



NJ 124 Corridor
Transit Access Improvement Study

Final Report

Appendix A: Existing Reports



Introduction

This appendix summarizes the existing reports and data that were reviewed by the VHB team for the NJ 124 Corridor Transit Access Improvement Study. Reports and data were received from Morris County, the North Jersey Transportation Planning Authority (NJTPA), TransOptions, the New Jersey Department of Transportation (NJDOT), NJ TRANSIT, Morris Township, Chatham Borough, Madison Borough, and Harding Township.

The reports and data were reviewed for pertinent material in the five major subject areas listed below:

- Highway Transportation adjacent to the train station and Train Station Parking
- Bicycle and Pedestrian
- Roadway and Transit Safety
- Transit Infrastructure and Operations
- Planning and Zoning

Table A-1 details the reports and data that were reviewed. Overall, the reviewed information documented and reinforced a need to improve access to the three stations (Chatham, Madison, and Convent) along the Morristown Line. A summary of the data in each of the five major subject areas follows Table A-1.



NJ 124 Corridor Transit Access Improvement Study

Final Report

TABLE A-1: Reports and Data Reviewed

Report Title	Author	Date	Highway Transportation and Parking	Bicycle and Pedestrian	Roadway and Transit Safety	Transit Infrastructure and Operations	Planning and Zoning/TOD
2010 Development Activity Report, Morris County, NJ	Morris County	2010		X			
2027 Transportation Needs Assessment Study, Florham Park, NJ	Greenman Pedersen, Inc.	2007	X	X			
2030 Parking & Ridership Forecast for Chatham/Madison/Convent Stations	NJ TRANSIT	2009	X				
Bicycle Route Plan	Borough of Madison	2005		X			
Borough of Chatham Zoning Ordinance	Borough of Chatham	As of February 2012		X			
Borough of Madison Master Plan	Borough of Madison	1992		X			X
Borough of Madison Zoning Ordinance	Borough of Madison	As of February 2012		X			X
Borough of Madison: A Center for Transit, the Arts, Lifelong Learning and Health & Recreation	Rutgers/NYU	2003				X	
Bulletin #7, "Life, Liberty, and the Pursuit of a Parking Space"	Morris County	2008	X				
Bulletin #8, "All Aboard Public Transportation"	Morris County	2008				X	
Bus Stops by Route	NJ TRANSIT	2012				X	



NJ 124 Corridor Transit Access Improvement Study

Final Report

TABLE A-1: Reports and Data Reviewed

Report Title	Author	Date	Highway Transportation and Parking	Bicycle and Pedestrian	Roadway and Transit Safety	Transit Infrastructure and Operations	Planning and Zoning/TOD
Bus Stop Safety Toolbox	NJTPA	2011			X	X	
Chatham Borough Business Zones Study/Presentation	Taylor Design Group	2009		X			X
Chatham Borough Master Plan Reexamination Report	Taylor Design Group	2006		X			X
Chatham Borough Open Space & Recreation Plan	Morris Land Conservancy	2002		X			
Chatham Borough RR Parking Spaces	Borough of Chatham	2012	X				
Concept Report Summary Morris & Essex Line Expansion of Shuttle Service and Park and Rides	NJTPA	As of January 2012				X	
Convent Station Parking Status Report	Township of Morris	2012	X				
Convent Train Station Parking Lots	Township of Morris	2006	X				
Evaluation of Pedestrian Improvements in the Vicinity of New Jersey Transit Rail Stations – Final Report to: Transportation Coordinating Council (TCC)/Federal Transit Administration (FTA)	Rutgers University	As of June 2012			X		



NJ 124 Corridor Transit Access Improvement Study

Final Report

TABLE A-1: Reports and Data Reviewed

Report Title	Author	Date	Highway Transportation and Parking	Bicycle and Pedestrian	Roadway and Transit Safety	Transit Infrastructure and Operations	Planning and Zoning/TOD
Final Report for Review of Existing & Future Conditions to Various Intersections within the Borough of Florham Park, Borough of Madison, Hanover Township, Morris Township, Chatham Borough and the Town of Morristown Due to the Potential Redevelopment of the Former Exxon Research Facility in Florham Park	Louis Berger Group	2010		X			
Land Development Standards for Morris County, NJ	Morris County Planning Board	2004		X			
Lincoln Place: Making Lincoln Place a "Place" in Downtown Madison, NJ	Project for Public Spaces	2009	X	X			X
Madison Avenue Direct Shuttle Ridership	TransOptions	2011, 2012				X	
Madison Avenue Direct Shuttle Schedule	TransOptions	2012				X	
Means of Transportation to Work by Municipality 2006-2011 (Five-Year Estimates)	US Census Bureau	2006-2011		X			
Minibus Daily Ridership, NJ TRANSIT, March 2012	NJ TRANSIT	2012				X	
Minibus Monthly Ridership, NJ TRANSIT, March 2012	NJ TRANSIT	2012				X	



NJ 124 Corridor Transit Access Improvement Study

Final Report

TABLE A-1: Reports and Data Reviewed

Report Title	Author	Date	Highway Transportation and Parking	Bicycle and Pedestrian	Roadway and Transit Safety	Transit Infrastructure and Operations	Planning and Zoning/TOD
Morris & Essex 2005 Origin-Destination Survey	NJ TRANSIT	2005	X	X			
Morris and Essex Line Rail Schedule (11/16/11)	NJ TRANSIT	2011				X	
Morris Area GREEN Transit Initiative	Borough of Madison	2009	X	X			X
Morris County Bicycle and Pedestrian User Guide	Morris County	2004		X			
Morris County Transit Guide	Morris County	2011				X	
Morris Township Tax Map	Township of Morris	1977					
Municipal Design Standards	Various	Unknown	X				
New Jersey Department of Transportation Bureau of Safety Programs (BSP) Program Methodologies	NJDOT	As of 1/26/12			X		
NJ TRANSIT Bike Rack Locations	NJ TRANSIT	2012		X			
NJDOT and Morris County Traffic Count Data (Various)	Morris County DOT, NJDOT	1995-2011	X				
NJTPA Crash Data	NJTPA	2006-2010			X		



NJ 124 Corridor Transit Access Improvement Study

Final Report

TABLE A-1: Reports and Data Reviewed

Report Title	Author	Date	Highway Transportation and Parking	Bicycle and Pedestrian	Roadway and Transit Safety	Transit Infrastructure and Operations	Planning and Zoning/TOD
Open Space and Recreation Plan Update for Township of Morris	Township of Morris Open Space Committee and Morris Land Conservancy	2004		X			
Park and Ride Data	TransOptions	Received 2/17/12	X	X			
Plan4Safety Crash Data Analysis	Plan4Safety	2006-2010			X		
NJ TRANSIT 873 Bus Schedule (9/5/11) ²⁷	NJ TRANSIT	2011				X	
NJT TRANSIT 878/879 Bus Schedule (1/14/12) ²⁸	NJ TRANSIT	2012				X	
Smart Transportation Guidebook	NJDOT/ PennDOT	2008		X		X	
Structured Parking Reference Material	NJ TRANSIT	2005		X			
Sustainable Living in Madison, NJ and Sustainable Commuting in the Region	Borough of Madison	2010		X			X
Township of Morris Master Plan	Morris Township Planning Board	1994					X

²⁷ New schedule issued on April 7, 2012; bus stop at Livingston Mall was relocated.

²⁸ New schedule issued on April 7, 2012 coordinates with new Morris & Essex Line rail schedule



NJ 124 Corridor Transit Access Improvement Study

Final Report

TABLE A-1: Reports and Data Reviewed

Report Title	Author	Date	Highway Transportation and Parking	Bicycle and Pedestrian	Roadway and Transit Safety	Transit Infrastructure and Operations	Planning and Zoning/TOD
Township of Morris Master Plan Reexamination	Morris Township Planning Board	2007		X			X
Township of Morris Parking Information	Township of Morris	As of March 2012	X				
Township of Morris Zoning Ordinance	Township of Morris	As of February 2012		X			X
Traffic Impact Study, General Development Plan: The Green at Florham Borough of Florham Park Morris County, NJ, March 2008.	Stantec	2008		X			
Transit Oriented Planning Map	Borough of Madison	As of February 2012					X
Bike Locker Inventory	TransOptions	2012		X			
Madison Avenue Direct Shuttle Brochure	TransOptions	As of February 2012				X	
Crossing Inventory Information (Convent Road)	U.S. Department of Transportation	2010	X	X	X		
Highway-Rail Grade Crossing Accident Report (Convent Road)	U.S. Department of Transportation	2010			X		



Highway Transportation and Parking

Convent Station

2027 Transportation Needs Assessment Study, Florham Park, New Jersey, GPI, 2007

The study includes a detailed traffic analysis and recommended improvements for the area bound by NJ 124, Park Avenue (623), Ridgedale Avenue (632), and Columbia Turnpike (510). This area is located immediately north of the NJ 124 Study area and is a major redevelopment site including a hotel, a sports medicine facility, age restricted housing, and commercial office space. The specific work elements included in this study are as follows:

- Evaluation of 2007 traffic operations on all study area roads
- Traffic projections for the year 2027
- Analysis of traffic operations for the year 2027 on all study area roads
- Determination of improvements required to mitigate future traffic operation problems

Traffic Issues

Issues identified in the report are shown below:

- The intersection of Columbia Turnpike and Park Avenue operates at or close to capacity during both morning and evening peak hours.
- During the morning peak hour, the westbound left and southbound through movements operate at unacceptable levels of service. During the evening peak hour, the northbound approach operates at marginal levels of service.
- There is a high volume of traffic exiting from NJ 24 eastbound onto Columbia Turnpike westbound, and merging several lanes over to turn left onto Park Avenue southbound during weekday mornings. There is inadequate transition room for this movement to operate efficiently. This creates congestion that occasionally backs up the ramp onto NJ 24 mainline during the morning peak.
- Several movements at the intersection of Park Avenue and Punch Bowl Road operate at marginal or unacceptable levels of service in peak hours.
- Queuing for the jug handle at the intersection of Park Avenue and Campus Drive creates problems during the morning peak hour.
- Critical movements at the intersection of Park Avenue and Danforth Road operate at unacceptable levels of service during peak hours.
- The southbound left turn lane at the intersection of Columbia Turnpike and Vreeland Avenue operates at unacceptable levels of service during the evening peak hour. The eastbound left turn lane operates at marginal levels of service during peak hours.
- The eastbound through and left turn lane to the intersection of Ridgedale Avenue and James Street operates at an unacceptable level of service during peak hours, due to left turning vehicles.



- The southbound approach to the intersection of Main Street (124) and Central Avenue (608)/ Waverly Place operates at marginal levels of service during the evening peak hour.
- The southbound left turn movement at the intersection of Main Street (124) and Greenwood Avenue/ Prospect Avenue operates at unacceptable levels of service during the evening peak hour.

In addition to the above problems, some regional access issues exist for the various commercial developments in Florham Park and the vicinity of key interchanges along NJ 24. NJ 24 westbound backs up at the lane reduction just west of the Mall at Short Hills in the morning, while NJ 24 eastbound backs up at the lane reduction to two lanes just before the Whippany Road (511) on-ramp. The westbound NJ 24 bottleneck begins at approximately 7:30 a.m., and peaks at 190 vehicles. This leads to approximately three minutes of additional delay at 8:30 a.m. The eastbound NJ 24 bottleneck begins long before 7:30 a.m. By 7:30 a.m., the queue is approximately 200 vehicles long. By 8:30 a.m., the queue reaches nearly 350 vehicles before beginning to subside. This leads to approximately six minutes of additional delay at its maximum.

Parking Issues

“The proposed Route 24 interchange is an ideal location for a park and ride lot. If combined with transit service, traffic from Route 24 would have an opportunity to exit the highway and park their vehicles without having to travel on lower class roads. Considering the shortage of available parking at the nearby rail stations, this strategy has an excellent chance of success (Page 48).”

Convent Station Parking Lots, Morris Township Division of Engineering, 2006

This is an AutoCAD drawing with the locations of the parking lots surrounding the Convent Train Station. There are no issues discussed in written text. This AutoCAD drawing color-coordinates the types of parking found around the station. The breakdowns are:

- Resident Permit Parking
- Resident Meter Parking with ID Tag
- General Meter Parking
- Non-Resident and Resident Permit Parking
- Handicap Parking



Convent Station Parking Status Report, Morris Township, 2012

Table A-2 is a numerical listing of the types of parking spaces at Convent Station for the 2011/2012. The list states that there are 358 “Permit Parking” spaces at Convent Station; however the document states that 546 existing parking permits have been sold and 44 people are on the waiting list.

Table A-2: Convent Station Parking Spaces (2011/2012)	
Parking Lot 1	
Resident Permit Parking	110
Resident Meter Parking (With ID)	30
General Meter Parking	130
Resident and Nonresident Permit Parking	78
Handicap Parking	9
Transit Ticket Agent	1
<i>Subtotal</i>	358
Parking Lot 2 - Old Post Office Lot	
Resident and Nonresident Permit Parking	115
Parking Lot 3 – St. Thomas More Lot	
General Meter Parking	68
Convent Road Resident Permits	45
Convent Road Resident Permits	10
<i>Subtotal</i>	238
Total	596

Multiple Stations/General Items

2030 Parking & Ridership Forecast for Chatham/Madison/Convent Stations, NJ TRANSIT, 2009

This report presents parking and ridership forecasts for 2030 for stations along the Morristown Line including Chatham, Madison, and Convent Stations. This 2030 forecast assumed the completion of the Access to the Regions Core (ARC) Project, and as such is out-of-date. The results are presented below for informational purposes only.



Parking Issues

Based on the 2030 forecast, a projected shortfall of about 320 spaces at all three stations was estimated:

- Chatham Station would only have a need for an additional 10 spaces.
- Madison Station would have a need for an additional 230 parking spaces.
- Convent Station would have a need for an additional 80 spaces.

Non-residents of the area would be hit with the brunt of the parking shortfall because of the imbalance between residential and non-residential parking demand and supply. Further investigation would be needed to implement some method of bus shuttle service to reduce parking demand and also for possible expansion for non-residents.

Bulletin #7, "Life, Liberty, and the Pursuit of a Parking Space," Morris County Division of Transportation, 2008

Bulletin #7 discusses the shortage of parking spaces at bus and rail transit stations. During the county's municipal outreach to elected officials, planners, engineers, and residents, the lack of parking spaces near transit was identified as an ongoing problem:

- The ARC Project would have expanded passenger rail service to Manhattan, attracting more riders.
- However, parking lots at many train stations in Morris County are already near or at capacity and would not have been able to handle the increased demand.
- Providing more parking spaces is one approach but is not always practical or the best use of land in close proximity to train stations.

The discussion in this bulletin focuses on providing sufficient transit parking through efficient use, planning, and development practices and management to meet commuters' needs.

Parking Issues

According to a 2005 park and ride inventory conducted by TransOptions, Morris County's Transportation Management Association, existing parking was at or near capacity at most of the rail stations in the County. Chatham, Dover, Madison, Morris Plains, and Mt. Olive train stations were at 100 percent capacity, and the parking lots at Morristown, Convent Station, Denville, and Gillette train stations were approaching maximum capacity. Also, park and ride lots serving bus transit to NYC, located in Dover, Parsippany, and Rockaway, were operating at 100 percent capacity.

Proposal topics discussed in this Bulletin:

- Update the Morris County Rail Access Improvement Study. This should include an inventory of parking spaces, bike racks, ADA (Americans with Disabilities Act) compatibility, and other amenities at railroad stations.



- Explore the creation of an overflow parking plan to identify shared parking opportunities at locations adjacent to or close to transit. Consider properties with reduced weekday activity such as houses of worship, movie theatres, and shopping malls.
- Create a long range parking demand plan for Morris County that forecasts expected future demand for parking at public transportation facilities. The plan would take into account current shortages, expected population growth, transit improvements, and potential development.
- Review the results of NJ TRANSIT's Station Car Program. This 2-year test program will evaluate the viability of leasing parking spaces at train stations to businesses that provide membership-based car sharing services to the public.
- Consolidate and centralize parking management to allow for consistent pricing and policies.
- Develop a centralized Advanced Traveler Information System (ATIS) that permits commuters to check parking availability through their phone, email, or personal digital assistant (PDA).
- Limit parking permit availability only to those who use transit. Businesses in proximity to transit stations that do not utilize those facilities would not be able to purchase reserved parking.
- Reconfigure existing parking facilities to maximize efficient use of space.
- Expand structured parking near train and bus park and rides.
- Require parking lots to include compact vehicle parking to maximize the number of spaces.
- Offer state grants to municipalities to construct new parking at or near transit.
- Dedicate an impact fee on new residential units towards the construction and improvement of transit parking. This impact fee must be based on the projected number of residents that will use transit parking.
- Develop off-site parking lots and provide shuttle service from these sites to the train station.

Final Report for Review of Existing & Future Conditions to Various Intersections within the Borough of Florham Park, Borough of Madison, Hanover Township, Morris Township, Chatham Borough and the Town of Morristown Due to the Potential Redevelopment of the Former Exxon Research Facility on Park Avenue in the Borough of Florham Park, Louis Berger Group, 2010

The purpose of this study was to examine the traffic impacts associated with redevelopment of the former Exxon site, located in the westernmost area of Florham Park between NJ 24 and NJ 124. This development site is located immediately to the north of the NJ 124 study area. Since the release of the study, the training facility for the New York Jets has been constructed and is in operation on the site, and the office space is under construction or has been recently completed. At full build-out, the potential improvements to the site would also include:

- 250-room Hotel with 75,000 SF fitness center/ health club
- 100,000 SF Sports Medicine Institute
- 600,000 SF Office Repopulation
- 130,000 SF of General Office Space
- 425 Age-Restricted Residential Units (55 years of age and above)



This report references the **2027 Transportation Needs Assessment Study and General Development Plan: The Green at Florham Park (GDP)** as current studies that examine traffic patterns within the former Exxon Research Facility area, but no reexamination will be done for this study.

Traffic Issues

The operational analysis results showed that the majority of intersections in Chatham Borough are operating at or over capacity with poor service levels. All but one intersection is located in the main commercial business district of Chatham Borough. During the peak periods, Main Street (124) traffic travels at slow speeds with congested conditions and vehicular queues exceeding beyond the study intersections. Field observations revealed long queues during the morning, evening, and Saturday study periods, primarily attributed to frequent parking maneuvers, left turning traffic, and vehicles and buses blocking traffic.

Madison's business district is primarily situated along Main Street. Similar to Chatham Borough, Main Street in Madison experiences some traffic conflicts with frequent parking maneuvers and insufficient storage lanes for left turning vehicles resulting in long queues. Although most intersections operate at acceptable Level of Service (LOS), queues are excessive on several intersection approaches.

Generally, most of the Morris Township intersections operate at acceptable levels of service. Several movements at the East Hanover Avenue and Whippany Road, and Madison Avenue and Punch Bowl/Canfield Road intersections exceed capacity and queue lengths. The Madison Avenue and Punch Bowl intersection also has heavy eastbound left turn traffic in the morning peak period, which causes sudden stops and unsafe maneuvers.

The analysis results show that there were no major existing operational issues at the studied intersection locations in Hanover Township.

For a more thorough intersection and approach detail for all municipalities included in the study, Table 3-5 through Table 3-9 of the report (pages 29-35) have AM/PM/Saturday peak hour volume/capacity ratios, delay in seconds, and LOS for signalized and un-signalized intersections.

Parking Issues

Chatham Station could benefit from the following potential improvements:

- Americans with Disabilities Act (ADA) compliant facilities.
- Signs to reduce speed and cut-through traffic along Bond Street at the western side of the rail station.
- Improved signage directing commuters from Main Street (124) to the station.
- Reconfiguration of the vehicular entrance at Front Street. This entrance currently has a narrow turning radius and low visibility of pedestrian movement.

Convent Station could benefit from the following potential improvements:

- Additional signage directing commuters to the rail station from Madison Avenue (124) and Park Avenue.



- Reorganization of the parking area in front of the station to allow better flow of vehicles. Currently, the lanes within the parking lot are narrow and back-up during rush hour.
- Repair or replace sidewalks towards the northern end of the parking lot to fill gaps in sidewalks between Old Turnpike Road and the rail station.
- Reconfiguration of the passenger drop-off area to improve queuing for cars, including designating an area for shuttles, buses and taxis.

Madison Station could benefit from the following potential improvements:

- Improved signage directing commuters from Main Street (124) to the station.
- Mid-block crosswalk in front of the station entrance on Lincoln Place. This will allow safe and direct pedestrian access from the station to the retail located on Lincoln Place.

LINCOLN PLACE: Making Lincoln Place a “Place” in Downtown Madison, NJ, Project for Public Spaces, 2009

There is minimal traffic or parking information in this document, but the summary of time-lapse images taken on Lincoln Place included traffic, bicycle and pedestrian activity at the train station during a 3:30-8:30 PM period which could prove to be useful in the analysis.

Morris Area GREEN Transit Initiative, Borough of Madison, 2009

Parking, traffic flows, and access points around the station are inadequate and discourage potential train ridership. Non-residents that live north and south of Madison Station between Morristown and South Orange are denied the ability to purchase annual parking permits, while residents of Madison are allowed the opportunity to purchase a limited number of annual permits. This report’s main purpose was to secure TIGER funds to:

- Build a 506-space parking deck structure at the existing municipal parking lot on Kings Road (a net increase of 306 spaces); and
- Improve access in the town of Madison and to the train station with traffic signal optimization, and infrastructure enhancements at the outbound (north) side of the station at Lincoln Place.

(Note: The Borough of Madison was unsuccessful in its application for these funds.)

Traffic Issues

The segment of NJ 124 that bisects the Central Business District of Madison is often congested with poor levels of service at many of its intersections. The application identified the following signalized intersections around Madison Station that would be negatively impacted during peak commuter periods by increased traffic associated with planned developments, as well as the proposed parking structure:

- Ridgedale Avenue and Park Avenue
- Madison Avenue and Main Street
- Community Place and Main Street



NJ 124 Corridor Transit Access Improvement Study

Final Report

- Green Village Road and Main Street
- Green Village Road and Kings Road
- Green Avenue and Main Street
- Green Avenue and Kings Road
- Prospect Street and Kings Road
- Greenwood Avenue and Main Street
- Cross Street and Main Street

All intersections along the NJ 124 corridor will have failing levels of service during the peak hour with wait times exceeding two to three minutes without any improvements to the signals.

Parking Issues

Expansion of Madison Station parking by 306 additional spaces will benefit the town of Madison and NJ TRANSIT by generating annual revenue from additional annual parking and train passes. The report listed various other environmental and financial benefits associated with the proposed parking lot structure including benefits associated with people taking the train (rather than driving) and jobs created through the construction of the parking lot. The report highlighted other stations in the area that do not allow non-residents to purchase annual parking permits, including Summit, Short Hills, Millburn, and Maplewood Stations (the report incorrectly states that Convent Station does not issue non-resident permits). Some parking constraints are so serious at other stations that valet parking has been used to increase capacity. Other stations have resorted to creating two to three year waiting lists for available annual parking permits.

Morris & Essex 2005 Origin-Destination Survey, NJ TRANSIT, 2005

No specific traffic-related questions were included in this survey, but it did include information about access mode and subjective ratings for a number of elements related to station access and parking.

