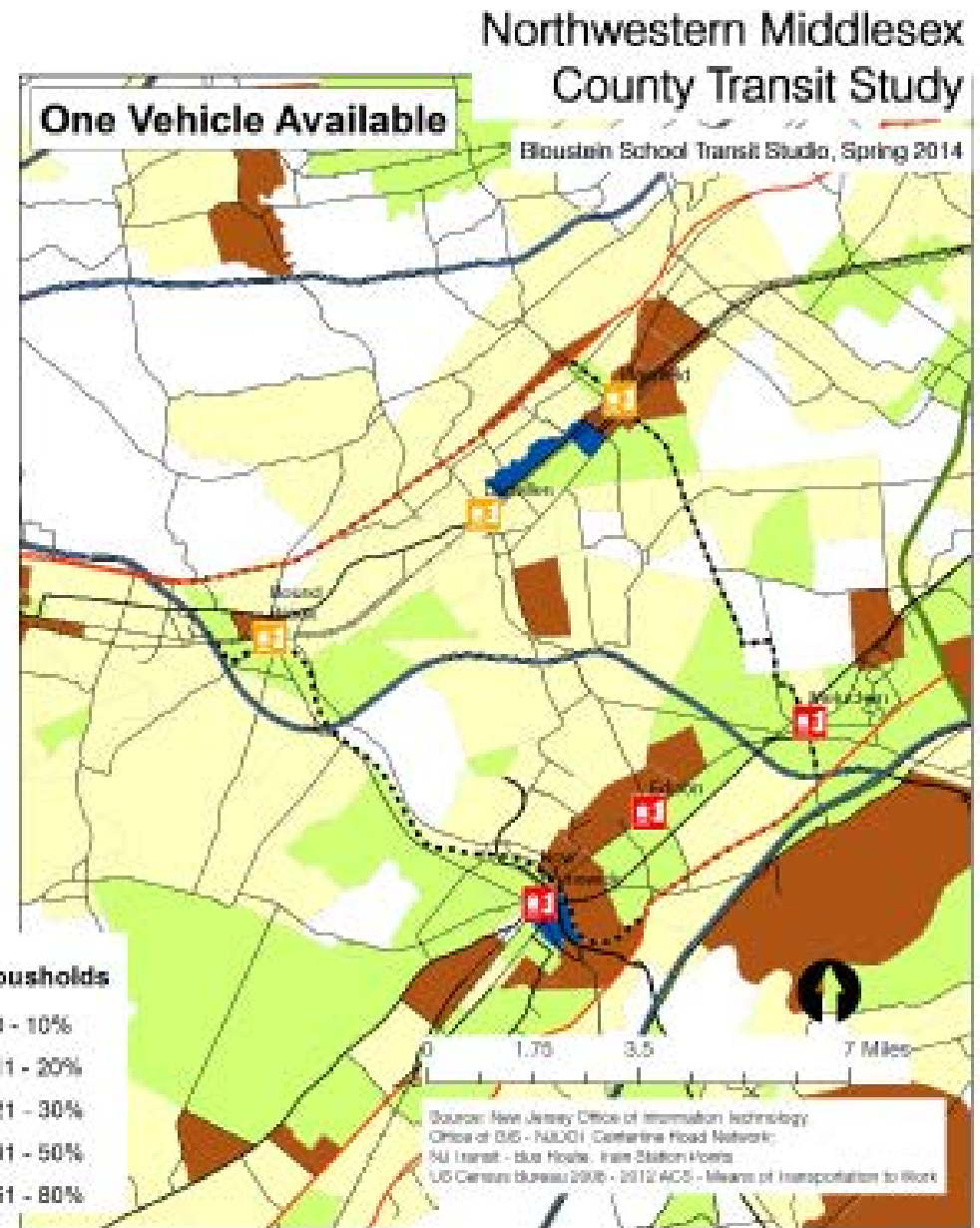
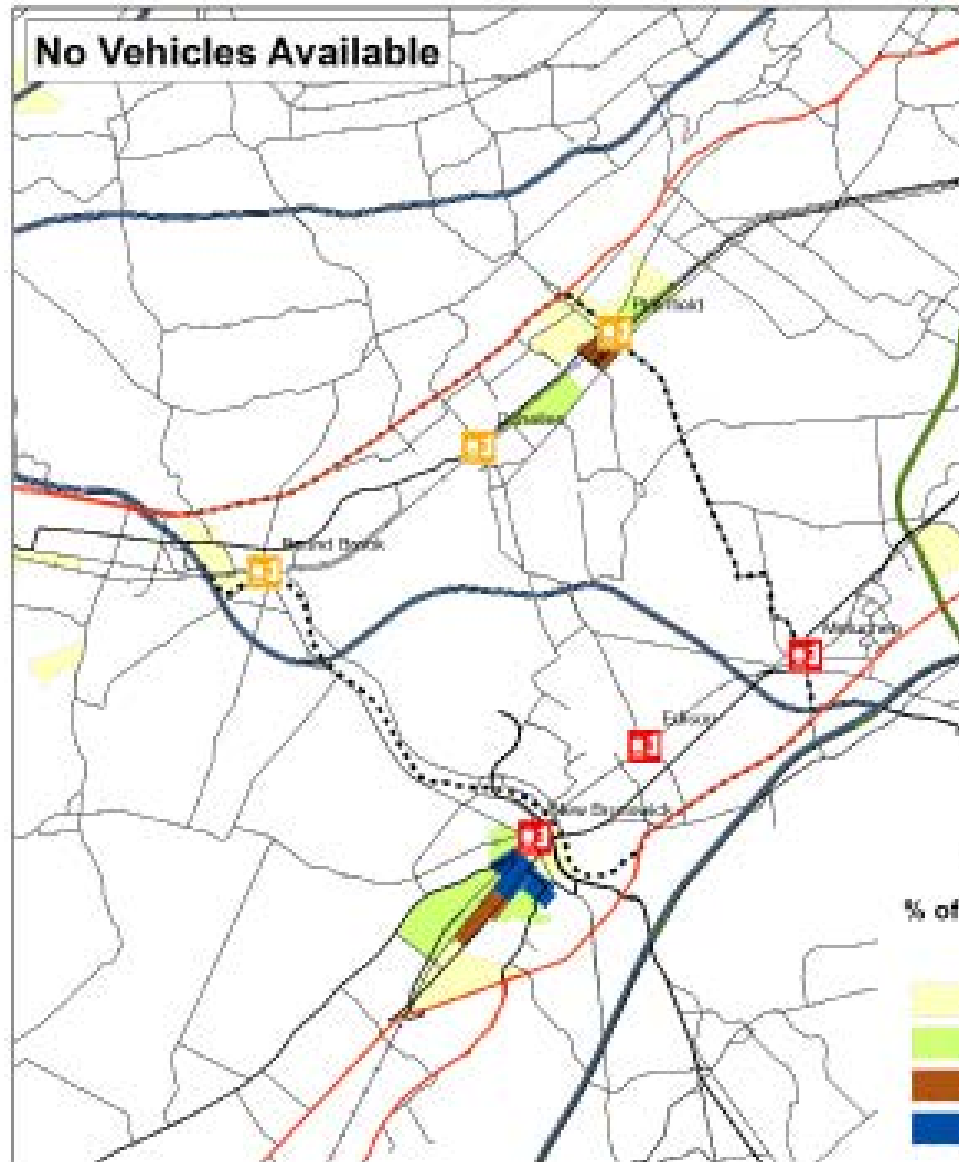


Median Household Income

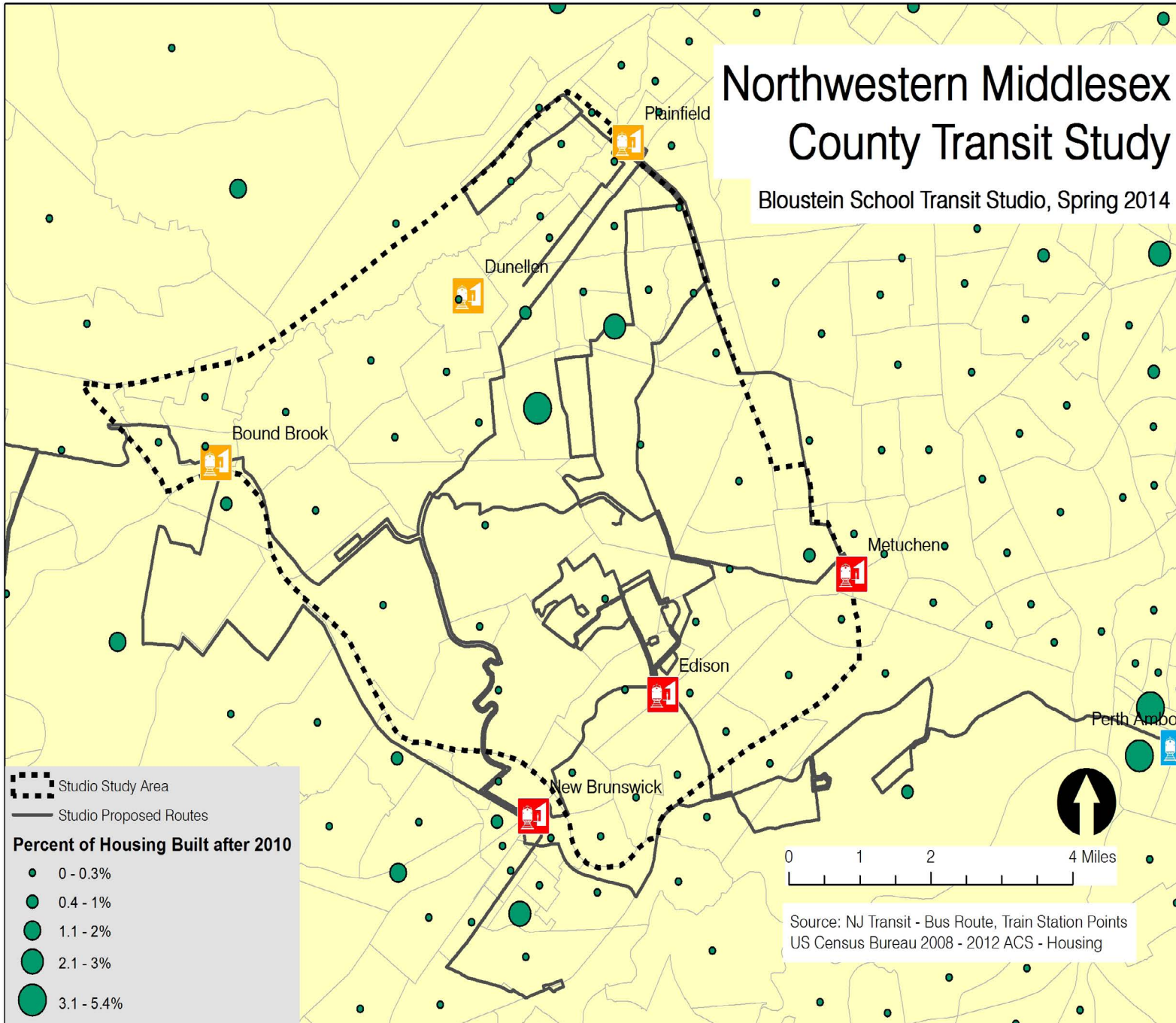


Zero and One Car Households

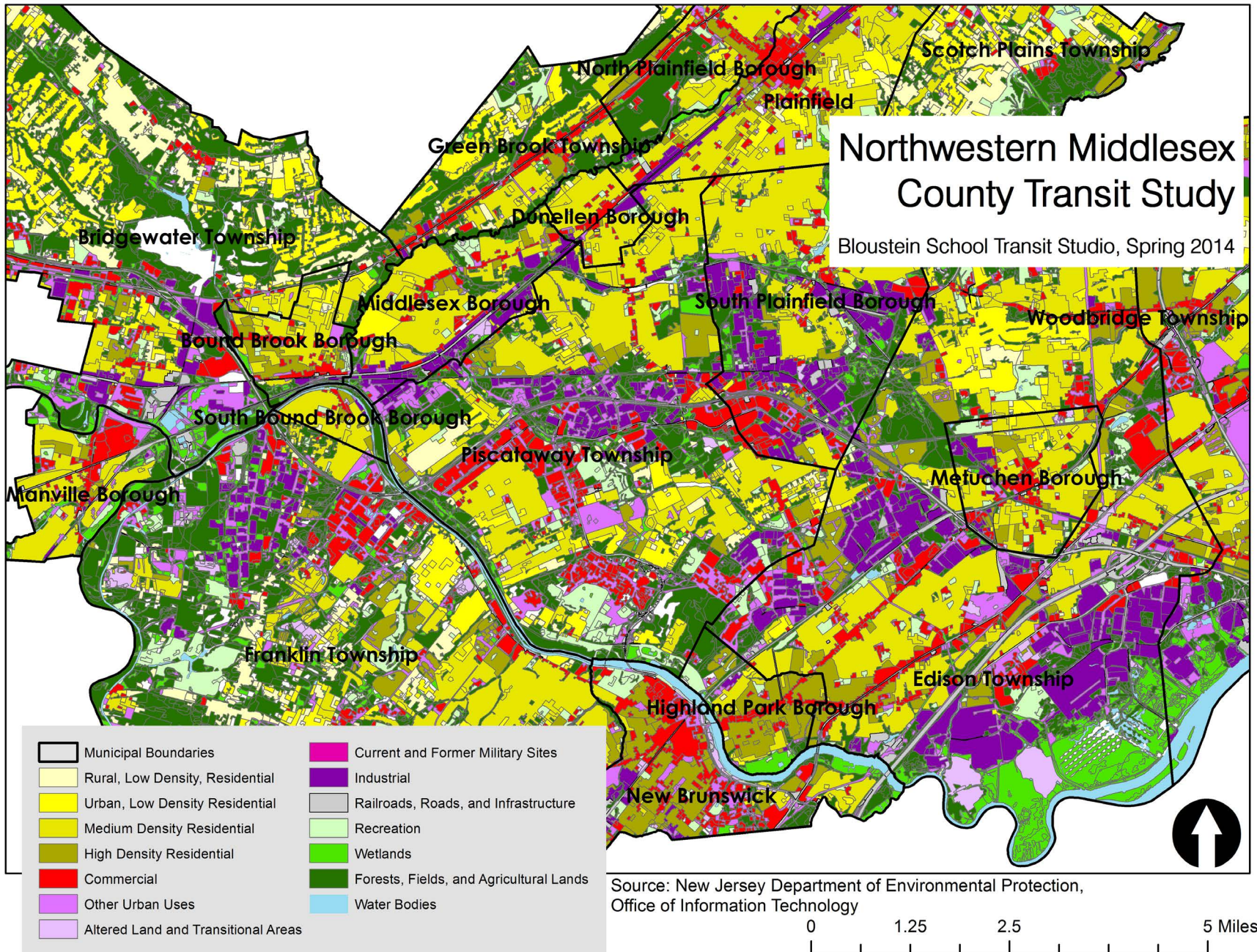
Vehicles Available per Household, 2012 5-year ACS