Municipal Design Standards (Various)

Design standards for Chatham Borough, Madison Borough, and Morris Township were reviewed. For traffic and parking considerations, the most relevant items in these standards include design details for various street types, and parking ratios for various land uses around the station sites. These standards have no direct bearing on current traffic and parking conditions, as the three train stations are in largely built-out areas (particularly in the central business districts of Madison and Chatham) and the standards would be relevant to this study only for future recommendations for access improvements that may require upgrades in streets, sidewalks, parking lots, etc. In general, many of the privately-owned properties around the train stations in the two CBDs do not have sufficient off-street parking to meet the standards under the pertinent municipal codes (e.g., one space for every 200 square feet of retail space under both §165-25 of the Chatham Borough Code and §195-35 of the Madison Borough Code). In both of these cases, these existing parking deficiencies relate to this study insofar as parking for the local businesses competes for space with the station parking needs.



NJDOT and Morris County Traffic Count Data (1995-2011)

The project files include several data resources with historical 24-hour Average Annual Daily Traffic (AADT) figures throughout Morris County. There are a number of count locations in the study area, and this data can be supplemented with more recent count station data from NJDOT. None of the locations have been counted on a regular basis, so this information is mostly useful for historical reference.

Parking Permit Data and Ridership Forecasts (Various)

Detailed parking data have been provided by Chatham Borough and Morris Township, including permits, utilization, regulations by user type (resident vs. non-resident permit, general meters, etc.), municipal codes, and other pertinent data. TransOptions has provided detailed information about permits and pricing structure for all three stations.

U.S. DOT Highway-Rail Grade Crossing Accident Report (Convent Road), U.S. DOT, 2010

U.S. DOT required accident reports prepared by New Jersey Transit Rail Operations (NJTRO) for the two at-grade rail crossing accidents in the study corridor include Federal Railroad Administration (FRA) codes for the crossings and detailed information about the crossing protection systems. None of the crossing protection systems appears to be tied to a nearby traffic signal for signal pre-emption purposes.

Bicycle Transportation and Pedestrians

Madison Station

Bicycle Route Plan, Borough of Madison, 2005

This document provides a plan for bicycle routes throughout the Borough, consisting of three levels of route designations: those with proposed striping, stenciling of a bicycle icon, and signage; those with stenciling and signage; and those with signage only. The following recommendations were made:

- NJ 124 was designated at the highest level, with recommendations for bicycle lane striping, stenciling of the bicycle icon in the bicycle lane, and signage, on both sides of the roadway.
(Note: it was recently observed that many of the bike stencil markings on NJ 124 are in place, however in segments where the road appeared to have been resurfaced, the bike markings are no longer present.)
- Other roadways such as Central Avenue (608) and Greenwood Avenue, which connect to the train station, were also proposed for the highest level of treatment, which, in this plan, includes striping, stenciling, and signage on both sides of the road.”



Borough of Madison: A Center for Transit, the Arts, Lifelong Learning and Health & Recreation, Rutgers/NYU, 2003

This capstone project makes a variety of livability recommendations for Madison, including pedestrian connections along NJ 124 from the train station to Drew University, and bicycling to the Great Swamp, a distance of 2.5 miles south.

LINCOLN PLACE: Making Lincoln Place a “Place” in Downtown Madison, NJ, Project for Public Spaces, 2009

Located a block from NJ 124, Lincoln Place is the street adjoining the Madison Train Station on its north-western side. The goal of this study was to help transform Lincoln Place from a street people walk along and through, to one that is a destination in itself.

The report details:

- Qualities of great public spaces and great streets, including active street life, strong linkages, pedestrian uses, a place that is walkable and siteable. Great streets are also great walking environments.
- Fundamental qualities of pedestrian friendly downtowns.
- Challenges to connecting assets of this area which include the train station, architecture, restaurants, and parks.
- Recommendations including the following overarching ideas:
 - Make Lincoln Place a destination to walk “to” rather than “through.”
 - Enhance the Pedestrian Environment through the widening and addition of sidewalks, lighting, and other specific short and long term recommendations.
 - Provide pedestrian wayfinding, orientation and access.
 - Expand the role of the train station presence on Lincoln Place.
 - Increase public amenities through more seating, landscaping, flowers, drinking fountains, bike racks, lighting, trash/ recycling, and WiFi.
 - Add Seasonal Activities.
 - Highlight businesses on the street.
- Detailed short and long-term recommendations for pedestrian improvements for three sites:
 - Western Lincoln Place – from crossing on Waverly Place to Post Office on Lincoln Place
 - Central Lincoln Place – in front of train station, Post office, & movie theater
 - Eastern Lincoln Place – area between movie theater & Prospect Place

Morris Area GREEN Transit Initiative, Borough of Madison, 2009

Page 8 notes the following: “The Friends of the Madison Train Station (FMST) have long advocated and supported the station, recognizing it as a transit hub for the area. With their help, over \$140,000 in donations were received through an engraved paver program to support repair of pedestrian walkways.”



Sustainable Living in Madison NJ and Sustainable Commuting in the Region, Borough of Madison, 2010

This report is a TIGER II and HUD Sustainable Community Grant application. The original application is used as backup and it promotes planning for complete streets and access for all modes to the Madison train station.

Convent Station

2010 Development Activity Report, Morris County, 2010

This report does not focus on general bike and pedestrian issues, but does mention the approval of the development of a pedestrian trail at a major office park in Florham Park, located off Park Avenue and Campus Drive. Although not within a half mile of Convent Station, and intended just for users of the office complex, development of these amenities could encourage walking in and around the area.

2027 Transportation Needs Assessment Study, Florham Park, New Jersey, GPI, 2007

This report assesses general transportation needs in Florham Park, the community located just northeast of Convent Station. Pedestrian and bicycling recommendations were to consider a “bicycle and pedestrian bridge over Route 24 ... to connect the housing on the Exxon site to the municipal complex and other portions of Florham Park. Further, new office and other developments should have sidewalks, and showers and bicycle lockers” (p. 50).

Open Space and Recreation Plan Update for Township of Morris, Township of Morris and Morris Land Conservancy, 2004

This plan inventories and recommends open space preservation and a series of greenway connections:

- The existing Traction Line Trail is a paved multi-use trail that runs parallel to the NJ TRANSIT Rail line near the Convent Station. It provides excellent connectivity to the station and to Route 124.
- The Greenway Map shows existing and proposed trails, with a note that this is not comprehensive and does not show all trails.
- One proposed Greenway Connection is shown within this project study area. It would connect the Convent Station and the Traction Line with Loantaka Brook Reservation, where a number of trails currently exist. The proposed connection is mapped from the Convent Station south on Convent Road, crossing Route 124 and continuing along Canfield Road to Fox Hollow Road and then left into the parkland. This route is through a residential neighborhood along local streets, and would assist with bicycle and pedestrian connectivity to Convent Station.



Final Report for Review of Existing & Future Conditions to Various Intersections within the Borough of Florham Park, Borough of Madison, Hanover Township, Morris Township, Chatham Borough and the Town of Morristown Due to the Potential Redevelopment of the Former Exxon Research Facility on Park Avenue in the Borough of Florham Park, Louis Berger Group, 2010

Traffic Impact Study: General Development Plan: The Green at Florham Park, Stantec, 2008

This site is located somewhat proximate to Convent Station. Although these reports were not reviewed completely for bicycle and pedestrian connections, it should be noted that the site is within relatively short distance of the Convent Station, and robust pedestrian and cycling connections would help limit vehicular traffic and boost ridership at the station.

U.S. DOT Crossing Inventory Information (Convent Road), U.S. DOT, 2010

This document is the USDOT Crossing Inventory Information as of 1/ 29/ 2012. It describes the at-grade rail crossing at Convent Road at Convent Station. Cyclists and pedestrians (and motorized vehicles, of course) cross the tracks at this location and elements important to bicycle and pedestrian connectivity and safety are noted as follows:

- The grade crossing is not a Quiet Zone, and there are two tracks.
- The crossing is illuminated but does not have Crossbucks, Advanced Warning, Pavement Markings, Highway Stop Signs, Wigwags, or Hump Crossing Signs.
- There are two signs “R15-2P” indicating there are two tracks.
- There are two gates – they are not four quad or full barrier (Pedestrian gates are present as observed in the field, but are not mentioned in this document).
- Total Number Flashing Light Pairs: 5
- Bells: 2
- Two traffic lanes cross the railroad.

Chatham Station

Chatham Borough Business Zone Study/Presentation, Taylor Design Group, 2009

This study included recommendations for “Illuminance Uniformity Ratios for Roadways and Walkways,” including a 4:1 average to minimum lighting ratio for pedestrian walkways and bikeways (Appendix, Table II).

Chatham Borough Master Plan Reexamination Report, 2006

- Traffic congestion locations may provide insight into pedestrian safety issues (Part 1 PDF p. 11).



- Goal 6 supports the creation and maintenance of a balanced transportation network, including “viability as a place safe for pedestrians and cyclists.”

Chatham Borough Open Space & Recreation Plan, Morris Land Conservancy and Borough of Chatham Open Space Committee, 2002.

This plan recommends, among other things, a system of greenways to protect the Passaic River and its floodplain:

- The plan calls for a system of trails, incorporating both walking and biking, that link the existing municipal parks with local neighborhoods (p. 26).
- The Greenways Map in the report illustrates that although the Greenways would improve walking and biking opportunities in Chatham, they are not proximate to the rail station. The Passaic River trail would cross NJ 124 just west of the interchange with NJ 24, and the curve of the river could allow for a connection into the neighborhoods south of NJ 124 along Summit Avenue. This could become part of a wider bicycle and pedestrian network throughout the Borough.

Multiple Stations/General Items

Land Development Standards for Morris County, Morris County Planning Board, 2004

- Section 514 states that “Each land development subject to County approval shall provide a sidewalk within the County road right-of-way if such is required,” and states they should be a minimum of 4-feet wide.

Morris County Bicycle and Pedestrian User Guide, Morris County, 2004

This is a map illustrating all existing and proposed bicycle and pedestrian facilities within Morris County. This includes mapping of Multi-use Paths or Trails, Walking Trails, Bicycle Lanes, and Shared Roadways, along with passenger rail stations, and open space as of 2004.

Morris & Essex 2005 Origin-Destination Survey, NJ TRANSIT, 2005

This is a summary presentation of the 2005 NJ TRANSIT Origin-Destination Survey. On the slide “How did you get to the train station...” (slide 4), it shows that 31.4% walked or biked only; and 15.9% and 4.6% were dropped off or took a bus/shuttle, respectively, both of which result in pedestrians.



Means of Transportation to Work by Municipality, US Census, 2006-2010

A summary of US Census travel statistics indicate that the corridor residents travel to work by public transportation and walking though these are not the predominant modes of travel:

- Chatham Township: 17% public transportation; 1.3% walking
- Madison: 14.3% public transportation; 5.8% walking
- Morris Township (Convent Station): 5.4% public transportation; 0.9% walking

Park and Ride Data (TransOptions, 2012)

- Provides inventory including bike racks and lockers at each station.

Smart Transportation Guidebook, NJDOT/PennDOT, 2008

This publication provides guidance on many types of street design, including standards for bicycles, sidewalks, and complete streets. This document will be consulted, in addition to national design standards, when planning for non-motorized transportation elements along NJ 124.

Township of Morris Master Plan Reexamination, 2007

This plan recommends a sidewalk priority program “to include sidewalks, where practical, on all arterial and most major collector roads...” (p.32) and lists roadways that should be prioritized for construction of sidewalks. It also recommends a review of open space and bikeway trail system to link to those in adjacent communities.

TransOptions Bike Locker Inventory, TransOptions, 2012

This inventory indicates the presence of bicycle lockers at each of the three stations, although at Madison Station they were observed in the Kings Lane Lot by the VHB project team. The inventory shows that there are 16 lockers at Chatham Station, 10 at Convent Station and six at Madison Station. There is a waiting list for lockers at Convent Station.

Structured Parking Reference Material, NJ TRANSIT, 2005

This document is a checklist of considerations for the design of structured parking, including bicycle and pedestrian elements. Bicycle and pedestrian elements to consider include:

- Planning, Programming Economic Considerations:
 - Vehicular and pedestrian circulation should be concurrently addressed to ensure balance.
 - Central point of pedestrian access to transit system.
 - Clearly defined internal paths of travel for all users.
 - Parkers become pedestrians so parking aisles should be oriented toward the primary access
 - Locate Drop-off/ Pick-up close to facility. These areas create conflict and congestion with significant pedestrian activity, so design carefully.



- Design, Engineering & Construction Considerations
 - This section covers design specifications and is not relevant to this study.

Zoning Ordinances for Madison, Morris Township, and Chatham Borough

A review of the ordinances indicates that:

- Bicycles are included in general provisions;
- No complete streets policies are in place;
- In Madison, several requirements exist for bike storage or parking associated with development of parking facilities or new development;
- In Chatham Borough's and Morris Township's ordinances, there is no discussion of non-motorized bicycles.

Roadway and Transit Safety

Crash summaries at the Chatham, Madison and Convent Stations are presented below. NJTPA provided crash data from 2006-2010 within one-half mile of each station (this is generally accepted as the maximum distance from which pedestrians would typically walk to transit). In the next phase of this project, crash analyses will be performed at up to 25 stations to determine the predominant crash types, patterns and causes so that the client, consultant team, and stakeholders can subsequently make roadway, pedestrian, and bike safety recommendations based on needs at high crash locations adjacent to stations.

Chatham Station

General Safety Data

There were 448 crashes within a half mile of Chatham Station from 2006-2010, or about 90 per year. Of those, about two percent involved cyclists and two percent involved pedestrians. The majority of pedestrian crashes and about half of the bicycle crashes occurred at intersections on NJ 124. Therefore, pedestrian and bicycle facility improvements would have the maximum benefit at intersections along NJ 124 within a half mile of Chatham Station.

Evaluation of Pedestrian Improvements in the Vicinity of New Jersey Transit Rail Stations – Final Report to: Transportation Coordinating Council (TCC)/Federal Transit Administration (FTA), Rutgers University, as of June 2012.

According to this study, there were no pedestrian crashes within 250 meters of Chatham Station during the 2005-2008 study period. The results of the roadway safety audit conducted at Chatham showed:



Positive Safety Attributes:

- Parking lots are directly adjacent to the station – therefore driving commuters are not required to cross any roadways to reach the platforms.
- The crosswalk at Coleman and NJ 124 had beacons which can be activated by pedestrians.
- The sidewalk network is relatively extensive and is well streetscaped.
- Un-signalized crosswalks at the train station are enhanced with centerline pedestrian signage.
- Vehicle operating speeds are relatively slow. Posted speed limits along Fairmount Avenue and Main Street (NJ 124) are 30 MPH. Traffic volumes along Fairmount Ave are relatively low.
- All roadways are two-lane roads (one in each direction) and many include parallel parking.
- The intersection of Main Street (124) & Fairmount Avenue (638) is signalized with pedestrian signal heads.

Negative Safety Attributes:

- Main Street (124) & Coleman Ave crosswalk markings are not uniform. The enhanced flasher beacons are not signed in accordance to Manual on Uniform Traffic Control Devices (MUTCD) recommendations, and push buttons to activate the system are only located on two of the four corners.
- Some locations are lacking federal ADA accommodations (under PROWAG) failing to meet modern standards.
- The area is subject to sign clutter.

The conclusions of the roadway safety audit pertaining to stations such as Chatham were:

Stations with low crash counts shared many of the same positive attributes:

- Relatively low operating speeds,
- Low volumes,
- Lack of parallel vehicle passing – i.e. two-lane, bi-directional cross-sections,
- Pedestrian accommodations were well marked with signage and/or pavement markings,
- Pedestrian accommodations were well maintained, and
- Visible streetscaping differentiated area to drivers as one with pedestrians.

General recommendations:

- Recommendation 1: Promulgate Complete Streets in the vicinity of train stations - roadways should be designed for slower speeds and to accommodate all users.
- Recommendation 2: Proper maintenance is important to safety.
- Recommendation 3: Upgrade traffic control devices to meet current engineering standards and best practices.
- Recommendation 4: Ensure a complete and accessible sidewalk network which is attractive for pedestrian use.



Madison Station

There were 442 crashes within a half mile of Madison Station from 2006-2010, or about 88 per year. Of those, about two percent involved cyclists and three percent involved pedestrians. Just over half of the pedestrian crashes and nearly all of the bicycle crashes occurred at intersections on NJ 124. Therefore, pedestrian and bicycle facility improvements would have the maximum benefit at intersections along NJ 124 within a half mile of Madison Station.

Convent Station

There were 100 crashes within a half mile of Convent Station from 2006-2010, or about 20 per year. There was one pedestrian crash and two bicycle crashes, none of which occurred on NJ 124. However, with improved transit service and increased residential density near the station potentially in the future, pedestrian and bicycle exposure to vehicular traffic would increase, which could cause an increase in pedestrian and bicyclist crashes.

Multiple Stations/General Items

New Jersey Department of Transportation Bureau of Safety Programs (BSP) Program Methodologies, NJDOT, As of February 2012

This document lists NJDOT methods for further evaluation/study. These methods are used to identify high crash locations for their bureau of safety programs.

Bus Stop Safety Toolbox, NJTPA, 2011

Recommendations:

- Consolidating driveways through access management reduces potential pedestrian and motorist crashes; NJDOT recommends driveways no closer than 100 feet from the nearest signalized intersection.
- Bus stop signage and markings, and pedestrian warning signs and ladder crosswalks are effective, low-cost improvements.
- To identify traffic calming candidate locations, municipalities should first identify high pedestrian crash locations at and near bus stops.
- Curb extensions and reducing the corner curb radii are ways to slow turning vehicles through crosswalks to decrease crash conflicts.
- Use crash data analysis to prioritize bus stop needs and safety improvements.
- Safety audits and bus stop safety checklists should be part of the plan for bus stop evaluations.
- Use Plan4Safety for pedestrian crash data analysis.



- Other safety recommendations include safe access via sidewalks, bike lanes, and one-way to two-way conversions, pedestrian islands at channelized right-turn lanes and medians, midblock crosswalks, ADA curb ramps to meet crosswalks, adequate signal timing for pedestrians, fixed pedestrian signals instead of actuated/ push button, leading pedestrian intervals (LPIs), and pedestrian-level lighting near shelters for safety and security.
- Safety improvements should be paired with enforcement and education.

Transit Infrastructure and Operations

Convent Station

Minibus Daily Ridership, NJ TRANSIT, March 2012
Minibus Monthly Ridership, NJ TRANSIT, March 2012

The daily ridership report documents ridership by route for the NJ TRANSIT 878 and 879 buses. Average passengers per trip is 5.9 for the 878 bus and 3.3 for the 879 bus.

The monthly ridership documents the combined monthly ridership for the two routes since January 2010. Ridership on both routes has been falling from approximately 3,000 in January, 2010 to approximately 2,000 in March 2011.

Multiple Stations/General Items

Borough of Madison: A Center for Transit, the Arts, Lifelong Learning and Health & Recreation, Rutgers/NYU, 2003

This report identified three potential shuttle routes from Madison Train Station. These three routes would largely serve the business areas to the north of Madison Station.

Bulletin #8, "All Aboard Public Transportation", Morris County Division of Transportation, 2008

This report identified the importance of public transportation in Morris County and made the following recommendations:

Improving Public Transportation Service

- County Actions
 - Work with NJ TRANSIT to better coordinate bus and train schedules to improve transfers.



NJ 124 Corridor Transit Access Improvement Study

Final Report

- Encourage NJ TRANSIT to increase off-peak Montclair-Boonton Line service between Dover and NYC during weekdays and add weekend service to the line.
- Encourage NJ TRANSIT to transition to energy efficient modes of transportation such as electric or hybrid buses.
- Increase operational efficiency of MAPS through technology and coordination of existing services.
- General Actions
 - Study the possibilities of Bus Rapid Transit in areas of high congestion. Commuter buses could be allowed to use the shoulder of the highway to circumvent traffic.
 - Continue to expand “Bike Aboard” program to allow bicycles on trains at all times and make NJ TRANSIT’s entire bus fleet bike friendly.
 - Utilize community shuttle services to connect neighborhoods and businesses to rail stations and bus stops.
 - Install bus shelters where practical to give riders a safe and protected location.
 - Explore the feasibility of giving buses signal pre-emption.

Transit Network Expansion

- County Actions
 - Investigate the potential to increase peak period service and expand the service area of Morris County Metro urban routes. (Since this document was release, the bus routes known as the Morris County Metro have been reconfigured and rebranded so that they are now known as NJ TRANSIT buses. The routes are no longer identified as Morris County Metro.)
 - Evaluate the possibility of expanding and increasing service for Morris County Metro 4, the only daily rural bus route. Operating from Morristown to Dover, through Mendham and Chester, it has the highest ridership among rural bus routes. (Since this document was released, the Morris County Metro 4 bus, along with the other two rural buses, was discontinued.)
 - Work with NJ TRANSIT and neighboring counties to study potential new inter-county bus routes to improve connections between population and employment centers.
 - Support passenger rail restoration of Lackawanna Cutoff, which will alleviate automobile congestion on I-80.
 - Support NJ TRANSIT’s reactivation of NYS&W Bergen-Passaic railroad passenger service.
 - Identify locations where new park-and-rides could be located to best reduce commuter traffic from highway corridors.
 - Provide technical assistance to municipalities interested in adding community shuttle services.
 - Explore route expansion, possibly into adjacent counties, for Morris On the Move (MOM). Currently, there is one route that runs from Mount Olive to Dover. MOM is funded through the Job Access Reverse Commute (JARC) program. JARC’s goal is to improve access to employment for low-income individuals.



- General Actions
 - Study the feasibility of adding bus or rail transit lines to provide service along or adjacent to north-south highway corridors such as I-287.
 - Determine the need for providing fixed-route bus service to age-restricted communities.
 - Consider the mobility needs of residents in the development of age restricted housing, assisted living, and nursing homes in Morris County.

Bus Route and Rail Schedules (Various)

The NJ 124 Transit Study Area is served by NJ TRANSIT’s Morris and Essex Line, stopping at Chatham, Madison and Convent Stations, and four bus routes, NJ TRANSIT 873, 878, and 879 buses, and the Madison Avenue Direct (MAD) Shuttle. The 873 bus runs parallel to the rail corridor along Route 124 and stops at, or in close proximity to, each of the three stations in the study area. The 878 and 879 buses are loop routes designed to distribute and collect rail passengers. These two bus routes both serve the Convent Station. The MAD shuttle is a downtown circulator which serves the three colleges in the NJ 124 Corridor, along with Madison and Convent Stations.

Timed transfers between existing bus service and the rail line are limited. This is particularly an issue for the 878 and 879 buses, which are designed to feed the rail line. Additionally, the existing timetables do not show potential transfers from the bus routes to the rail lines.

Table A-3 summarizes the percent of total trips that meet the train within 15 minutes (in each direction). In some cases, the percent of total trips that meet the train is higher for the peak hour, but not consistently across all bus routes and stations. While there are numerous variables involved in the scheduling of bus service, creating connections by scheduling buses in concert with rail service would improve station accessibility.