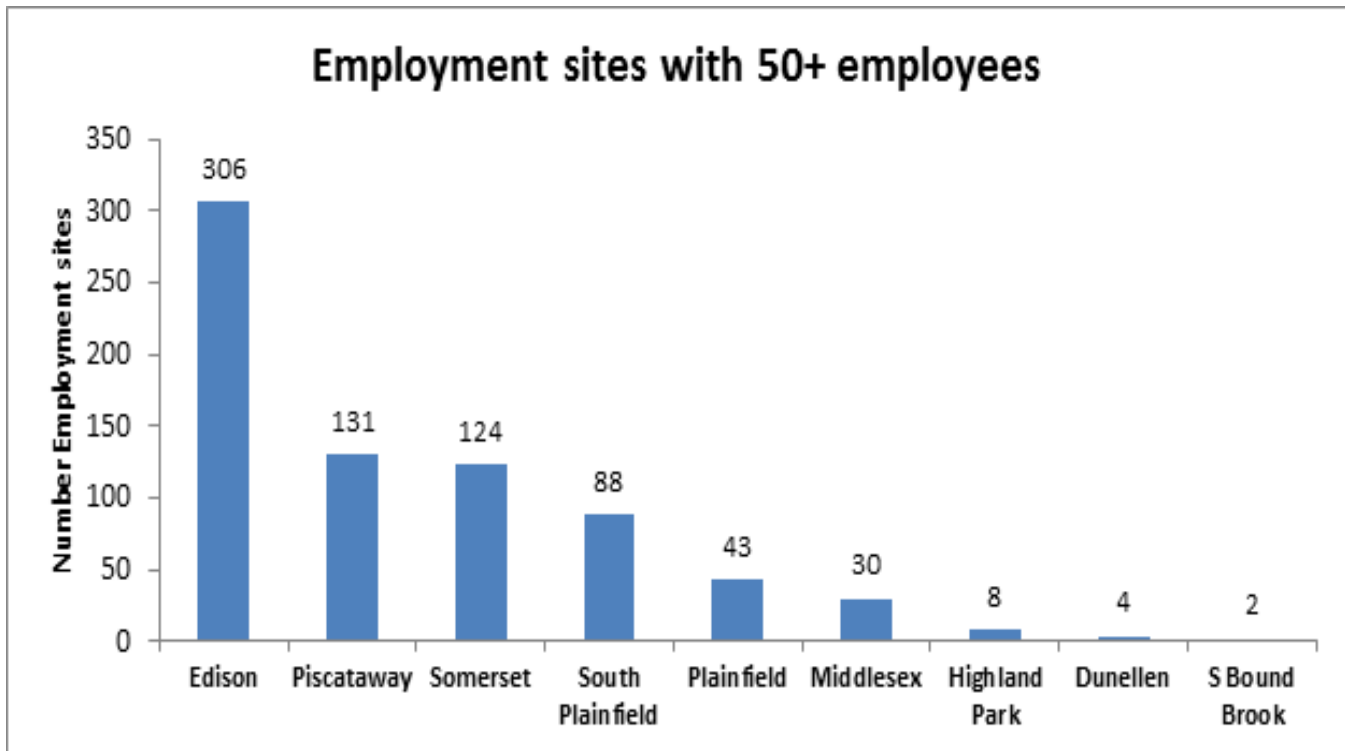
Housing Built After 2010



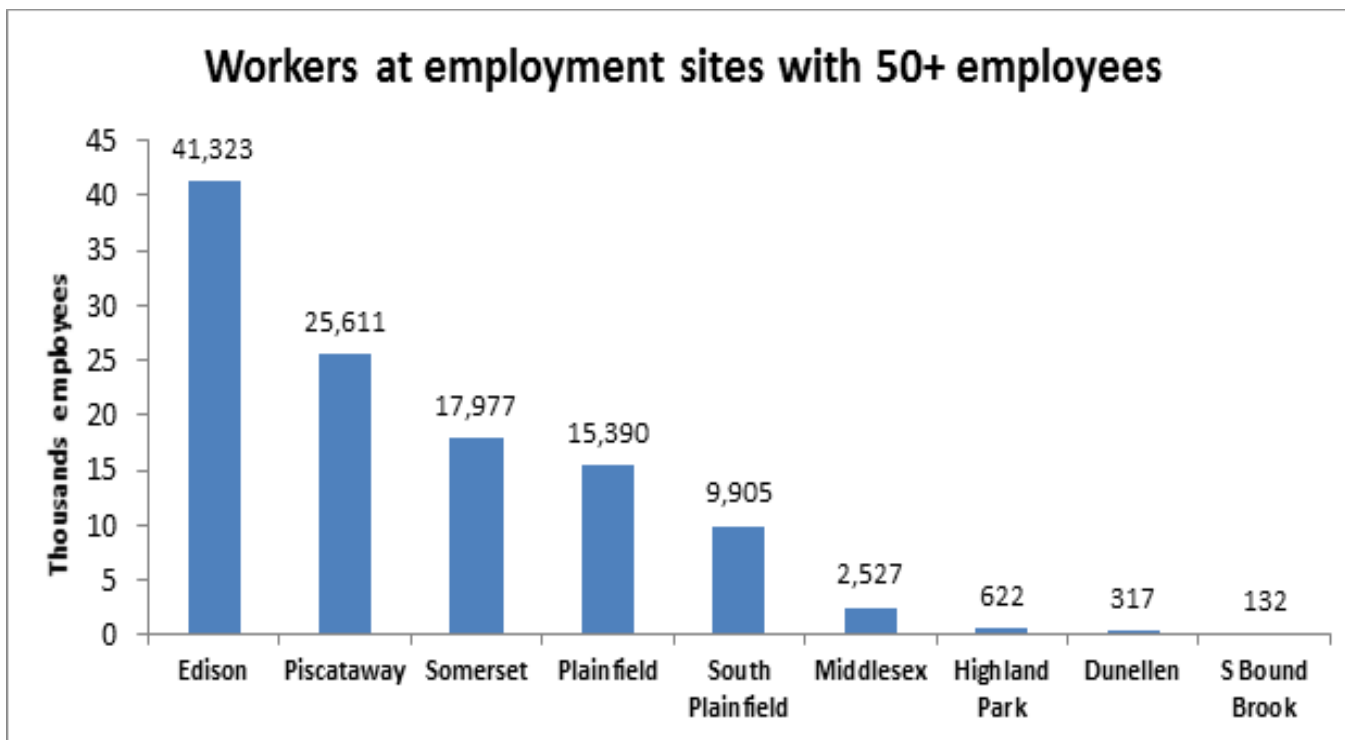
Land Use



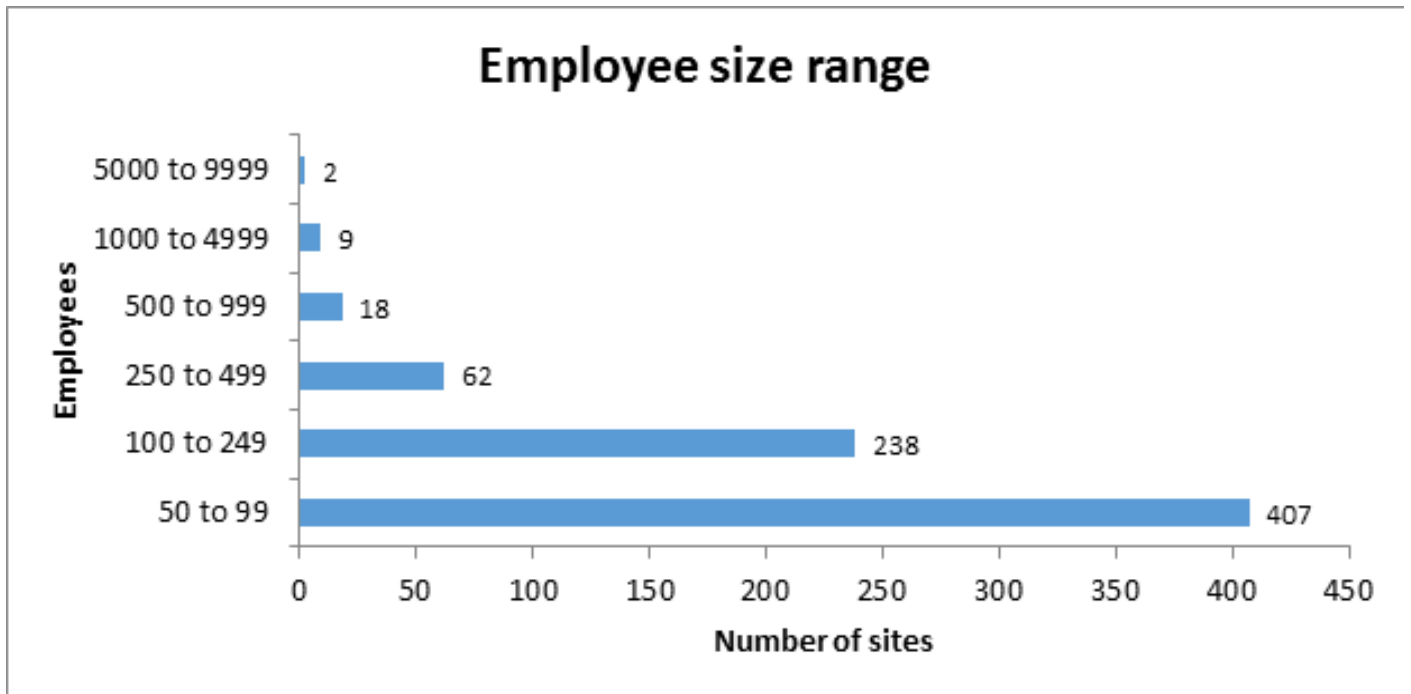
Employment Data



Source: ReferenceUSA.com



Source: ReferenceUSA.com



Source: ReferenceUSA.com

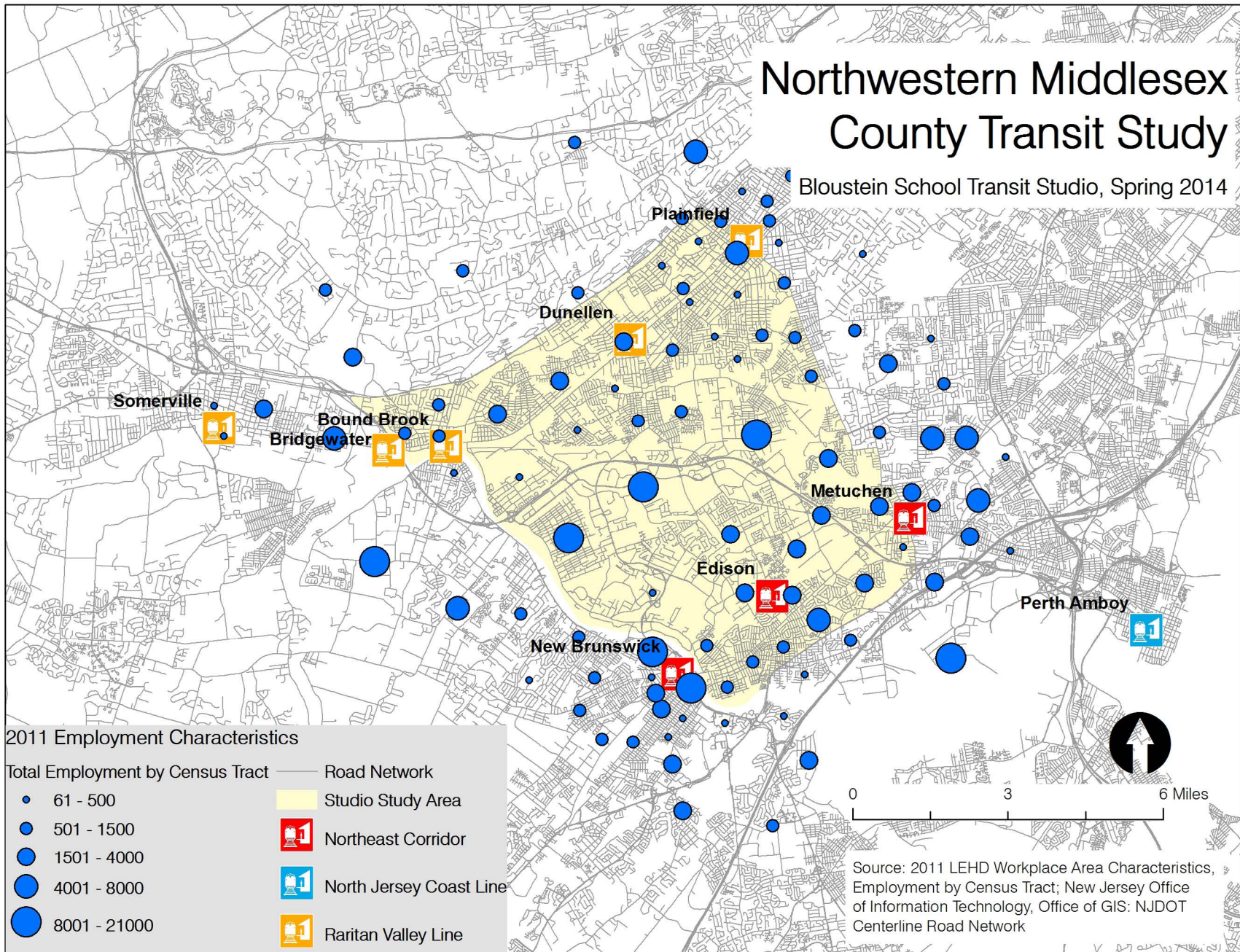
Top Five by Type of Industry*

Industry	Number of sites	Employees
Elementary & Secondary Schools	73	6,725
Full-Service Restaurants	31	2,510
Supermarkets/Other Grocery (Excluding Convenience) Stores	24	3,645
Electronic Stores	17	1,906
Hotels (Except Casino Hotels) & Motels	16	1,593
Total	161	16,379

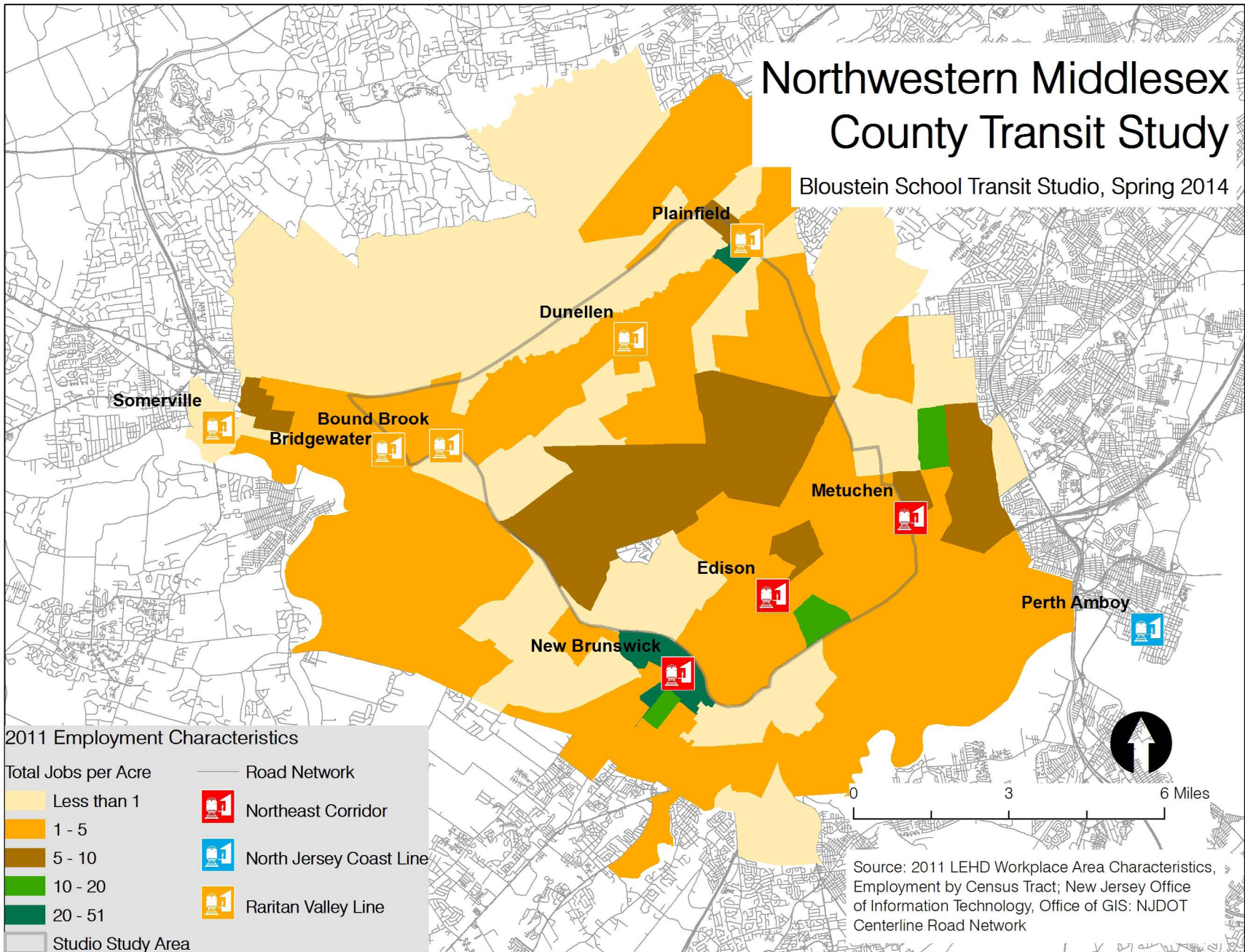
* North American Industry Classification System (NAICS)

Source: ReferenceUSA.com

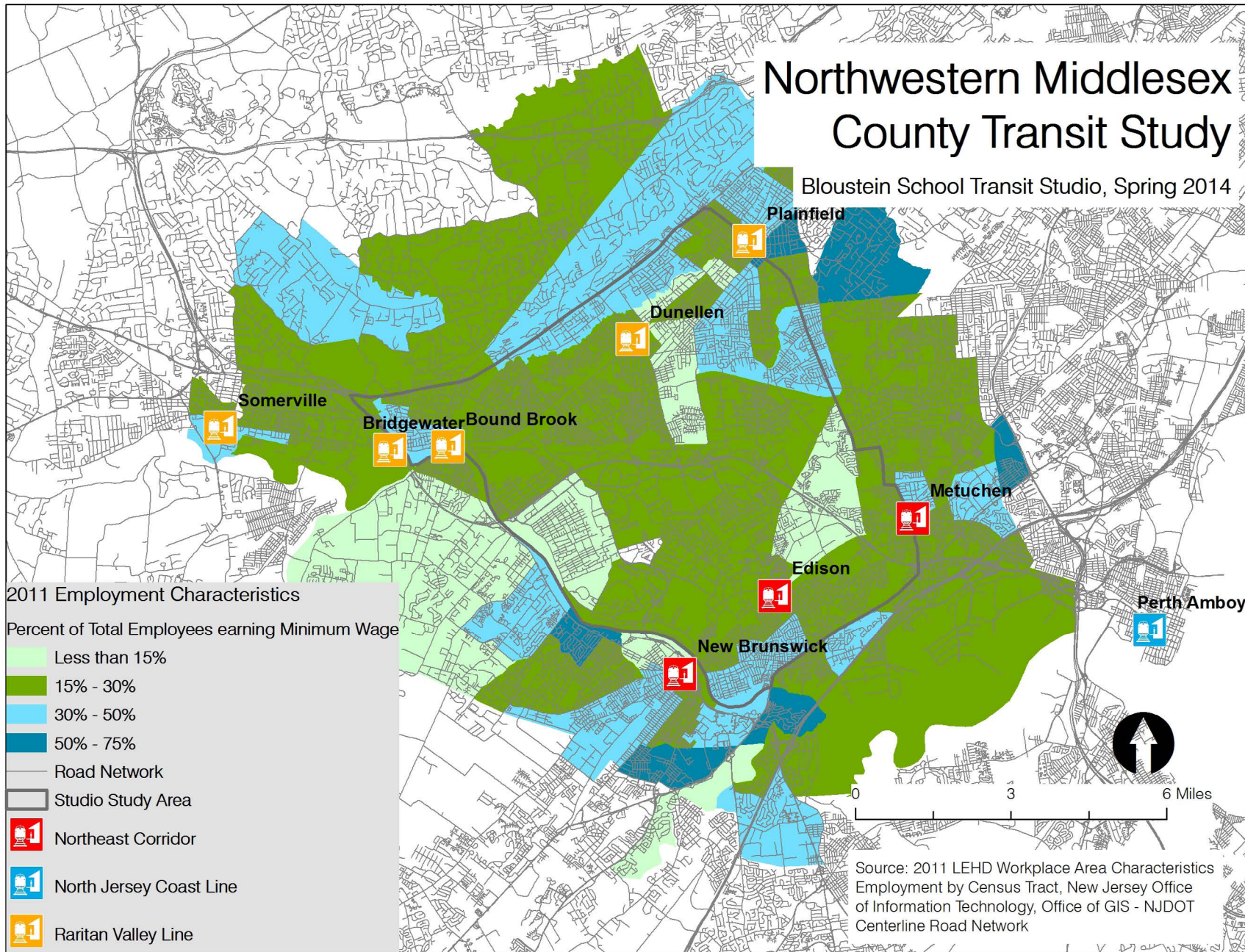
Total Employment



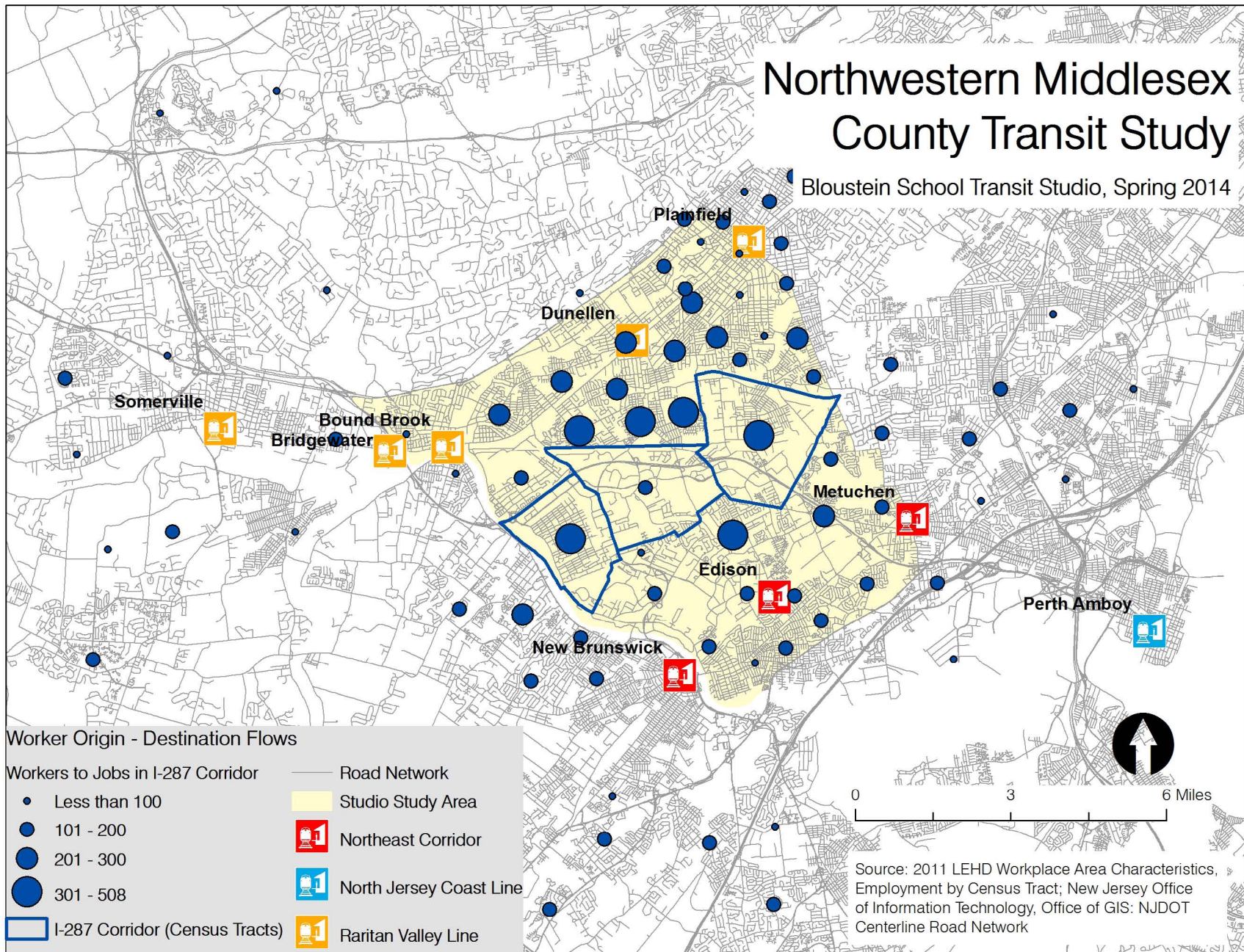
Employment Density



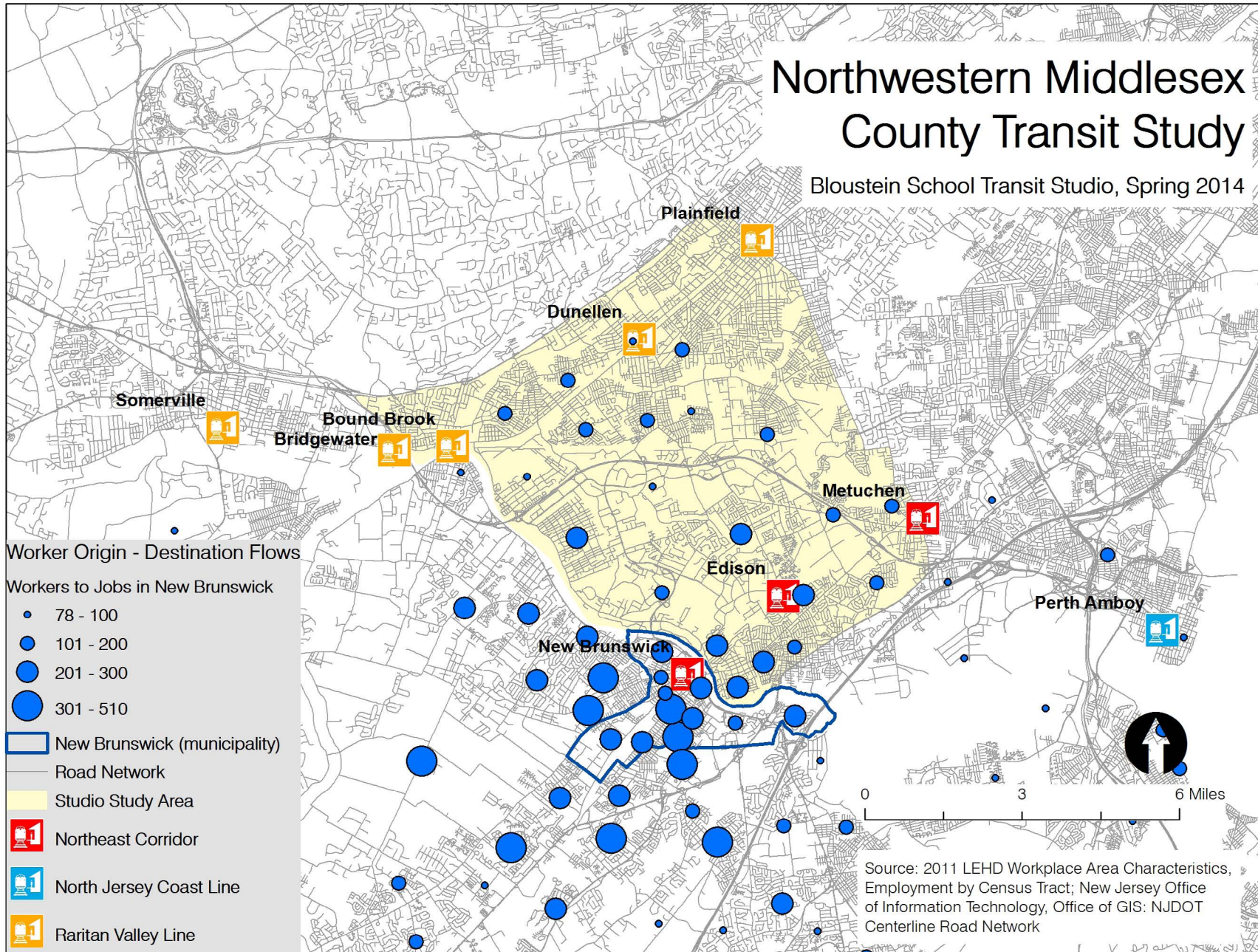
Low Paying Jobs



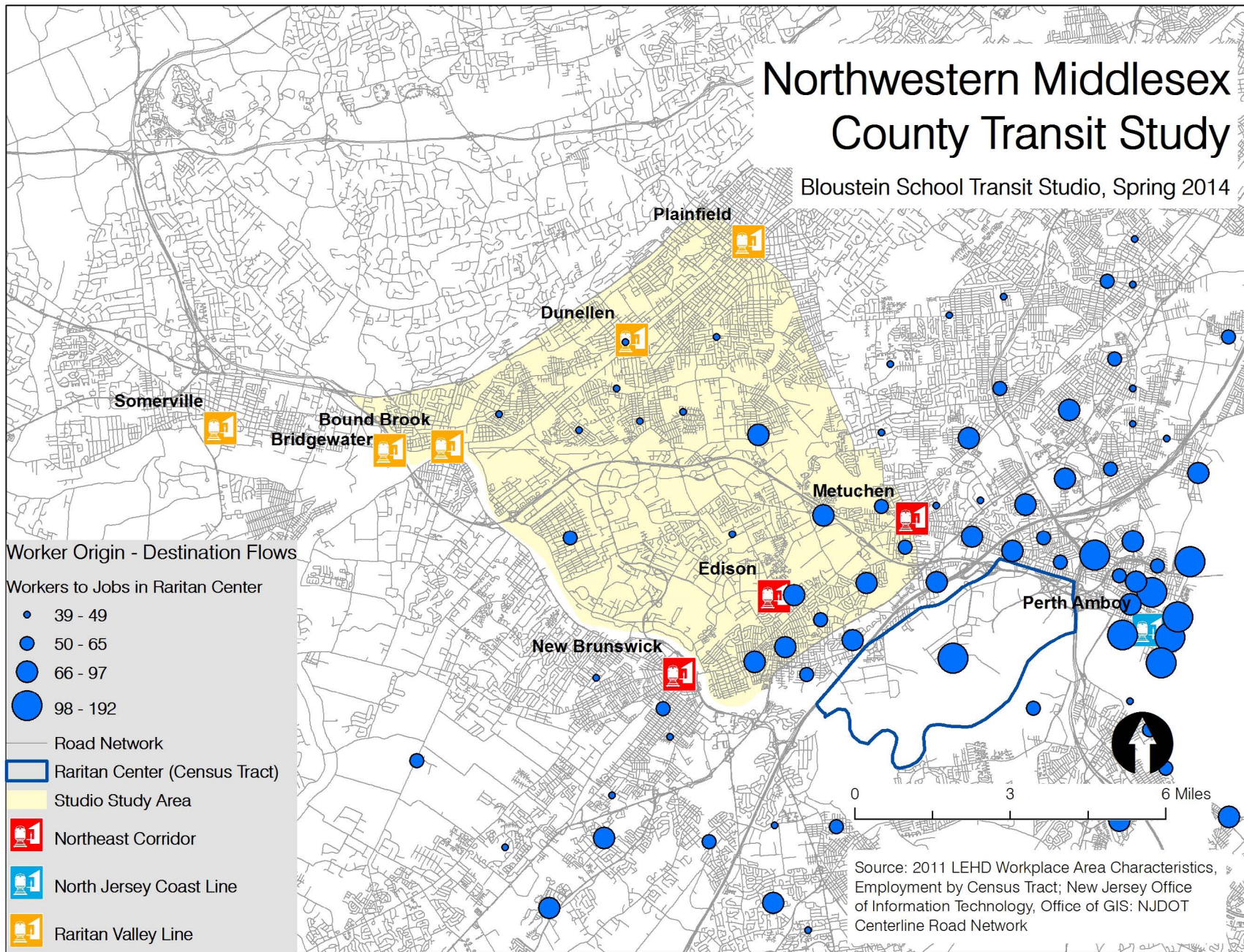
Worker Origin - I-287 Corridor Employment



Worker Origin - New Brunswick Employment

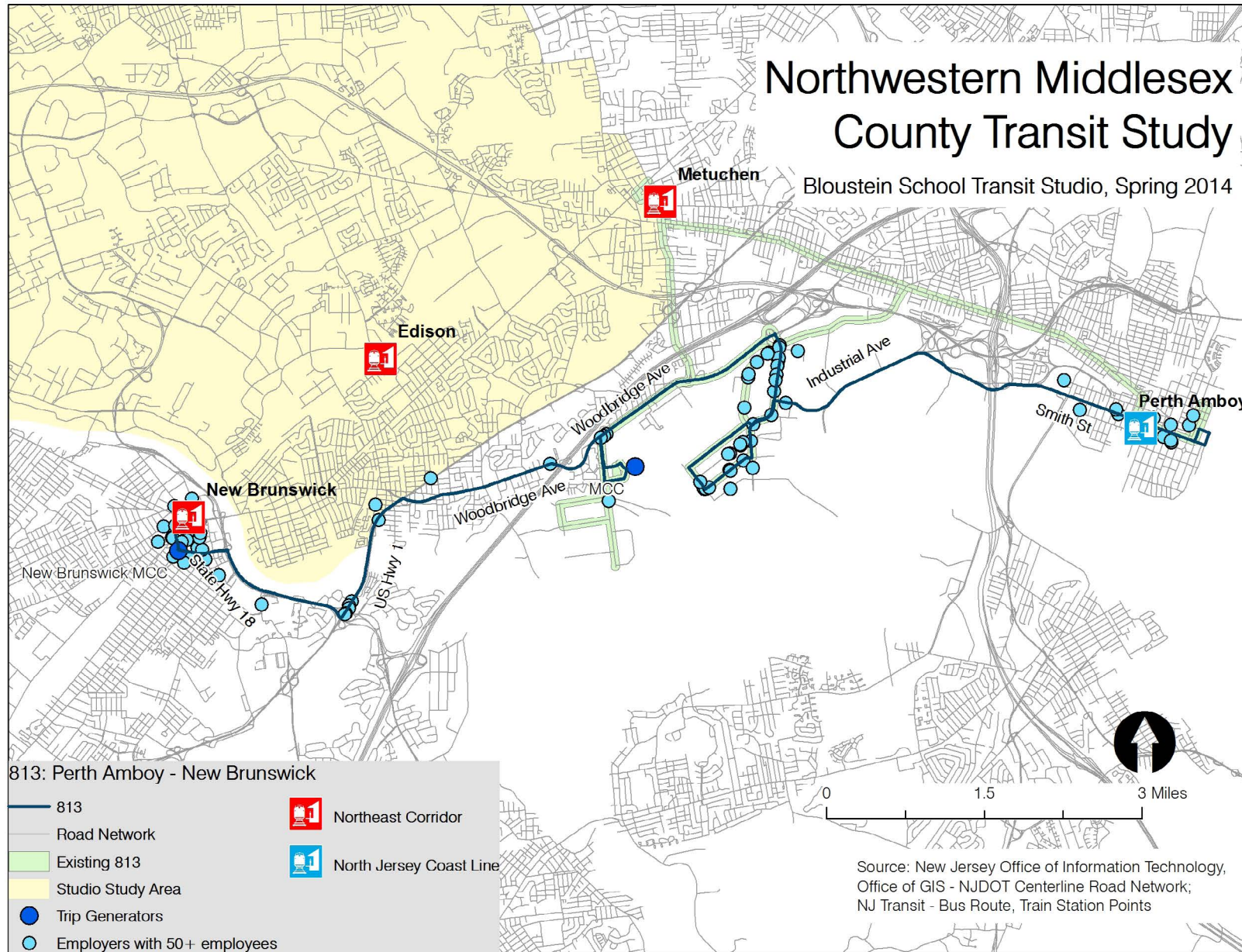


Worker Origin - Raritan Center Employment



Route Details

813: Perth Amboy - New Brunswick



813 Express: Perth Amboy to New Brunswick**Start: Smith Street and Rector Street, Perth Amboy**

R on Rector St.
 R on Fayette St.
 BR on Front St.
 R on Smith St.
 R on Industrial Ave./Riverside Dr.
 BR on Riverside Dr.
 C on Parkway Pl.

Entering Edison

L on Raritan Center Pkwy.
 R on Fieldcrest Ave.
 L on Northfield Ave.
 L on Fernwood Ave.
 L on Newfield Ave.
 L on Raritan Center Pkwy.
 C on Woodbridge Ave.
 BL on Woodbridge Ave.
 L on Mill Rd.
 L on College Dr. E
 L on Otlowski Dr.
 BR on Mill Rd.
 L on Woodbridge Ave.
 BR on Rt. 1 S

Entering New Brunswick

R on Rt. 18
 BR on Rt 18 North
 BR on Rt. 27/New Brunswick Exits service road
 R on New St.
 R on Joyce Kilmer Ave.
 R on French St.
 L on Easton Ave.
 R on Somerset St.

End: Somerset St. and George St, New Brunswick**813 Express: New Brunswick to Perth Amboy****Start: Somerset St. and George St., New Brunswick**

R on George St.
 R on Albany St.
 L on Joyce Kilmer Ave.
 L on New St.
 R on Burnet St.
 C on Rt. 18 S
 R on Rt. 1 N

Entering Edison

R on Travers Ave.
 R on Woodbridge Ave.
 R on Mill Rd.
 L on College Dr. E
 L on Parkside Dr.
 L on Otlowski Dr.
 R on Mill Rd.
 R on Woodbridge Ave.
 R on Raritan Center Pkwy.
 R on Fieldcrest Ave.
 R on Northfield Ave.
 L on Fernwood Ave.
 L on Sunfield Ave.
 L on Raritan Center Pkwy.

Entering Perth Amboy

R on Riverside Dr.
 R on Smith St.

End: Smith St. and High St., Perth Amboy

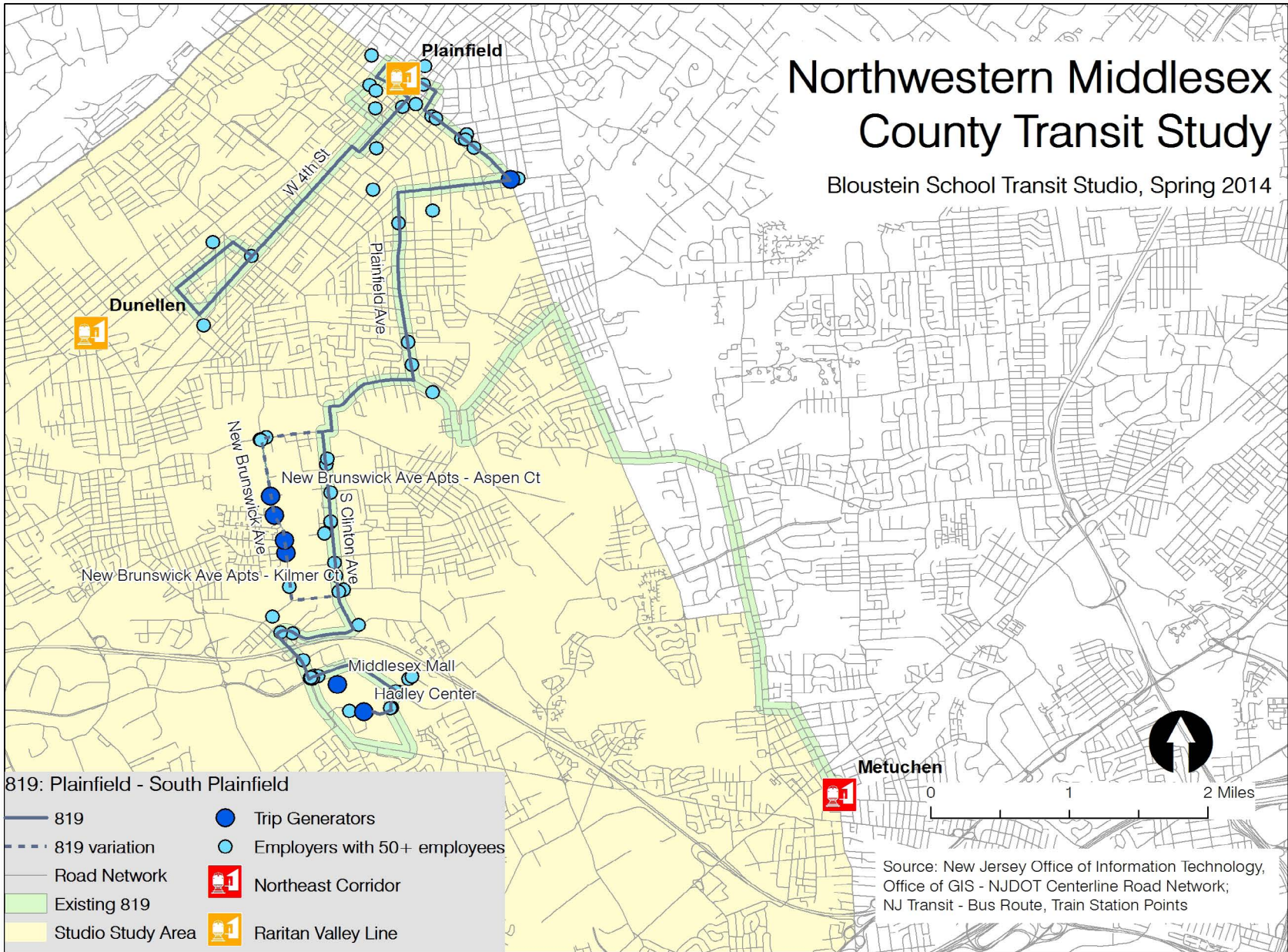
Modified Route 813 - New Brunswick to Perth Amboy (Mon-Fri)

To New Brunswick (NB)							
Rector St. at Smith St.	Front St. at Smith Street	Perth Amboy Train Station	Raritan Center Pkwy. & Fieldcrest	Fernwood & Northfield	Middlesex County College	New St. & Joyce Kilmer Ave.	Somerset & George Streets
6:30 AM	6:33 AM	6:37 AM	6:48 AM	6:53 AM	7:17 AM	7:32 AM	7:36 AM
7:30 AM	7:33 AM	7:37 AM	7:48 AM	7:53 AM	8:17 AM	8:32 AM	8:36 AM
8:30 AM	8:33 AM	8:37 AM	8:48 AM	8:53 AM	9:17 AM	9:32 AM	9:36 AM
9:30 AM	9:33 AM	9:37 AM	9:48 AM	9:53 AM	10:17 AM	10:32 AM	10:36 AM
10:30 AM	10:33 AM	10:37 AM	10:48 AM	10:53 AM	11:17 AM	11:32 AM	11:36 AM
11:30 AM	11:33 AM	11:37 AM	11:48 AM	11:53 AM	12:17 PM	12:32 PM	12:36 PM
12:30 PM	12:33 PM	12:37 PM	12:48 PM	12:53 PM	01:17 PM	01:32 PM	01:36 PM
01:30 PM	01:33 PM	01:37 PM	01:48 PM	01:53 PM	02:17 PM	02:32 PM	02:36 PM
02:30 PM	02:33 PM	02:37 PM	02:48 PM	02:53 PM	03:17 PM	03:32 PM	03:36 PM
03:30 PM	03:33 PM	03:37 PM	03:48 PM	03:53 PM	04:17 PM	04:32 PM	04:36 PM
04:30 PM	04:33 PM	04:37 PM	04:48 PM	04:53 PM	05:17 PM	05:32 PM	05:36 PM
05:30 PM	05:33 PM	05:37 PM	05:48 PM	05:53 PM	06:17 PM	06:32 PM	06:36 PM
06:30 PM	06:33 PM	06:37 PM	06:48 PM	06:53 PM	07:17 PM	07:32 PM	07:36 PM
07:30 PM	07:33 PM	07:37 PM	07:48 PM	07:53 PM	08:17 PM	08:32 PM	08:36 PM
08:30 PM	08:33 PM	08:37 PM	08:48 PM	08:53 PM	09:17 PM	09:32 PM	09:36 PM
09:30 PM	09:33 PM	09:37 PM	09:48 PM	09:53 PM	10:17 PM	10:32 PM	10:36 PM

To Perth Amboy (PA)							
Somerset & George Streets	New St. & Joyce Kilmer Ave.	Middlesex County College	Fernwood & Northfield	Raritan Center Pkwy. & Fieldcrest	Perth Amboy Train Station	Rector St. at Smith St.	
6:00 AM	6:03 AM	6:18 AM	6:44 AM	6:51 AM	7:02 AM	7:05 AM	
7:00 AM	7:03 AM	7:18 AM	7:44 AM	7:51 AM	8:02 AM	8:05 AM	
8:00 AM	8:03 AM	8:18 AM	8:44 AM	8:51 AM	9:02 AM	9:05 AM	
9:00 AM	9:03 AM	9:18 AM	9:44 AM	9:51 AM	10:02 AM	10:05 AM	
10:00 AM	10:03 AM	10:18 AM	10:44 AM	10:51 AM	11:02 AM	11:05 AM	
11:00 AM	11:03 AM	11:18 AM	11:44 AM	11:51 AM	12:02 PM	12:05 PM	
12:00 PM	12:03 PM	12:18 PM	12:44 PM	12:51 PM	01:02 PM	01:05 PM	
01:00 PM	01:03 PM	01:18 PM	01:44 PM	01:51 PM	02:02 PM	02:05 PM	
02:00 PM	02:03 PM	02:18 PM	02:44 PM	02:51 PM	03:02 PM	03:05 PM	
03:00 PM	03:03 PM	03:18 PM	03:44 PM	03:51 PM	04:02 PM	04:05 PM	
04:00 PM	04:03 PM	04:18 PM	04:44 PM	04:51 PM	05:02 PM	05:05 PM	
05:00 PM	05:03 PM	05:18 PM	05:44 PM	05:51 PM	06:02 PM	06:05 PM	
06:00 PM	06:03 PM	06:18 PM	06:44 PM	06:51 PM	07:02 PM	07:05 PM	
07:00 PM	07:03 PM	07:18 PM	07:44 PM	07:51 PM	08:02 PM	08:05 PM	
08:00 PM	08:03 PM	08:18 PM	08:44 PM	08:51 PM	09:02 PM	09:05 PM	
09:00 PM	09:03 PM	09:18 PM	09:44 PM	09:51 PM	10:02 PM	10:05 PM	

	Layover Time to NB	Layover Time to PA	Total Layover Time	Total Time	Revenue Hours
Block 1	2:00	2:05	4:05	16:05	12:00
Block 2	2:00	2:05	4:05	16:06	12:01
Block 3	1:36	2:05	3:41	15:36	11:55
TOTAL	5:36	6:15	11:51	47:01	35:01
TOTAL ANNUAL COST @ \$90/hour				\$824,670.00	

819/819A: Plainfield - South Plainfield



891: Piscataway to South Plainfield via Clinton Avenue**Start: 4th Street at Rushmore Avenue, Piscataway**

C on 4th Street

Entering Plainfield

C on 4th Street
 R on Plainfield Ave
 L on 5th Street
 BL on Park Ave
 R on Front Street
 R on Watchung Avenue
 C on Watchung Avenue
 R on 7th Street
 L on Park Avenue
 R on Randolph Road
 L on Plainfield Avenue

Entering South Plainfield

C on Lakeview Ave/Hamilton Blvd
 R on New Market Avenue
 L on Clinton Avenue
 R on Hamilton Boulevard
 L on Stelton Road
 L on Hadley Road
 R on Corporate Boulevard
 R on New Durham Avenue
 R on Stelton Road

End: Stelton Road at Hadley Center Drive Bus Stop, South Plainfield**891: South Plainfield to Piscataway via Clinton Avenue****Start: Stelton Road at Hadley Center Drive Bus Stop, South Plainfield**

C on Stelton Road
 R on Hamilton Boulevard
 L on Clinton Avenue
 R on New Market Avenue
 L on Hamilton Blvd
 L on Plainfield Avenue

Entering Plainfield

C on Plainfield Avenue
 R on Randolph Road
 L on Park Avenue
 R on 7th Street
 L on Watchung Avenue
 L on Front Street
 L on New Street
 R on 4th Street
 R on Clinton Avenue
 L on 3rd Street

Entering Piscataway

L on Rock Avenue
 L on 4th Street

End: 4th Street at Rushmore Avenue, Piscataway

819A: Plainfield to South Plainfield via New Brunswick Avenue**Start: E. 3RD Street at Church Street, Plainfield**

L on Watchung Avenue
 R on 7th Street
 L on Park Avenue
 R on Randolph Road
 L on Plainfield Avenue
 C on Plainfield Avenue

Entering South Plainfield

C on Plainfield Avenue
 R on New Market Avenue
 L on New Brunswick Ave
 L on Stelton Road
 L on Hadley Road
 R on Corporate Boulevard
 R on New Durham Avenue
 R on Stelton Road

End: Stelton Road at Hadley Center Drive Bus Stop, South Plainfield**819A : South Plainfield to Plainfield via New Brunswick Avenue****Start: Stelton Road at Hadley Center Drive Bus Stop, South Plainfield**

C on Stelton Road
 R on New Brunswick Avenue
 R on New Market Avenue
 L on Plainfield Avenue

Entering Plainfield

C on Plainfield Avenue
 R on Randolph Road
 L on Park Avenue
 R on 7th Street
 L on Watchung Avenue
 R on 2nd Street
 R on Roosevelt Avenue

End: E. 3RD Street at Church Street, Plainfield

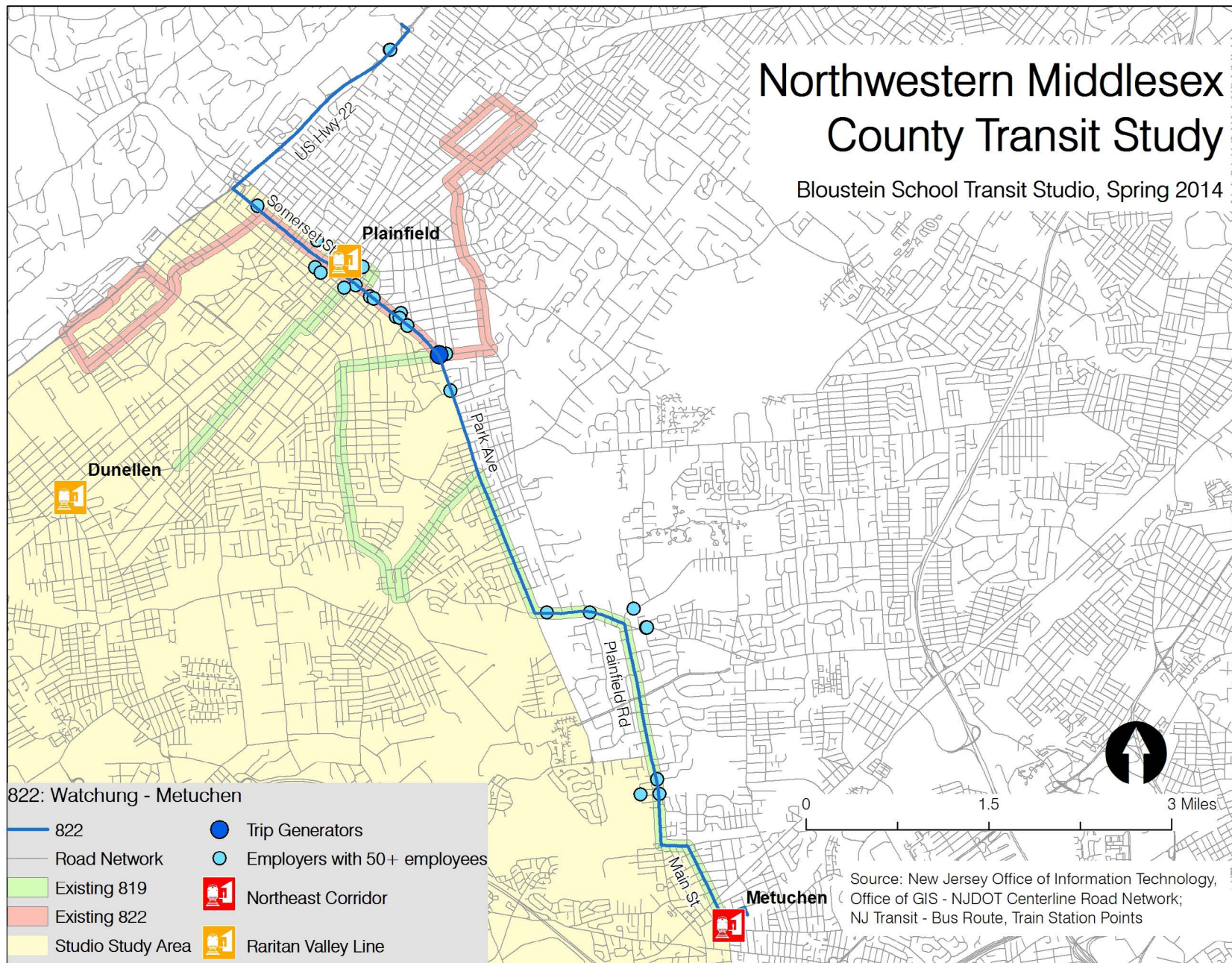
Modified Route 819 - Plainfield to South Plainfield (Mon-Sat)