TABLE A-3: Summary of Bus to Rail Trip Connections						
		873		878	879	MAD
		<i>EB</i>	<i>WB</i>	<i>Loop</i>	<i>Loop</i>	<i>Loop</i>
Convent Station	From NYC/HOB	33%	67%	41%	38%	
	To NYC/HOB	44%	22%	82%	75%	
Madison Station	From NYC/HOB	44%	33%			25%
	To NYC/HOB	44%	56%			38%
Chatham Station	From NYC/HOB	22%	44%			
	To NYC/HOB	44%	56%			



Bus Stop Safety Toolbox, NJTPA, 2011

This report documents NJ TRANSIT’s bus stop policies. Included in this are the optimal spacing of bus stops (between 600-1,250 feet); the placement at intersections (near-side, mid-block, or far-side); and potential amenities (benches, signs, real-time information).

Concept Report Summary Morris & Essex Line Expansion of Shuttle Service and Park and Rides, NJTPA

This report identified the need for connections to three stations in the study area. Demand increased tremendously with the implementation of Midtown Direct service. However, there is a lack of available land to expand parking facilities at these stations. This is caused by existing development as well as due to environmental regulations related to being in the Highlands District.

The study recommended the following feeder services (either for businesses or homes) for each rail station:

- At Madison Station both a residential and employer shuttle could be possible at this station given the land use.
- At Convent Station expansion of the existing employer shuttle could be possible at this station, given the land use. A residential shuttle is not advisable.
- At Chatham Station residential shuttles are preferred for this station. An employer shuttle would not be advisable given the land use.

Northwest New Jersey Bus Study, 2010

This study conducted by NJTPA includes Convent Station in its study area. Although the majority of the study area is to the north of the NJ 124 corridor, the recommendations it makes are pertinent to this study:

Need 1: Strengthen transit service along the major study area corridors

- Increase the frequency of off-peak service on commuter
- Restructure local routes in Morris County
- Increase span and frequency to key Morris County local routes
- Improve coverage
- Integrate local and New York commuter service

Need 2: Improve connectivity through shuttles and linkages to rail stations, transit hubs, and employment centers

- Improve community circulators
- Improve railroad station connections
- Improve service to major transit hubs

Need 3: Integrate private carrier services and locally run services into the area’s transit network through service and fare coordination and transit information improvements

- Accept local fares and passes on commuter buses operated by private carriers



- Integrate private carrier route, schedule and fare information with NJ TRANSIT

Need 4: Implement improvements to bus passenger facilities and running ways to support service proposals, upgrade system image and improve passenger comfort

- Improve passenger information, safety and amenities at existing park-and-rides and major bus stops
- Add commuter park-and-ride facilities and capacity
- Initiate a bus bypass lanes pilot project
- Create new and enhanced transit hubs

There was one specific recommendation pertaining to Convent Station:

- **Modify Wheels 966 Shuttle Route:** NJ TRANSIT operates two shuttles from Convent Station (Wheels 966). Route 1 offers six trips from the station in the morning and five trips to the station in the evening. Route 2 offers five trips in the morning and four in the evening. The Wheels 966 shuttle has sufficient ridership to justify the service, particularly on Route 1. In this concept, a few unserved office complexes on Park Avenue would be added to the route. The two 966 routes are completely separate and should be numbered separately. The route should be rebranded as a rail connection shuttle (distinct from other types of Wheels service which typically are local community circulators). The service should be noted on the Morristown Line train schedule. The new schedule for the service should include arrival and departure times of connecting rail trips at Convent Station. (Since this study was completed, the two 966 shuttle routes have been rebranded and numbered separately as the NJ TRANSIT 878 and 879 buses.)

Smart Transportation Guidebook, NJDOT/PennDOT, 2008

This report identified the importance of transit in designing a transportation project. Wider sidewalks and pedestrian friendly elements support both pedestrians as well as transit users. Grid networks, and streets with adequate geometry support transit use. Important elements for transit services (particularly bus and other non-fixed guideway service) include:

- Easily identifiable bus stops that are located at:
 - intersections and where convenient transfers between routes can be provided and sufficient curb area for bus operations and passenger queuing exists
 - in a consistent pattern (e.g., all nearside or all farside) to enable transit patrons to readily comprehend where they need to board a bus;
 - close to major passenger generators;
- Bus Stops Should Have the Following Amenities:
 - Passenger Waiting Shelters
 - Seating
 - Information Kiosks/Boxes
 - Trash receptacles, bicycle racks, public telephones, lighting, and landscaping



Planning and Zoning/TOD

Chatham Station

Borough of Chatham Zoning Ordinance

The following is a summary of the key zones presented in the ordinance:

- B-1 Business Service District: small scale business and professional offices compatible with residential uses.
- B-2 Regional Business District: general goods and services on a regional scale.
- B-3 General Business District: business, office and retail for local community in scale with historic buildings; more vehicular and less intensive than B-4.
- B-4 Community Business District: Pedestrian-oriented shopping in the downtown. Retail and personal services on ground level; offices and business services on upper levels.
- B-5 Office District: Large scale office use and research laboratories.

Chatham Borough Business Zone Study/Presentation, Taylor Design Group, 2009

This study examined Chatham Borough Zones B-1 through B-5, with a focus on the relationship between development build-out and parking availability. A parking utilization analysis for the two municipal lots near the railroad station was included and found the parking supply to be adequate. The Study suggested issuing commuter parking permits at the Bowers Lane lot. The focus of the study appeared to be more on preserving scale and character of the business areas rather than in encouraging higher density Transit Oriented Development (TOD) in Chatham. It was noted that the Master Plan called for business development “compatible with the predominant historic period.”

Chatham Borough Master Plan Reexamination Report, 2006

This report presented an update of *2000 Chatham Borough Master Plan*. The following are items relevant to the NJ 124 Transit Study:

- The 2006 Reexamination noted that the 2000 Plan included the following:
 - Identified the “short supply of parking for commuters in downtown” as a major problem/ issue.
 - Recommended “promoting bus ridership” and “use of vans for transportation to the railroad station” as possible solutions to identified problems.
 - Expressed the goals of “Preservation and enhancement of the small-town character of the Borough” and “Minimize conflicts between shopper and commuter parking, and between circulation needs for local vs. regional traffic.”
- Stated that the opening of Route 24 had only partially alleviated heavy traffic on Main Street (NJ 124).



- The 2006 Reexamination included the following new goals, objectives, and implementation strategies:
 - “Consider common regional issues, such as...transportation...as opportunities for cooperative regional solutions.”
 - “Continue to pursue planning and zoning rules and procedures, including development incentives that will protect and enhance the historic character of the downtown and of the residential areas.”
 - “Balance transportation needs of residents, workers and transients as they move within and through the Borough.”
 - “Encourage land planning that incorporates safe pedestrian and bicycle pathways.”
 - “Continue involvement with regional traffic management and regional municipal organizations relative to traffic and development issues.”

Madison Station

Borough of Madison Master Plan, Borough of Madison, 1992

The Borough prepared a Master Plan in 1992. More recently, Reexamination Reports were prepared in accordance with State Law in 2004 and 2011. Madison also prepared a *Master Plan Land Use Amendment* in 2009. The following is a summary of key points presented in the 2011 Reexamination Report which builds on the earlier work and suggests revisions where appropriate.

Relevant goals and objectives for Madison that appear to have remained consistent from 1992 through the recent updates include:

- “To permit multi-family residential use at appropriate densities in locations accessible to major highways, commercial services, and public facilities.”
- “Encourage the use of mass transportation.”

The 2004 report noted several problems that would require planning efforts in order to address them, including “Addressing parking demand in the downtown.”

The 2009 Amendment noted that the Borough had been utilizing shared parking and parking management to deal with parking demand in the downtown and identified new objectives including:

- “To encourage development opportunities that incorporate transit-oriented design principles in locations within a ¼ mile of the NJ TRANSIT train station with densities, amenities and uses reflective of the specific neighborhood context and site-related features and opportunities.”

The 2011 Reexamination reported on progress towards reaching previously stated goals issues including that the borough had reduced the maximum downtown building heights to three stories, consistent with the existing scale, and lowered non-residential parking requirements in the downtown to reflect its “mixed-use, transit accessible nature.” And, it reiterated the 2009 report’s newly added objectives.



Borough of Madison Zoning Ordinance

Madison’s downtown area, which includes the railroad station, is zoned CBD-1, CBD-2, CC (Community Commercial), and OSGU (Open Space/ Government Use). The objectives of each are as follows:

- CBD-1, CBD-2, Central Business District Zones: Intended to promote a vital, mixed use downtown core – residential, retail, office, institutional, theaters, etc. - designed to encourage street-level pedestrian activity. Each has similar regulations, except that one and two-family housing is not permitted in CBD-1. Allows for 20% reduction of non-residential parking requirements; additional 10% reduction is possible with demand management. Shared parking is permissible.
- CC (Community Commercial) Zone: Intended to provide commercial uses to serve local residents rather than regional demand. Permits retail, office, institutional and other uses, plus apartments over commercial. This zone is generally located adjacent to NJ 124.
- OSGU Open Space/Government Use Zone: Intended to recognize and preserve open space and government uses, including the train station.

In December 2010, the Borough adopted regulations for the Green Village Road Special Use (GVRSU) District and mapped it on a former school site located adjacent to the downtown. The purpose of the zone is “to encourage development of the area, consistent with transit-oriented design and sustainable design principles...” The District includes two sub-zones. In Sub-Zone 1, townhouse and multi-family developments are permitted uses and a boutique hotel is a permitted conditional use. With bonuses, residential densities can go as high as 28 units per acre with maximum heights governed by the sky exposure plain and topographic elevations. In Sub-Zone 2 permitted uses include boutique hotels along with ground floor retail, restaurants, and various cultural facilities. Upper levels can accommodate commercial, offices, apartments, live/work artist lofts, and institutional/educational uses subject to various regulations. The borough recently issued a Request for Qualifications from developers interested in developing the GVRSU zoned property in accordance with the Borough’s *Redevelopment Plan for the GVRSU Area*.

LINCOLN PLACE: Making Lincoln Place a “Place” in Downtown Madison, NJ, Project for Public Spaces, 2009

- Identified improvement ideas for Lincoln Place which is across the railroad tracks from the Madison Station.
- Focus was on making Lincoln Place a destination by: improving the pedestrian environment through physical improvements to streets, sidewalks and buildings; expanding the mix of businesses and activities; and attracting more people.
- Study noted the “significant commuter ridership on trains” and recommended expansion of the role of the station beyond just being a transit station to make it a “central hub from which activities spill onto the street.”

Morris Area GREEN Transit Initiative, Borough of Madison, 2009

The report projected that the proposed parking garage would allow 306 additional commuters to take the train to New York City. It also highlighted the need to improve traffic operations, particularly in light of proposed and



approved developments in the area, including the redevelopment of the Exxon tract in Florham Park. Finally, it posited that improving station access by implementation of the recommendations for Lincoln Place from the 2009 Project for Public Spaces study (see above) “is critical to increasing usage” of the train station.

Sustainable Living in Madison, New Jersey and Sustainable Commuting in the Region, Borough of Madison, 2010

In August 2010, the Borough of Madison applied for a USDOT TIGER II and HUD Sustainable Community Challenge Grant to prepare a Transit Oriented Development Action Plan. The focus of the Plan was to link land use and transportation planning efforts to enhance the borough’s long-term “sustainability and community livability.” The three major components of the Plan were to be: (1) Maximize sustainable access to transit for the region; (2) Enhance community livability through transit-oriented mixed use development; and, (3) Implementation of transit oriented development action plan. The application indicated that Madison had the support of:

- Borough of Florham Park
- Harding Township
- Morris Township
- Chatham Township
- Morris County Freeholders

The application included the Morris Area Green Transit Initiative as an attachment.

Convent Station

Township of Morris Master Plan Reexamination, 2007

The reexamination does not specifically address the Convent Station area or transit service in general. Policies that are relevant to the NJ 124 Transit Study include the following goals and objectives:

- “Maintain established patterns of density both for single-family and multi-family uses...”
- “Maintenance of existing commercial areas and restriction of new commercial development”

The report also noted that the Township was participating in a regional traffic study that was to include intersections of Madison Avenue (124) with Punch Bowl Road, just west of Convent Station, and with Normandy Parkway further to the west. The Town suggested that the Madison/Punch Bowl intersection be considered for

signalization and that the signal at Normandy Parkway should be reviewed to reduce congestion in Madison. Madison Avenue was also listed as a priority for sidewalk construction.

Township of Morris Zoning Ordinance

The ordinance contains three Mixed Housing Zones, RH-5, 16, and 20, which are aimed at meeting Mt. Laurel obligations with maximum densities of 5, 16, and 20 units per acre. Zoning of areas around the Convent Station are a mix of Open Space/Government Use (OS/GU), Office and Research Laboratory (OL-5), University (U), various single-family residential zones, and an area of Town House Residential (TH-8) with a maximum density of eight units per acre.



NJ 124 Corridor
Transit Access Improvement Study

Final Report

Appendix B: Outreach



Stakeholder Interview Notes



NJ 124 Corridor Transit Access Improvement Study

Final Report

Date: April 4, 2012

Meeting Name: Stakeholder Meeting – NJ TRANSIT

Attendees:

Name	Representing	Name	Representing
RJ Palladino	NJ TRANSIT	John Del Colle	NJ TRANSIT– Government and Community Relations
Ken Beitel	NJ TRANSIT	Jim Gilligan	NJ TRANSIT – Bus Planning
Alan Budde	NJ TRANSIT – Bus Planning	Tom Marchwinski	NJ TRANSIT – Forecasting
Janice Pepper (2 nd half of the meeting)	NJ TRANSIT – Market Research	Lisa DiTaranti	VHB
Susan O’Donnell	VHB		

The following are the meeting highlights:

- A project overview was provided to the attendees. The Study seeks to provide recommendations to improve access to transit. NJ TRANSIT noted that Morris County is leading this Study because most parking in the Study area is not owned by NJ TRANSIT.
- Lisa DiTaranti discussed some of the NJ TRANSIT-related findings from the earlier stakeholder meetings:
 - During a meeting with College representatives, the idea of distributing a “transit information package” to incoming students was discussed. The Colleges also asked why the Student Weekly Pass was discontinued. The Colleges would like to see a mechanism for parents to purchase transit passes for their students at new student orientation. The Colleges would also like to see a “day pass” allowing unlimited use of transit for a day or a multi-pass pack. NJ TRANSIT has had success working with other Colleges and Universities during the student orientation process. During orientation at other colleges and universities, NJ TRANSIT has spoken with students and, most importantly, with the parents about NJ TRANSIT services. This has been successful but NJ TRANSIT has not been able to do this with the colleges/universities in this corridor. A “One-stop shop” of transit information for students on campus is critical as learned from the Northwest New Jersey Bus study.
 - The Colleges indicated that kitchen and maintenance staffs appear to use transit in addition to students.



- At the College of St. Elizabeth, cut-through traffic is reported as a problem; vehicles use the main campus roadway to travel between Park Avenue and NJ 124. Additionally the College is concerned about pedestrians crossing the tracks unsafely when the guard rails are down on Convent Road. The College would be interested in an Operation Lifesaver presentation.
- Students attending evening classes at Drew University have had travel difficulties reaching campus because NJ TRANSIT does not provide evening bus service.
- Harding Township residents would like to have access to more parking for their residents; however, residents are finding alternative parking at church lots or on-street, or they are driving to stations further east.
- The municipalities along the NJ 124 corridor are working on economic development and reoccupying the vacant buildings/offices.
- Representatives from Pfizer, located at 5 Giralda Farms, indicated that a corporate shuttle is provided as an employee benefit. The shuttle is not promoted because, while there is a contingent that wants to maintain it, and there are also those who want it be discontinued. The existing NJ TRANSIT bus service does not travel into the Giralda Farms Campus, so some of the buildings with long access driveways further into the campus are not directly served by NJ TRANSIT.

NJ TRANSIT Bus Routes in the Corridor

- NJ TRANSIT discussed the history of bus service in the corridor:
 - The 873 bus route connects the Livingston Mall to Morristown and to the Morris County Human Services Facilities in Parsippany, operating six days per week. The route has been restructured twice in the last two years (fall of 2010 and in 2011). Through the fall of 2010 the route ran hourly; after that the midday service was reduced to run up to every two hours. In 2010, NJ TRANSIT originally proposed eliminating the route but there was substantial public outcry for service to continue. The 873 was eventually routed through Morristown Station to further enhance the station's role as a transit hub.
 - As part of the restructuring, NJ TRANSIT examined routing the 873 bus into the Drew University's and Fairleigh Dickenson University's campuses. However, it was determined that these diversions would result in an unacceptable increase in the bus line's travel time through the corridor.
 - Most of the bus ridership market that is served by NJ TRANSIT's routes is local. Eighty percent of the passengers are non-English speaking passengers traveling to jobs and shopping opportunities. The remaining 20 percent are mostly seniors trying to move about for shopping or medical appointments. Very few students use NJ TRANSIT's buses in the corridor.
 - The two other routes that NJ TRANSIT operates in the study area are an outgrowth of the Wheels 966 shuttles and were rebranded as the 878 and 879 routes. The Wheels 966 shuttles were also slated to be eliminated in 2010, but the corporate community "saved" them. As the trains arrive from the east the shuttles pick up passengers to



circulate them to the corporate sites. Recently, NJ TRANSIT added an official stop at St. Anne's Villa because drivers were stopping there by request. The 879 stop at the old Verizon site (which was closed and will be reopened by the Realogy Corporation) was discontinued. Both the 878 and 879 routes operate in the weekday peak AM and PM periods. There are no observed reverse peak riders, such as residents using these shuttles to access the train, on these routes.

- Bohler Engineering has contacted NJ TRANSIT on behalf of BASF to inquire about adding transit service to their new site. BASF would like the bus to serve their site because they are pursuing LEED Gold certification.
- The 878 and 879 routes have about 75 total riders per day (both directions). NJ TRANSIT has some ride check information that will be provided to the project team.
- NJ TRANSIT had utilized cut-away vans for the 878 and 879 routes until last year when they switched to 30 foot passenger transit buses with bicycle racks. The 30 foot passenger buses have been a problem because the vehicles' mirrors were hitting trees. NJ TRANSIT will be switching back to "big mini-buses" with 20 to 25 seats but probably without bicycle racks.
- Realogy will be opening an office at the former Verizon site on Park Avenue. The company contacted NJ TRANSIT a few months ago because they are also pursuing LEED certification and are interested in transit service to their building. NJ TRANSIT will re-instate the stop on the 879 route to serve their site when Realogy opens.
- NJ TRANSIT's buses also turn into a few businesses' driveways on Madison Avenue such as Crum and Forster, and others like Honeywell where the bus must pass through security gates. Some companies prefer front door service while others are satisfied with stops within walking distance of their buildings.
- The NJ TRANSIT buses that serve the study area generate nearly zero revenue for NJ TRANSIT Bus Operations because most of the bus riders are also rail riders with monthly passes who are entitled to a free one zone bus transfer. Revenue for these riders goes to the rail side of NJ TRANSIT.
- The 873 route once had the \$0.50 reduced fare, but with the restructuring it went back to the \$1.50 fare for one zone trips.
- Each of the routes is served by a single bus, so increasing service or making additional stops would be costly. The train to bus connections are closely spaced (without much cushion) because of train schedule modifications.
- At Convent Station, a food truck and several taxis are usually occupying the bus stop area or the handicapped spaces on the eastbound side of the tracks. NJ TRANSIT has spoken with Morris Township to request a designated space for the food vendor, but this has yet to be accomplished.
- The Giralda Farms shuttle was originally funded through the Congestion Management Air Quality (CMAQ) program and managed by TransOptions. When CMAQ funds were expended, TransOptions asked NJ TRANSIT to take over the shuttle but NJ TRANSIT had no funds to run the service. TransOptions secured corporate sponsors to fund the



service, however the sponsors shortly pulled their money and the route was terminated.

- NJ TRANSIT said there is a new route in Mercer and Middlesex counties (the 655 Healthline from Princeton to Plainsboro) that is primarily funded with CMAQ money, and partially subsidized by County and local governments. CMAQ only funds these shuttles for three years after which they have to be self-sustaining or funded through other sources. NJTPA requests that the shuttle service applicants have a plan for continual funding after the three year CMAQ funds are no longer available. The policy requires that 1.5 years before the funding ends, the various parties will negotiate to continue the supporting the shuttle so that it can be continued, provided that the route is successful.
- The 871 through 880 NJ TRANSIT bus routes, with the exception of the 878 and 879, are partially funded by Morris County Freeholders through an annual cash contribution. NJ TRANSIT is still lobbying for more support.
- NJ TRANSIT was contacted within the last year by a large company that wants to locate in Morris Township near I-287 and Convent Station. The company needs transit service for its many transit dependent employees.
- Bayer International is relocating to a new corporate headquarters on Whippany Road, near NJ 10 in Hanover Township. The corporation is interested in shuttle service for its employees. The redevelopment of the site will consist of a commercial phase, which will be followed by residential development. The redevelopment is designed to accommodate transit buses.
- NJ TRANSIT has also received a request for bus service from Atlantic Health. NJ TRANSIT is encouraging them to design their site in a transit-friendly way.
- If NJ TRANSIT funding is reduced again, these shuttles could also be subject to cuts.

Madison Avenue Direct Shuttle (MAD)

- The MAD Shuttle service, managed by TransOptions and funded with CMAQ dollars, provides service along the NJ 124 corridor, and follows a route similar to the NJ TRANSIT 873 route. To not undercut existing NJ TRANSIT service, NJ TRANSIT required that the shuttle fare be equal or greater than the fare on the NJ TRANSIT routes.
- Additionally, the shuttle service could only operate at times that do not compete with the NJT services. This explains why the MAD shuttle operates with restricted hours. The MAD Shuttle service will probably be refined as more rider needs are identified. Customers have expressed concerns about the shuttle's "look" indicating it appears unsafe or unofficial. The identity and branding of the shuttle are issues that should be addressed.
- NJ TRANSIT is willing to drop the 873 bus and let the MAD shuttle take over the 873 route. However, if the 873 route or any of the other NJ TRANSIT buses or shuttles were taken over by another operator, then rail customers with monthly passes would have to pay a bus fare; currently, rail passengers with monthly passes ride for free on NJ TRANSIT buses for a certain number of zones indicated on the pass.



Other Discussion

- There is an interest in bus service to the offices in the corridor. Although Morris County has one of the highest office-vacancy rates in the state, there is a lot of redevelopment proposed along Park Avenue such as on the former Exxon Site and the former Verizon site, which Realology will move into. A representative from Realology attended this project's Public Open House expressing interest in transit service for company employees.
- NJ TRANSIT cautioned that when additional parking is made available to non-residents the actual demand is not as always as high as expected.
- NJ TRANSIT predicts some increase in ridership as phases of the World Trade Center redevelopment are completed.
- NJ TRANSIT cautioned that when VHB is given ridership demand by NJ TRANSIT, VHB needs to look closely at what the demand is showing. NJ TRANSIT suggested VHB examine if improvements in parking management and bicycle and pedestrian infrastructure could address parking demand.
- VHB has conducted a comparison between the bus schedules and the rail schedules and has also spoken with bus riders.
- NJ TRANSIT believes there is an unmet demand to provide transit service between the Lyons VA Hospital and Morristown. If that route was developed, it could possibly run through Harding on the way to Morristown during rush hour. This route would primarily be focused on serving the hospital.
- NJ TRANSIT discussed whether there is a need for more bicycle racks and lockers. Regular bicycles are currently prohibited from boarding trains at low level platforms. The commissioner has asked NJ TRANSIT to revisit the bicycle regulations. Further actions may occur at the June board meeting.²⁹ For updated information on the NJ TRANSIT's bicycle policy, refer to the following website:
http://www.njtransit.com/rg/rg_servlet.srv?hdnPageAction=BikeProgramTo
- TransOptions was considering relocating bicycle lockers from underused stations to stations with demand in this corridor. TransOptions noted that bicycle lockers occupy a lot of space and are expensive.
- Information is another key element for transit users. A static or electronic kiosk is needed with information regarding "how to get somewhere from here." A kiosk has been installed in Morristown and NJ TRANSIT will provide a picture of one. Typically, TransOptions or the municipality would need to take on ownership of the kiosk.
- Madison Station is owned by NJ TRANSIT.
- NJ TRANSIT stated the importance of installing bus stops proximate to the stations. NJ TRANSIT will provide a list of bus stops along the corridor from Morristown to Livingston.
- NJ TRANSIT tested a station Zipcar program, but it was unsuccessful. If the study area municipalities were interested in pursuing a program, NJ TRANSIT would be willing to help

²⁹ NJ TRANSIT revised its bicycle policy at the June Board meeting. Bicycles are now allowed on trains from any station, except during peak hours on weekdays and weekends.



NJ 124 Corridor Transit Access Improvement Study

Final Report

- promote the program. Drew has a Zipcar program. Zipcar will locate a “pod” car anywhere as long as it generates revenue.
- Ongoing conversations are needed between the NJTPA, Morris County, NJ TRANSIT, TransOptions, and the Colleges.

Action Items

- NJ TRANSIT to provide ridership forecasts next week.
- NJ TRANSIT will provide existing rail ridership at the stations and a complete Morris County bus operation map.
- NJ TRANSIT will follow up with real estate and ownership and confirm that at Convent Station, Morris Township owns the eastbound station building and NJ TRANSIT owns the westbound station building.



Date: March 26, 2012

Meeting Name: Stakeholder Meeting - TransOptions

Attendees:

Name	Representing	Name	Representing
John Ciaffone	TransOptions	Lisa DiTaranti	VHB
Donald Watt	TransOptions	Susan O'Donnell	VHB
Daniel Callas	TransOptions		

The following are the meeting highlights:

- A project overview was provided to TransOptions.
- TransOptions has not run many feeder shuttle routes which provide service for residents to train stations. They have mostly assisted with station to employer site shuttles.
- Chatham Township had a community shuttle through the NJ TRANSIT “Wheels” shuttle program around 2002. The shuttle became a political issue with town infighting. Since it was a Chatham Township shuttle, borough residents were not permitted to ride the shuttle. The Township also had to hire an employee with benefits to help manage the shuttle, which added to the overall cost of the service.
- TransOption’s “Last Mile” shuttle served two stations and provided 53,000 rides over its three year run. It cost \$125,000 to \$200,000 per year to operate. It was CMAQ funded and after the three year funding period ended neither NJ TRANSIT nor the communities wanted to take it over. The shuttle was taken over by Maersk, Quest Diagnostic, and Bausch & Lomb in Giralda Farms; service is provided only to their employees, not the general public. The fares for employees are as follows:
 - Quest - \$3/ride
 - Bausch & Lomb - \$2/ride
 - Maersk - free
- BASF has about 90 employees who ride the train and get picked up.
- Giralda Farms began their employee shuttle to reduce the demand for parking at the office park. Only underground parking spaces could constructed, which is very costly, so the property owner started the shuttle to avoid the more expensive expenditure. Now that there are empty offices on the campus, and less parking demand, Giralda Farms would prefer to eliminate the shuttle. However, the office park is concerned about the negative perception that may arise if they were to cancel the shuttle.
- TransOptions conducted passenger surveys on the Last Mile shuttle and Wheels route that were going to be eliminated about three years ago. Around 80 percent of the riders indicated that they would drive to work if the shuttles were to be eliminated. The Wheels 966 shuttle was not terminated and became the NJ TRANSIT 878 and 879. These shuttles help bring low income workers to jobs in the corridor. Many employees from Dover, which has a large



Hispanic population, use these NJ TRANSIT shuttles. These shuttles also have a large contingent of Hoboken riders, who have a transit affinity and larger proportion of residents under 30 years of age than other communities.

- The MAD shuttle is CMAQ funded which provides three years of financial support. The two year application process and paperwork are very onerous.
- In addition to CMAQ funding, the Madison Downtown Development Commission and the colleges in the corridor to help fund the MAD Shuttle. The ridership is primarily comprised of college students traveling to Madison, to home on weekends, and to take classes at the other universities in the corridor. The real driving force for this shuttle was the colleges.
- The MAD Shuttle is not permitted to serve the businesses that the Last Mile Shuttle had been designed to serve. The CMAQ program will not provide new funding to operate shuttle service similar in design to previous CMAQ funded routes. (After the initial three-year CMAQ funding period ends, the sponsor is responsible to secure funding from other sources for the shuttle's operation.)
- The MAD Shuttle runs with one 15-passenger van. These smaller vehicles provide maneuvering flexibility to access office park sites. The NJ TRANSIT operated employee shuttles are typically also 15 passengers.
- There are some operating requirements because the MAD Shuttle service the same corridor as the NJ TRANSIT 873 bus. The MAD Shuttle is required to charge the same NJ TRANSIT one-zone fare of \$1.50. The MAD Shuttle also cannot serve College of St. Elizabeth during the same hours that NJ TRANSIT's buses serve the College.
- TransOptions does not want to keep eliminating successful shuttles due to lack of funding; however, the local communities are not willing or able to take on the cost burden.
- TransOptions feels that NJ TRANSIT moves slowly because there is a lack of flexibility to assess and correct problems in part due to their slow approval process.
- During a discussion of why the Maplewood shuttle is successful, several things were identified including: culture (New York City Transplants who are comfortable with using transit), younger demographics, proximity, and municipal support.
- According to TransOptions, the employer shuttles are pretty well used. TransOptions will provide the ridership numbers for the shuttles.
- TransOptions conducted a NJ 124 study several years ago with Bob Vogel in Madison. Parking at the Madison train station was identified as a major issue. Residential permits are not transferrable; new residents will need to join the waiting list for permit parking space. Many choose to drive and park at another station like Summit where parking may be more available. There should be better bicycle amenities. In Madison, the bike path stops before it reaches the downtown. Local bicycle shops should become partners to develop a bike share program.
- There has not been a new bike locker installed in the region in 12 years, so TransOptions has tried to relocate unused bike lockers to stations with greater demand. However, due to limited space at some stations, TransOptions cannot always move unused bike lockers. They consider the potential demand for locker usage, beyond the number of bicyclists. For example, Dover has a lot of bicyclists, however many are low income who are less likely to



- rent bike lockers. Bicycle lockers have been moved because of security concerns of having them close to the station platform.
- TransOptions cannot propose new transit services. They can only promote existing services.
 - TransOptions encounters many misconceptions or different beliefs regarding transportation through their interaction with employers and the public. One misconception is that the private sector is interested in taking over public transportation. While employers believe that transportation is a government issue, not a private sector issue. A belief held by some is that roads should be free and transit should be paid for by the rider. TransOptions noted that for transit fares to fully pay for the cost of the service, also referred to as the fare box recovery, the fare would be \$14 per ride, which no one would pay. TransOptions feels that corporate parks should be required to implement an employee shuttle as part of their development/lease, and these shuttles would help attract tenants.
 - There is about a 25 to 30 percent office vacancy rate in Morris County. There is also a significant amount of space where tenants have vacated but their lease is not terminated, which is not included in the 25 to 30 percent. So after 2012 the vacancy rate may go up significantly. Additionally, many office buildings in the region are old and not up to current standards, and therefore they have low potential for re-occupancy when their tenants leave. These obsolete buildings tend to be too far west, too far from transit, and too costly to upgrade.
 - Generally, there has been a change in corporate philosophy. In the early 2000's, unemployment was very low and employers were doing well so they provided many employee amenities. Now with a 7.5 percent unemployment rate, employers feel less need to provide as many amenities in order to keep their employees from switching to another company. Also, with all the corporate mergers and acquisitions many companies are operated by entities headquartered outside of the County and the State, so there is less interest and concern about their traffic impact and less support for local community efforts. Employers feel obligated to provide benefits across the company and not necessarily provide special benefits to New Jersey employees.
 - TransOptions is currently developing a private shuttle to take people from Livingston to South Orange Station on the NJ TRANSIT Morris and Essex Rail Line.
 - The opening of NJ 24 many years ago diverted some truck traffic off of NJ 124. NJ 124 has a combination of local and through traffic. Turning movements at intersections and driveways, and parking contribute to the congestion.
 - TransOption reported that a bicyclist heading to downtown was killed on Woodland Road in Madison.
 - TransOptions suggested that the police need to enforce the "stop and stay stopped" law for vehicles while pedestrians are within crosswalks, and simultaneously enforce laws for pedestrians such as regarding jaywalking. The complete streets design approach should be promoted.
 - TransOptions would prefer that CMAQ funding for shuttles not end after three years. Instead, they would recommend that ridership metrics be developed to determine whether funding



- for each shuttle should be continued. As part of the CMAQ bidding process, TransOptions must develop a plan for identifying sources of funding for continuing any proposed shuttle.
- The Rockefeller group has expressed interest in an employee shuttle but they have not determined a means to fund it. TransOptions has developed traffic mitigation plans for the Rockefeller Group, Honeywell, and BASF. TransOptions will provide copies of the traffic mitigation plans.
 - TransOptions is primarily funded through four revenue streams. The largest amount is now through the NJTPA in a defined work program. Up until 2011, this funding was administered by the NJDOT. They also receive smaller grants through NJ TRANSIT to promote and support TransOptions' existing services which include managing the bicycle locker rental program and vanpool sponsorship program. TransOptions also receives a Highway Traffic Safety grant focused on bicycle and pedestrian safety (not on enforcement) including crosswalk, immigrant bicycle programs, and senior programs. The final funding stream is a Safe Routes to School (SRTS) which is in its last year. They also receive funding through much smaller corporate sponsorships and County subsidies.

Action Items

- TransOptions to provide copies of the Honeywell and Rockefeller Group traffic mitigation plans.
- TransOptions to provide ridership data for the MAD, Maersk, and Wyndham shuttles.



Date: March 26, 2012

Meeting Name: Stakeholder Meeting – Planning Officials

Attendees:

Name	Representing	Name	Representing
Richard Crater	Borough of Chatham Planning Board	Jim Slate	Township of Morris Engineer/Planning Board Engineer
Astri Baillie	Borough of Madison Planning Board	Marshall Bartlett	Harding Township Mayor and Planning Board
David Schiff	VHB	Todd Poole	4Ward
John Hayes	Morris County	Gerald Rohsler	Morris County

The following are the meeting highlights:

- A project overview was provided to the attendees.

Convent Station

- Parking was expanded at Convent Station about five or six years ago.
- Space is leased from St. Thomas More Church.
- Recently there have been more non-resident parkers.
- Traffic in the evening on NJ 124 towards Morristown is heavily congested at Normandy Parkway. A traffic signal is needed at Punch Bowl Road.
- Luxury transit oriented development (TOD) townhomes were built on Old Turnpike Road near the station but they were priced high and have not sold.
- The station building closes at 8 PM. Students waiting on the station platform to travel home by train after evening classes are exposed to the elements.
- Morris Township maintains the station.
- The path from campus is not lighted so students are walking in the dark at night.
- Parking demand is not currently as high as in the past due to the economic downturn.

Madison

- A number of parking spaces were lost when the Police and Fire Building was recently constructed on parking lot #2.
- Madison applied for a TIGER grant to construct a parking deck over lot #3 but was unsuccessful.
- Harding residents are not having a problem finding parking. They are paying to park at the Presbyterian Church or on side streets near the YMCA.
- The Green Village Road school site is being redeveloped for residential and mixed uses.



- Vans operated by various companies have been observed at the Madison Station picking up and dropping off passengers.
- Fairleigh Dickinson University is building a new library.

Chatham Borough

- Chatham Borough has about 50 residents on the waiting list for parking.
- Chatham Township residents utilize the daily parking spaces.
- The NJ TRANSIT owned lots are open to non-residents. NJ TRANSIT-owned lots cannot be designated for residents-only.
- Chatham Borough Council is considering paving an area near the existing lots for additional parking. The municipality has also examined converting some of the shopper parking to commuter parking.
- The Chatham Borough Planning Board representative indicated that the town does not want to be a transit hub and does not want a parking deck. Stakeholders representing other Chatham organizations (like economic development) that attended other stakeholder interview meetings expressed more of an interest in transit-oriented development.
- There is not enough access to NJ 24.
- There is very little development activity before the planning board recently since Chatham Borough is fairly built-out.
- The public schools are operated jointly between the Borough and Township so there is a lot of traffic activity when parents drop off and pick up their children.
- The Walgreens being built at Greenwood Avenue includes office space over the retail space. It previously was a gas station, so there is no residential.
- Some Stop & Shop employees use the train to get to work, and some commuters park in the Stop & Shop lot.
- Chatham Borough needs to improve bicycle and pedestrian access to encourage people who live nearby to give up their parking permits and walk or bicycle to train.

Harding Township

- Harding Township has no train station but about 100 residents are train commuters who prefer using the Morris and Essex line over other train lines.
- The Township would like better access to the train station on the Morris and Essex line but Harding Township residents do not want a park-and-ride lot in Harding, with a shuttle connection to the train station, because it will extend the commute time.
- It takes about five to seven minutes for Harding residents to drive to Madison Station.
- Harding is willing to work with Madison to build parking provided there would be a guaranteed number of spaces for Harding residents. This was discussed with a previous Mayor of Madison.



Regional

- Fees for parking vary. Parking in Morristown is high; Morris Township charges double for non-residents.
- The Park Avenue corridor has a lot of redevelopment activity such as the Jets facility on the Exxon site. Public transit access is needed to reduce the number of vehicles traveling to the Exxon site. Additionally, the aquifer needs to be protected and parking on the site should be reduced. The NJ TRANSIT bus shuttles need to continue in order to encourage transit access to the site.
- The Honeywell development is a regional issue. The developers are going before the Morris Township planning board for a master plan amendment to allow mixed office and residential land uses.
- NJ 24 needs another travel lane because it is at capacity.



Date: March 26, 2012

Meeting Name: Stakeholder Meeting – Chambers of Commerce and Economic Development

Attendees:

Name	Representing	Name	Representing
Peter Fife	Chatham Area Chamber of Commerce	Rebecca Feldman	Morris County Economic Development Corporation
Laura Cole	Madison Downtown Development Commission	Tim Quinn	Morris Township Administrator
David Schiff	VHB	Lisa DiTaranti	VHB
Susan O’Donnell	VHB	Todd Poole	4Ward
John Hayes	Morris County		

The following are the meeting highlights:

- A project overview was provided to the attendees.

Chatham

- Most of the parking in Chatham Borough’s downtown is reserved for commuters.
- More free parking is needed to support businesses.
- The Chatham Area Chamber of Commerce serves both the Borough and the Township, and needs to address issues from both municipalities’ perspectives, as well as from a business and commuter perspective. The challenge is to accommodate the needs of both towns.
- People drive to Summit and other communities like Berkeley Heights and New Providence to do their shopping because those communities have available parking. There is no metered parking in Chatham Borough.
- There has been discussion about adding some additional commuter parking in Chatham Borough.

Madison

- Economic development is what drives people to downtown Madison. The Chamber’s goal is to attract people shop at local businesses.
- There are three demands for parking – merchants, commuters, and shoppers.
- The MAD (Madison Avenue Direct) Shuttle began operating in September to serve the three colleges/universities.
- College students use the NJ TRANSIT buses to travel to the mall.



- There is a walking access problem and the train trestle serves as a physical barrier between sections of town.
- Kings Road along the train station is a problem. It has a narrow sidewalk, but there are not enough trees to block out the glaring sun. The existing car traffic is dangerous and gives pedestrians a sense of vulnerability.
- There has been a strong interest in mixed use/transit oriented development at the Green Village Road School site. Fifteen developers have expressed interest in the redevelopment of the site.
- Short term parking in downtown deters people from staying in town because of fear of getting a parking ticket.
- Downtown is doing well and has only limited vacancies which are primarily due to landlord issues rather than lack of demand for space.

Morris Township

- Residents are concerned that the post office may close.
- Parking is a problem. Residential and non-residential permits are always oversold since all permit holders do not necessarily park every day.
- The Township rents a parking lot from St. Thomas Moore Church. In the past there has been a two year lease between the Township and the Church but more recently it has changed to a yearly lease. There is concern over the loss of about 100 parking spaces should the leased lot be converted to new parish center.
- A Condo project was built near the station, but it went bankrupt and the owner is going before the town to change it to a rental development.
- The Liberty Greens townhouses are located north of the station. The Liberty Greens townhouses have been around for about 25 to 30 years and are a stable community.
- Constructing a parking deck near the train station may face objections from St. Elizabeth and St. Thomas More Church. The Township would also likely get pushback from the community because of traffic concerns and changing the landscape.
- Train noise is perceived as an issue.
- There are only a few railroad grade crossings along the Morristown Line. One crossing is located at the back gate of Honeywell and one is located at Convent Station at the entrance to the College of Saint Elizabeth.
- Quiet Zones have been examined for both at grade crossing locations to estimate cost and liability.

Morris County

- It is in the best interest of the surrounding towns that Morris County stays suburban.
- A TOD development at Convent Station would be successful because it would draw from other towns. There is a need for affordable housing.
- Traffic diminishes the desirability for businesses to come into the area.
- The Atlantic Health Shuttle is good.
- The rail line is underutilized because it is only used primarily for commuting to New York City.



NJ 124 Corridor Transit Access Improvement Study

Final Report

- The County has a 25 percent office vacancy rate. It is the highest office vacancy rate in the State. Many buildings are in need of redevelopment.
- The Morris County Economic Development Corporation (MCEDC) has shown how shared parking can work.
- Traffic is bad from 3:30 PM to 6PM between Giralda Farms and I-287. Roadway improvement recommendations have not been addressed.



Date: March 26, 2012

Meeting Name: Stakeholder Meeting – Public Works and Parking Enforcement

Attendees:

Name	Representing	Name	Representing
Randy Williams	Morris Township	Dave Powell	Morris Township Police Department Traffic Safety
Robert Sweetin	Chatham Borough Police Officer	Janice Piccolo (for Vince DeNave)	Chatham Borough Engineering
Connie Phillips	Madison Police Department	Lisa DiTaranti	VHB
Susan O’Donnell	VHB	Thomas Phelan	VHB
Matt Carmody	VHB	John Hayes	Morris County

The following are the meeting highlights:

- A project overview was provided to the attendees.

Chatham Borough

- Chatham Borough has 9,000 residents.
- The train station’s 282 parking spots are typically filled every day.
- The Borough has commuter parking as well as parking on Main Street.
- A study has been conducted that included surveying businesses in town to determine how many employee permit spaces are needed.
- Police Officer Sweetin indicated that he handles traffic and crossing guard training.
- There are ongoing discussions regarding adding parking near the train station. If additional parking spaces are constructed, Borough residents on the waiting list will most likely be accommodated first, and then the new spaces will be offered to Chatham Township residents.
- The daily parking spaces at the station are usually fully occupied by 6:45 AM.
- The municipality has received some complaints about vehicles blocking handicapped parking spaces while dropping off or picking up passengers. There is no designated area or spaces for drop-offs and pick-ups, but generally there is ample space to drive around waiting vehicles.
- Some permit spaces are available at times during the day.
- There is a small amount of over sale of permits. About 40 people are on the waiting list. There is very little turnover of permits so people are on the waiting list for years.
- Enforcement is conducted daily in the commuter parking lots. A multi-space meter is used to enforce daily parking.



- There is minimal illegal parking; when it does occur, typically the police encounter a daily parker in a permit spot or shoehorned in parking.
- The station's bicycle parking fills up with bikes and scooters. Additional bike racks and lockers are needed. Additional lockers could be placed adjacent to the existing locations.
- Bike theft is minimal.
- The Police Department and NJDOT are reviewing the intersection of Coleman Avenue and Main Street with respect to pedestrian traffic. There are a high number of pedestrians crossing the intersection at night and drivers are not able to see them to stop in time. The Police are unsure whether or not it will warrant a traffic signal.
- There have been no recent traffic accidents at the entrance or exits to the station.
- Under the railroad trestle there is an attenuator with a warning stop sign to alert drivers of pedestrians in the cross walks. The Borough would like to add in-pavement lighting to the crosswalk.
- The borough has not received any complaints regarding NJ TRANSIT buses. NJ TRANSIT buses work fine.
- During weekday mornings, traffic is heavy starting from 5 AM. After the morning peak period, traffic is light mid-day and then builds approaching the evening peak period. Traffic is a little more diluted during the evening peak period than the morning, but is still pretty heavy at 6 PM.
- The Borough established a parking task force about a year ago. A survey was conducted to determine where people are parking and how many spaces are needed. An under usage of parking was discovered and parking spaces have been re-allocated. The merchants can use the permitted lots for their employees. Parking violations are monitored by parking enforcement agents.
- Some rail commuters who use the station are from Berkley Heights. There is some illegal parking at Kings or Stop and Shop parking lots, and the swim club lot. In the summer, the swim club spots are in use by club members but this potential conflict is usually offset because rail ridership is typically lower during the season.
- There are voice activated pedestrian signals at Hillside Avenue and Main Street. The municipality would like to install two additional voice activated pedestrian signals.
- All businesses are required to have employee vehicles registered.
- The Borough would like to offer concierge services at the station.
- Bowers Lane is an option for at TOD pilot project because Chatham owns the land.
- Chatham wants to relocate the USPS sorting facility to a different location.
- With respect to development, there is an area with access off Commerce Street that the Borough would like to be redeveloped. There have been some DEP issues. The Borough has been discussing redevelopment in the Commerce Street area with a Fortune 500 Company. To proceed, a substation of some sort would need to be constructed.
- Chatham recently passed a Complete Streets Policy. As part of the complete streets program, the Borough is going to look at each road individually to see if bikes can be accommodated.



NJ 124 Corridor Transit Access Improvement Study

Final Report

- The Borough has voiced an interest in being designated as a Transit Village (note this contradicts statements made by the town planner in other stakeholder group meetings). The Borough has discussed the potential for this designation with Main Street New Jersey.