To South Plainfield (SP)								
	Rock Ave. & W. 4th St.	W. 4th St. & Grant Ave.	W. 2nd St. & Park Ave.	Randolph Rd. & Plainfield Ave.	Plainfield Ave. & Samp-ton Ave.	New Market Ave. & S. Clinton Ave.	Hamilton Blvd. & Stelton Rd.	Hadley Center
A	6:30 AM	6:38 AM	6:46 AM	6:58 AM	7:07 AM	7:13 AM	7:27 AM	7:39 AM
A	7:00 AM	7:08 AM	7:16 AM	7:28 AM	7:37 AM	7:43 AM	7:57 AM	8:09 AM
A	7:30 AM	7:38 AM	7:46 AM	7:58 AM	8:07 AM	8:13 AM	8:27 AM	8:39 AM
A	8:00 AM	8:08 AM	8:16 AM	8:28 AM	8:37 AM	8:43 AM	8:57 AM	9:09 AM
A	8:30 AM	8:38 AM	8:46 AM	8:58 AM	9:07 AM	9:13 AM	9:27 AM	9:39 AM
A	9:00 AM	9:08 AM	9:16 AM	9:28 AM	9:37 AM	9:43 AM	9:57 AM	10:09 AM
	9:30 AM	9:38 AM	9:46 AM	9:58 AM	10:07 AM	10:13 AM	10:27 AM	10:39 AM
	10:00 AM	10:08 AM	10:16 AM	10:28 AM	10:37 AM	10:43 AM	10:57 AM	11:09 AM
	11:00 AM	11:08 AM	11:16 AM	11:28 AM	11:37 AM	11:43 AM	11:57 AM	12:09 PM
	12:00 PM	12:08 PM	12:16 PM	12:28 PM	12:37 PM	12:43 PM	12:57 PM	01:09 PM
	01:00 PM	01:08 PM	01:16 PM	01:28 PM	01:37 PM	01:43 PM	01:57 PM	02:09 PM
	02:00 PM	02:08 PM	02:16 PM	02:28 PM	02:37 PM	02:43 PM	02:57 PM	03:09 PM
A	03:00 PM	03:08 PM	03:16 PM	03:28 PM	03:37 PM	03:43 PM	03:57 PM	04:09 PM
A	03:30 PM	03:38 PM	03:46 PM	03:58 PM	04:07 PM	04:13 PM	04:27 PM	04:39 PM
A	04:00 PM	04:08 PM	04:16 PM	04:28 PM	04:37 PM	04:43 PM	04:57 PM	05:09 PM
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	06:00 PM	06:08 PM	06:16 PM	06:28 PM	06:37 PM	06:43 PM	06:57 PM	07:09 PM
	07:00 PM	07:08 PM	07:16 PM	07:28 PM	07:37 PM	07:43 PM	07:57 PM	08:09 PM
	08:00 PM	08:08 PM	08:16 PM	08:28 PM	08:37 PM	08:43 PM	08:57 PM	09:09 PM
	09:00 PM	09:08 PM	09:16 PM	09:28 PM	09:37 PM	09:43 PM	09:57 PM	10:09 PM
	010:00 PM	010:08 PM	010:16 PM	010:28 PM	010:37 PM	010:43 PM	010:57 PM	11:09 PM

To Plainfield (P)								
	Hadley Center	Hamilton Blvd. & Stelton Rd.	New Market Ave. & S. Clinton Ave.	Plainfield Ave. & Samp-ton Ave.	Randolph Rd. & Plainfield Ave.	W. 2nd St. & Park Ave.	W. 4th St. & Grant Ave.	Rock Ave. & W. 4th St.
A	6:45 AM	6:54 AM	7:07 AM	7:13 AM	7:22 AM	7:34 AM	7:41 AM	7:49 AM
A	7:15 AM	7:24 AM	7:37 AM	7:43 AM	7:52 AM	8:04 AM	8:11 AM	8:19 AM
A	7:45 AM	7:54 AM	8:07 AM	8:13 AM	8:22 AM	8:34 AM	8:41 AM	8:49 AM
A	8:15 AM	8:24 AM	8:37 AM	8:43 AM	8:52 AM	9:04 AM	9:11 AM	9:19 AM
A	8:45 AM	8:54 AM	9:07 AM	9:13 AM	9:22 AM	9:34 AM	9:41 AM	9:49 AM
A	9:45 AM	9:54 AM	10:07 AM	10:13 AM	10:22 AM	10:34 AM	10:41 AM	10:49 AM
	10:15 AM	10:24 AM	10:37 AM	10:43 AM	10:52 AM	11:04 AM	11:11 AM	11:19 AM
	10:45 AM	10:54 AM	11:07 AM	11:13 AM	11:22 AM	11:34 AM	11:41 AM	11:49 AM
	11:45 AM	11:54 AM	12:07 PM	12:13 PM	12:22 PM	12:34 PM	12:41 PM	12:49 PM
	12:45 PM	12:54 PM	01:07 PM	01:13 PM	01:22 PM	01:34 PM	01:41 PM	01:49 PM
	01:45 PM	01:54 PM	02:07 PM	02:13 PM	02:22 PM	02:34 PM	02:41 PM	02:49 PM
	02:15 PM	02:24 PM	02:37 PM	02:43 PM	02:52 PM	03:04 PM	03:11 PM	03:19 PM
A	02:45 PM	02:54 PM	03:07 PM	03:13 PM	03:22 PM	03:34 PM	03:41 PM	03:49 PM
A	03:15 PM	03:24 PM	03:37 PM	03:43 PM	03:52 PM	04:04 PM	04:11 PM	04:19 PM
A	03:45 PM	03:54 PM	04:07 PM	04:13 PM	04:22 PM	04:34 PM	04:41 PM	04:49 PM
A	04:15 PM	04:24 PM	04:37 PM	04:43 PM	04:52 PM	05:04 PM	05:11 PM	05:19 PM
A	04:45 PM	04:54 PM	05:07 PM	05:13 PM	05:22 PM	05:34 PM	05:41 PM	05:49 PM
	05:45 PM	05:54 PM	06:07 PM	06:13 PM	06:22 PM	06:34 PM	06:41 PM	06:49 PM
	06:45 PM	06:54 PM	07:07 PM	07:13 PM	07:22 PM	07:34 PM	07:41 PM	07:49 PM
	07:45 PM	07:54 PM	08:07 PM	08:13 PM	08:22 PM	08:34 PM	08:41 PM	08:49 PM
	08:45 PM	08:54 PM	09:07 PM	09:13 PM	09:22 PM	09:34 PM	09:41 PM	09:49 PM
	09:45 PM	09:54 PM	10:07 PM	10:13 PM	10:22 PM	10:34 PM	10:41 PM	10:49 PM

	Layover Time to SP	Layover Time to P	Total Layover Time	Total Time	Revenue Hours
Block 1	0:01	0:01	1:40	8:19	6:39
Block 2	1:12	0:33	1:45	8:24	6:39
Block 3	0:12	0:11	0:23	4:49	4:26
Block 4	0:01	0:11	0:11	2:24	2:13
Block 5	0:06	0:01	0:06	2:19	2:13
Block 6	1:01	0:44	2:08	12:09	10:01
Block 7	1:12	0:33	1:45	8:24	6:39
Block 8	0:01	0:22	1:10	7:49	6:39
Block 9	0:01	0:11	0:11	2:24	2:13
Block 10	0:01	0:11	0:11	2:24	2:13
TOTAL	5:42	3:48	9:30	59:25	49:01
TOTAL ANNUAL COST @ \$90/hour				\$1,406,152.50	

822: Watchung - Metuchen



822: Watchung to Metuchen**Start: Watchung Square Mall, Watchung**

C on US Route 22 East

Entering North Plainfield

R on Somerset St
 R on Ramp to The Plainfields
 L on Somerset St

Entering Plainfield

C on Park Ave

Entering South Plainfield

C on Park Ave
 L on Oak Tree Rd

Entering Edison

C on Oak Tree Rd
 R on Plainfield Rd

Entering Metuchen

L on Plainfield Avenue
 R on Main St
 L on Pennsylvania Ave

End: Metuchen Train Station**822: Metuchen to Watchung****Start: Metuchen Train Station**

C on Pennsylvania Ave
 L on Station Pl
 L on Hillside Ave
 R on Main St
 L on Plainfield Ave

Entering Edison

R on Plainfield Rd
 L on Oak Tree Rd

Entering South Plainfield

C on Oak Tree Road
 R on Park Ave

Entering Plainfield

C on Park Ave

Entering North Plainfield

C on Somerset St
 R on US Route 22 East

Entering Watchung

R on Ramp to Terrill Rd
 L on US Route 22 West

End: Watchung Square Mall, Watchung

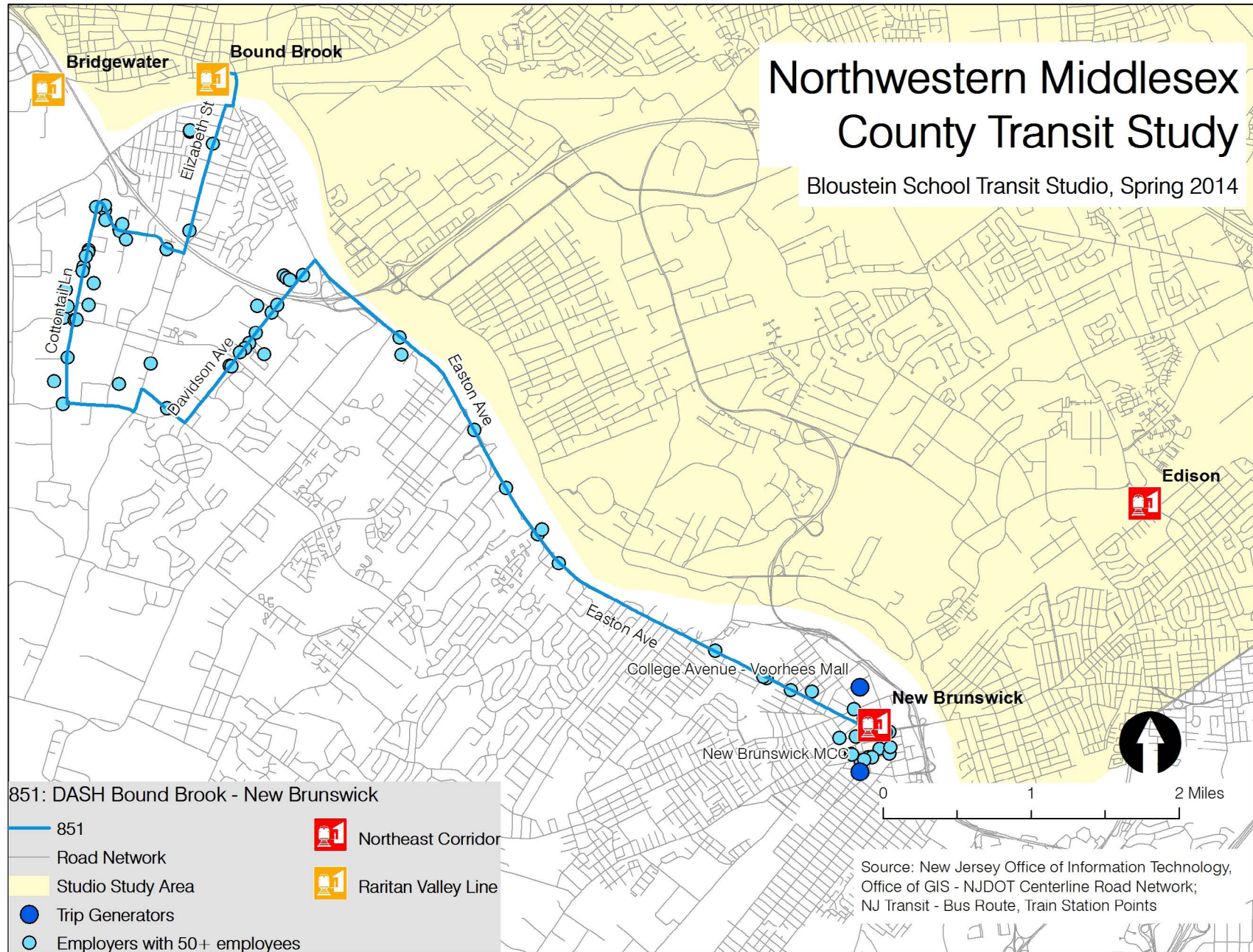
Modified Route 822 - Plainfield to Metuchen (Mon - Sat)

To Metuchen (M)						
Hillside Ave. & Pleasant Pl.	Main St. & Plainfield Ave.	Plainfield Rd. & Park Ave.	Plainfield Rd. & Oak Tree Rd.	Park Ave. & Randolph Rd.	Greenbrook Rd. & Park Ave.	Mountain Ave. & Somerset St.
6:30 AM	6:35 AM	6:41 AM	6:48 AM	7:06 AM	7:28 AM	7:34 AM
7:00 AM	7:05 AM	7:11 AM	7:18 AM	7:36 AM	7:58 AM	8:04 AM
7:30 AM	7:35 AM	7:41 AM	7:48 AM	8:06 AM	8:28 AM	8:34 AM
8:00 AM	8:05 AM	8:11 AM	8:18 AM	8:36 AM	8:58 AM	9:04 AM
8:30 AM	8:35 AM	8:41 AM	8:48 AM	9:06 AM	9:28 AM	9:34 AM
9:00 AM	9:05 AM	9:11 AM	9:18 AM	9:36 AM	9:58 AM	10:04 AM
9:30 AM	9:35 AM	9:41 AM	9:48 AM	10:06 AM	10:28 AM	10:34 AM
10:00 AM	10:05 AM	10:11 AM	10:18 AM	10:36 AM	10:58 AM	11:04 AM
11:00 AM	11:05 AM	11:11 AM	11:18 AM	11:36 AM	11:58 AM	12:04 PM
12:00 PM	12:05 PM	12:11 PM	12:18 PM	12:36 PM	12:58 PM	01:04 PM
01:00 PM	01:05 PM	01:11 PM	01:18 PM	01:36 PM	01:58 PM	02:04 PM
02:00 PM	02:05 PM	02:11 PM	02:18 PM	02:36 PM	02:58 PM	03:04 PM
03:00 PM	03:05 PM	03:11 PM	03:18 PM	03:36 PM	03:58 PM	04:04 PM
03:30 PM	03:35 PM	03:41 PM	03:48 PM	04:06 PM	04:28 PM	04:34 PM
04:00 PM	04:05 PM	04:11 PM	04:18 PM	04:36 PM	04:58 PM	05:04 PM
04:30 PM	04:35 PM	04:41 PM	04:48 PM	05:06 PM	05:28 PM	05:34 PM
05:00 PM	05:05 PM	05:11 PM	05:18 PM	05:36 PM	05:58 PM	06:04 PM
06:00 PM	06:05 PM	06:11 PM	06:18 PM	06:36 PM	06:58 PM	07:04 PM
07:00 PM	07:05 PM	07:11 PM	07:18 PM	07:36 PM	07:58 PM	08:04 PM
08:00 PM	08:05 PM	08:11 PM	08:18 PM	08:36 PM	08:58 PM	09:04 PM
09:00 PM	09:05 PM	09:11 PM	09:18 PM	09:36 PM	09:58 PM	10:04 PM
10:00 PM	10:05 PM	10:11 PM	10:18 PM	10:36 PM	10:58 PM	11:04 PM

To Plainfield (P)						
Mountain Ave. & Somerset St.	Park Ave. & Randolph Rd.	Plainfield Rd. & Oak Tree Rd.	Plainfield Rd. & Park Ave.	Main St. & Plainfield Ave.	Hillside Ave. & Pleasant Pl.	
6:45 AM	6:59 AM	7:17 AM	7:24 AM	7:30 AM	7:35 AM	
7:15 AM	7:29 AM	7:47 AM	7:54 AM	8:00 AM	8:05 AM	
7:45 AM	7:59 AM	8:17 AM	8:24 AM	8:30 AM	8:35 AM	
8:15 AM	8:29 AM	8:47 AM	8:54 AM	9:00 AM	9:05 AM	
8:45 AM	8:59 AM	9:17 AM	9:24 AM	9:30 AM	9:35 AM	
9:45 AM	9:59 AM	10:17 AM	10:24 AM	10:30 AM	10:35 AM	
10:45 AM	10:59 AM	11:17 AM	11:24 AM	11:30 AM	11:35 AM	
11:45 AM	11:59 AM	12:17 PM	12:24 PM	12:30 PM	12:35 PM	
12:45 PM	12:59 PM	01:17 PM	01:24 PM	01:30 PM	01:35 PM	
01:45 PM	01:59 PM	02:17 PM	02:24 PM	02:30 PM	02:35 PM	
02:15 PM	02:29 PM	02:47 PM	02:54 PM	03:00 PM	03:05 PM	
02:45 PM	02:59 PM	03:17 PM	03:24 PM	03:30 PM	03:35 PM	
03:15 PM	03:29 PM	03:47 PM	03:54 PM	04:00 PM	04:05 PM	
03:45 PM	03:59 PM	04:17 PM	04:24 PM	04:30 PM	04:35 PM	
04:15 PM	04:29 PM	04:47 PM	04:54 PM	05:00 PM	05:05 PM	
04:45 PM	04:59 PM	05:17 PM	05:24 PM	05:30 PM	05:35 PM	
05:45 PM	05:59 PM	06:17 PM	06:24 PM	06:30 PM	06:35 PM	
06:45 PM	06:59 PM	07:17 PM	07:24 PM	07:30 PM	07:35 PM	
07:45 PM	07:59 PM	08:17 PM	08:24 PM	08:30 PM	08:35 PM	
08:45 PM	08:59 PM	09:17 PM	09:24 PM	09:30 PM	09:35 PM	
09:45 PM	09:59 PM	10:17 PM	10:24 PM	10:30 PM	10:35 PM	

	Layover Time to M	Layover Time to P	Total Layover Time	Total Time	Revenue Hours
Block 1	1:01	1:15	2:48	10:35	7:47
Block 2	1:01	1:40	3:13	10:49	7:36
Block 3	0:11	0:25	0:36	3:34	2:58
Block 4	0:01	0:25	0:25	2:19	1:54
Block 5	1:01	1:15	2:29	10:05	7:36
Block 6	1:22	1:15	2:37	8:19	5:42
Block 7	1:22	0:50	2:12	6:50	4:38
Block 8	0:41	0:25	1:06	4:04	2:58
TOTAL	7:56	7:30	15:26	56:01	41:01
TOTAL ANNUAL COST @ \$90/hour				\$1,159,195.50	

DASH Fusion: Bound Brook - New Brunswick



DASH Fusion: New Brunswick to Bound Brook

DASH Fusion: Bound Brook to New Bruswick

Start: New Brunswick Train Station

Start: Bound Brook Train Station

C on Easton Ave

C on E Main St

R on County Rd 527 N/Main St

Entering Franklin Township

Entering South Bound Brook

C on Easton Ave

C on County Rd 527 N/Main St

L on Davidson Ave

R on Canal Rd

R on New Brunswick Rd

L on Elizabeth Ave

C on Schoolhouse Rd

R on Cottontail Ln

R on Campus Dr

L on Elizabeth Ave

Entering Franklin Township

C on Elizabeth Ave

R on Campus Dr

L on Cottontail Ln

L on Schoolhouse Rd

C on New Brunswick Rd

L on Davidson Ave

R on Easton Ave

Entering South Bound Brook

C on Elizabeth Ave

R on Canal Rd

L on County Rd 527 N/Main St

Entering Bound Brook

Entering New Brunswick

C on County Rd 527 N/Main St

L on E Main St

C on Easton Ave

End: Bound Brook Train Station

End: New Brunswick Train Station

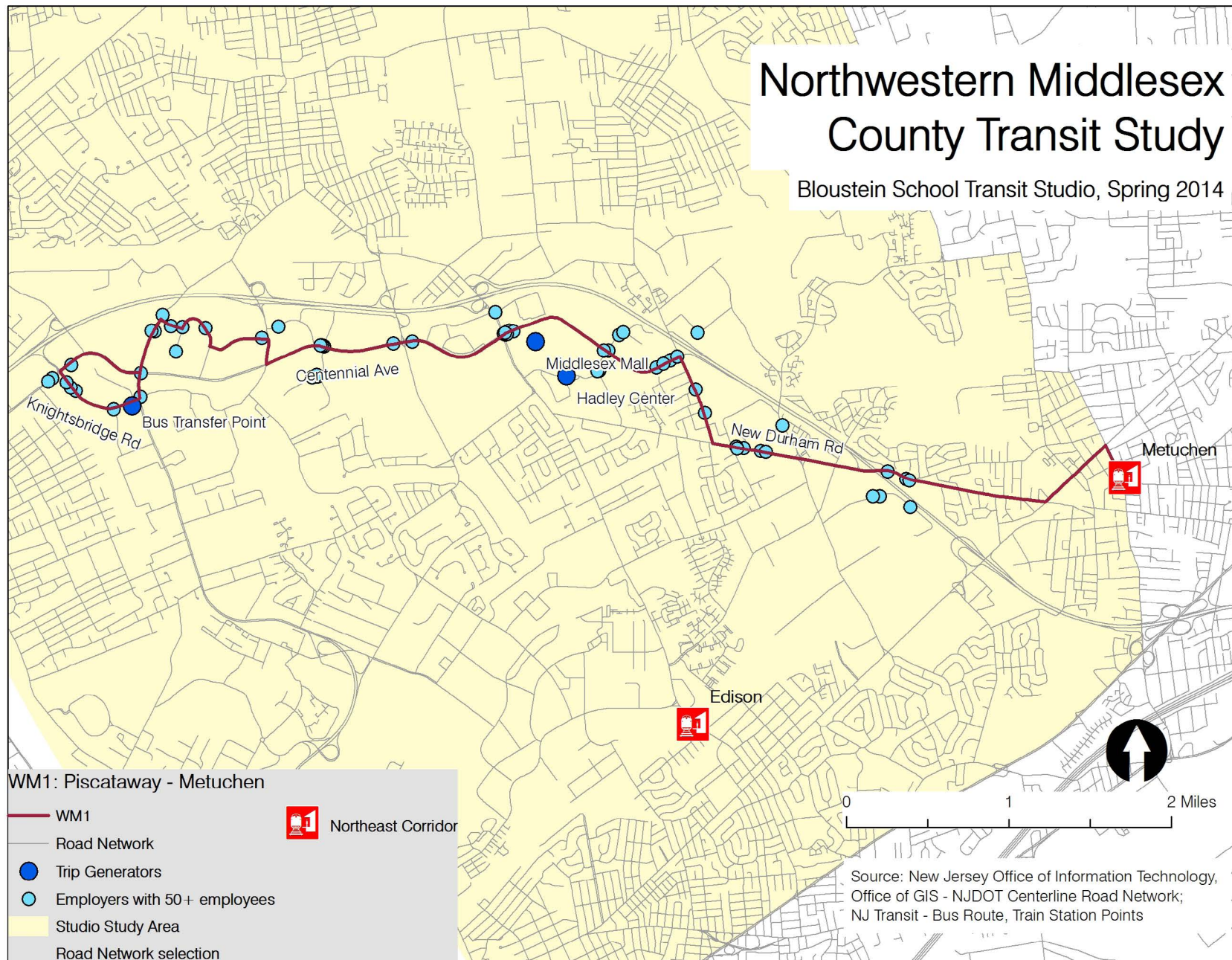
DASH FUSION - Bound Brook Station to New Brunswick Station