Madison

- Madison Station has plenty of bike racks. However, abandoned bicycles that are left on the racks are a problem.
- Bicycle theft is an issue around the station.
- The Kings Road parking lot is full most of the time.
- The length of the parking permit waiting list fluctuates. Last year there were approximately 100 people on the waiting list. Currently there are only three people on the waiting list. When the public calls about train station parking availability, the municipality recommends using the Summit parking garage. Nonresidents who call, mostly those who call are Florham Park and Harding Township residents, are not aware of alternatives to parking at Madison.
- There are no major issues with traffic accessing the stations. There have been no major crashes.
- The Madison parking lots are scattered around the station so there is not a major influx or out flow from one location.
- The pedestrian underpasses are now well lit.
- Madison provides “stop in the crosswalks” signage at various intersections; the signage is removed when inclement weather occurs and they would be damaged by snow plows.
- Lincoln Place is safe for pedestrians. At Kings Road and Prospect Street people run across the street. There is a new traffic signal at Kings and Prospect with walk and don’t walk pedestrian signals.
- The current Walgreens construction at Greenwood Avenue has slowed the traffic down, which is good.
- Weekend traffic is fairly low except for Saturday mornings. Traffic is more congested when school is in session and during school start and end times.
- There are no problems with pick-ups/drop offs at the station.
- The municipal commuter lots have about 280 parking spaces in total. There were problems years ago when the police building was built and nonresident parkers were turned away as the number of spaces for nonresidents was reduced.
- Parking inquiries come mostly from out-of town residents from Florham Park, Livingston, and Harding.
- Merchants have complained about other merchants’ employees parking in spaces reserved for shoppers.
- Parking is designated for employee, shopper, or commuter parking.
- Merchants occasionally complain about commuter parking.
- There are a couple of private lots that charge commuters to park monthly including some churches and private lots.
- Madison shuttles and taxis park on Lincoln Place.
- Friends of the Madison Train Station own 90 parking spaces.
- Bicycles ride in traffic in Madison and use the shoulder east of Rosemont Avenue.



Morris Township

- Currently there is not as much of a parking shortage issue as there was a couple of years ago, when there was a problem with the Hotel parking spaces. Additional lots were made available which has addressed the issue.
- There have been periodic parking conflicts between commuters and church parishioners in the St. Thomas Moore Church lot. The church parishioners can park with a copy of their church program on their windshield.
- There is restricted parking on roads including Old Turnpike Road, Barberry Road, and Shephard Place.
- Residents have complained about people parking in front of their houses all day.
- Two NJ TRANSIT buses park in the kiss & ride area along with a food vendor that parks for one hour each morning.
- Metlife, Westin Suites, and MAD Shuttles serve the station along with five taxi companies that are allowed to serve the area. Some taxis have scheduled trips so taxi's wait for riders on a regular basis.
- Most complaints received are regarding people speeding while traveling to and from the station.
- Some commuters cut through the St. Elizabeth campus to travel between NJ 124 and Park Avenue.
- There are very few people walking to the station from NJ 124.
- Buses serve NJ 124 in both directions from the station.
- TransOptions leases the bike lockers.
- The Township sells resident and nonresident permits.
- Daily parking fees can be paid in cash or by credit card - \$5.00 for 24 hours daily rate.
- Nonresident permits are limited to 125. The Township keeps a waiting list of 50 to 75. The list is purged by calling the people at the top of the list, and if there is no response the person is removed from the list and people move up. There are about 600 spaces. Resident permits take precedence over nonresident permits.
- There have been no grade crossing incidents at Convent Station; however, commuters have been observed going under the gate. An Operation Lifesaver program at the Colleges should be considered.
- A parking deck is not needed at this time. The Township would have to see a real overflow of demand in order to consider a parking deck.
- The Township has explored various parking management techniques to deal with demand. When the economy picks up there might be more demand for parking.
- The township does not envision a TOD with retail and parking in place of the current parking lots. The Township would like to keep the existing look; a TOD would be too urban looking.



Traffic Issues/High Accident Locations

- In Chatham there were two pedestrians struck by autos near the center of town in the last six months. In both cases, the cause was distracted driving. The accidents were at Main Street and Passaic Avenue/Kings Road, and Lafayette Avenue and Main Street. Chatham has conducted a number of traffic studies and made improvements that have made it safer, but with the increase in cell phones, texting, and other distractions there are still problems.
- Chatham is installing a crosswalk at Dunbar Street to provide access to Kings Supermarket.
- A traffic signal is needed at Coleman Avenue and Main Street in Chatham. There are over 50 daily crossings and the Borough is waiting to hear back from NJDOT regarding whether a traffic signal is warranted.
- There is some cut through traffic and speeding on Kings Road and Woodland Road. Madison has installed traffic calming devices including permanent radar advisory and painted shoulders. In Madison, as part of the paving program, some roads have been narrowed using paint to create an illusion to slow down traffic. The intersection of Main Street and Rosedale Avenue in Madison has a lot of pedestrians exiting the train and walking to Stop and Shop or Whole Foods.
- Main Street and Greenwood Avenue in Madison has a lot of pedestrian traffic.
- South Passaic Avenue in Chatham has a lot of truck loading and unloading.



Date: March 26, 2012

Meeting Name: Stakeholder Meeting – Senior Citizen/ Disabled/ Minority/ Low Income AND Advocacy Groups

Attendees:

Name	Representing	Name	Representing
Sandra Fielo	Senior Citizens Advisory Committee	Gary Ruckelshaus	Friends of Madison Train Station
Jay Marowitz	Morris Area Freewheelers	Jim Hunt	Morris Area Freewheelers
John Tetz	Morris Area Freewheelers	Edna Lerley-Byrne	Madison Senior Center Foundation
Marty Epstein	Marty’s Reliable Cycle	Bill Ruddicic	Gran Fondo NJ
Nance Greenberg	Rose City Steppers	Hope Hezel	Morris County - Morris Area Para Transit System (MAPS)
Susan O’Donnell	VHB	Thomas Phelan	VHB
Matt Carmody	VHB	John Hayes	Morris County

The following are the meeting highlights:

- A project overview was provided to the attendees.

Bicycle and Pedestrian Access

- A Madison Area Freewheeler (MAF) uses his bicycle mostly as recreation. In the past, he has commuted via Convent Station and parked his automobile in front of neighbor’s house. When he was a regular commuter there always were complaints that there was not enough parking at the station. He indicated that he believes using human powered vehicles would minimize the need for parking.
- The MAF would like NJ TRANSIT to change their bicycle policy regarding bicycles on trains. The NJ TRANSIT regulations are subjective so it is difficult for cyclist to ride the trains because of the rules. Rules only allow two bikes per train car. Buses accept two bikes now.
- At the end of the Traction Line, the crossing in front of Giralda Farms near Danforth Road allows turning movements. The problem with that intersection is that bicycles do not trigger the traffic signal so cyclists must wait for a vehicle to arrive to trigger the signal.
- The Traction Line should be extended further into Madison. The Traction Line ends at Danforth Road. An extension would require engineering but there is a clear path right to the Madison Train station. If the connection was made from Morristown to Madison, then people



would start riding for recreation and for transportation – a cyclist could ride from the medical center in Morristown to Madison in about 10 minutes. If you create a safe path, more people will use it.

- People feel safer bicycling off-road than with traffic.
- A bike sharing program should be created for this area. This area has three colleges/universities, a hospital, Giralda Farms, hotels, etc. that could attract bike share participants.
- At Normandy Parkway the Traction Line goes under the highway overpass. The stairs are in horrible condition in that area and bicyclists must carry their bikes down steep steps. In New York City channels for bicycle wheels have been installed at some locations next to steps to help guide bikes up and down stairs. Bicycle wheel channels should be added to the stairs at this location.
- One of the problems with commuting on a bike is sweating. There may be a revenue opportunity to install lockers and showers at the train stations similar to what is found in Chicago at Millennium Station.
- Walking from downtown Morristown to Morris Township is difficult. In some places the sidewalks are in poor shape or they are not continuous.
- The Mayors wellness campaign is about to start up again and it encourages walkability.
- Madison and Chatham have a large number of children that walk to school but Morris Township does not. Madison and Chatham would benefit from more safe routes to school programs.

Parking

- The permitted parking spaces in Madison are taken early so it is difficult to find parking midday in Madison after all the parking permits are taken. There are no major problems with access to the stations. Safety has been improved at the grade crossing over the tracks at Convent Station.

Senior Citizens

- Senior Citizens walk to town and would like to use the station building to warm up. The seniors have had trouble getting into the station building after the peak hour. The Chatham Senior Center has a van service to take seniors to the station, but that service ends at 2:30pm so returning from the city late in the day can be an issue. The Senior Center runs the van for residents 60 years and older, and for people with disabilities. The van runs Monday through Thursday.
- The Senior Citizen reduced train fare is very appealing -- \$5.00 to travel to the New York City.

Paratransit

- The Morris Area Para Transit System (MAPS) provides medical transportation. MAPS transports seniors and people with disabilities to train stations when that provides the best accessibility to their customers' destinations; they encourage customers to utilize the train



when possible. MAPS has received calls from the colleges asking for transportation into Morristown. Sometimes they provide transportation to Convent Station.

Safety

- An example of a safe crosswalk is the one with red brick pavers near the Hartley Dodge Memorial Municipal Building in Madison.
- A number of students cross at Kings Road and Cross Street and midblock between Greenwood Avenue and Waverly Place in downtown Madison.
- The Elmer Street parking lot in Madison would be a good mid-block crossing location.
- There should be some marked crosswalks on NJ 124 near Convent Station. Currently there are none.
- The new “stop and stay stopped” pedestrian law has been helpful.
- Crossing NJ 124 is difficult in front of Drew University. There is a similar long stretch from the Starbucks area of Madison into the beginning of Chatham where it is difficult to identify where to cross NJ 124.
- The Senior Citizens had previously suggested adding a crosswalk near the Starbucks and Staples, but were advised against it because of the difficulty to get NJDOT approval.
- Recent improvements along Lincoln Place have been very good.

Congested Areas

- Traffic congestion is generally heavy around the schools during drop off and pick up times. Madison Junior High School near the Stop and Shop generates a lot of congestion during school hours. The MAPS service has morning and afternoon pickups and drop offs near Pitney Place and Punchbowl Road in Morris Township, which is also congested.
- Even though traffic volumes are not always high, sometimes the friction with parking activity makes NJ 124 feel congested.
- The area near Friendly’s in Morris Township is always heavily congested around 3PM to 4PM.
- When traveling west (towards Morristown) on Woodland Avenue the right turn onto South Street going towards Morristown is very difficult and unsafe. Seniors have changed medical appointments to avoid that congested area.
- From the cyclist point of view, the condition of the roads is an additional challenge beyond the traffic. At times alternate routes are taken because the roads are in such poor condition.
- MAPS drivers have cut through Morristown Memorial Hospital by the cancer center to Franklin Street to avoid congestion on NJ 124 in Morristown.
- MAPS also receives many requests to transport patients from a Morristown Hospital appointment to an appointment across the street at 95 Madison Avenue because they do not feel safe crossing the street..
- Old Turnpike Road is used by some people as a shortcut but it is underutilized by bicyclists and pedestrians. Creative use of that road to shift people (maybe vehicles, pedestrians, and/or bicyclists) from NJ 124 which would be good.
- There is a lot of concern in Madison about the construction on Park Avenue. Park Avenue is an alternative corridor to NJ 124 and the concern is that as more development occurs it may shift



NJ 124 Corridor Transit Access Improvement Study

Final Report

more traffic to NJ 124. Park Avenue would benefit from Complete Streets thinking – it is wide enough to put a bicycle/pedestrian path similar to the Traction Line and it may encourage people to use other modes.

General

- Each town and the County should adopt a Complete Streets policy.
- Friends of the Madison Train Station work to keep the station neat and clean. Their work is funded through the parking on Crescent.
- There was a question regarding the status of a new on ramp to Route 24. It was examined as part of the Exxon Redevelopment project.



Date: March 26, 2012

Meeting Name: Stakeholder Meeting –Environmental and Neighborhood Groups?

Attendees:

Name	Representing	Name	Representing
Ron Goldberg	Morris Township Environmental Commission	Betsy Uhlman	Madison Environmental Commission
Annie Acken (Not in attendance -- emailed responses)	Washington’s Headquarters Neighborhood Association	Thomas Phelan	VHB
Susan O’Donnell	VHB	John Hayes	Morris County

The following are the meeting highlights:

- A project overview was provided to the attendees.
- Some Morris Township residents are concerned that Honeywell wants to fully develop their 140 acres. There have been a lot of questions regarding accommodating the traffic associated with the proposed development including: How do we deal with traffic that crosses the train tracks? How do we get people to stay out of their cars and to get to the train station another way? How do we get to people to use the train to get to work? What do we do about that last or first mile?
- A traffic study was prepared that presents the impact of the Honeywell redevelopment. With Honeywell fully built out, certain intersections’ levels of service (LOS) will drop from LOS D to LOS F.
- Mobility needs for an outlying site may conflict with mobility to the train station. Some recommendations may be vehicular focused but such improvements may not work well in a downtown environment with a lot of bicycle and pedestrian activity. All stakeholders should be brought to the table to work together and share resources to make improvements rather than competing.
- There is an opportunity to do something innovative such as people movers or fuel-efficient vehicles. There are potential opportunities to be explored to run something along the rail line and/or along the traction line.
- There is no way to improve travel flow unless all the stakeholders including neighbors, local government, NJ TRANSIT, large landholders, businesses, and universities work together and come to a consensus.
- The Traction Line should continue to the Madison Train station.



- Can the transfer of affordable housing requirements (that allows transfers from one town to another) be used with parking? For example, along the business corridors we could find who the major traffic contributors are and where people are coming from. Businesses would save a lot of money in lost time and in parking structures by developing an incentive system. The incentives would reduce the need to build parking and then maybe the development space could be used for something else. Businesses could use the money that would have been spent on parking structures by contributing to offsite parking or last mile shuttles.
- The Convent Station townhouses on Old Turnpike Road have not been fully sold so the developer is asking to be permitted to rent some units.
- People who would like to use the train are confused about the complexity of parking. There are many different payment categories, a strange payment system, and poor signage. There are subtle differences between whether you have a parking permit or a resident identification. If the resident parking spaces are filled then your permit is valid in the nonresident spaces. People are angry if they are ticketed because they didn't understand that they were doing something wrong.
- Some of the residential streets leading to the station do not have sidewalks. The distance between residences and the train is an impediment to walking and biking.
- There are some business shuttles that travel to Convent Station. The shuttles are used much more by service workers rather than by the professionals that are staffing the offices.
- Morris Township and Morristown funded a bus operated by Colonial Coach. The bus was fairly expensive to operate and it only operated in the midday. Now it just serves Morristown. The bus cost \$100K and each town was paying \$50K each year to fund it. The fuel was provided by a co-op so it was not quite as expensive as regular gas. The bus was used mostly by service workers and retired people traveling in the middle of the day.
- It is difficult to get into Convent Station from Morristown if you were walking along NJ 124. If you want to cross the tracks to access the station from Cromwell Hills or across Columbia Turnpike or off of Park Avenue there are difficult crossings. Generally if you are along a County road you might have a problem safely navigating. There are not always sidewalks or safe shoulders plus the travel speeds are high. It is sometimes difficult to tell if there are no sidewalks because no one walks, or maybe no one walks because there are no sidewalks.
- There is not an easy way to get from Danforth Road to Madison Station by bicycle.
- There is a Safe Routes program in Madison. The program usually conducts events in the fall including a walking school bus program and walking /biking programs – mostly at the three elementary schools.
- Madison is very worried about Park Avenue and the developments occurring there. Park Avenue goes from two lanes down to one lane as you approach downtown Madison.
- Limited access on NJ 24 does not allow for traffic to be distributed.
- Traffic congestion is bad between 7 AM and 9:30 AM and again between 4:30 PM and 7 PM.
- Narrowing Morris Avenue from three lanes to two lanes has helped with speeding issues.
- A wider shoulder for bicycles on NJ 124 would be helpful.



NJ 124 Corridor Transit Access Improvement Study

Final Report

- In Morris Township, the Old Glen Road /NJ 124 intersection was improved and restriped. An improved pedestrian crossing was one of the improvements. The consultant team should examine Old Turnpike Road to make it more bicycle and pedestrian friendly.
- Punchbowl Road is unsafe. There are no bicycle and pedestrian amenities. The road is unsafe for bicyclists and pedestrians. The Morris County Golf Course should improve the roadway shoulder that runs adjacent to the golf course.
- Bicycle access from Drew's campus to the Madison train station is difficult.
- Additional sidewalks on Morris Avenue up to Normandy Parkway and on Normandy Parkway are needed. A crosswalk is needed across Normandy Parkway to the stairway access to the Traction Line, or on the Friendly's side of NJ 124. Crossings at those locations are difficult
- There could be more nonresident parking at Convent Station as many Morristown residents park there along with Morris Township residents.
- There are tanks underground at the intersection of Greenwood Avenue and Main Street where the new Walgreens is being built. The street and sidewalks may be required to be torn up for tank removal.
- This area might be good for a bike share program with the downtown areas and the universities. A bike share program would be good for economic development.
- Taxis shares might be something to consider.



Date: March 26, 2012

Meeting Name: Stakeholder Meeting –Businesses and Colleges

Attendees:

Name	Representing	Name	Representing
Roland Feit	VPSI, Inc./ Pfizer	Kevin J. Bremer	Sisters of Charity of St. Elizabeth
Frank Neglia	College of St. Elizabeth	Robert Lucid	Drew University
Andre Turner	Fairleigh Dickenson University	Jesse Linder	NY Jets (Not in attendance -- emailed responses)
Lisa DiTaranti	VHB	Susan O’Donnell	VHB
John Hayes	Morris County		

The following are the meeting highlights:

- A project overview was provided to the attendees.

Drew University

- Drew University does not appear to be directly affected by the traffic issues associated with the corridor but the University needs transportation choices. There are many students who could and would use the transit system if it were reasonable, accessible, and easy to use – particularly when making transfers and interconnections to other systems.
- The MAD shuttle ridership is not where it should/could be. Drew University is not sure if the reason for low ridership is the service frequency or the cost.
- Only the Juniors and Seniors are allowed to have cars on campus.
- One of the University’s saleable points is the direct access to NYC. Access to NYC is integrated into the curriculum for both cultural and educational benefits. Drew has an internship program with Wall Street.
- Drew University has a campus bike program – students can rent bicycles by the semester or year. Usually all the bikes are rented out. The campus is relatively pedestrian and bicycle friendly.
- It would be great if there was a “packet” of transit information that could be provided to the parents at orientation so that the parents would know that their student could get around and get home without having a car.



- Drew University liked the idea of working in concert with the three universities to develop vanpools and carpools. With all three colleges there may also be opportunities to find car/vanpool matches between workers at the three colleges.
- Drew University – total population for graduate and under graduate residents is about 2,000, which is far higher than the employee population. The University has a relatively high student resident population (about 90 percent compared to 10 percent commuting population) and about 350 employees (not including all faculty because the College has some adjunct professors).

Fairleigh Dickenson University (FDU)

- FDU feels the issue holding back more student ridership on transit is the lack of advertising of transit services. FDU is working with the MAD shuttle and NJ TRANSIT to offer ticket books for sale at the book store. While students have access to train, they generally either get a ride home from another student or get picked up by their parents on campus.
- The University has been working with the commuting population but they are not sure if the students, faculty, and administrative staff are aware of the transit and carpooling options. FDU is working with TransOptions to develop options for students. Resident students have complained that the commuter students take their parking spots. Some international students have been observed walking from the train.
- The housekeeping staff at FDU may take the bus or train but faculty most likely drive. Morris County provides packages of transit materials to the libraries, and other places in the county including the colleges.
- FDU asked why NJ TRANSIT doesn't offer the "free transit week" for students at the beginning of the semester as they have in the past. Another option would be to offer Juniors and Senior students a transit discount to discourage bringing a car to campus. A "transit buddy" program should also be established to help both students and staff learn how to use transit.
- FDU has 1,200 students living on campus. The remaining 2,000 students are commuters. There is a mixture of graduate and undergraduate students. Most of the graduate classes are at night.

Sisters of Charity of St. Elizabeth

- The Sisters of Charity are the property owners of the College and Academy and own property on Park Avenue -- the Villa. The Sisters usually carpool because they live close together. About 15 Sisters take the train to get to the City – many are much older and do not travel. About 15 percent of the girls from the Academy come by train. Students and others heading to FDU get off the train and go through St. Elizabeth's campus because of the shared gate.
- St. Elizabeth sees a lot of vehicles that use the campus as a cut-through to get between NJ 124 and Park Avenue, mostly during the midday. There is not much traffic calming in place to discourage cut-through traffic. The back gate is completely open so anyone can come in. Speed humps and/or narrowing the roadway have been suggested.



College of St. Elizabeth

- The College is much smaller than FDU and Drew. The College has 450 students on campus and about three-quarter of them have cars. All students can bring vehicles to campus.
- Some students use the train to get to school but most usage is for travel to and from NYC. While the school is very close to the train station, many students call security for transport to the train station.
- Security is not supposed to transport students unless they are carrying a suitcase or something heavy; students will take a large bag with them to get transported by security.
- A small amount of employees use the train, such as the kitchen staff.
- St. Elizabeth would like to see the MAD shuttle succeed but right now the ridership seems low.
- The College likes the idea of providing an orientation package with transit information. It would be good to also provide transit information to the College Student Services office.
- Some employees might ride the bus.
- St. Elizabeth has 450 resident students. In addition the College has a large population of night students – about a three to one ratio of night students to day students. During the day there are not that many commuter students, about 100-150, in comparison to the evening and night students. Almost all of the night students are commuters.
- Many commuters walk around the rail crossing gate when they are down/activated at Convent Station. Occasionally there has been enforcement near the station which has deterred people. Both commuters and students have been observed walking around the gate. During graduations and larger events, a guard is usually posted. An Operation Lifesaver program would be beneficial at the College.

Pfizer

- Pfizer has a shuttle service that runs several times a day but it may be scaled back due to budget issues.
- Pfizer's workforce population is primarily located to the east of the office. Workers are usually in early and out late, which makes carpool/vanpool matching difficult. Pfizer has worked with TransOptions and with its predecessor, MC RIDES, to determine vanpool/carpool options to reduce the number of vehicles coming to the site. Van/carpools have been organized by geographic area reducing the parking and traffic demands. This has been funded partially by the **Federal Workforce Transportation Subsidy Program**; however the transit subsidy funding has recently been reduced to \$125 per month. It is uncertain if that funding will be restored. New Jersey provides \$175/\$350 for worksites in the state.
- VPSI operates vanpools throughout the country. Participation ebbs and flows depending on funding. The best few years occurred when federal employees received \$230 per month in funding. Large federal employers like Picatinny Arsenal benefited from that with a number of shuttles. The Pfizer last mile shuttle was not well used – it was looked at as a benefit. The shuttle was not available for lunchtime visits into town. Vanpools are formed by groups of commuters living reasonably nearby each other who travel from their home to work in a vehicle with no more than 15 seats. The driving is shared by some and the costs are shared by all and sometimes the employer. As part of the program, participants are provided a vehicle,



- insurance, emergency highway servicers, and loaner vehicle if your vehicle is out of service for more than two days. VPSI provides ridematching services for employers and individuals.
- Why is the MAD shuttle not being used?
 - FDU said students have said the van looks “a little sketchy”.
 - The headways between shuttles are not efficient. Students do not want to stay at Staples for an hour to wait for the next bus.
 - Cost \$1.50 – students do not want to pay the money out of their pocket. It would be better if tickets could be prepaid by parents.
 - Drew University suggested a daily pass.
 - The service hours are acceptable. Morning service is not needed because students are not awake. Later hours would be beneficial but there was a concern at MAD Shuttle meetings that the shuttle could end up transporting inebriated students.
 - Car Shares
 - Drew University has Zip cars. Drew University also had an eight or nine passenger VRC – Volunteer Resource Center. Students can use these vehicles as part of a group trip.
 - FDU had a Hertz car rental program on campus but the cars were not being used. FDU is looking into a Zip car program.
 - St. Elizabeth College also has something similar to Drew University’s VRC through Student Services.
 - Would dedicated College/University parking at the train stations be beneficial and encourage train usage?
 - Drew University said most of the students walk or take a cab to the station. If the students are returning to school late at night, dedicated parking might be useful. Drew University has a program to pick up students, if needed. The school calls a cab for the student and then bills the student’s account for the charge.
 - Do train times match class times?
 - At St. Elizabeth College most of the night students drive because they are coming from day jobs. Parking is at capacity during evening classes. The College has 175 employees, not including all of the faculty and adjunct professors.