To New Brunswick (NB)										
Bound Brook Station	High St. & Elizabeth St.	Elizabeth Ave. & Campus Dr.	Campus Dr. & Cottontail Ln.	Cottontail Ln. & Schoolhouse Rd.	Davidson Ave. & Pierce St.	Easton Ave. & Davidson Ave.	Cedar Grove Ln. & Easton Ave.	New Brunswick Station		
6:00 AM	6:04 AM	6:12 AM	6:16 AM	6:25 AM	6:34 AM	6:38 AM	6:43 AM	6:54 AM		
6:30 AM	6:34 AM	6:42 AM	6:46 AM	6:55 AM	7:04 AM	7:08 AM	7:13 AM	7:24 AM		
7:00 AM	7:04 AM	7:12 AM	7:16 AM	7:25 AM	7:34 AM	7:38 AM	7:43 AM	7:54 AM		
7:30 AM	7:34 AM	7:42 AM	7:46 AM	7:55 AM	8:04 AM	8:08 AM	8:13 AM	8:24 AM		
8:00 AM	8:04 AM	8:12 AM	8:16 AM	8:25 AM	8:34 AM	8:38 AM	8:43 AM	8:54 AM		
8:30 AM	8:34 AM	8:42 AM	8:46 AM	8:55 AM	9:04 AM	9:08 AM	9:13 AM	9:24 AM		
9:00 AM	9:04 AM	9:12 AM	9:16 AM	9:25 AM	9:34 AM	9:38 AM	9:43 AM	9:54 AM		
10:00 AM	10:04 AM	10:12 AM	10:16 AM	10:25 AM	10:34 AM	10:38 AM	10:43 AM	10:54 AM		
11:00 AM	11:04 AM	11:12 AM	11:16 AM	11:25 AM	11:34 AM	11:38 AM	11:43 AM	11:54 AM		
12:00 PM	12:04 PM	12:12 PM	12:16 PM	12:25 PM	12:34 PM	12:38 PM	12:43 PM	12:54 PM		
01:00 PM	01:04 PM	01:12 PM	01:16 PM	01:25 PM	01:34 PM	01:38 PM	01:43 PM	01:54 PM		
02:00 PM	02:04 PM	02:12 PM	02:16 PM	02:25 PM	02:34 PM	02:38 PM	02:43 PM	02:54 PM		
03:00 PM	03:04 PM	03:12 PM	03:16 PM	03:25 PM	03:34 PM	03:38 PM	03:43 PM	03:54 PM		
03:30 PM	03:34 PM	03:42 PM	03:46 PM	03:55 PM	04:04 PM	04:08 PM	04:13 PM	04:24 PM		
04:00 PM	04:04 PM	04:12 PM	04:16 PM	04:25 PM	04:34 PM	04:38 PM	04:43 PM	04:54 PM		
04:30 PM	04:34 PM	04:42 PM	04:46 PM	04:55 PM	05:04 PM	05:08 PM	05:13 PM	05:24 PM		
05:00 PM	05:04 PM	05:12 PM	05:16 PM	05:25 PM	05:34 PM	05:38 PM	05:43 PM	05:54 PM		
06:00 PM	06:04 PM	06:12 PM	06:16 PM	06:25 PM	06:34 PM	06:38 PM	06:43 PM	06:54 PM		
07:00 PM	07:04 PM	07:12 PM	07:16 PM	07:25 PM	07:34 PM	07:38 PM	07:43 PM	07:54 PM		
08:00 PM	08:04 PM	08:12 PM	08:16 PM	08:25 PM	08:34 PM	08:38 PM	08:43 PM	08:54 PM		
09:00 PM	09:04 PM	09:12 PM	09:16 PM	09:25 PM	09:34 PM	09:38 PM	09:43 PM	09:54 PM		
10:00 PM	10:04 PM	10:12 PM	10:16 PM	10:25 PM	10:34 PM	10:38 PM	10:43 PM	10:54 PM		
11:00 PM	11:04 PM	11:12 PM	11:16 PM	11:25 PM	11:34 PM	11:38 PM	11:43 PM	11:54 PM		

To Bound Brook (BB)										
New Brunswick Station	Cedar Grove Ln. & Easton Ave.	Easton Ave. & Davidson Ave.	Davidson Ave. & Pierce St.	Cottontail Ln. & Schoolhouse Rd.	Campus Dr. & Cottontail Ln.	Elizabeth Ave. & Campus Dr.	High St. & Elizabeth St.	Bound Brook Station		
6:00 AM	6:11 AM	6:16 AM	6:20 AM	6:29 AM	6:38 AM	6:42 AM	6:47 AM	6:51 AM		
6:30 AM	6:41 AM	6:46 AM	6:50 AM	6:59 AM	7:08 AM	7:12 AM	7:17 AM	7:21 AM		
7:00 AM	7:11 AM	7:16 AM	7:20 AM	7:29 AM	7:38 AM	7:42 AM	7:47 AM	7:51 AM		
7:30 AM	7:41 AM	7:46 AM	7:50 AM	7:59 AM	8:08 AM	8:12 AM	8:17 AM	8:21 AM		
8:00 AM	8:11 AM	8:16 AM	8:20 AM	8:29 AM	8:38 AM	8:42 AM	8:47 AM	8:51 AM		
8:30 AM	8:41 AM	8:46 AM	8:50 AM	8:59 AM	9:08 AM	9:12 AM	9:17 AM	9:21 AM		
9:00 AM	9:11 AM	9:16 AM	9:20 AM	9:29 AM	9:38 AM	9:42 AM	9:47 AM	9:51 AM		
10:00 AM	10:11 AM	10:16 AM	10:20 AM	10:29 AM	10:38 AM	10:42 AM	10:47 AM	10:51 AM		
11:00 AM	11:11 AM	11:16 AM	11:20 AM	11:29 AM	11:38 AM	11:42 AM	11:47 AM	11:51 AM		
12:00 PM	12:11 PM	12:16 PM	12:20 PM	12:29 PM	12:38 PM	12:42 PM	12:47 PM	12:51 PM		
01:00 PM	01:11 PM	01:16 PM	01:20 PM	01:29 PM	01:38 PM	01:42 PM	01:47 PM	01:51 PM		
02:00 PM	02:11 PM	02:16 PM	02:20 PM	02:29 PM	02:38 PM	02:42 PM	02:47 PM	02:51 PM		
03:00 PM	03:11 PM	03:16 PM	03:20 PM	03:29 PM	03:38 PM	03:42 PM	03:47 PM	03:51 PM		
03:30 PM	03:41 PM	03:46 PM	03:50 PM	03:59 PM	04:08 PM	04:12 PM	04:17 PM	04:21 PM		
04:00 PM	04:11 PM	04:16 PM	04:20 PM	04:29 PM	04:38 PM	04:42 PM	04:47 PM	04:51 PM		
04:30 PM	04:41 PM	04:46 PM	04:50 PM	04:59 PM	05:08 PM	05:12 PM	05:17 PM	05:21 PM		
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06:00 PM	06:11 PM	06:16 PM	06:20 PM	06:29 PM	06:38 PM	06:42 PM	06:47 PM	06:51 PM		
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08:00 PM	08:11 PM	08:16 PM	08:20 PM	08:29 PM	08:38 PM	08:42 PM	08:47 PM	08:51 PM		
09:00 PM	09:11 PM	09:16 PM	09:20 PM	09:29 PM	09:38 PM	09:42 PM	09:47 PM	09:51 PM		
10:00 PM	10:11 PM	10:16 PM	10:20 PM	10:29 PM	10:38 PM	10:42 PM	10:47 PM	10:51 PM		
11:00 PM	11:11 PM	11:16 PM	11:20 PM	11:29 PM	11:38 PM	11:42 PM	11:47 PM	11:51 PM		

	Layover Time to NB	Layover Time to BB	Total Layover Time	Total Time	Revenue Hours
Block 1	0:54	1:12	2:06	17:51	15:45
Block 2	0:48	1:21	2:09	17:54	15:45
Block 3	0:06	0:09	0:15	2:54	2:39
Block 4	0:06	0:09	0:15	2:51	2:36
Block 5	0:06	0:01	0:06	1:51	1:45
Block 6	0:00	0:09	0:09	1:54	1:45
TOTAL	2:00	3:00	5:00	43:01	40:01
TOTAL ANNUAL COST @ \$65/hour				\$667,143.75	

WM1: Piscataway - Metuchen



WM1: Centennial Ave to Metuchen**Start: Centennial Avenue bus stop, Piscataway**

C on Centennial Ave
 R on Knightsbridge Road
 L on NJ-18 N/Old New Brunswick Rd
 R on Springfield Ave
 L on New England Ave
 L on Colonial Dr
 R on S Randolphville Rd
 L on Centennial Ave

Entering South Plainfield

C on Hadley Rd
 R on Durham Ave

Entering Edison

L on New Durham Rd
 C on Durham Ave

Entering Metuchen

L on Central Ave
 R on W Chestnut Ave
 R on Main St

End: Metuchen Train Station, Metuchen**WM 1: Metuchen to Centennial Ave****Start: Metuchen Train Station, Metuchen**

C on Main St
 L on Route-27/Lincoln Hwy

Entering Edison

R on New Durham Rd

Entering South Plainfield

R on Durham Ave
 L on Hadley Rd

Entering Piscataway

C on Centennial Ave
 L on Route-18 S
 R on Knightsbridge Rd
 L on Centennial Ave

End: Centennial Avenue bus stop, Piscataway

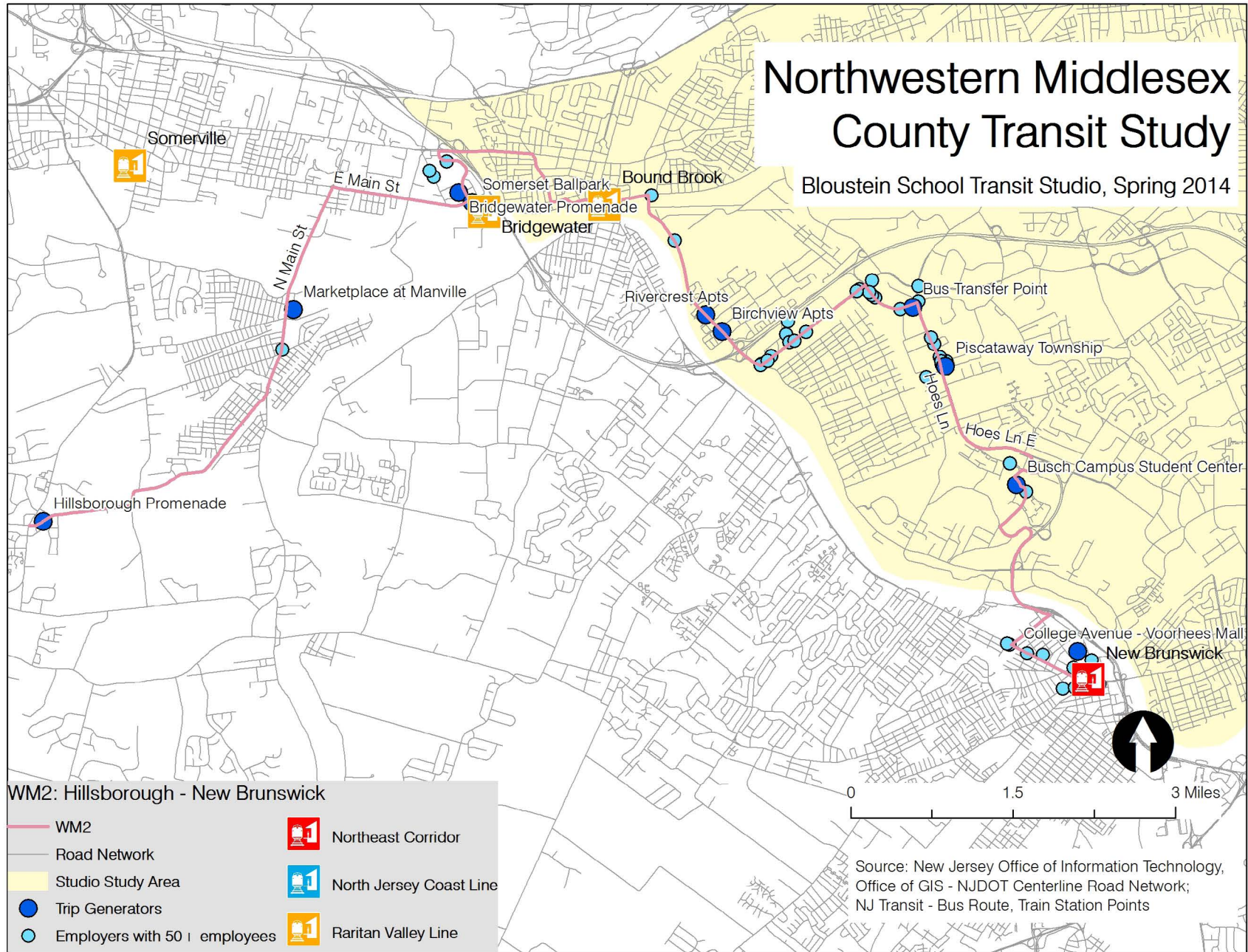
WM1 - Piscataway to Metuchen (Sun-Sat.)

To Piscataway (P)							
Metuchen Station	Middlesex Ave. & New Durham Rd.	New Durham Rd. & Talmadge Rd.	New Durham Rd. & Durham Ave.	Stelton Rd. & Hadley Rd.	Centennial Ave. & S. Randolphville Rd.	Old New Brunswick Rd. & Centennial Ave.	Centennial Ave. & Kingsbridge Rd.
6:30 AM	6:32 AM	6:36 AM	6:38 AM	6:42 AM	6:52 AM	6:57 AM	7:03 AM
7:00 AM	7:02 AM	7:06 AM	7:08 AM	7:12 AM	7:22 AM	7:27 AM	7:33 AM
7:30 AM	7:32 AM	7:36 AM	7:38 AM	7:42 AM	7:52 AM	7:57 AM	8:03 AM
8:00 AM	8:02 AM	8:06 AM	8:08 AM	8:12 AM	8:22 AM	8:27 AM	8:33 AM
8:30 AM	8:32 AM	8:36 AM	8:38 AM	8:42 AM	8:52 AM	8:57 AM	9:03 AM
9:00 AM	9:02 AM	9:06 AM	9:08 AM	9:12 AM	9:22 AM	9:27 AM	9:33 AM
9:30 AM	9:32 AM	9:36 AM	9:38 AM	9:42 AM	9:52 AM	9:57 AM	10:03 AM
10:00 AM	10:02 AM	10:06 AM	10:08 AM	10:12 AM	10:22 AM	10:27 AM	10:33 AM
10:30 AM	10:32 AM	10:36 AM	10:38 AM	10:42 AM	10:52 AM	10:57 AM	11:03 AM
11:00 AM	11:02 AM	11:06 AM	11:08 AM	11:12 AM	11:22 AM	11:27 AM	11:33 AM
11:30 AM	11:32 AM	11:36 AM	11:38 AM	11:42 AM	11:52 AM	11:57 AM	12:03 PM
12:00 PM	12:02 PM	12:06 PM	12:08 PM	12:12 PM	12:22 PM	12:27 PM	12:33 PM
12:30 PM	12:32 PM	12:36 PM	12:38 PM	12:42 PM	12:52 PM	12:57 PM	01:03 PM
01:00 PM	01:02 PM	01:06 PM	01:08 PM	01:12 PM	01:22 PM	01:27 PM	01:33 PM
01:30 PM	01:32 PM	01:36 PM	01:38 PM	01:42 PM	01:52 PM	01:57 PM	02:03 PM
02:00 PM	02:02 PM	02:06 PM	02:08 PM	02:12 PM	02:22 PM	02:27 PM	02:33 PM
02:30 PM	02:32 PM	02:36 PM	02:38 PM	02:42 PM	02:52 PM	02:57 PM	03:03 PM
03:00 PM	03:02 PM	03:06 PM	03:08 PM	03:12 PM	03:22 PM	03:27 PM	03:33 PM
03:30 PM	03:32 PM	03:36 PM	03:38 PM	03:42 PM	03:52 PM	03:57 PM	04:03 PM
04:00 PM	04:02 PM	04:06 PM	04:08 PM	04:12 PM	04:22 PM	04:27 PM	04:33 PM
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05:00 PM	05:02 PM	05:06 PM	05:08 PM	05:12 PM	05:22 PM	05:27 PM	05:33 PM
05:30 PM	05:32 PM	05:36 PM	05:38 PM	05:42 PM	05:52 PM	05:57 PM	06:03 PM
06:00 PM	06:02 PM	06:06 PM	06:08 PM	06:12 PM	06:22 PM	06:27 PM	06:33 PM
06:30 PM	06:32 PM	06:36 PM	06:38 PM	06:42 PM	06:52 PM	06:57 PM	07:03 PM
07:00 PM	07:02 PM	07:06 PM	07:08 PM	07:12 PM	07:22 PM	07:27 PM	07:33 PM
07:30 PM	07:32 PM	07:36 PM	07:38 PM	07:42 PM	07:52 PM	07:57 PM	08:03 PM
08:00 PM	08:02 PM	08:06 PM	08:08 PM	08:12 PM	08:22 PM	08:27 PM	08:33 PM
08:30 PM	08:32 PM	08:36 PM	08:38 PM	08:42 PM	08:52 PM	08:57 PM	09:03 PM
09:00 PM	09:02 PM	09:06 PM	09:08 PM	09:12 PM	09:22 PM	09:27 PM	09:33 PM
09:30 PM	09:32 PM	09:36 PM	09:38 PM	09:42 PM	09:52 PM	09:57 PM	10:03 PM
10:00 PM	10:02 PM	10:06 PM	10:08 PM	10:12 PM	10:22 PM	10:27 PM	10:33 PM
10:30 PM	10:32 PM	10:36 PM	10:38 PM	10:42 PM	10:52 PM	10:57 PM	11:03 PM

To Metuchen (M)							
Centennial Ave. & Kingsbridge Rd.	Old New Brunswick Rd. & Centennial Ave.	Centennial Ave. & S. Randolphville Rd.	Stelton Rd. & Hadley Rd.	New Durham Rd. & Durham Ave.	New Durham Rd. & Talmadge Rd.	Middlesex Ave. & New Durham Rd.	Metuchen Station
6:30 AM	6:36 AM	6:43 AM	6:53 AM	6:57 AM	6:59 AM	7:03 AM	7:05 AM
7:00 AM	7:06 AM	7:13 AM	7:23 AM	7:27 AM	7:29 AM	7:33 AM	7:35 AM
7:30 AM	7:36 AM	7:43 AM	7:53 AM	7:57 AM	7:59 AM	8:03 AM	8:05 AM
8:00 AM	8:06 AM	8:13 AM	8:23 AM	8:27 AM	8:29 AM	8:33 AM	8:35 AM
8:30 AM	8:36 AM	8:43 AM	8:53 AM	8:57 AM	8:59 AM	9:03 AM	9:05 AM
9:00 AM	9:06 AM	9:13 AM	9:23 AM	9:27 AM	9:29 AM	9:33 AM	9:35 AM
9:30 AM	9:36 AM	9:43 AM	9:53 AM	9:57 AM	9:59 AM	10:03 AM	10:05 AM
10:00 AM	10:06 AM	10:13 AM	10:23 AM	10:27 AM	10:29 AM	10:33 AM	10:35 AM
10:30 AM	10:36 AM	10:43 AM	10:53 AM	10:57 AM	10:59 AM	11:03 AM	11:05 AM
11:00 AM	11:06 AM	11:13 AM	11:23 AM	11:27 AM	11:29 AM	11:33 AM	11:35 AM
11:30 AM	11:36 AM	11:43 AM	11:53 AM	11:57 AM	11:59 AM	12:03 PM	12:05 PM
12:00 PM	12:06 PM	12:13 PM	12:23 PM	12:27 PM	12:29 PM	12:33 PM	12:35 PM
12:30 PM	12:36 PM	12:43 PM	12:53 PM	12:57 PM	12:59 PM	01:03 PM	01:05 PM
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05:30 PM	05:36 PM	05:43 PM	05:53 PM	05:57 PM	05:59 PM	06:03 PM	06:05 PM
06:00 PM	06:06 PM	06:13 PM	06:23 PM	06:27 PM	06:29 PM	06:33 PM	06:35 PM
06:30 PM	06:36 PM	06:43 PM	06:53 PM	06:57 PM	06:59 PM	07:03 PM	07:05 PM
07:00 PM	07:06 PM	07:13 PM	07:23 PM	07:27 PM	07:29 PM	07:33 PM	07:35 PM
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09:30 PM	09:36 PM	09:43 PM	09:53 PM	09:57 PM	09:59 PM	10:03 PM	10:05 PM
10:00 PM	10:06 PM	10:13 PM	10:23 PM	10:27 PM	10:29 PM	10:33 PM	10:35 PM
10:30 PM	10:36 PM	10:43 PM	10:53 PM	10:57 PM	10:59 PM	11:03 PM	11:05 PM

	Layover Time to P	Layover Time to M	Total Layover Time	Total Time	Revenue Hours
Block 1	3:36	3:20	6:56	16:33	9:37
Block 2	3:36	3:20	6:56	16:35	9:39
Block 3	3:36	2:55	6:31	16:35	10:04
Block 4	3:09	3:20	6:29	15:33	9:04
TOTAL	13:57	12:55	26:01	65:01	38:01
TOTAL ANNUAL COST @ \$90/hour				\$1,261,440.00	

WM2: Hillsborough - New Brunswick



WM2: Hillsborough Promenade to New Brunswick**WM2: New Brunswick to Hillsborough Promenade****Start: Hillsborough Promenade, Hillsborough**

C on Falcon Rd
 R on Falcon Road
 L on Sunnymeade Rd
 C on Weston Rd

Entering Manville

C on Kennedy Blvd
 L on S. Main St

Entering Bridgewater

C on Finderne Ave
 R on E. Main St
 L on Promenade Blvd
 C on NJ-28 E/W Union Ave

Entering Bound Brook

SR on Vosseller Ave
 L on Talmage Ave
 R on Columbus Pl
 C on W Main St
 C on E Main St