Open House Feedback



A Public Open House was held Thursday, March 29th from 4PM to 7PM at the Madison Train Station. The Open House included five “information areas” where attendees could view presentation boards and converse with project staff. These information areas provided an introduction to the project and an opportunity for the project team and the public to learn about station access issues and planning. Below is feedback and issues that attendees provided at the information areas from the Transit Access, Traffic Access and Parking, Bicycle and Pedestrian Access, and Land Use stations.

TRANSIT ACCESS

- Extend the hours that the Madison station building is open -- five months during the winter on weekends/weekend mornings and weekdays 2-5PM.
- Platform accessibility on the eastbound side is difficult when the station is closed.
- Signage for the short high-level (and ADA accessible) platform is needed.
- Transit access from the south side neighborhoods is poor.
- The bathrooms in Madison Station are locked.
- Track assignment postings are needed in advance for disabled customers.
- The NJ TRANSIT 873 bus route does not make connections with the train.
- Bus-to-bus connections in Livingston and Morristown are not available.
- The current train schedule is erratic (schedule not clock face).
- Please make at least one consistent bus-to-train connection in the group of stations (Chatham, Madison, Convent)
- Better advertising should be provided for the Madison Shuttles
- The zone fare differential between Madison and Convent Stations is a disincentive to using Convent Station.

TRAFFIC ACCESS and PARKING

- There are parking challenges for Harding Township residents so people park at St. Vincent Martyr and Green Village Road School.
- The parking fee of \$5/day is expensive.
- Madison has a four-hour on-street parking limit to discourage commuter parking.
- The cost of train fares is a disincentive to taking transit.
- Morris & Essex Line parking pricing should be more flexible
- To finance new parking spaces, sell the spaces so that they are “owned” much in the same way as sports teams are selling seat licenses.
- The NJ TRANSIT fare zones in Madison vs. Convent Station and more frequent service at Madison Station makes it a more attractive station for Harding Township, residents.
- Local shuttle buses should be provided instead of additional parking.



BICYCLE and PEDESTRIAN ACCESS

Madison Station Accessibility

- Bathrooms are needed on both sides of the track and heat is needed in the station.
- The gap between the platform and the trains is too wide.
- The buildings are closed afternoons and weekends which makes it difficult to wait for the train.
- There are elevated ADA platforms but the trains don't stop there to allow passengers to board.
- Bathrooms are not accessible on double-decker trains.

Pedestrian Access

- NJ 124 sidewalks are cracked and uneven near the cemetery and Stop & Shop.
- On Cross Street there are discontinuous sidewalks between Main Street and Kings Shopping Center.
- Between the Hospital (Morristown Medical) and Franklin Street along NJ 124 there are discontinuous sidewalks and cracked and uneven sidewalks. Near Chatham Station the following streets have unsafe pedestrian crossings:
 - Front St
 - Fairmount Ave
 - Lum Ave
 - Washington Ave
- The sidewalks need to be cleaned better after snowfalls.

Bicycling

- Eastbound NJ 124 between Convent Station and Giralda Farms has a bike lane that should be continued thru the intersection.
- Actuated bicycle signals are needed at:
 - Kings Road and Madison Avenue
 - Giralda Farms and Madison Avenue
- Adding a signed bypass for cyclists to go around the narrow section of Ridgedale Avenue would encourage a safer route.
- Bike route signs are needed leaving Madison Train Station. Way-finding signs for cyclists en route to the Post Office, Hospitals and other local areas area needed.
- Cycling on NJ 124 past Friendly's is unsafe when there's traffic. Signage should direct cyclists to the Traction line.
- Crossing Ridgedale Avenue at the Madison Recreation Center on a bicycle is the most dangerous crossing on the ride from Florham Park to the Madison Station.

NJ TRANSIT

- Trains need to pull train up to the elevated platform for disabled passengers, or passengers with bicycles, strollers, and luggage.
- There is no bus from Madison to Newark Airport or the City of Newark.



- Some driveways are very wide and it's unsafe for pedestrians to cross.

Open Space

- Pocket parks like a sitting area behind the station are needed and they should include:
 - Chair and tables
 - Planters
 - Water fountains
 - Better lighting
 - Recycling containers

LAND USE

- Harding residents should be able to purchase a parking space much like fans purchase "seat licenses."
- A newsstand is needed on both sides of the rail line.
- Better information is needed regarding bus routes and stops.
- Structured parking should not be added in Chatham unless it is well designed.
- What are costs for structured parking?



Online Survey Questions



NJ 124 Corridor Transit Access Improvement Study

Final Report

The NJ 124 Corridor Transit Access Improvement Study (NJ 124 Transit Study) will assess and recommend station access improvements at the three NJ TRANSIT commuter rail stations in the NJ 124 Corridor: **Chatham, Madison, and Convent Station**. If you travel to or from southeast Morris County daily, a few days per week, or once a year, we would like to hear from you. Whether you travel by train or not, please complete this Transportation Survey which will provide valuable input into the study.

1. In what ZIP code (or town) is your HOME located? (enter 5-digit ZIP code; for example, 17837 or Lewisburg)
2. What is your employment status?
Employed -- full or part time Go to Q.3
Student -- full or part time Go to Q.3
Not working Go to Q.6
Retired Go to Q.6
Other (please specify) Go to Q.6
3. In what ZIP code (or town) is your JOB or SCHOOL located? (enter 5-digit ZIP code; for example, 17837 or Lewisburg)
4. How many days a week do you usually commute to work or school?
1, 2, 3, 4, 5, 6, 7
5. During a typical week, how do you usually travel to work or school? (*Please indicate your primary mode*)
Drive Alone Go to Q.6
Dropped Off by spouse or family member Go to Q.6
Taxi Go to Q.6
Train Go to Q.7
Bus Go to Q.6
Car/Vanpool Go to Q.6
Bicycle Go to Q.6
Walk Go to Q.6
6. Have you traveled by train for any purpose in the past year?
Yes Go to Q.7
No Go to Q.16



7. When you travel by train, what is your typical boarding station? (please select one)

- Chatham
- Madison
- Convent Station
- Summit
- Morristown
- Other (specify)

8. How do you typically travel to the train station? (Please indicate your primary mode)

- Drove alone and parked Go to Q.10
- Carpooled and parked Go to Q.10
- ALL BELOW** Go to Q.12
- Car-Dropped off
- Bus
- Public Shuttle
- Private Shuttle/Security Car
- Taxi
- Bicycle
- Walk Only
- Other _____ (Please specify)

9. What type of parking do you typically use?

- Station/Municipal Lot parking
- Private Lot parking nearby station
- Metered On-street parking
- Free On-Street Parking or free private lot
- Other _____ (Please specify)

10. How do you typically pay for parking?

- Monthly Resident permit
- Monthly Non-Resident permit
- Daily
- Free
- Other _____ (Please specify)

11. Is this your preferred way to travel to the station?



NJ 124 Corridor Transit Access Improvement Study

Yes Go to Q.13 or No Go to Q.12

12. If no, what is your preferred way to travel to the station?

- Drive alone and park
- Carpool and park
- Car-Drop off
- Bus
- Public Shuttle
- Private Shuttle/Security Car
- Taxi
- Bicycle
- Walk ONLY
- Other _____ (*Please specify*)

13. When you travel by train, what station do you typically get off? (If you switch to another train in New Jersey, tell us the final station. (please select one)

- NY Penn Go to Q.15
- Newark Penn Go to Q.15
- Newark Broad Street Go to Q.15
- Hoboken Go to Q.15
- Chatham Go to Q.14
- Madison Go to Q.14
- Convent Station Go to Q.14
- Summit Go to Q.15
- Morristown Go to Q.15
- Other (specify) Go to Q.15

14. How do you travel from the train to your final destination?

- Drive alone and park
- Carpool and park
- Car-Drop off
- Bus
- Public Shuttle
- Private Shuttle/Security Car
- Taxi
- Bicycle
- Walk ONLY

15. What is needed most to improve travel to and from the NJ TRANSIT train station?



_____ (Please specify)

16. Was a personal vehicle available to you to make this trip?
Yes
No

For the purposes of this survey, the MORRIS COUNTY TRANSPORTATION SYSTEM is defined as:
"All the services to travel around the County, including roads, buses, and trains, and services for bicycling, walking and carpooling."

17. How well does the Morris County transportation system meet your travel needs? Please rate on a scale of 1 to 5 where "1" is "not at all well" and "5" is "extremely well."
18. About how far from your home is the nearest train station?
0.0 to 0.25 miles
0.26 to 0.5 miles
0.51 to 1 miles
1.1. to 2.0 miles
More than 2 miles
I don't know
19. In your home neighborhood, are there . . . ?
Sidewalks on most/all streets
Sidewalks on some streets
No sidewalks
20. About how far from your home is the nearest bus stop?
0.0 to 0.25 miles
0.26 to 0.50 miles
0.51 to 1 miles
1.1 to 2.0 miles
More than 2 miles
I don't know
21. In the past year, did you request or seek information on types of transportation you could use to get around Morris County or other parts of New Jersey?
Yes Go to Q.22
No Go to Q.26
22. What information were you seeking and where did you look or whom did you contact?



23. After receiving this information, did you take any actions to change how you travel?
Yes Go to Q.24
No Go to Q.25
24. If yes, what changes did you make and why?
25. If no, why didn't you make changes to your travel?
26. What improvements could be made to encourage you to make more trips by train? (select all that apply)
- More shuttles/bus connections
 - Additional parking
 - Better bicycle and pedestrian connections
 - Roadway improvements
 - Carpool and auto-share options
 - Housing, employment and retail adjacent to the train station
 - Information services regarding existing transit services
 - Nothing would encourage me
 - Other (please specify)
27. What improvements could be made to encourage you to walk to the train station? (Select all that apply)
- Provide sidewalks in neighborhood
 - Maintain sidewalks
 - Better snow removal
 - Can't - health or personal constraints
 - Nothing would encourage me
 - Other (please specify)
28. What improvements could be made to encourage you to bicycle to the train station? (Select all that apply)
- Separate bike lanes
 - More bike lanes
 - Shoulder on roadway for bike use
 - Make motorists aware of bicyclists
 - Bike lockers/Racks
 - I don't have a bicycle
 - Can't ride due to physical conditions
 - Nothing would encourage me



NJ 124 Corridor Transit Access Improvement Study

Final Report

Other (please specify)

29. How important is it for government agencies to invest in each of the following transportation improvements on a scale of 1 to 5, with "1" being "not at all important" and "5" being "extremely important?"

- Improve/expand transit
- Transit information/services
- Carpool information/services
- Construct more sidewalks
- More Park & Ride lots
- Build/expand highways/roadways
- Special carpool/bus lanes
- Expand bicycle trails/lanes

THANK YOU FOR YOUR TIME!



Detailed Survey Tables

*From the Online Survey
of Regular Rail
Commuters, occasional
riders, and non-riders*



NJ 124 Corridor Transit Access Improvement Study

Final Report

The online surveys intended to gather demographic, employment, and commute information from residents of the NJ 124 corridor area (both rail commuters and non-rail commuters) as well as suggestions on how to improve access to Chatham, Madison, and Convent Stations. Tables B-1a through B-25 display information gathered concerning respondents' demographic, employment, and commute information, and Tables B-26 through B-29 display suggestions on how to improve train station access.

Table B-1a - In what ZIP code (or town) is your HOME located? Results by Town

Home Town	Total	Percent
MORRISTOWN (including Morris Township)	131	30.3%
MADISON	120	27.7%
CHATHAM (Borough and Township)	44	10.2%
FLORHAM PARK	16	3.7%
MORRIS PLAINS	9	2.1%
NEW VERNON	7	1.6%
RANDOLPH	6	1.4%
MENDHAM	6	1.4%
ALL OTHERS	94	21.7%
Total	433	100.0%



Table B-1b - In what ZIP code (or town) is your HOME located? Results by County

Home County	Total	Percent
MORRIS	370	85.5%
ESSEX	14	3.2%
SOMERSET	10	2.3%
UNION	6	1.4%
HUNTERDON	5	1.2%
PASSAIC	4	0.9%
MIDDLESEX	4	0.9%
HUDSON	3	0.7%
WARREN	3	0.7%
MONMOUTH	3	0.7%
SUSSEX	2	0.5%
OCEAN	2	0.5%
BERGEN	2	0.5%
QUEENS	1	0.2%
PHILADELPHIA	1	0.2%
ROCKLAND	1	0.2%
MERCER	1	0.2%
NEW YORK	1	0.2%
Total	433	100.0%

Table B-2 - What is your employment status?

Employment Status	Total	Percent
Employed -- full or part time	345	79.7%
Retired	49	11.3%
Not working	29	6.7%
Student -- full or part time	10	2.3%
Total	433	100.0%



NJ 124 Corridor Transit Access Improvement Study

Final Report

Table B-3a - In what ZIP code (or town) is your JOB or SCHOOL located? Results by Town

Work Town	Total	Percent
MADISON	97	22.4%
NEW YORK	71	16.4%
Retired	49	11.3%
MORRISTOWN(Including Morris Township)	47	10.9%
No Answer	37	8.5%
Not working	29	6.7%
FLORHAM PARK	16	3.7%
CHATHAM (Borough and Township)	8	1.8%
PARSIPPANY	7	1.6%
ALL OTHERS	72	16.6%
Total	433	100.0%

Table B-3b - In what ZIP code (or town) is your JOB or SCHOOL located? Results by County

Work County	Total	Percent
MORRIS	194	44.8%
NEW YORK	71	16.4%
Retired	49	11.3%
No Answer	36	8.3%
Not working	29	6.7%
ESSEX	12	2.8%
ALL OTHERS	42	9.7%
Total	433	100.0%



Table B-4 - How many days a week do you usually commute to work or school? (Employed - 345 respondents and Students -10 respondents)

Commute Frequency	Total	Percent
1 Day per week	16	4.5%
2 Days per week	10	2.8%
3 Days per week	15	4.2%
4 Days per week	40	11.3%
5 Days per week	248	69.9%
6 Days per week	12	3.4%
7 Days per week	3	0.8%
No Answer	11	3.1%
Total	355	100.0%

Table B-5 - During a typical week, how do you usually travel to work or school? (Employed - 345 respondents and Students -10 respondents)

Mode for Commuting to Work or School	Total	Percent
Bicycle	11	3.1%
Bus	3	0.8%
Car/Vanpool	16	4.5%
Drive Alone	216	60.8%
Dropped Off by spouse or family member	3	0.8%
Taxi	2	0.6%
Telework/Compressed Schedule	8	2.3%
Train	80	22.5%
Walk	12	3.4%
No Answer	4	1.1%
Total	355	100.0%

Table B-6 - Have you traveled by train for any purpose in the past year?

Have you traveled by train for any purpose in the past year?	Total	Percent
Yes	374	86.4%
No	59	13.6%
Total	433	100.0%



Table B-7 - When you travel by train, what is your typical boarding station?

Typical train boarding station	Total	Percent
Madison	138	36.9%
Convent Station	86	23.0%
Morristown	49	13.1%
Chatham	44	11.8%
Morris Plains	10	2.7%
Summit	9	2.4%
Denville	5	1.3%
South Orange	4	1.1%
All Others	28	7.5%
No Answer	1	0.3%
Total	374	100.0%

Table B-8 - How do you typically travel to the train station?

Train - Access Mode	Total	Percent
Bicycle	8	2.1%
Bus	2	0.5%
Car-Dropped off	45	12.0%
Carpooled and parked	36	9.6%
Drove alone and parked	191	51.1%
PATH	1	0.3%
Public Shuttle	1	0.3%
Taxi	2	0.5%
Walk Only	86	23.0%
No Answer	2	0.5%
Total	374	100.0%

Table B-9 - What type of parking do you typically use?

What type of parking do you typically use?	Total	Percent
Free On-Street Parking or free private lot	30	13.2%
Metered On-street parking	4	1.8%
Station/Municipal Lot parking	173	75.9%
Private Lot parking nearby station	16	7.0%
No Answer	5	2.2%
Total	228	100.0%



Table B-10 - How do you typically pay for parking?

How do you typically pay for parking?	Total	Percent
Annual Resident Permit	12	5.3%
Monthly resident permit	20	8.8%
Monthly non-resident permit	1	0.4%
Daily	117	51.3%
Free	41	18.0%
No Answer	37	16.2%
Total	228	100.0%

Table B-11 - Is this your preferred way to travel to the station?

Is this your preferred way to travel to the station?	Total	Percent
No	72	19.3%
Yes	300	80.2%
No Answer	2	0.5%
Total	374	100.0%

Table B-12 - If no, what is your preferred way to travel to the station?

If no, what is your preferred way to travel to the station?	Total	Percent
Bicycle	12	16.7%
Car-Drop off	13	18.1%
Carpool and park	3	4.2%
Drive alone and park	14	19.4%
No Answer	2	2.8%
Other Train Station	2	2.8%
Public Shuttle	13	18.1%
Walk ONLY	13	18.1%
Total	72	100.0%



Table B-13 - When you travel by train, what station do you typically get off?

Alighting Station	Total	Percent
NY Penn Station	310	82.9%
Hoboken	20	5.3%
Newark Penn Station	9	2.4%
Newark Broad Street	4	1.1%
Madison	10	2.7%
All Others	13	3.5%
No Answer	8	2.1%
Total	374	100.0%

Table B-14 - How do you travel from the train to your final destination?

How do you travel from the train to your final destination?	Total	Percent
Bicycle	1	7.7%
Bus	1	7.7%
Walk ONLY	9	69.2%
No Answer	2	15.4%
Total	13	100.0%

Table B-15 - What is needed most to improve travel to and from the NJ TRANSIT train station?

What is needed most to improve travel to train station?	Total	Percent
More parking	93	24.9%
Parking Management etc.	18	4.8%
Buses/Shuttles to Station	26	7.0%
Improved bicycle access, parking	16	4.3%
Improved walk access; sidewalks, crosswalks	15	4.0%
Traffic improvements	7	1.9%
Faster, more reliable, expanded train service	33	8.8%
Hi-Level Platform	2	0.5%
Lower or maintained train fares	9	2.4%
Next Train information	1	0.3%
Nothing; Travel is fine	28	7.5%
Other	3	0.8%
No Answer	123	32.9%
Total	374	100.0%



Table B-16 - Was a personal vehicle available to you to make this trip?

Was a personal vehicle available to you to make this trip?	Total	Percent
Yes	327	75.5%
No	27	6.2%
No Answer	79	18.2%
Total	433	100.0%

Table B-17 - How well does the Morris County transportation system meet your travel needs?

Rate on a scale of 1 to 5 where "1" is "not at all well" and "5" is "extremely well"

How well does the Morris County transportation system meet your travel needs?	Total Responses	Percent
1	51	11.8%
2	68	15.7%
3	149	34.4%
4	99	22.9%
5	34	7.9%
No Answer	32	7.4%
Total	433	100.0%

Table B-18 - About how far from your home is the nearest train station?

About how far from your home is the nearest train station?	Total	Percent
0.0 to 0.25 miles	41	9.5%
0.26 to 0.5 miles	62	14.3%
0.51 to 1 miles	114	26.3%
1.1. to 2.0 miles	104	24.0%
More than 2 miles	94	21.7%
I don't know	3	0.7%
No Answer	15	3.5%
Total	433	100.0%

Table B-19 - In your home neighborhood, are there . . . ?

In your home neighborhood, are there . . . ?	Total	Percent
Sidewalks on most/all streets	163	37.6%
Sidewalks on some streets	158	36.5%
No sidewalks	97	22.4%
No Answer	15	3.5%
Total	433	100.0%



Table B-20 - About how far from your home is the nearest bus stop?

About how far from your home is the nearest bus stop?	Total	Percent
0.0 to 0.25 miles	63	14.5%
0.26 to 0.5 miles	62	
0.51 to 1 miles	55	12.7%
1.1. to 2.0 miles	49	11.3%
I don't know	148	34.2%
More than 2 miles	42	9.7%
No Answer	14	3.2%
Total	433	100.0%

Table B-21 - In the past year, did you request or seek information on types of transportation you could use to get around Morris County or other parts of New Jersey?

In the past year, did you request or seek information on types of transportation you could use to get around Morris County or other parts of New Jersey?	Total	Percent
Yes	134	30.9%
No	284	65.6%
No Answer	15	3.5%
Total	433	100.0%

Table B-22 - What information were you seeking and where did you look or whom did you contact?

Information Requested
Senior transit options for mother in law. Checked online.
Train schedules. njtransit.com
NJ TRANSIT website
Got bus schedules at Madison library
My employer offered share-a-ride information.
Train schedules - NJ TRANSIT
Schedule
Transfer
Online
Carpool
General schedules new jersey transit on line and also Morris county transport agency
Schedules, locations, efficiency: looked mostly online.
Bus route in Madison NJ
NJ TRANSIT site Amtrak
NJ TRANSIT.com
I wanted to see if it was possible to commute using public transit. I also checked for routes to and from New York City.



NJ 124 Corridor Transit Access Improvement Study

Final Report

Information Requested
Train schedules
NJ TRANSIT and Middlesex County
Form of transportation from my home in West Milford, NJ to my place of work in Madison, NJ from my Campus Sustainability Coordinator.
Online train/bus schedules. Limited sidewalks to get to public transportation is an issue. FLORHAM park downtown to bus stop on Hanover rd in east Hanover needs better access.
Train schedules- njtransit.com
NJ TRANSIT information. I got it online.
Schedules Web Pages
Other ways to get to NYC
Train access from Long Valley NJ to NYC
Website for NJ TRANSIT, Amtrak and sought paper timetables at stations. Tried to find way from Madison to Trenton via train. Not easy.
Tried to find bus routes. Looked online for train schedules
Trains to get around, specifically to cities. I referenced NJ TRANSIT.
How to get from home to other parts of the state
njtransit.com
Train schedule
Checked N.J. Transit to see if there were trains direct from Summit to Mountain Creek.
NJ TRANSIT trains are so unreliable at interment period going to New York that I was looking for the nearest Bus to go to New York
Train schedules - on internet
I submitted my name to a carpooling program but have never heard anything.
Trains schedules, NJ TRANSIT website
I was looking for train schedules. I looked online.
NJ TRANSIT train schedule, looked online
Train times. Checked on njtransit.com
Look online for train/bus schedules
Schedule, online (NJ TRANSIT web site)
Shuttle schedules from train to office
Bike commuting information
Train info to Newark airport - NJTransit.com Bus/train information to out of state locations - NJ TRANSIT.com
I was looking online for NJ TRANSIT Train schedules.
Online access to train/bus information.
Train schedules; internet
Train schedules NJtransit.com
Bus and train schedules
Train schedules. Mostly NJ TRANSIT
Travel to Morristown, using web site of NJ TRANSIT
Nothing that met my needs
Train routes to other parts of the state (ie, Princeton); looked at www.njtransit.com



NJ 124 Corridor Transit Access Improvement Study

Final Report

Information Requested
Bus schedules from Madison library. Train schedules from NJ TRANSIT.
Travel information, njtransit.com
Schedules
NJ TRANSIT web site
I was looking to see if the buses still went to NY
Schedules and routes; I used websites.
NJ TRANSIT website
I have contacted NJ TRANSIT to find out about the bus stations in the Oakwood Village of Flanders complex.
Bus transportation from Morris County to NYC
Bus
Bus and train lines and times to NYC. I looked on the internet for this info.
Bus routes.....checked on the computer.....used the yellow pages
Train schedules - online
Train schedules - looked on the web
NJtransit.com
MAPS-phone Train schedule-online
Bus info around Morris County. NJ TRANSIT.
Train schedules/bus schedules. website.
NJ TRANSIT Routes / Schedule / Fares
Local transportation for an elderly member of the family. looked online for info.
NJ TRANSIT which was completely a waste of time. The lack of professionalism is staggering. The crs people are rude, brief, unknowledgeable, and otherwise predisposed. They hid behind a cloak of anonymity
Train schedule ..online
Info on buses to NYC. Consulted njt website.
NJTransit website
Availability of nonresident parking in other NJT train stops.
How to get from Madison Station to the Jersey Shore, and how to travel from Madison to Newark Airport.
Looked at bus availability along 287 corridor.
commuting, car-pool. Morris County web site, NJ Dot web site
Bus schedules to doctor's offices. Looked in NJ TRANSIT site.
I looked on the internet for bus routes. I am interested in taking mass transportation as much as possible. I could probably use the bus, but I have not tried it yet. I feel like I do not even know how to pay the fare any more.
I was looking for a way to make my commute shorter. I looked on the Internet.
Asked agents in stations. Checked website. Use train schedules
I wanted to take a train from Chatham to another part of NJ.
I was looking for information on public transportation to the shore area. I looked at the NJ TRANSIT web site.
A MORRIS COUNTY MAP. THE MCDOT.
Train Schedules
Bus schedules and stop locations from NJ TRANSIT and MC rides. Roadway network and driving directions from Google.



NJ 124 Corridor Transit Access Improvement Study

Final Report

Information Requested
Mostly NJ TRANSIT train schedule info, but we have considered buses when our cars were out of service, ultimately did not use buses, 'tho.
Access to from Mt. Arlington station, Morristown station
Bus schedules and locations of stops
Schedules. NJ TRANSIT
Alternates for MAPS when it wasn't available.
How to take the train from Morristown to the Jersey beaches. Like the idea but it takes over 2 hours.
njtransit.com schedules and locations
NJ TRANSIT web site provided schedule and fare information
Njtransit.com
NJ TRANSIT website. Looked for alternative/cheaper routes
Train schedules and transfer points Online
Train schedules. Contacted NJ TRANSIT website.
Clifton-NYC links for an event I was planning. I used the NJT web site.
I've looked for bus and train schedules on line. I am very pleased with the bike racks on local Morris County buses and displeased with the inability to bring my bike on the NJ TRANSIT trains.
Website for Lakeland bus line. The site was useless .
TransOptions and NJ TRANSIT
Train schedules, from njtransit.com
Looked into taking a bus into city
Hoping to find quick bus routes for my teen to get to possible places of employment.
Train information to get to & from a further distance, located information on website. Also, looked into alternative routes to walk/ride bike to & from work.
Bicycle paths on streets. Online search
I looked for information on www.njtransit.com. And I will say, that the new site works very well and I like it.
Better bus service

Table B-23 - After receiving this information, did you take any actions to change how you travel?

After receiving this information, did you take any actions to change how you travel?	Total	Percent
Yes	41	30.6%
No	91	67.9%
No Answer	2	1.5%
Total	134	100.0%

Table B-24 – If yes, what changes did you make and why?

Change Made
No Answer
No Answer
No Answer



NJ 124 Corridor Transit Access Improvement Study

Final Report

Change Made
Decided on how to commute to work.
No Answer
driving to other stations to make transportation easier
I decided to invest in a more fuel efficient car since there was no route that was efficient to my work.
Numerous connections to get to work, try to get rides to train stations or possibly to work
No Answer
Changed plans from private to public transportation.
Well, I moved, and so I started commuting by car to Madison. It was a change from living in Madison and walking/driving within Madison.
No Answer
Used transit more fully
I chose a different train.
-Picked appropriate trains and made arrangements to be on them
Adjusted time needed to get to station
Had to take train
After the snowstorm, my spouse took the bus from downtown to NYC, but he paid on the way in because we had not been able to determine whether the bus was honoring train passes.
Changed travel times to fit schedule
No Answer
Because of timing and logistics, and my long drive home from work, I have found it easier to park in Millburn on certain occasions I needed to travel to NYC in the evening. Cheaper fare than Madison, more trains per hour, and closer to my office.
We took the train since the buses did not go where we wanted to go
Followed train schedule
Adjusted my time of arrival and plans at my destination of NYC.
Took a different bus - more convenient schedule
Drove instead due to lack of service
Time
No Answer
Opted against purchasing monthly fare from Convent Station to Hoboken - too costly.
Was able to take public transportation to the doctors' appointments (bus with transfer to train) at a cost of \$5.50 each way instead of \$30 taxi fare each way.
I used the Madison station when traveling with wheelchair. If miss the mid town direct out penn I wait for next I don't both trying a board street transfer
For that trip, decided to take the train instead of drive.
I SWITCHED TO LINCOLN PARK FOR MY WEEKDAY TRIPS. FREE PARKING.
I continue to walk on a dangerous curve to get to town.
Got a taxi due to limited trains from Mt Arlington. Took train more often from Morristown when schedule permits.
I had to decide which was more cost effective to drive or take the train since the time it would take was the same. Driving 4 people was cheaper.
Chose a direct train rather than one that required a connection



Change Made
Changed time and/or days.
Choose a bur route and time and avoided the train.

Table B-25 - If no, why didn't you make changes to your travel?

Why Changes Were Not Made
No Answer
No Answer
No mass transit to Bernardsville or Rt. 10 in East Hanover.
The information I was verifying was correct.
convenience/timing
Information wasn't anything that I could use for my specific commute
Too expensive
The train schedule was robust enough to get me where I needed to go in a reasonable timeframe.
It was not time efficient nor cost efficient.
no good scheduled trains
The schedules weren't convenient
No Answer
schedule too inconvenient
Nothing met needs
Hoping to travel to other towns but haven't had time.
No Answer
schedule suited me
None of the service changes had a material impact on the ease (or lack thereof) of dealing with the "last two" miles.
No Answer
There were no options available to me to make changes.
No more convenient than taking the train
would have to get off in Norristown to get to Madison which took t to long
No Answer
No Answer
MAPS was too difficult of a process Train Scheduled was sufficient for me to make my scheduled appointment
Options I needed not available.
No Answer
No Answer
I just explained why. The best and the brightest need not apply.
what i wanted was available
Impractical to drive into NYC on day in question. Regular commuting pattern, by car alone, to work remain unchanged.
Train is the easiest most convenient way to travel
No better nonresident parking than in Madison.



Why Changes Were Not Made
Train to the Shore was not convenient. I decided against train to the Airport because I didn't like that I had to rely on a taxi to get me to Newark Airport from Broad Street.
No 287 transportation was available
Nothing convenient to my schedule
Since I do have a car available to me, it is too easy for me to use it.
Because I didn't find the information that I was looking for.
No Answer
Public transportation did not go where I wanted to get to.
Just looking for the train schedules
Bus service not convenient - insufficient frequency, operating hours.
Most of the info was just refining our plans (looking for which train, express vs. local, etc.).
Still not clear where buses stop and how you hail them.
Not needed
Could not find alternates and had to rely on coworkers or taxis.
schedule did not allow
No reason to
Didn't see any options
No Answer
Wasn't cheaper or easier
It didn't apply to me. I was checking for participants from other areas.
Because I could not find the information I needed...namely, commuter bus information.
The bus routes are not usable for my commute
Not applicable because Morris county trains are not feasible for my commute
No need to change.
it was not more convenient
buses very slow and infrequent
No Answer
I tried biking in Morristown to run errands and felt threatened by cars driving on the same roads.
Because NJ TRANSIT didn't make any changes. Actually, they raised the prices for tickets and reduced schedules. This actually limited my choices and forced me only be able to drive to NYC.
The train trip I take is still the shortest and most frequent option for my daily commute. For other trips, like weekend trips into the city, it is often twice as fast to drive because there are no express trains at all on the weekends.
Too long of travel time and not often



Table B-26 - What improvements could be made to encourage you to make more trips by train?

Multiple answers were permitted

What improvements could be made to encourage you to make more trips by train?	Total	Percent
More parking	163	37.6%
OTHER - Parking Management	3	0.7%
OTHER - Free or less expensive parking	4	0.9%
More shuttles/bus connections	85	19.6%
Better bicycle and pedestrian connections	89	20.6%
OTHER - Safety improvements	5	1.2%
Roadway improvements	35	8.1%
Carpool and auto-share	16	3.7%
Housing, employment and retail adjacent to the train station	31	7.2%
Information services regarding existing transit services	47	10.9%
OTHER - Faster, more reliable, expanded train service	62	14.3%
OTHER - Accessibility improvements	3	0.7%
OTHER - Lower train fares	42	9.7%
Other	2	0.5%
OTHER - Already ride the train	10	2.3%
Nothing would encourage me	51	11.8%

Table B-27 – What improvements could be made to encourage you to walk to the train station?

Multiple answers were permitted

What improvements could be made to encourage you to make more trips by walking?	Total	Percent
Provide sidewalks in neighborhood	128	29.6%
Maintain sidewalks	118	27.3%
Better snow removal	65	15.0%
Improved lighting	1	0.2%
Additional pedestrian safety measures	2	0.5%
I walk already	4	0.9%
Nothing would encourage me	104	24.0%
Can't - health or personal constraints	16	3.7%



Table B-28 - What improvements could be made to encourage you to bicycle to the train station?
Multiple answers were permitted

What improvements could be made to encourage you to bicycle to the train station?	Total	Percent
Separate bike lanes	82	18.9%
More bike lanes	70	16.2%
Shoulder on roadway for bike use	90	20.8%
Make motorists aware of bicyclists	85	19.6%
Bike lockers/Racks	112	25.9%
Allow bikes on trains	7	1.6%
Showers/changing areas at work/station	4	0.9%
Too far away/hills	9	2.1%
Other	4	0.9%
I don't have a bicycle	50	11.5%
Can't ride due to physical conditions	21	4.8%
Nothing would encourage me	128	29.6%

Table B-29 – How important is it for government agencies to invest in each of the following transportation improvements on a scale of 1 to 5, with “1” being “not at all important” and “5” being “extremely important?”

Improvement	1	2	3	4	5	No Answer	Total	Weighted Average
Improve/expand transit	10	19	92	80	186	46	433	4.07
Transit information/services	15	39	128	104	99	48	433	3.61
Carpool information/services	67	102	122	51	33	58	433	2.68
Construct more sidewalks	53	68	105	79	76	52	433	3.15
More Park & Ride lots	30	56	116	100	78	53	433	3.37
Build/expand highways/roadways	80	76	90	64	63	60	433	2.88
Special carpool/bus lanes	101	117	85	47	23	60	433	2.39
Expand bicycle trails/lanes	57	62	102	61	100	51	433	3.22



Survey Question Response Totals

Survey Question		Type of Question	Respondents	Number of Responses
1	In what ZIP code (or town) is your HOME located?	Single Answer	All respondents	433
2	What is your employment status?	Single Answer	All respondents	433
3	In what ZIP code (or town) is your JOB or SCHOOL located?	Single Answer	All respondents	433
4	How many days a week do you usually commute to work or school?	Single Answer	Employed -- full or part time AND Student -- full or part time	355
5	During a typical week, how do you usually travel to work or school?	Single Answer	Employed -- full or part time and Student -- full or part time	355
6	Have you traveled by train for any purpose in the past year?	Single Answer	All respondents	433
7	When you travel by train, what is your typical boarding station?	Single Answer	Respondents that traveled by train in the past year	374
8	How do you typically travel to the train station?	Single Answer	Respondents that traveled by train in the past year	374
9	What type of parking do you typically use?	Single Answer	Respondents that traveled by train in the past year AND Drove alone and parked AND Carpooled and parked	228
10	How do you typically pay for parking?	Single Answer	Respondents that traveled by train in the past year AND Drove alone and parked AND Carpooled and parked	228
11	Is this your preferred way to travel to the station?	Single Answer	Respondents that traveled by train in the past year	374
12	If no, what is your preferred way to travel to the station?	Open-Ended/Coded	Respondents that indicated "No, it is not my preferred way to travel to the station"	72
13	When you travel by train, what station do you typically get off?	Single Answer	Respondents that traveled by train in the past year	374
14	How do you travel from the train to your final destination?	Single Answer	Respondents that traveled by train in the past year AND Train Alighting Station Chatham, Madison OR Convent Station	13
15	What is needed most to improve travel to and from the NJ TRANSIT train station?	Open-Ended/Coded	Respondents that traveled by train in the past year	374
16	Was a personal vehicle available to you to make this trip?	Single Answer	All respondents	433



NJ 124 Corridor Transit Access Improvement Study

Final Report

	Survey Question	Type of Question	Respondents	Number of Responses
17	How well does the Morris County transportation system meet your travel needs? Please rate on a scale of 1 to 5 where "1" is "not at all well" and "5" is "extremely well."	Rating Scale	All respondents	433
18	About how far from your home is the nearest train station?	Single Answer	All respondents	433
19	In your home neighborhood, are there . . . ?	Single Answer	All respondents	433
20	About how far from your home is the nearest bus stop?	Single Answer	All respondents	433
21	In the past year, did you request or seek information on types of transportation you could use to get around Morris County or other parts of New Jersey?	Single Answer	All respondents	433
22	What information were you seeking and where did you look or whom did you contact?	Open-Ended/Coded	All respondents	134
23	After receiving this information, did you take any actions to change how you travel?	Single Answer	Respondents that sought travel information	134
24	If yes, what changes did you make and why?	Open-Ended/Coded	Respondents that sought travel information AND Changed their travel based on information received	41
25	If no, why didn't you make changes to your travel?	Open-Ended/Coded	Respondents that sought travel information AND DID NOT Changed their travel based on information received	91
26	What improvements could be made to encourage you to make more trips by train?	Multiple Answers with Open-Ended/Coded	All respondents	433
27	What improvements could be made to encourage you to walk to the train station?	Multiple Answers with Open-Ended/Coded	All respondents	433
28	What improvements could be made to encourage you to bicycle to the train station?	Multiple Answers with Open-Ended/Coded	All respondents	433
29	How important is it for government agencies to invest in each of the following transportation improvements on a scale of 1 to 5, with "1" being "not at all important" and "5" being "extremely important?"	Rating Scale	All respondents	433



Detailed Survey Tables

*From the
ScoreCard Survey*



The ScoreCard Survey intended to gather demographic and commute information from those in the NJ 124 corridor who currently use Chatham, Madison, and Convent Stations. It also asked for suggestions on how to improve access to the three stations. Tables B-30 through B-38 display information gathered concerning respondents' commute information, Table B-39 shows suggested improvements to increase station access, and Tables B-40 through B-44 show demographic information.

Table B-30 – Origin by Station

Origin	Chatham		Madison		Convent	
	Total	Percent	Total	Percent	Total	Percent
Chatham Borough	332	41.4%	7	1.0%	0	0.0%
Chatham Township	188	23.4%	13	2.0%	0	0.0%
Chatham (Unspecified)	39	4.9%	0	0.0%	0	0.0%
Madison	23	2.9%	426	63.4%	0	0.0%
Morris Township	0	0.0%	0	0.0%	226	38.8%
Basking Ridge	0	0.0%	7	1.0%	0	0.0%
Bernardsville	0	0.0%	00	0.0%	5	0.9%
Bloomfield	0	0.0%	0	0.0%	5	0.9%
Chester	0	0.0%	0	0.0%	5	0.9%
East Hanover	8	1.0%	7	1.0%	5	0.9%
Flemington	0	0.0%	0	0.0%	5	0.9%
Florham Park	47	5.9%	47	6.9%	25	4.3%
Hanover	0	0.0%	13	2.0%	40	6.9%
Harding Township	0	0.0%	27	4.0%	10	1.7%
Mendham	0	0.0%	0	0.0%	35	6.0%
Morristown	0	0.0%	0	0.0%	75	12.9%
Morristown (unspecified)	0	0.0%	0	0.0%	15	2.6%
New Providence	8	1.0%	0	0.0%		0.0%
Newark	0	0.0%	0	0.0%	5	0.9%
No Answer	156	19.5%	120	17.8%	100	17.2%
Parsippany-Troy Hills	0	0.0%	0	0.0%	5	0.9%
Randolph	0	0.0%	0	0.0%	15	2.6%
Roxbury	0	0.0%	7	1.0%	5	0.9%
Total	802	100.0%	672	100.0%	582	100.0%



Table B-31 – Access Mode by Boarding Station

Access Mode	Chatham		Madison		Convent	
	Total	Percent	Total	Percent	Total	Percent
Drove alone and parked	297	37.1%	326	48.5%	431	74.1%
Carpool and parked	16	2.0%	13	2.0%	0	0.0%
Car drop off	180	22.4%	126	18.8%	45	7.8%
Passenger in carpool	8	1.0%	0	0.0%	5	0.9%
Bus/Shuttle	23	2.9%	0	0.0%	15	2.6%
Walk	215	26.8%	173	25.7%	50	8.6%
Bicycle	31	3.9%	20	3.0%	15	2.6%
Other	8	1.0%	0	0.0%	0	0.0%
No Answer	23	2.9%	13	2.0%	20	3.4%
Grand Total	802	100.0%	672	100.0%	582	100.0%

Table B-32 - Egress Mode by Alighting Station

Egress Mode	Chatham		Madison		Convent	
	Total	Percent	Total	Percent	Total	Percent
Drove alone and parked	0	0.0%	0	0.0%	35	10.8%
Car pick up	12	16.7%	6	4.8%	12	3.6%
Bus/Shuttle	0	0.0%	53	42.9%	182	56.9%
Walk	47	66.7%	41	33.3%	81	25.1%
Bicycle	0	0.0%	6	4.8%	0	0.0%
Other	12	16.7%	18	14.3%	12	3.6%
Total	71	100.0%	123	100.0%	321	100.0%



Table B-33 – Where do you typically park?

Parking Location	Chatham		Madison		Convent	
	Total	Percent	Total	Percent	Total	Percent
Station/Municipal Lot parking – Resident only	149	46.3%	200	58.8%	216	49.4%
Station/Municipal Lot parking – Non-resident	141	43.9%	60	17.6%	201	46.0%
Private Lot parking nearby station	23	7.3%	20	5.9%	5	1.1%
Metered On-street parking	0	0.0%	0	0.0%	10	2.3%
Free On-street parking	0	0.0%	60	17.6%	0	0.0%
No Answer	8	2.4%	0	0.0%	5	1.1%
Total	321	100.0%	339	100.0%	437	100.0%

Table B-34 – How do you typically pay for parking?

Parking Payment Type	Chatham		Madison		Convent	
	Total	Percent	Total	Percent	Total	Percent
Monthly Permit	63	19.5%	86	25.5%	135	31.0%
Daily	156	48.8%	80	23.5%	140	32.2%
Free	0	0.0%	53	15.7%	5	1.1%
Other	94	29.3%	120	35.3%	151	34.5%
No Answer	8	2.4%	0	0.0%	5	1.1%
Total	321	100.0%	339	100.0%	437	100.0%

Table B-35 – Was a Personal Vehicle Available for this Trip?

Station	Chatham		Madison		Convent Station	
	Total	Percent	Total	Percent	Total	Percent
Yes	626	78.1%	539	80.2%	492	84.5%
No	137	17.1%	67	9.9%	25	4.3%
No Answer	39	4.9%	67	9.9%	65	11.2%
Total	802	100.0%	672	100.0%	582	100.0%



Table B-36 - If transit service was not available, how would you have made this trip?

Alternate Mode	Chatham		Madison		Convent Station	
	Total	Percent	Total	Percent	Total	Percent
Drive alone	454	56.6%	333	49.5%	346	59.5%
Car drop off	23	2.9%	13	2.0%	5	0.9%
Carpool	117	14.6%	93	13.9%	50	8.6%
Taxi	0	0.0%	7	1.0%	5	0.9%
Walk	19	2.4%	0	0.0%	0	0.0%
Would not have made this trip	78	9.8%	140	20.8%	70	12.1%
Other	70	8.8%	20	3.0%	40	6.9%
No Answer	39	4.9%	67	9.9%	65	11.2%
Total	802	100.0%	672	100.0%	582	100.0%

Table B-37 - Trip Frequency by Station

Trip Frequency	Chatham		Madison		Convent Station	
	Total	Percent	Total	Percent	Total	Percent
4 or more times a week	702	81.4%	567	71.3%	745	82.5%
1 - 3 times a week	82	9.5%	150	18.8%	116	12.9%
1 - 3 times a month	16	1.8%	26	3.2%	17	1.8%
6 - 11 times a year		0.0%	19	2.4%		0.0%
1 - 5 times a year	31	3.6%	7	0.8%	5	0.6%
No Answer	31	3.6%	27	3.3%	20	2.2%
Total	863	100.0%	795	100.0%	903	100.0%

Table B-38 - Trip Purpose by Station

Trip Purpose	Chatham		Madison		Convent Station	
	Total	Percent	Total	Percent	Total	Percent
Work	777	90.0%	678	85.2%	819	90.8%
Company business	16	1.8%	7	0.8%	17	1.8%
School	0	0.0%	19	2.4%	17	1.8%
Recreation	31	3.6%	20	2.5%	5	0.6%
Medical	8	0.9%	0	0.0%	0	0.0%
Social	0	0.0%	20	2.5%	5	0.6%
Personal business	0	0.0%	25	3.1%	10	1.1%
Other	0	0.0%	0	0.0%	10	1.1%
No Answer	31	3.6%	27	3.3%	20	2.2%
Total	863	100.0%	795	100.0%	903	100.0%



Table B-39 – What one improvement would you make to improve your travel to the station (non-parking access related improvements are highlighted)?