Entering Piscataway

R on River Rd
 L on Centennial Ave
 R on Knightsbridge Rd
 R on NJ-18 S
 R on Davidson Rd exit
 R on Davidson Rd
 L on Bartholomew Rd
 R on Campus Rd exit at circle

Entering New Brunswick

C on NJ-18 S
 R on Huntington St
 L on Easton Ave

End: New Brunswick Train Station, New Brunswick**Start: New Brunswick Train Station, New Brunswick**

C on George St
 R on Hamilton St
 L on George St
 SR on NJ-18 N

Entering Piscataway

SR on Campus Rd/Rutgers Stadium/Busch
 Campus Exit
 C on Campus Rd
 R on Bartholomew Rd
 R on Davidson Rd
 C on Avenue E
 C on NJ-18 N
 L on Knightsbridge Rd
 L on Centennial Ave
 R on River Rd

Entering Bound Brook

L on Lincoln Blvd/E Main St
 C on E Main St

Entering Bridgewater

R on Columbus Pl
 L on Talmadge Ave
 C on Main St
 R on Foothill Rd
 L on NJ-28 W
 L on Finderne Ave

Entering Manville

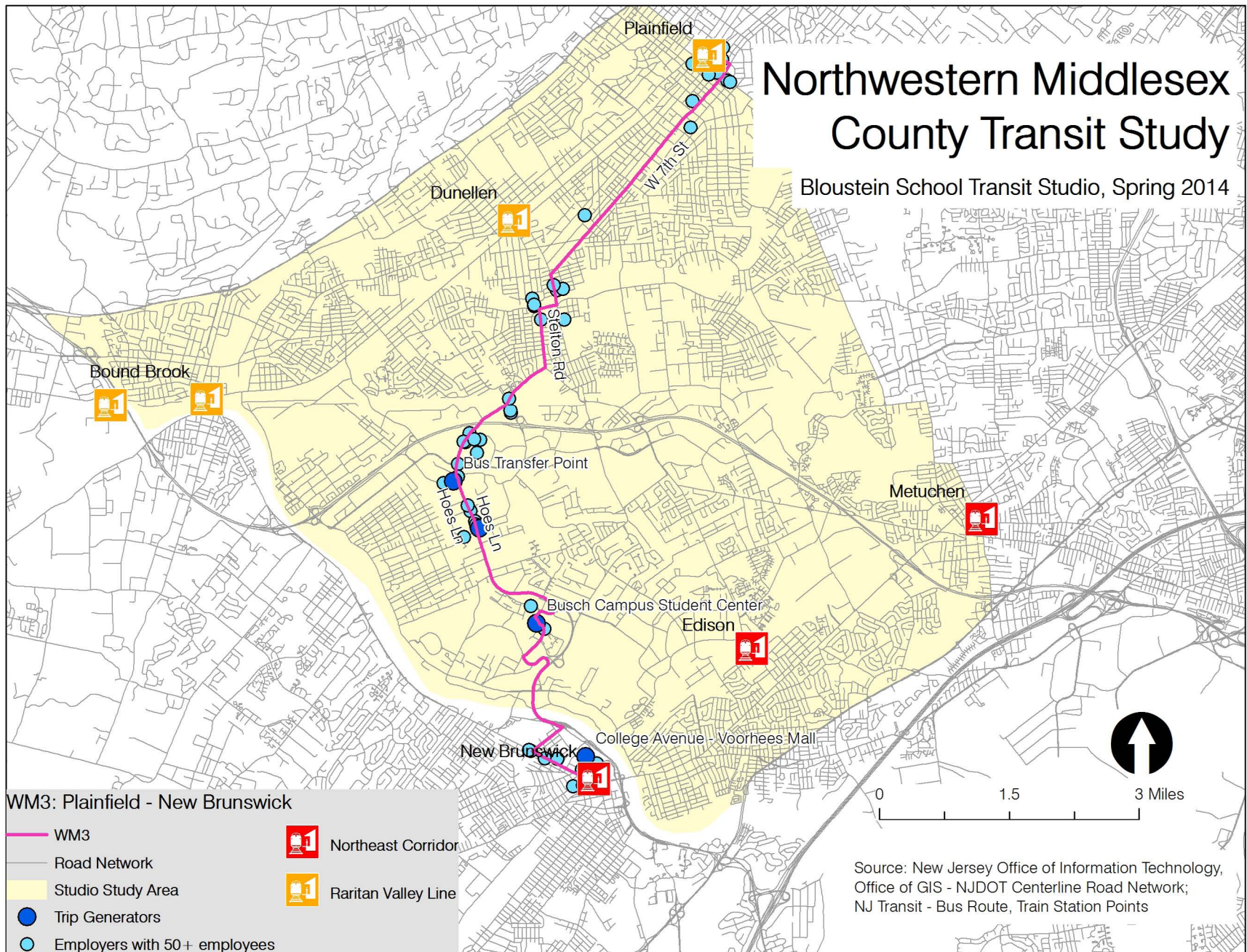
C on N Main St
 SR on Kennedy Blvd
 C on Kennedy Blvd

Entering Hillsborough

C on Weston Rd
 C on Sunnymeade Rd
 R on Falcon Rd

End: Hillsborough Promenade, Hillsborough

WM3: Plainfield - New Brunswick



WM3: Plainfield - New Brunswick**Start: Plainfield Train Station, Plainfield**

C on Leland Ave
R on E 7th St

Entering Dunellen

L on S Washington Ave

Entering Piscataway

R on Lakeview Ave
L on Stelton Rd
R on Old New Brunswick Rd
C on NJ-18 S
R on Division St Exit
R on Division St
L on Bartholomew Rd
R on Campus Rd

Entering New Brunswick

R on NJ-18 S
R on George St Exit
C on George St
R on Hamilton St
L on Easton Ave

End: New Brunswick Train Station, New Brunswick**WM3: New Brunswick - Plainfield****Start: New Brunswick Train Station, New Brunswick**

C on George St
R on Hamilton St
L on George St
SR on NJ-18 N

Entering Piscataway

SR on Campus Rd/Rutgers Stadium/Busch
Campus Exit
C on Campus Rd
R on Bartholomew Rd
R on Davidson Rd
C on Avenue E
C on NJ-18 N
C on Old New Brunswick Rd
L on Stelton Rd
R on Lakeview Ave

Entering Dunellen

L on S Washington Ave

Entering Plainfield

R on W 7th St
L on Leland Ave

End: Plainfield Train Station, Plainfield

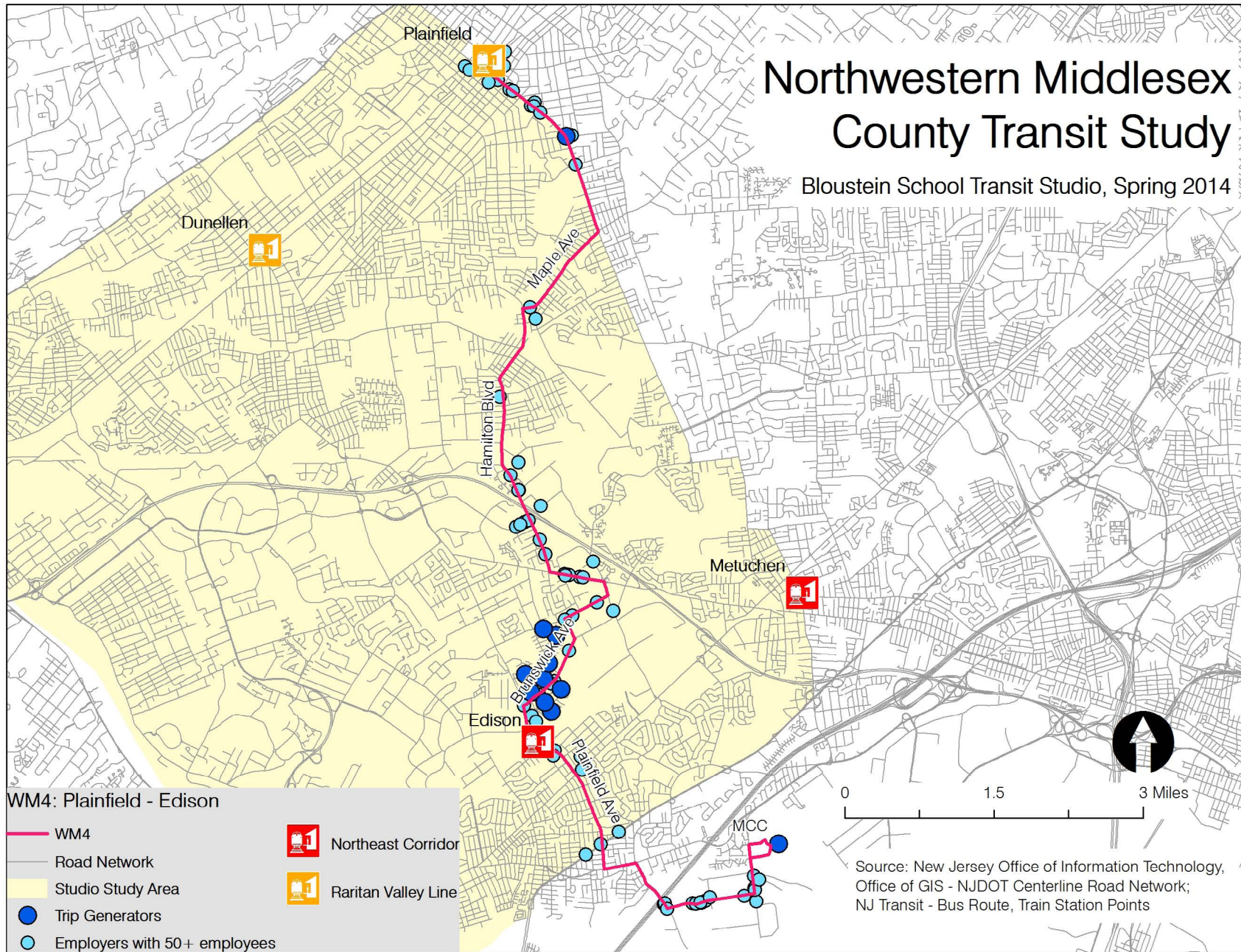
WM3 - Plainfield to New Brunswick (Sun-Sat.)

To Plainfield (P)						
New Brunswick Station	Franklin Blvd. & Landing Ln.	Busch Campus Center	Route 18 & Centennial Ave.	Old New Brunswick Rd. & Stelton Rd.	S. Washington Ave. & W. 7th St.	Plainfield Station
6:00 AM	6:12 AM	6:19 AM	6:25 AM	6:35 AM	6:43 AM	7:03 AM
6:30 AM	6:42 AM	6:49 AM	6:55 AM	7:05 AM	7:13 AM	7:33 AM
7:00 AM	7:12 AM	7:19 AM	7:25 AM	7:35 AM	7:43 AM	8:03 AM
7:30 AM	7:42 AM	7:49 AM	7:55 AM	8:05 AM	8:13 AM	8:33 AM
8:00 AM	8:12 AM	8:19 AM	8:25 AM	8:35 AM	8:43 AM	9:03 AM
8:30 AM	8:42 AM	8:49 AM	8:55 AM	9:05 AM	9:13 AM	9:33 AM
9:00 AM	9:12 AM	9:19 AM	9:25 AM	9:35 AM	9:43 AM	10:03 AM
9:30 AM	9:42 AM	9:49 AM	9:55 AM	10:05 AM	10:13 AM	10:33 AM
10:00 AM	10:12 AM	10:19 AM	10:25 AM	10:35 AM	10:43 AM	11:03 AM
10:30 AM	10:42 AM	10:49 AM	10:55 AM	11:05 AM	11:13 AM	11:33 AM
11:00 AM	11:12 AM	11:19 AM	11:25 AM	11:35 AM	11:43 AM	12:03 PM
11:30 AM	11:42 AM	11:49 AM	11:55 AM	12:05 PM	12:13 PM	12:33 PM
12:00 PM	12:12 PM	12:19 PM	12:25 PM	12:35 PM	12:43 PM	01:03 PM
12:30 PM	12:42 PM	12:49 PM	12:55 PM	01:05 PM	01:13 PM	01:33 PM
01:00 PM	01:12 PM	01:19 PM	01:25 PM	01:35 PM	01:43 PM	02:03 PM
01:30 PM	01:42 PM	01:49 PM	01:55 PM	02:05 PM	02:13 PM	02:33 PM
02:00 PM	02:12 PM	02:19 PM	02:25 PM	02:35 PM	02:43 PM	03:03 PM
02:30 PM	02:42 PM	02:49 PM	02:55 PM	03:05 PM	03:13 PM	03:33 PM
03:00 PM	03:12 PM	03:19 PM	03:25 PM	03:35 PM	03:43 PM	04:03 PM
03:30 PM	03:42 PM	03:49 PM	03:55 PM	04:05 PM	04:13 PM	04:33 PM
04:00 PM	04:12 PM	04:19 PM	04:25 PM	04:35 PM	04:43 PM	05:03 PM
04:30 PM	04:42 PM	04:49 PM	04:55 PM	05:05 PM	05:13 PM	05:33 PM
05:00 PM	05:12 PM	05:19 PM	05:25 PM	05:35 PM	05:43 PM	06:03 PM
05:30 PM	05:42 PM	05:49 PM	05:55 PM	06:05 PM	06:13 PM	06:33 PM
06:00 PM	06:12 PM	06:19 PM	06:25 PM	06:35 PM	06:43 PM	07:03 PM
06:30 PM	06:42 PM	06:49 PM	06:55 PM	07:05 PM	07:13 PM	07:33 PM
07:00 PM	07:12 PM	07:19 PM	07:25 PM	07:35 PM	07:43 PM	08:03 PM
07:30 PM	07:42 PM	07:49 PM	07:55 PM	08:05 PM	08:13 PM	08:33 PM
08:00 PM	08:12 PM	08:19 PM	08:25 PM	08:35 PM	08:43 PM	09:03 PM
08:30 PM	08:42 PM	08:49 PM	08:55 PM	09:05 PM	09:13 PM	09:33 PM
09:00 PM	09:12 PM	09:19 PM	09:25 PM	09:35 PM	09:43 PM	10:03 PM
09:30 PM	09:42 PM	09:49 PM	09:55 PM	10:05 PM	10:13 PM	10:33 PM

To New Brunswick (NB)						
Plainfield Station	Franklin Blvd. & Landing Ln.	Busch Campus Center	Route 18 & Centennial Ave.	Old New Brunswick Rd. & Stelton Rd.	S. Washington Ave. & W. 7th St.	New Brunswick Station
6:15 AM	6:36 AM	6:44 AM	6:58 AM	7:06 AM	7:12 AM	7:23 AM
6:45 AM	7:06 AM	7:14 AM	7:28 AM	7:36 AM	7:42 AM	7:53 AM
7:15 AM	7:36 AM	7:44 AM	7:58 AM	8:06 AM	8:12 AM	8:23 AM
7:45 AM	8:06 AM	8:14 AM	8:28 AM	8:36 AM	8:42 AM	8:53 AM
8:15 AM	8:36 AM	8:44 AM	8:58 AM	9:06 AM	9:12 AM	9:23 AM
8:45 AM	9:06 AM	9:14 AM	9:28 AM	9:36 AM	9:42 AM	9:53 AM
9:15 AM	9:36 AM	9:44 AM	9:58 AM	10:06 AM	10:12 AM	10:23 AM
9:45 AM	10:06 AM	10:14 AM	10:28 AM	10:36 AM	10:42 AM	10:53 AM
10:15 AM	10:36 AM	10:44 AM	10:58 AM	11:06 AM	11:12 AM	11:23 AM
10:45 AM	11:06 AM	11:14 AM	11:28 AM	11:36 AM	11:42 AM	11:53 AM
11:15 AM	11:36 AM	11:44 AM	11:58 AM	12:06 PM	12:12 PM	12:23 PM
11:45 AM	12:06 PM	12:14 PM	12:28 PM	12:36 PM	12:42 PM	12:53 PM
12:15 PM	12:36 PM	12:44 PM	12:58 PM	01:06 PM	01:12 PM	01:23 PM
12:45 PM	01:06 PM	01:14 PM	01:28 PM	01:36 PM	01:42 PM	01:53 PM
01:15 PM	01:36 PM	01:44 PM	01:58 PM	02:06 PM	02:12 PM	02:23 PM
01:45 PM	02:06 PM	02:14 PM	02:28 PM	02:36 PM	02:42 PM	02:53 PM
02:15 PM	02:36 PM	02:44 PM	02:58 PM	03:06 PM	03:12 PM	03:23 PM
02:45 PM	03:06 PM	03:14 PM	03:28 PM	03:36 PM	03:42 PM	03:53 PM
03:15 PM	03:36 PM	03:44 PM	03:58 PM	04:06 PM	04:12 PM	04:23 PM
03:45 PM	04:06 PM	04:14 PM	04:28 PM	04:36 PM	04:42 PM	04:53 PM
04:15 PM	04:36 PM	04:44 PM	04:58 PM	05:06 PM	05:12 PM	05:23 PM
04:45 PM	05:06 PM	05:14 PM	05:28 PM	05:36 PM	05:42 PM	05:53 PM
05:15 PM	05:36 PM	05:44 PM	05:58 PM	06:06 PM	06:12 PM	06:23 PM
05:45 PM	06:06 PM	06:14 PM	06:28 PM	06:36 PM	06:42 PM	06:53 PM
06:15 PM	06:36 PM	06:44 PM	06:58 PM	07:06 PM	07:12 PM	07:23 PM
06:45 PM	07:06 PM	07:14 PM	07:28 PM	07:36 PM	07:42 PM	07:53 PM
07:15 PM	07:36 PM	07:44 PM	07:58 PM	08:06 PM	08:12 PM	08:23 PM
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08:45 PM	09:06 PM	09:14 PM	09:28 PM	09:36 PM	09:42 PM	09:53 PM
09:15 PM	09:36 PM	09:44 PM	09:58 PM	10:06 PM	10:12 PM	10:23 PM
09:45 PM	10:06 PM	10:14 PM	10:28 PM	10:36 PM	10:42 PM	10:53 PM

	Layover Time to P	Layover Time to NB	Total Layover Time	Total Time	Revenue Hours
Block 1	1:12	0:42	1:54	16:03	14:09
Block 2	1:12	0:42	1:54	16:08	14:14
Block 3	1:12	0:42	1:54	16:03	14:09
Block 4	1:12	0:42	1:54	16:08	14:14
Block 5	1:12	0:35	1:47	14:53	13:06
TOTAL	6:00	3:23	9:23	79:15	69:01
TOTAL ANNUAL COST @ \$90/hour				\$2,295,120.00	

WM4: Plainfield - Edison



WM4: Plainfield to Edison**Start: Plainfield Train Station, Plainfield**

L on to Park Ave

Entering South Plainfield

R on to Maple Ave

L on to Lakeview Ave

C on to Hamilton Blvd

C on to Durham Ave

Entering Edison

L on to New Durham Rd

R on to Talmadge Rd

R on to Brunswick Ave

L on to Plainfield Ave

L on to Woodbridge Ave

R on to Meadow Rd

L on to Executive Ave

L on to Mill Rd

R on to College Dr E

L on to MCC Bus Terminal

End: Middlesex Community College, Edison**WM4: Plainfield to Edison****Start: Middlesex Community College, Edison**

L on to Otlowski Dr

L on to Parkside Dr

R on to College Dr E

L on to Mill Rd

R on to Executive Ave

R on to Meadow Rd

L on to Woodbridge Ave

R on to Plainfield Ave

R on to Brunswick Ave

L on to Talmadge Rd

L on to New Durham Rd

Entering South Plainfield

R on to Durham Ave

C on to Hamilton Blvd

C on to Lakeview Ave

R on to Maple Ave

Entering Plainfield

L on to Park Ave

R on to E 5th St

L on to Watchung Ave

L on to North Ave

End: Plainfield Train Station, Plainfield

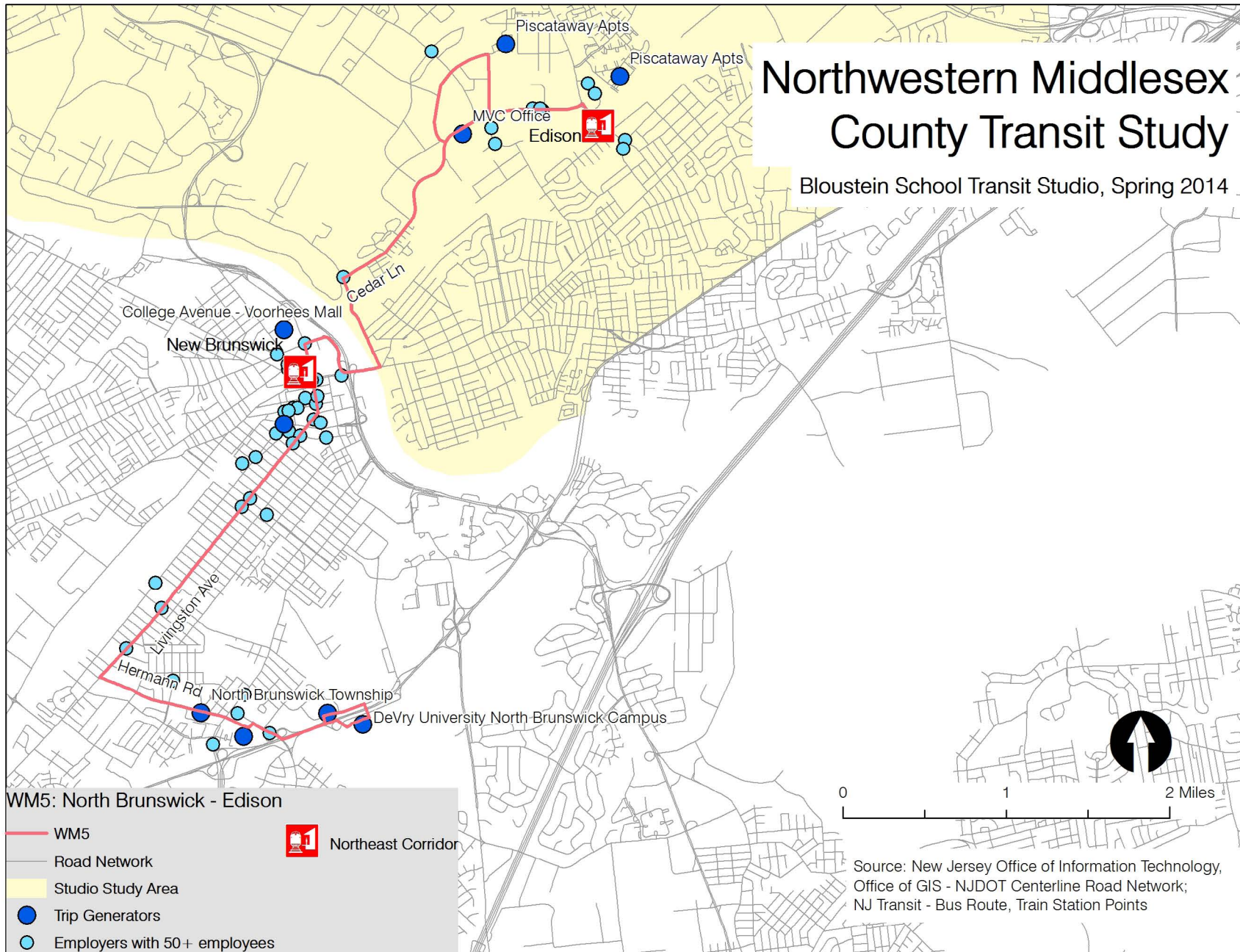
WM4 - Plainfield to Middlesex County College (Sun-Sat.)

To Middlesex County College (MCC)							
Plainfield Station	Muhlenberg Regional Medical Center	Park Ave. & Maple Ave.	Maple Ave. & Lakeview Ave.	Durham Ave. & New Durham Rd.	Talmadge Rd. & Brunswick Ave.	Edison Station	Middlesex County College
6:00 AM	6:08 AM	6:21 AM	6:32 AM	6:43 AM	6:54 AM	6:57 AM	7:22 AM
6:30 AM	6:38 AM	6:51 AM	7:02 AM	7:13 AM	7:24 AM	7:27 AM	7:52 AM
7:00 AM	7:08 AM	7:21 AM	7:32 AM	7:43 AM	7:54 AM	7:57 AM	8:22 AM
7:30 AM	7:38 AM	7:51 AM	8:02 AM	8:13 AM	8:24 AM	8:27 AM	8:52 AM
8:00 AM	8:08 AM	8:21 AM	8:32 AM	8:43 AM	8:54 AM	8:57 AM	9:22 AM
8:30 AM	8:38 AM	8:51 AM	9:02 AM	9:13 AM	9:24 AM	9:27 AM	9:52 AM
9:00 AM	9:08 AM	9:21 AM	9:32 AM	9:43 AM	9:54 AM	9:57 AM	10:22 AM
9:30 AM	9:38 AM	9:51 AM	10:02 AM	10:13 AM	10:24 AM	10:27 AM	10:52 AM
10:00 AM	10:08 AM	10:21 AM	10:32 AM	10:43 AM	10:54 AM	10:57 AM	11:22 AM
10:30 AM	10:38 AM	10:51 AM	11:02 AM	11:13 AM	11:24 AM	11:27 AM	11:52 AM
11:00 AM	11:08 AM	11:21 AM	11:32 AM	11:43 AM	11:54 AM	11:57 AM	12:22 PM
11:30 AM	11:38 AM	11:51 AM	12:02 PM	12:13 PM	12:24 PM	12:27 PM	12:52 PM
12:00 PM	12:08 PM	12:21 PM	12:32 PM	12:43 PM	12:54 PM	12:57 PM	01:22 PM
12:30 PM	12:38 PM	12:51 PM	01:02 PM	01:13 PM	01:24 PM	01:27 PM	01:52 PM
01:00 PM	01:08 PM	01:21 PM	01:32 PM	01:43 PM	01:54 PM	01:57 PM	02:22 PM
01:30 PM	01:38 PM	01:51 PM	02:02 PM	02:13 PM	02:24 PM	02:27 PM	02:52 PM
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08:30 PM	08:38 PM	08:51 PM	09:02 PM	09:13 PM	09:24 PM	09:27 PM	09:52 PM
09:00 PM	09:08 PM	09:21 PM	09:32 PM	09:43 PM	09:54 PM	09:57 PM	10:22 PM
09:30 PM	09:38 PM	09:51 PM	10:02 PM	10:13 PM	10:24 PM	10:27 PM	10:52 PM

To Plainfield (P)							
Middlesex County College	Edison Station	Talmadge Rd. & Brunswick Ave.	Durham Ave. & New Durham Rd.	Maple Ave. & Lakeview Ave.	Park Ave. & Maple Ave.	Muhlenberg Regional Medical Center	Plainfield Station
6:30 AM	6:54 AM	7:06 AM	7:12 AM	7:29 AM	7:36 AM	7:42 AM	7:49 AM
7:00 AM	7:24 AM	7:36 AM	7:42 AM	7:59 AM	8:06 AM	8:12 AM	8:19 AM
7:30 AM	7:54 AM	8:06 AM	8:12 AM	8:29 AM	8:36 AM	8:42 AM	8:49 AM
8:00 AM	8:24 AM	8:36 AM	8:42 AM	8:59 AM	9:06 AM	9:12 AM	9:19 AM
8:30 AM	8:54 AM	9:06 AM	9:12 AM	9:29 AM	9:36 AM	9:42 AM	9:49 AM
9:00 AM	9:24 AM	9:36 AM	9:42 AM	9:59 AM	10:06 AM	10:12 AM	10:19 AM
9:30 AM	9:54 AM	10:06 AM	10:12 AM	10:29 AM	10:36 AM	10:42 AM	10:49 AM
10:00 AM	10:24 AM	10:36 AM	10:42 AM	10:59 AM	11:06 AM	11:12 AM	11:19 AM
10:30 AM	10:54 AM	11:06 AM	11:12 AM	11:29 AM	11:36 AM	11:42 AM	11:49 AM
11:00 AM	11:24 AM	11:36 AM	11:42 AM	11:59 AM	12:06 PM	12:12 PM	12:19 PM
11:30 AM	11:54 AM	12:06 PM	12:12 PM	12:29 PM	12:36 PM	12:42 PM	12:49 PM
12:00 PM	12:24 PM	12:36 PM	12:42 PM	12:59 PM	01:06 PM	01:12 PM	01:19 PM
12:30 PM	12:54 PM	01:06 PM	01:12 PM	01:29 PM	01:36 PM	01:42 PM	01:49 PM
01:00 PM	01:24 PM	01:36 PM	01:42 PM	01:59 PM	02:06 PM	02:12 PM	02:19 PM
01:30 PM	01:54 PM	02:06 PM	02:12 PM	02:29 PM	02:36 PM	02:42 PM	02:49 PM
02:00 PM	02:24 PM	02:36 PM	02:42 PM	02:59 PM	03:06 PM	03:12 PM	03:19 PM
02:30 PM	02:54 PM	03:06 PM	03:12 PM	03:29 PM	03:36 PM	03:42 PM	03:49 PM
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03:30 PM	03:54 PM	04:06 PM	04:12 PM	04:29 PM	04:36 PM	04:42 PM	04:49 PM
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05:00 PM	05:24 PM	05:36 PM	05:42 PM	05:59 PM	06:06 PM	06:12 PM	06:19 PM
05:30 PM	05:54 PM	06:06 PM	06:12 PM	06:29 PM	06:36 PM	06:42 PM	06:49 PM
06:00 PM	06:24 PM	06:36 PM	06:42 PM	06:59 PM	07:06 PM	07:12 PM	07:19 PM
06:30 PM	06:54 PM	07:06 PM	07:12 PM	07:29 PM	07:36 PM	07:42 PM	07:49 PM
07:00 PM	07:24 PM	07:36 PM	07:42 PM	07:59 PM	08:06 PM	08:12 PM	08:19 PM
07:30 PM	07:54 PM	08:06 PM	08:12 PM	08:29 PM	08:36 PM	08:42 PM	08:49 PM
08:00 PM	08:24 PM	08:36 PM	08:42 PM	08:59 PM	09:06 PM	09:12 PM	09:19 PM
08:30 PM	08:54 PM	09:06 PM	09:12 PM	09:29 PM	09:36 PM	09:42 PM	09:49 PM
09:00 PM	09:24 PM	09:36 PM	09:42 PM	09:59 PM	10:06 PM	10:12 PM	10:19 PM
09:30 PM	09:54 PM	10:06 PM	10:12 PM	10:29 PM	10:36 PM	10:42 PM	10:49 PM

	Layover Time to MCC	Layover Time to P	Total Layover Time	Total Time	Revenue Hours
Block 1	0:40	0:55	1:35	16:22	14:47
Block 2	0:40	0:55	1:35	16:19	14:44
Block 3	0:40	0:55	1:35	16:22	14:47
Block 4	0:32	0:55	1:27	14:52	13:25
Block 5	0:40	0:44	1:24	14:49	13:25
Block 6	0:40	0:44	1:24	14:49	13:25
TOTAL	2:32	3:18	9:00	93:01	84:01
TOTAL ANNUAL COST @ \$90/hour				\$2,777,467.50	

WM5: North Brunswick - Edison



WM5: North Brunswick to Edison**Start: DeVry University North Brunswick Campus**

C on DeVry University access road
 L on Silverline Drive (crossing under US 1)
 L on access road in front of Technology
 Center of NJ
 BL on US 1 South
 R on Milltown Road
 L at Brunswick Shopping Center
 C on access road to bus stop for
 Brunswick Shopping Center
 C on Hermann Road
 R on Livingston Avenue

Entering New Brunswick

C on Livingston Avenue
 L on George Street
 R on Johnson Drive
 L on Raritan Avenue

Entering Highland Park

C on Raritan Avenue
 L on River Road
 R on Cedar Lane

Entering Edison

C on Kilmer Road
 L on Truman Drive S

Entering Piscataway

C on Truman Drive S
 L on Road 2

Entering Edison

C on Road 2
 L on Kilmer Road
 R on Plainfield Avenue
 R on Central Avenue
 R on Reed Street

**End: Access Road, Edison Station Parking Lot
 Eastbound Platform Parking Lot**

WM5: Edison to North Brunswick**Start: Access Road, Edison Station Parking Lot
 Eastbound Platform Parking Lot**

L on Reed Street
 L on Central Avenue
 L on Plainfield Avenue
 L on Kilmer Road
 R on Road 2

Entering Piscataway

C on Road 2
 R on Truman Drive S

Entering Edison

C on Truman Drive S
 R on Kilmer Road

Entering Highland Park

C on Cedar Lane
 L on River Road
 R on Raritan Avenue

Entering New Brunswick

C on Raritan Avenue
 BR on Johnson Drive
 L on George Street
 SR on Livingston Avenue

Entering North Brunswick

C on Livingston Avenue
 L on Hermann Road
 C into Brunswick Shopping Center
 C on access road to Brunswick Shopping
 Center bus stop
 C on access road to Milltown Road
 R on Milltown Road
 L on exit ramp to US 1 North
 C on US 1 North
 R on DeVry access road to DeVry bus stop

End: DeVry University North Brunswick Campus

WM5 - North Brunswick to Edison (Mon.-Sat.)

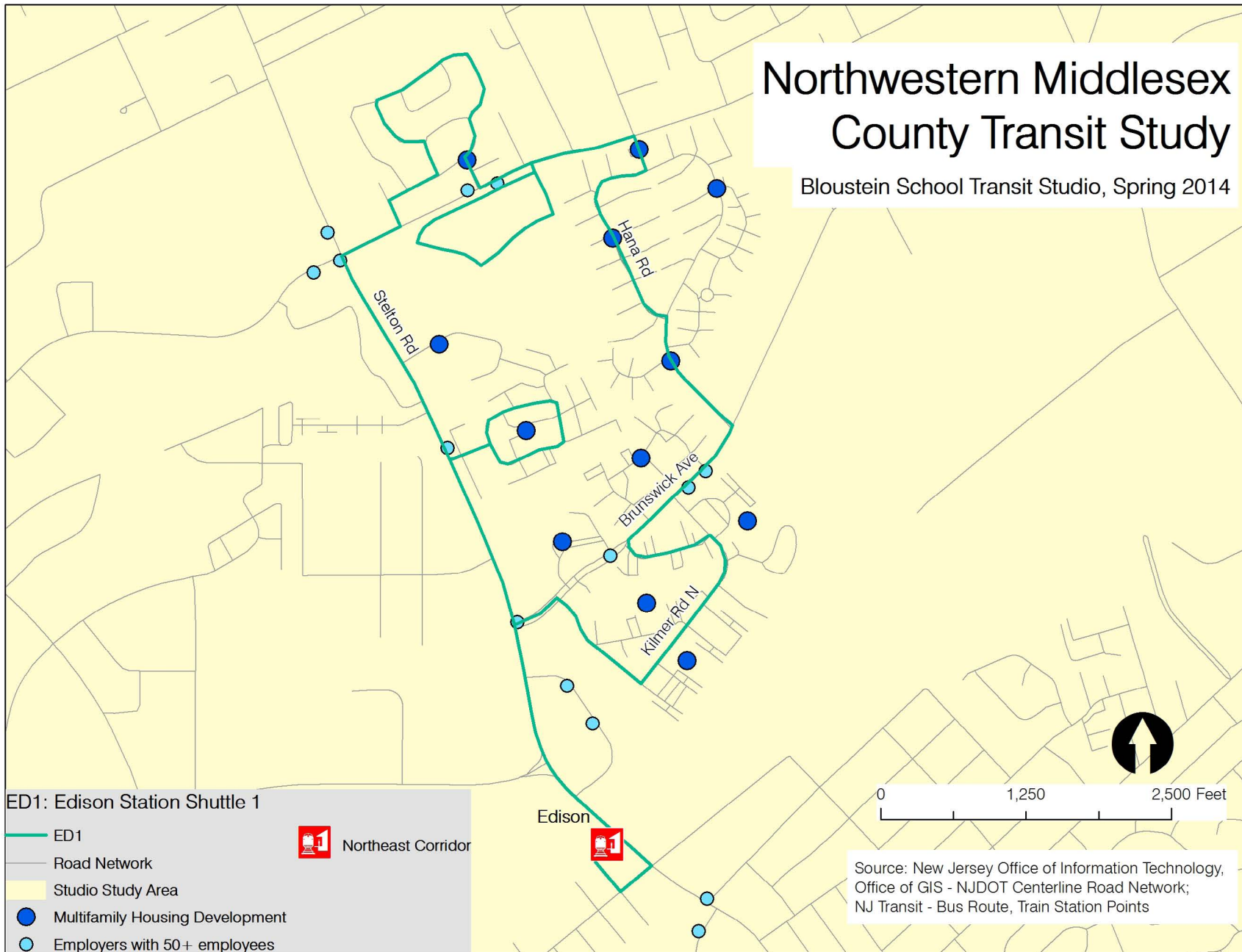
Weekday Service											
To Edison (E)						To North Brunswick (NB)					
DeVry College of Technology	Brunswick Shopping Center	George St. & Somerset St.	Cedar Ln. & Leia Ln.	Truman Dr. S. at Road 2	Edison Station	Edison Station	Truman Dr. S. at Road 2	Cedar Ln. & Leia Ln.	George St. & Somerset St.	Brunswick Shopping Center	DeVry College of Technology
6:00 AM	6:04 AM	6:20 AM	6:30 AM	6:37 AM	6:45 AM	6:00 AM	6:09 AM	6:16 AM	6:27 AM	6:43 AM	6:48 AM
6:30 AM	6:34 AM	6:50 AM	7:00 AM	7:07 AM	7:15 AM	6:30 AM	6:39 AM	6:46 AM	6:57 AM	7:13 AM	7:18 AM
7:00 AM	7:04 AM	7:20 AM	7:30 AM	7:37 AM	7:45 AM	7:00 AM	7:09 AM	7:16 AM	7:27 AM	7:43 AM	7:48 AM
7:30 AM	7:34 AM	7:50 AM	8:00 AM	8:07 AM	8:15 AM	7:30 AM	7:39 AM	7:46 AM	7:57 AM	8:13 AM	8:18 AM
8:00 AM	8:04 AM	8:20 AM	8:30 AM	8:37 AM	8:45 AM	8:00 AM	8:09 AM	8:16 AM	8:27 AM	8:43 AM	8:48 AM
8:30 AM	8:34 AM	8:50 AM	9:00 AM	9:07 AM	9:15 AM	8:30 AM	8:39 AM	8:46 AM	8:57 AM	9:13 AM	9:18 AM
9:00 AM	9:04 AM	9:20 AM	9:30 AM	9:37 AM	9:45 AM	9:00 AM	9:09 AM	9:16 AM	9:27 AM	9:43 AM	9:48 AM
9:30 AM	9:34 AM	9:50 AM	10:00 AM	10:07 AM	10:15 AM	9:30 AM	9:39 AM	9:46 AM	9:57 AM	10:13 AM	10:18 AM
10:00 AM	10:04 AM	10:20 AM	10:30 AM	10:37 AM	10:45 AM	10:00 AM	10:09 AM	10:16 AM	10:27 AM	10:43 AM	10:48 AM
11:00 AM	11:04 AM	11:20 AM	11:30 AM	11:37 AM	11:45 AM	11:00 AM	11:09 AM	11:16 AM	11:27 AM	11:43 AM	11:48 AM
12:00 PM	12:04 PM	12:20 PM	12:30 PM	12:37 PM	12:45 PM	12:00 PM	12:09 PM	12:16 PM	12:27 PM	12:43 PM	12:48 PM
01:00 PM	01:04 PM	01:20 PM	01:30 PM	01:37 PM	01:45 PM	01:00 PM	01:09 PM	01:16 PM	01:27 PM	01:43 PM	01:48 PM
02:00 PM	02:04 PM	02:20 PM	02:30 PM	02:37 PM	02:45 PM	02:00 PM	02:09 PM	02:16 PM	02:27 PM	02:43 PM	02:48 PM
03:00 PM	03:04 PM	03:20 PM	03:30 PM	03:37 PM	03:45 PM	03:00 PM	03:09 PM	03:16 PM	03:27 PM	03:43 PM	03:48 PM
04:00 PM	04:04 PM	04:20 PM	04:30 PM	04:37 PM	04:45 PM	04:00 PM	04:09 PM	04:16 PM	04:27 PM	04:43 PM	04:48 PM
05:00 PM	05:04 PM	05:20 PM	05:30 PM	05:37 PM	05:45 PM	05:00 PM	05:09 PM	05:16 PM	05:27 PM	05:43 PM	05:48 PM
05:30 PM	05:34 PM	05:50 PM	06:00 PM	06:07 PM	06:15 PM	05:30 PM	05:39 PM	05:46 PM	05:57 PM	06:13 PM	06:18 PM
06:00 PM	06:04 PM	06:20 PM	06:30 PM	06:37 PM	06:45 PM	06:00 PM	06:09 PM	06:16 PM	06:27 PM	06:43 PM	06:48 PM
06:30 PM	06:34 PM	06:50 PM	07:00 PM	07:07 PM	07:15 PM	06:30 PM	06:39 PM	06:46 PM	06:57 PM	07:13 PM	07:18 PM
07:00 PM	07:04 PM	07:20 PM	07:30 PM	07:37 PM	07:45 PM	07:00 PM	07:09 PM	07:16 PM	07:27 PM	07:43 PM	07:48 PM
07:30 PM	07:34 PM	07:50 PM	08:00 PM	08:07 PM	08:15 PM	07:30 PM	07:39 PM	07:46 PM	07:57 PM	08:13 PM	08:18 PM
08:00 PM	08:04 PM	08:20 PM	08:30 PM	08:37 PM	08:45 PM	08:00 PM	08:09 PM	08:16 PM	08:27 PM	08:43 PM	08:48 PM
08:30 PM	08:34 PM	08:50 PM	09:00 PM	09:07 PM	09:15 PM	08:30 PM	08:39 PM	08:46 PM	08:57 PM	09:13 PM	09:18 PM
09:00 PM	09:04 PM	09:20 PM	09:30 PM	09:37 PM	09:45 PM	09:00 PM	09:09 PM	09:16 PM	09:27 PM	09:43 PM	09:48 PM
09:30 PM	09:34 PM	09:50 PM	10:00 PM	10:07 PM	10:15 PM	09:30 PM	09:39 PM	09:46 PM	09:57 PM	10:13 PM	10:18 PM

	Layover Time to E	Layover Time to NB	Total Layover Time	Total Time	Revenue Hours
Block 1	1:00	0:36	1:36	7:48	6:12
Block 2	0:45	0:48	1:33	7:45	6:12
Block 3	0:30	0:12	0:42	3:48	3:06
Block 4	0:15	0:24	0:39	3:45	3:06
Block 5	1:00	0:36	1:36	7:48	6:12
Block 6	0:45	0:48	1:33	7:45	6:12
Block 7	0:30	0:24	0:54	4:45	3:51
Block 8	0:30	0:24	0:54	4:48	3:54
TOTAL	2:45	4:12	9:27	55:01	38:01
TOTAL ANNUAL COST @ \$90/hour					\$889,312.50

Saturday Service											
To Edison (E)						To North Brunswick (NB)					
DeVry College of Technology	Brunswick Shopping Center	George St. & Somerset St.	Cedar Ln. & Leia Ln.	Truman Dr. S. at Road 2	Edison Station	Edison Station	Truman Dr. S. at Road 2	Cedar Ln. & Leia Ln.	George St. & Somerset St.	Brunswick Shopping Center	DeVry College of Technology
6:00 AM	6:04 AM	6:20 AM	6:30 AM	6:37 AM	6:45 AM	6:00 AM	6:09 AM	6:16 AM	6:27 AM	6:43 AM	6:48 AM
7:00 AM	7:04 AM	7:20 AM	7:30 AM	7:37 AM	7:45 AM	7:00 AM	7:09 AM	7:16 AM	7:27 AM	7:43 AM	7:48 AM
8:00 AM	8:04 AM	8:20 AM	8:30 AM	8:37 AM	8:45 AM	8:00 AM	8:09 AM	8:16 AM	8:27 AM	8:43 AM	8:48 AM
9:00 AM	9:04 AM	9:20 AM	9:30 AM	9:37 AM	9:45 AM	9:00 AM	9:09 AM	9:16 AM	9:27 AM	9:43 AM	9:48 AM
10:00 AM	10:04 AM	10:20 AM	10:30 AM	10:37 AM	10:45 AM	10:00 AM	10:09 AM	10:16 AM	10:27 AM	10:43 AM	10:48 AM
11:00 AM	11:04 AM	11:20 AM	11:30 AM	11:37 AM	11:45 AM	11:00 AM	11:09 AM	11:16 AM	11:27 AM	11:43 AM	11:48 AM
12:00 PM	12:04 PM	12:20 PM	12:30 PM	12:37 PM	12:45 PM	12:00 PM	12:09 PM	12:16 PM	12:27 PM	12:43 PM	12:48 PM
01:00 PM	01:04 PM	01:20 PM	01:30 PM	01:37 PM	01:45 PM	01:00 PM	01:09 PM	01:16 PM	01:27 PM	01:43 PM	01:48 PM
02:00 PM	02:04 PM	02:20 PM	02:30 PM	02:37 PM	02:45 PM	02:00 PM	02:09 PM	02:16 PM	02:27 PM	02:43 PM	02:48 PM
03:00 PM	03:04 PM	03:20 PM	03:30 PM	03:37 PM	03:45 PM	03:00 PM	03:09 PM	03:16 PM	03:27 PM	03:43 PM	03:48 PM
04:00 PM	04:04 PM	04:20 PM	04:30 PM	04:37 PM	04:45 PM	04:00 PM	04:09 PM	04:16 PM	04:27 PM	04:43 PM	04:48 PM
05:00 PM	05:04 PM	05:20 PM	05:30 PM	05:37 PM	05:45 PM	05:00 PM	05:09 PM	05:16 PM	05:27 PM	05:43 PM	05:48 PM
06:00 PM	06:04 PM	06:20 PM	06:30 PM	06:37 PM	06:45 PM	06:00 PM	06:09 PM	06:16 PM	06:27 PM	06:43 PM	06:48 PM
07:00 PM	07:04 PM	07:20 PM	07:30 PM	07:37 PM	07:45 PM	07:00 PM	07:09 PM	07:16 PM	07:27 PM	07:43 PM	07:48 PM
08:00 PM	08:04 PM	08:20 PM	08:30 PM	08:37 PM	08:45 PM	08:00 PM	08:09 PM	08:16 PM	08:27 PM	08:43 PM	08:48 PM

	Layover Time to E	Layover Time to NB	Total Layover Time	Total Time	Revenue Hours
Block 1	1:45	1:45	3:30	14:45	11:15
Block 2	1:45	1:45	3:30	14:48	11:18
TOTAL	3:30	3:30	7:00	29:01	22:01
TOTAL ANNUAL COST @ \$90/hour				\$105,534.00	
COMBINED ANNUAL COST @ \$90/hour				\$889,312.50	

ED1: Edison Shuttle



ED1: EDISON TRAIN STATION SHUTTLE**Start: Reed Street, Edison Train Station**

L	on	Reed St
L	on	Central Ave
L	on	Plainfield Ave
R	on	Brunswick Ave
R	on	Village Ave
L	on	Kilmer Rd N
L	on	Forest Dr
R	on	Brunswick Ave
L	on	Hana Rd
BL	on	Hana Rd
L	on	Victoria Ct
L	on	Ethel Rd
R	on	Ethel Rd
R	on	Ethel Rd
R	on	Ethel Rd
L	on	Ethel Rd
L	on	Ethel Rd
R	on	Smalley St
C	on	Smalley St
C	on	Nebula Rd
R	on	Orion Rd
L	on	Hicks St
R	on	Ethel Rd
L	on	Stelton Rd
C	on	Plainfield Ave
L	on	Rivendell Way
BL	on	Rivendell Way
L	on	Rivendell Way
R	on	Rivendell Way
L	on	Rivendell Way
L	on	Stelton Rd
R	on	Ethel Rd
L	on	Plainfield Ave
R	on	Central Ave
R	on	Reed St

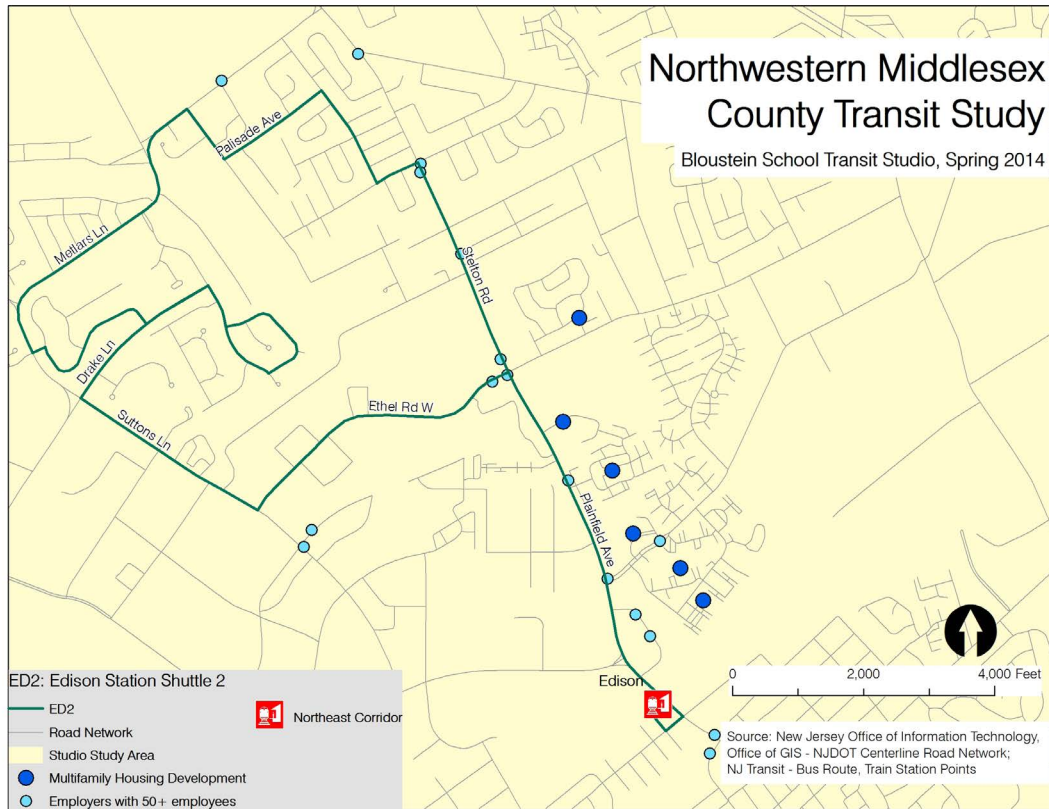
End: Reed Street, Edison Train Station

ED1 - Edison Station Shuttle (Mon. - Fri.)

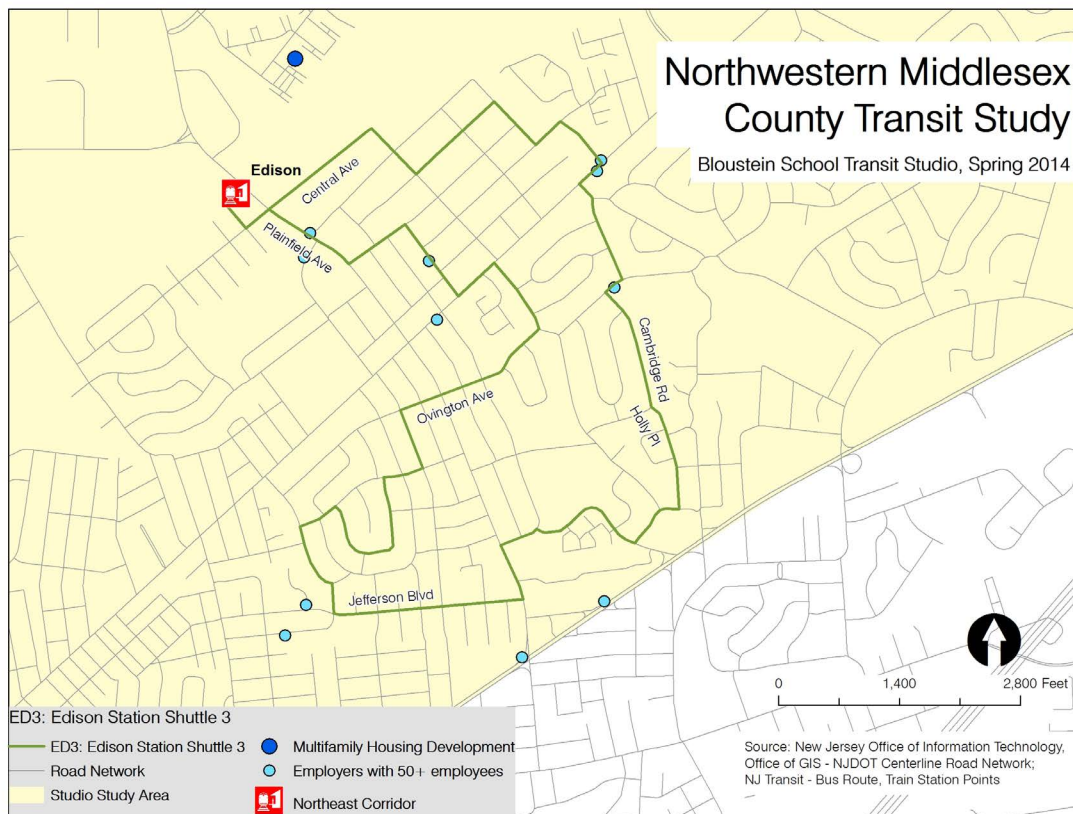
Edison Station Loop						
Depart Edison Station	Plainfield Ave. & Village Dr.	Hana Rd. & Victoria Ct.	Nebula Rd. & Lunar Rd.	Hicks St. & Ethel Rd.	Plainfield Ave. & Rivendell Way	Arrive at Edison Station
5:30 AM	5:35 AM	5:43 AM	5:52 AM	5:54 AM	5:58 AM	6:04 AM
6:00 AM	6:05 AM	6:13 AM	6:22 AM	6:24 AM	6:28 AM	6:34 AM
6:15 AM	6:20 AM	6:28 AM	6:37 AM	6:39 AM	6:43 AM	6:49 AM
6:30 AM	6:35 AM	6:43 AM	6:52 AM	6:54 AM	6:58 AM	7:04 AM
6:45 AM	6:50 AM	6:58 AM	7:07 AM	7:09 AM	7:13 AM	7:19 AM
7:00 AM	7:05 AM	7:13 AM	7:22 AM	7:24 AM	7:28 AM	7:34 AM
7:15 AM	7:20 AM	7:28 AM	7:37 AM	7:39 AM	7:43 AM	7:49 AM
7:30 AM	7:35 AM	7:43 AM	7:52 AM	7:54 AM	7:58 AM	8:04 AM
7:45 AM	7:50 AM	7:58 AM	8:07 AM	8:09 AM	8:13 AM	8:19 AM
8:00 AM	8:05 AM	8:13 AM	8:22 AM	8:24 AM	8:28 AM	8:34 AM
8:30 AM	8:35 AM	8:43 AM	8:52 AM	8:54 AM	8:58 AM	9:04 AM
9:00 AM	9:05 AM	9:13 AM	9:22 AM	9:24 AM	9:28 AM	9:34 AM
9:30 AM	9:35 AM	9:43 AM	9:52 AM	9:54 AM	9:58 AM	10:04 AM
BREAK IN SERVICE						
03:30 PM	03:35 PM	03:43 PM	03:52 PM	03:54 PM	03:58 PM	04:04 PM
04:00 PM	04:05 PM	04:13 PM	04:22 PM	04:24 PM	04:28 PM	04:34 PM
04:30 PM	04:35 PM	04:43 PM	04:52 PM	04:54 PM	04:58 PM	05:04 PM
05:00 PM	05:05 PM	05:13 PM	05:22 PM	05:24 PM	05:28 PM	05:34 PM
05:15 PM	05:20 PM	05:28 PM	05:37 PM	05:39 PM	05:43 PM	05:49 PM
05:30 PM	05:35 PM	05:43 PM	05:52 PM	05:54 PM	05:58 PM	06:04 PM
05:45 PM	05:50 PM	05:58 PM	06:07 PM	06:09 PM	06:13 PM	06:19 PM
06:00 PM	06:05 PM	06:13 PM	06:22 PM	06:24 PM	06:28 PM	06:34 PM
06:15 PM	06:20 PM	06:28 PM	06:37 PM	06:39 PM	06:43 PM	06:49 PM
06:30 PM	06:35 PM	06:43 PM	06:52 PM	06:54 PM	06:58 PM	07:04 PM
06:45 PM	06:50 PM	06:58 PM	07:07 PM	07:09 PM	07:13 PM	07:19 PM
07:00 PM	07:05 PM	07:13 PM	07:22 PM	07:24 PM	07:28 PM	07:34 PM
07:30 PM	07:35 PM	07:43 PM	07:52 PM	07:54 PM	07:58 PM	08:04 PM
08:00 PM	08:05 PM	08:13 PM	08:22 PM	08:24 PM	08:28 PM	08:34 PM
08:30 PM	08:35 PM	08:43 PM	08:52 PM	08:54 PM	08:58 PM	09:04 PM

	Total Layover Time	Total Time	Revenue Hours
Block 1	2:01	11:39	9:38
Block 2	1:28	8:36	7:08
Block 3	1:06	6:14	5:08
TOTAL	4:35	26:01	21:01
TOTAL ANNUAL COST @ \$65/hour			\$362,992.50

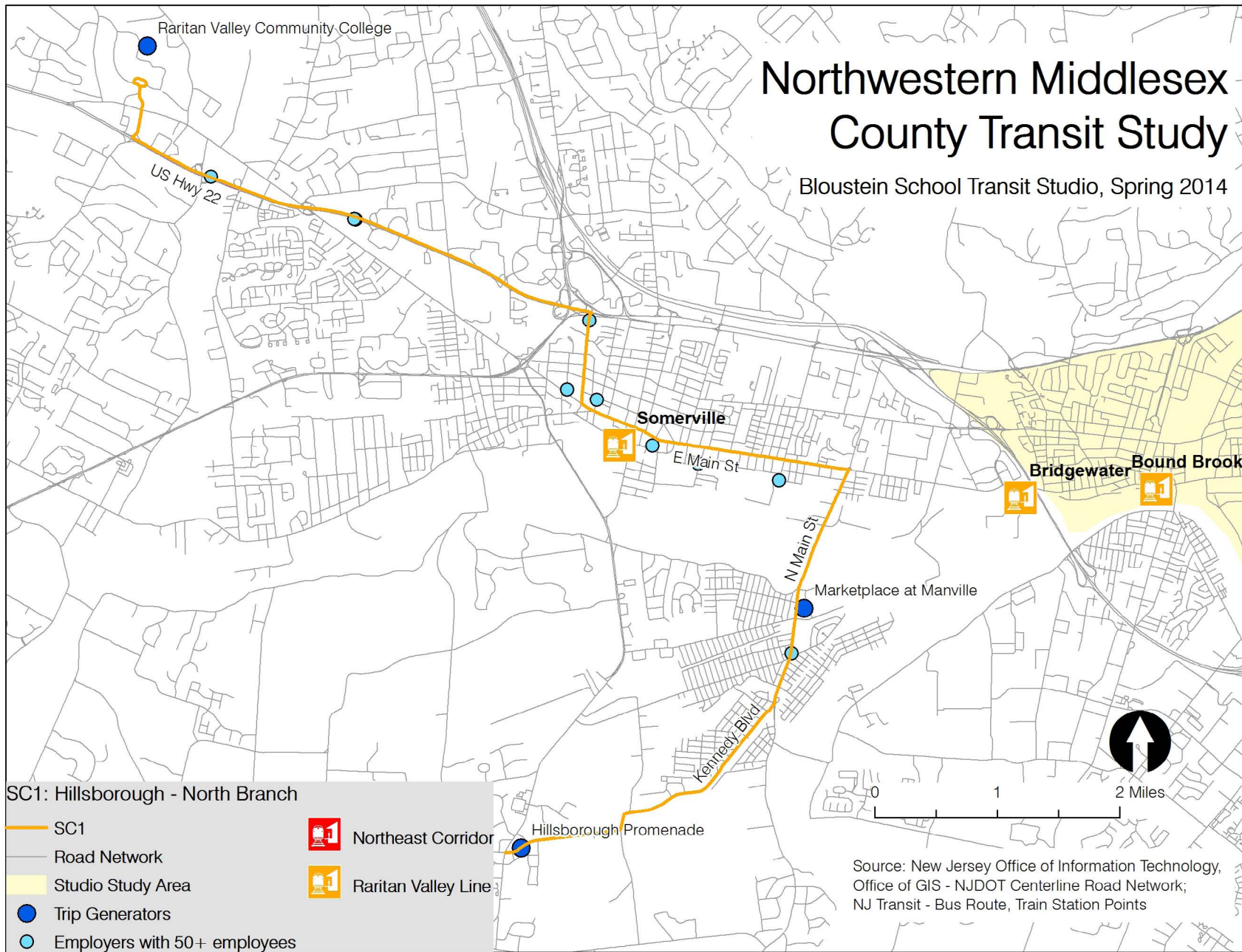
ED2



ED3



SC1: Hillsborough - North Brunswick



SC1: Raritan Valley Community College to Hillsborough**Start: Raritan Valley Community College, Branchburg**

C on Campus Drive
 C on Athletic Way
 L on Campus Drive
 C on Raritan Valley College Drive
 C on RVCC Drive
 L on US 22 East

Entering Bridgewater

C on US 22 East
 R on exit to US 202 North

Entering Somerville

R on Mountain Avenue
 L on West End Avenue
 L on Somerset Street
 BR on West Main Street

Entering Bridgewater

R on Finderne Avenue

Entering Manville

C on North Main Street
 BR on Kennedy Boulevard
 C on Kennedy Boulevard

Entering Hillsborough

C on Weston Road
 C on Sunnymeade Road
 R on Falcon Road

End: Hillsborough Promenade, Hillsborough**SC1: Hillsborough to Raritan Valley Community College****Start: Hillsborough Promenade, Hillsborough**

R on Falcon Road
 L on Sunnymeade Road
 C on Weston Road

Entering Manville

C on Kennedy Boulevard
 L on South Main Street

Entering Bridgewater

C on Finderne Avenue

Entering Somerville

L on East Main Street
 L on West End Avenue
 BR on West End Avenue
 BR on West End Avenue
 R on Mountain Avenue
 BL on exit for US 202 North

Entering Bridgewater

R on exit for Commons Way
 C on Commons Way
 L on Commons Way
 L on Somerset Corporate Boulevard
 R on Somerset Corporate Boulevard
 R on exit for Campus Drive
 R on RVCC Dr
 C on RVCC Drive
 C on Campus Drive
 BR on Athletics Way

End: Raritan Valley Community College, Branchburg

Raritan Valley Community College to Hillsborough via Somerville, via Manville					Hillsborough to Raritan Valley Community College via Manville, via Somerville					Raritan Valley Community College to Hills- borough via Somerville, via Manville					Hillsborough to Raritan Valley Community College via Manville, via Somerville				
Southbound					Northbound					Southbound					Northbound				
RVCC	BWC	SVRR	MNVL	HLSH	HLSH	MNVL	SVRR	BWRC	RVCC	RVCC	BWC	SVRR	MNVL	HLSH	HLSH	MNVL	SVRR	BWRC	RVCC
		7:04	7:13	7:22	6:00	6:09	6:18	6:24	6:37			7:04	7:13	7:22	6:00	6:09	6:18	6:24	6:37
7:35	7:48	7:54	8:03	8:12	6:50	6:59	7:08	7:14	7:27	7:35	7:48	7:54	8:03	8:12	6:50	6:59	7:08	7:14	7:27
7:55	8:08	8:14	8:23	8:32	7:15	7:24	7:33	7:39	7:52	7:55	8:08	8:14	8:23	8:32	7:15	7:24	7:33	7:39	7:52
8:30	8:43	8:49	8:58	9:07	7:50	7:59	8:08	8:14	8:27	8:30	8:43	8:49	8:58	9:07	7:50	7:59	8:08	8:14	8:27
9:25	9:38	9:44	9:53	10:02	8:20	8:29	8:38	8:44	8:57	9:25	9:38	9:44	9:53	10:02	8:20	8:29	8:38	8:44	8:57
10:25	10:38	10:44	10:53	11:02	9:20	9:29	9:38	9:44	9:57	10:25	10:38	10:44	10:53	11:02	9:20	9:29	9:38	9:44	9:57
11:25	11:38	11:44	11:53	12:02	10:20	10:29	10:38	10:44	10:57	11:25	11:38	11:44	11:53	12:02	10:20	10:29	10:38	10:44	10:57
12:25	12:38	12:44	12:53	13:02	11:20	11:29	11:38	11:44	11:57	12:25	12:38	12:44	12:53	1:02	11:20	11:29	11:38	11:44	11:57
13:25	13:38	13:44	13:53	14:02	12:20	12:29	12:38	12:44	12:57	1:25	1:38	1:44	1:53	2:02	12:20	12:29	12:38	12:44	12:57
14:25	14:38	14:44	14:53	15:02	13:20	13:29	13:38	13:44	13:57	2:25	2:38	2:44	2:53	3:02	1:20	1:29	1:38	1:44	1:57
15:25	15:38	15:44	15:53	16:02	14:20	14:29	14:38	14:44	14:57	3:25	3:38	3:44	3:53	4:02	2:20	2:29	2:38	2:44	2:57
16:25	16:38	16:44	16:53	17:02	15:20	15:29	15:38	15:44	15:57	4:25	4:38	4:44	4:53	5:02	3:20	3:29	3:38	3:44	3:57
17:25	17:38	17:44	17:53	18:02	16:20	16:29	16:38	16:44	16:57	5:25	5:38	5:44	5:53	6:02	4:20	4:29	4:38	4:44	4:57
-	-	18:18	18:27	18:36	17:10	17:19	17:28	17:34	17:47			6:18	6:27	6:36	5:10	5:19	5:28	5:34	5:47
18:25	18:38	18:44	18:53	19:02	17:30	17:39	17:48	17:54	18:07	6:25	6:38	6:44	6:53	7:02	5:30	5:39	5:48	5:54	6:07
		19:02	19:11	19:20	18:20	18:29	18:38	18:44	18:57			7:02	7:11	7:20	6:20	6:29	6:38	6:44	6:57
19:25	19:38	19:44	19:53	20:02	18:40	18:49	18:58			7:25	7:38	7:44	7:53	8:02	6:40	6:49	6:58		
20:25	20:38	20:44	20:53	21:02	19:20	19:29	19:38	19:44	19:57	8:25	8:38	8:44	8:53	9:02	7:20	7:29	7:38	7:44	7:57
21:25	21:38	21:44	21:53	22:02	20:20	20:33	20:39	20:48	20:57	9:25	9:38	9:44	9:53	10:02	8:20	8:33	8:39	8:48	8:57
22:25	22:38	22:44	22:53	23:02	21:20	21:29	21:38	21:44	21:57	10:25	10:38	10:44	10:53	11:02	9:20	9:29	9:38	9:44	9:57
					22:20	22:33	22:39	22:48							10:20	10:33	10:39	10:48	

PM Trips
in Bold

Node	Timepoint
HLSH	Hillsborough Promenade
MNVL	Manville Walmart
BWRC	Bridgewater Commons

PM
Trips in
Bold

Node	Time-point
SVRR	Somerville Train Station
RVCC	Raritan Valley Community College

TOTAL ANNUAL COST @ \$90/hour	\$872,865.00
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Total Cost

Route	Vehicle Type	Cost/Hr.	Total Annual Cost
813	Bus	\$90	\$824,670
819	Bus	\$90	\$1,406,152.50
822	Bus	\$90	\$1,159,195.50
DASH	Shuttle	\$65	\$667,143.75
ED1	Shuttle	\$65	\$262,992.50
ED2	Shuttle	\$65	\$453,050.00
ED3	Shuttle	\$65	\$372,108.75
WM1	Bus	\$90	\$1,261,440.00
WM2	Bus	\$90	\$2,582,557.50
WM3	Bus	\$90	\$2,295,120.00
WM4	Bus	\$90	\$2,777,467.50
WM5	Bus	\$90	\$994,846.50
SC1	Bus	\$90	\$872,865.00
Total Annual Cost of System			\$15,929,609.50