Comments
More reasonable monthly parking
Better lighting under the rail overpass on Fairmount Avenue
More parking options.
Traffic flow patterns in the parking lot, no cars allowed to stand with passengers inside waiting for the train to come in drop off area of parking lot
The parking machines are the worst! There are too few, they often do work, and people don't know how to use. It is the most stressful part of the commute.
More parking spaces.
Stoplight at north entrance to Chatham station on Main street
More daily parking spaces. All spots taken by 7 am. Why not restrict parking spots for commuters from Chatham & Madison. Also, paying \$5.00 daily is OBNOXIOUS!
Expand the parking passes to Chatham Township residents not just Chatham Borough.
The one improvement would if Chatham Borough provided permit parking to Chatham Township residents. I would then not need a ride to the train station
Create a cheaper parking option and parking machines that actually work.
Increase parking and drop-off area at the station.
Shuttle bus in the winter
more parking
Concrete platform is crumbling. Would like to see it refurbished at some point. its tolerable (as i'm sure its been crumbling for decades). Also, work was recently done on the west bound side, and the platform was blocked in a manner that forced people to have no way off the platform, without basically transiting across a barrier. a stair case was closed for no apparenty reason as well related to this which made for an unpleasant, and downright dangerous situation. engineering should be more thoughtful about this kind of thing, because it can only be described as stupid by users, who shake their heads in disgust as the lack of attention and though put into this was most apparent.
More covered areas on the platform.
Nothing
Free motorcycle, scooter or very small car parking
More parking spaces for non-residents of Chatham Borough
None
N/A
More permit parking
Need more parking, particularly for Chatham Township residents.
Better coffee/food options
Much more parking--there is generally no parking available if one needs to make a midday trip into NYC
More bike racks. Today I had to double-up on a bike rack before 8am.
More parking
None
Guaranteed parking. I have to take a much earlier train than necessary most days in order to secure parking anywhere near the station.



Comments
Parking spaces. There are none available for Chatham township.
My travel to the station could be better if i could drive without having to pay for parking.
None
None
None
Waiting rooms open longer, ATM Machine, LED Board announcing time for arriving train and destination. Use it other than blinking CHATHAM
More parking
Cross walk with lights on Fairmount Ave. The traffic can make crossing the street dangerous.
I would add more parking spaces at or near the station for individuals who are not residents.
Street lighting
City should offer monthly unlimited parking ticket.
Move it closer to my home
Improved timeliness
Be able to get a permit. The process is too long
I take the 7:27am train from Chatham and frequently have to stand all the way to NY Penn station, it would be good if you can add one more car to this train.
Renovated rest rooms
More parking for non residents
N/A - The station is great - clean and friendly
Add additional nonresident parking so I don't have to catch such an early train.
Allow non-residents to purchase annual parking permit.
There should be a specific entrance and exit into the station, because it gets very crowded and backed up with all the cars going opposite directions
Nothing
Jitney
None at this time
Lower the cost of daily parking
Increase the number of daily spaces
None.
More non-resident parking. It is a nightmare and typically no spots available after the 6:42a train. If you have to drive your child to school, you cannot get parking in Chatham, even at 715a. I live in Chatham Township and only Chatham Borough has permits, and there is ample parking for them.
Travel to the station is okay for me, but I arrive very early and have no problem finding a parking space.
The possibility of a shuttle service on Main Street that would take you to the train station
Make a monthly pass, just like for the train, that I can use for daily parking with certain restrictions. No guarantee of a spot or something. I know many people would like this. This pay \$5 everyday at a long line with the machine broke half the time is nuts. I know we can do better. Please!
Raised platforms
Travel to the station is not a problem for me. Unless you could teleport me from home to station.....
More parking.
More lighting along the street.



Comments
Ability to get a monthly/annual Parking permit
more parking
Nothing
More parking availability. There is extremely limited parking at all nearby train stations. The closest station with enough non permit parking is metropark. Horrible. That's not considered commuter service
N/A
Station building should be open for more time. Chatham station building (climate controlled) is closed all day past mid-morning.
Parking is sparse. I assume there are studies to determine demand / parking needs. But, this is why I walk... I don't want the stress of working to find parking
None
N/A
More Parking space with working meters
None
It's crowded on the 7:34 to new York I can't even sit
Clear sidewalks, particularly in the winter
Not have to go there.
More parking
Delay warnings in the stations...maybe monitors will be a good idea, in the small stations, as well.
No changes needed.
The parking machines do not work 50% of the time. It is extremely annoying! The lines can be so bad people miss their trains.
Grant Chatham Township residents the option to purchase parking permits. Chatham Boro residents that drive to the station frequently live within walking distance. Spaces for daily parking are usually gone after the 6:42 AM train
More parking
More bicycling storage lockers
The Midtown Direct line is too often re-routed through Hoboken. This makes travel difficult and should go directly to Penn Station. Again. IT HAPPENS FAR TOO OFTEN.
None
N/A
Alleviate traffic on Hanover Rd in Morris Plains and Morristown area
Parking for non-residents is expensive \$690/year with no guarantee that even though you apply for parking, get a sticker that there will be an available space for you
N/A
None
Penn Station is a dumb where nothing appears ever to work (e.g., escalators)
It's fine. Can't complain
Nothing, traveling to this station is fine.
A shuttle to take me to the station so I don't have to pay \$300+ for the yearly resident parking fee.
More train options; less expensive parking



Comments
Fix/Add better parking meters. There is only one which accepts credit cards which is inside the station and does not work efficiently at all. Commuters who would like to pay with credit cards have to use this machine, which is not easy to use, has trouble reading cards, and because it takes a long time to print the actual parking ticket- it gets backed up. (especially since if you do not use it everyday and know the quirks and tricks- i.e. when you put in the card you have to push it back all the way, leave it in the machine for a second, then pull it out as fast as possible- it will not read properly and you will just have to do it again which again- backs everything up. Also - if the machine is broken or someone can't get it to work- there isn't any information on the machine to indicate who to call/what to do in order to NOT receive a parking ticket. There should be a sign which states, if this machine is out of order or not working properly- call this number. (I myself found this out the hard way- after multiple parking tickets
I wouldn't mind a bus option, but the trip is quick. Bigger complaint is about the lack of parking lot oversight by NJT - the municipalities are lousy at running a service.
NA
No improvement
None
More parking spaces
We are held hostage by the towns where train stations reside. As non-residents to these towns, there are very limited parking permits which are double the resident costs and then limited daily spots
More frequent shuttle bus service.
None
None
N/A... wish it would be just a little closer so i could walk.
None
None
None
None needed
More space, better cash machine.
A less frequent payment option - i.e. monthly or quarterly, rather than daily.
None
Better Ventilation of the Convent Station waiting room.
Make it easier to get to/from the westbound track (not just at one end of the train).
None
Chaffeur service to the train paid for by the useless conductors union. Get rid of these unions immediately as commuters will only pay so much for their rail tickets. Another rate hike will not be tolerated.
Shuttle Service - More Parking
Additional monthly or annual non-resident parking spaces would make my annual commute much cheaper.
All fine
Having the ability as a non resident to pay monthly parking
Fix the damn potholes on 287 so they stop wrecking my suspension



Comments
I'm not sure what I could. It is 4.5 miles each way and I encounter only one street light (which I can right-on-red) and it takes me about 9-11 minutes.
An over/under pass to get from one side of the tracks to the other at Convent Station.
The public parking at Convent Station is a disgrace. Both the cash and credit card machines are very temperamental and cause a great deal of anxiety for my daily trip. I can't even use my Benefits card for the transaction because it is denied by the machine! On weekends you must pay for parking but the only available machine is cash only and it doesn't always accept the bills inserted.
Free parking or cheaper parking would be great. Even though this is a municipal decision the price we pay to park it ridiculous.
Keep parking rates low. Morristown station parking increases were unacceptable.
Monthly passes for parking aren't available. I was told I can only purchase 6 month and one year passes.
None
None
I've been on the waiting list for a parking pass for a year, which is ridiculous when I park pretty much in the same spot everyday. It almost triples the cost because I'm 40 people deep on the list. Make more year passes.
N/A
A local shuttle to the train station for local area residents would be helpful
none
A bus/van
NONE
It's great. In fact, there's a bike bath that I use regularly to get to the station. I would encourage more people to walk, or bike to the station.
More bicycle lockers.
There are many people being dropped off that are waiting in their cars until the train arrives. However, they are all waiting right in front of the station, rather than pulling into a parking spot. This causes significant backups in the morning.
With people trying to hustle past the station to their parking spot, I've seen more than one instance of rage. Suggest that someone patrol this area to ensure that cars don't clog up the road.
no improvement needed
None.
More direct route with fewer stop signs/lights
Morristown station is closer but parking difficult so travel extra distance to Convent.
none
There is never enough parking at Convent Station for daily non-resident commuters. It helped to get the church parking lot for daily metered parking, but I still need to get to the train station before 7 AM in order to park my car to take the train to my NY office 6 or 8 times a month. In summer, the parking situation is better of course. But from September-June, it is an issue.
Can't think of anything.... Love the double deckers are nice, clean, quieter trains, I always get a seat.
None
Nothing - i am happy with the travel
None



Comments
The traffic light before the Madison Hotel stays red for a long time and green for only a short period. Causes anxiety.
My walk takes about 6 minutes. It's hard to improve on that.
Not having to ride my bike on a busy street, Rte. 124/Main Street.
Can't think of one.
To have precise timing when picking up the citizens.
Nothing to add.
A crosswalk should be added that connects the sidewalks on either side of Madison Avenue. There is a crosswalk at this intersection between canfield/convent station and Madison Avenue but it is on the opposite side where there are no sidewalks. Thus, everyone crosses in an unmarked intersection and not safely in the crosswalk.
None
None
Shorter distance
Have monthly permits available everywhere
None
Nothing. walking to station is mostly ideal
None
MORE PARKING
None.
The Parking Meter machine is EXTREMELY slow. Consider invoking Smart Parking Cards Commuters
Parking Lot needs repaving
I've worked at 210 Park Ave. Florham Park, NJ for 2 months & of those 2 months I walked 2 miles to the Madison train station FOR OVER 1 MONTH because your Representatives & your Trip Planner is absolutely WORTHLESS. I called on several different occasions to ask about mass transit from Florham Park & was told there wasn't any! Well there are 2 bus #878 & #879 that are under contract with NJ TRANSIT!! HOW ABSURD IS YOUR COMPANY & YOUR RESOURCES THAT THESE FIRST STUDENT BUS ROUTES DO NOT COME UP ON YOUR TRIP PLANNER OR IN FRONT OF THE REPRESENTATIVE. If there were any other services, I would not waste my time or money with NJ TRANSIT. ABSOLUTELY RIDICULOUS & ABSURD
Sidewalks along Punch Bowl Road.
None.
Please, please add signs to the Quiet Cars. They are one of the best improvements in a long time, but it adds such stress when someone doesn't know and the other passengers either are annoyed or confront the talkers. Can't there be a spot for a sign to be posted so that people know when they enter the car?
More parking
N/A
More places to park. Madison, Chatham, Summit, and Short Hills will not give me a parking permit because I am not a resident. Incredibly difficult (and costly) to park in daily parking. Parking spots should not be limited to residents only.
More spaces



Comments
If there were public transportation to train station, I would take it. I cannot walk because I get home after dark, and it is pretty far--over a mile.
None
None
Less handicap parking spots since they're very rarely used.
None
Reduce the cost for parking and make more spaces available to park.
None. I am able to walk
N/A
More parking, monthly permits for non-residents
Better lighting.
None
No improvements needed.
More non-permit parking
Better parking accommodations. My town does not have a municipal station, so I only have a pay per day option, other than walking 0.5 miles from a free private lot. Also, it could be nice if there was a parking perk for monthly pass holders.
None.
pedestrian signal priority at signaled intersections
pedestrian signal priority at signaled intersections
none--v nice and pleasant train station
Less expensive parking close to train station.
None
Closer
Larger parking lot closer to station.
A electronic sign at the parking lots saying how many minutes away the next train is from the station.
There is no parking by the time I get on the 7:58 train so my mother has to wake up every morning and drive me. It would be helpful if there was more parking.
No improvement. Great walk in a beautiful town.
N/A
I would like to see the ticket vending machines on the platform instead of being on the street level.
Better safety for pedestrians crossing to/from station
None
More parking spots at the train station
Open lobby area.
More parking spaces in the lot closer to the station.
None
Have more public parking at the Madison station for non-residents
None
Reduce the price of parking
Nothing
None



Comments
Parking for out of town users
None
Nothing. I do not live far from the station.
None
Nothing - it's perfect.
None
Nothing, I walk. But there are tons of steps :-)
More resident parking . I am on waiting list.
Given that my monthly ticket from Madison to Hoboken costs \$273.00, and a PATH ride from Hoboken to the WTC costs a discounted \$1.50 each way, the \$5.00 per day parking fee in Madison is high. There should be more options for reduced rate parking for daily commuters.
Dropped off by my dad so I wish I didn't have to wait so long in the waiting area before the train I have to catch.
Price. The lower the price is for a monthly pass, the more people would use the NJ TRANSIT system. More express trains and train times, similar to the summit station. The more trains available to fit people's schedules the more customers will choose them. Currently beyond summit, there are not enough express trains for people to think of NJTransit as a means of transportation more frequently. The population of people at the madison area is large enough to call for more trains to run from hoboken and NY Penn. Trains to run on time. It is very important to riders that the trains are running on schedule since this is the way that riders get to work and need to be on time.
More parking so I could drive myself. Presently, if you are not a Madison resident, you can not get a parking permit.
More daily parking spaces
Nothing much, it is easy to get to and there is not much traffic.
Frequency of trains to Hoboken has diminished over the years. Trains that are left are more local than express So more and/or faster trains
Nothing it is fantastic
Double track Peapack Gladstone and provide better service on that line.
Nothing except maybe the cost of the parking permit
Better spaces.
None are necessary
Stop constant delays and going to Hoboken instead of Penn Station when there are problems in the tunnel
Sidewalks should be even, without depressions/potholes/elevations, and trees overhang should be cut, so that normal person can walk under them without bending over.
Replace bike racks on western end of station with bike lockers.
Better parking options
None. I live about a mile away from the station. Travel local roads, early, so traffic is not a problem.
None
More parking available by station
None
More trains to NYC that begin and end on the half hour especially after 7.00 pm.



Comments
Persuade town to allow free parking on designated blocks within walking distance of station.
It's perfect.
More parking at station
None
Not applicable; Train station is within walking distance.
I could use another way to get there like walking, riding a bicycle or moving nearest the train station

Table B-40 – Gender

Gender	Chatham		Madison		Convent Station		Total	
	Total	Percent	Total	Percent	Total	Percent	Total	Percent
Male	530	67.6%	380	53.5%	502	62.4%	1412	61.4%
Female	255	32.4%	330	46.5%	302	37.6%	887	38.6%
Total	785	100.0%	709	100.0%	804	100.0%	2298	100.0%

No Answer	78		86		98		262	
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Table B-41 - Age

Age	Chatham		Madison		Convent Station		Total	
	Total	Percent	Total	Percent	Total	Percent	Total	Percent
18 - 24 years	39	5.0%	92	13.0%	47	6.1%	177	7.9%
25 - 34 years	119	15.2%	108	15.3%	180	23.4%	407	18.0%
35 - 44 years	251	31.9%	172	24.5%	185	24.1%	608	26.9%
45 - 54 years	235	29.9%	162	23.1%	155	20.2%	552	24.5%
55 - 64 years	106	13.5%	124	17.6%	164	21.4%	394	17.5%
65 years and over	35	4.5%	47	6.6%	37	4.8%	118	5.3%
Total	785	100.0%	704	100.0%	768	100.0%	2257	100.0%

No Answer	78		91		135		304	
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Table B-42 - Are you of Spanish/Hispanic/Latino origin?

Spanish/ Hispanic /Latino origin	Chatham		Madison		Convent Station		Total	
	Total	Percent	Total	Percent	Total	Percent	Total	Percent
Yes	16	2.0%	40	5.6%	17	2.1%	72	3.2%
No	753	98.0%	670	94.4%	756	97.9%	2180	96.8%
Total	769	100.0%	710	100.0%	773	100.0%	2252	100.0%

No Answer	94		85		130		309	
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Table B-43 – Race

Spanish/ Hispanic /Latino origin	Chatham		Madison		Convent Station		Total	
	Total	Percent	Total	Percent	Total	Percent	Total	Percent
White	610	81.9%	617	89.1%	592	80.4%	1819	83.7%
Black or African American	20	2.6%	6	0.8%	33	4.5%	59	2.7%
Asian or Pacific Islander	64	8.6%	24	3.5%	56	7.6%	145	6.7%
Mixed Race	16	2.1%	33	4.8%	17	2.2%	65	3.0%
Other	35	4.7%	12	1.7%	38	5.2%	85	3.9%
Total	745	100.0%	692	100.0%	736	100.0%	2173	100.0%
No Answer	118		103		166		387	

Table B-44 - Income

Income	Chatham		Madison		Convent Station		Total	
	Total	Percent	Total	Percent	Total	Percent	Total	Percent
\$250,000 and over	250	39.1%	118	18.7%	159	27.3%	528	28.5%
\$200,000- \$249,999	86	13.5%	57	9.0%	32	5.6%	175	9.5%
\$150,000- \$199,999	70	11.0%	125	19.8%	92	15.9%	288	15.5%
\$100,000- \$149,999	70	11.0%	95	15.0%	152	26.2%	317	17.1%
\$75,000-\$99,999	55	8.6%	62	9.8%	51	8.8%	167	9.0%
\$50,000-\$74,999	35	5.5%	50	7.9%	24	4.2%	109	5.9%
\$35,000-\$49,999	31	4.9%	55	8.7%	38	6.6%	124	6.7%
\$25,000-\$34,999	10	1.5%	44	7.0%	7	1.1%	61	3.3%
\$15,000-\$24,999	8	1.2%	17	2.6%	0	0.0%	24	1.3%
Under \$15,000	23	3.7%	10	1.6%	25	4.3%	59	3.2%
Total	640	100.0%	631	100.0%	581	100.0%	1852	100.0%
No Answer	223		271		214		709	



NJ 124 Corridor Transit Access Improvement Study

Final Report

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Appendix C: TOD Pro Forma Analysis



Chatham Station 30 Dwelling Unit Scenario

Assumed Zoning Densities		
Retail Floor Area Ratio	1.0	SF
Office Floor Area Ratio	4.0	SF
Residential Dwelling Units per Acre	30.0	Acre

Acquisition, Demolition & Site Work		
Site Acquisition Cost		\$6,000,000
Demolition Costs per CF		\$7.00
Residential Buildings	0	\$0
Office Buildings	20,000	\$0
Retail Buildings	0	\$0
Public Buildings	0	\$0
Haz Mat Abatement:		\$0
Site Prep & Grading: Entire Site		\$500,000
Site Infrastructure Costs		8.00%

Residential: Multi-Family Rental		
Efficiency Rate	92%	
Avg. Unit Size	1,150	SF
Parking Spaces per Unit	1.25	spaces
Construction Costs: Low-Rise	\$185	per SF
Construction Costs: Mid-Rise	\$220	per SF
Average Rent per SF/Month	\$2.00	
Vacancy Rate: Rental	5.00%	
Operating Expenses per SF	\$3.00	per SF

Retail: Ground Floor		
Efficiency Rate	90%	
Parking Spaces per 1,000 SF	3	spaces
Construction Costs: Shell	\$100	per SF
Construction Costs: Fit Out	\$25	per SF
Construction Costs: Shell + Fit Out	\$125	per SF
Rent per SF: Triple Net	\$25	per SF
Vacancy Rate: Retail	5.00%	
Operating Expenses per SF	\$4.00	per SF

Office: Class A		
Efficiency Rate	90%	
Parking Spaces per 1000 SF	3.00	spaces
Construction Costs: Inclusive of shell and fit-up	\$200	per SF
Rent per SF	\$25.00	
Vacancy Rate: Class A	5.00%	
Operating Expenses per SF	\$6.00	per SF



NJ 124 Corridor Transit Access Improvement Study

Final Report

Parking		
SF per Space: Structured	400	SF
SF per Space: Surface	300	SF
Construction Costs: Structured	\$20,000	per space
Construction Costs: Surface, New	\$3,500	per space
Construction Costs: Surface, Existing	\$2,000	per space

Misc		
Sales Cost	5.00%	
Hold Period	15	years
Investment Return Goal: Unleveraged	8%	
Inflation Factor	2.20%	
Estimate of Annual Real Property Taxes	\$2.50	per SF

Cap Rates	
Residential	7.00%
Retail	7.50%
Office	8.00%



Chatham Station: 50 Dwelling Unit Scenario

Assumed Zoning Densities		
Retail Floor Area Ratio	1.0	SF
Office Floor Area Ratio	4.0	SF
Residential Dwelling Units per Acre	50.0	Acre

Acquisition, Demolition & Site Work		
Site Acquisition Cost		\$6,000,000
Demolition Costs per CF		\$7.00
Residential Buildings	0	\$0
Office Buildings	20,000	\$0
Retail Buildings	0	\$0
Public Buildings	0	\$0
Haz Mat Abatement:		\$0
Site Prep & Grading: Entire Site		\$500,000
Site Infrastructure Costs		8.00%

Residential: Multi-Family Rental		
Efficiency Rate	92%	
Avg. Unit Size	1,150	SF
Parking Spaces per Unit	1.25	spaces
Construction Costs: Low-Rise	\$185	per SF
Construction Costs: Mid-Rise	\$220	per SF
Average Rent per SF/Month	\$2.00	
Vacancy Rate: Rental	5.00%	
Operating Expenses per SF	\$3.00	per SF

Retail: Ground Floor		
Efficiency Rate	90%	
Parking Spaces per 1,000 SF	3	spaces
Construction Costs: Shell	\$100	per SF
Construction Costs: Fit Out	\$25	per SF
Construction Costs: Shell + Fit Out	\$125	per SF
Rent per SF: Triple Net	\$25	per SF
Vacancy Rate: Retail	5.00%	
Operating Expenses per SF	\$4.00	per SF

Office: Class A		
Efficiency Rate	90%	
Parking Spaces per 1000 SF	3.00	spaces
Construction Costs: Inclusive of shell and fit-up	\$200	per SF
Rent per SF	\$25.00	
Vacancy Rate: Class A	5.00%	
Operating Expenses per SF	\$6.00	per SF



NJ 124 Corridor Transit Access Improvement Study

Final Report

Parking		
SF per Space: Structured	400	SF
SF per Space: Surface	300	SF
Construction Costs: Structured	\$20,000	per space
Construction Costs: Surface, New	\$3,500	per space
Construction Costs: Surface, Existing	\$2,000	per space

Misc		
Sales Cost	5.00%	
Hold Period	15	years
Investment Return Goal: Unleveraged	8%	
Inflation Factor	2.20%	
Estimate of Annual Real Property Taxes	\$2.50	per SF

Cap Rates	
Residential	7.00%
Retail	7.50%
Office	8.00%



Chatham Station 30 Dwelling Unit Scenario	
1	Acreage Acquired 2.76
2	Property Acquisition Cost \$6,000,000
3	Demolition Cost \$140,000
4	Relocation Costs \$0
5	Site Work Cost \$500,000
6	Multi-family Residential Units Developed 83
7	Multi-family Residential Development Costs \$20,948,400
8	Townhouse Residential Units Developed 0
9	Townhouse Residential Development Costs \$0
10	Retail Square Footage Developed 24,045
11	Retail Development Costs \$3,005,640
12	Office Square Footage Developed 9,618
13	Office Development Costs \$1,923,610
14	Lodging Square Footage Developed 0
15	Lodging Development Costs \$0
16	Parking Spaces - Structured 204
17	Total Structured Parking Costs \$4,089,790
18	Parking Spaces - Surface 0
19	Total Surface Parking Costs \$0
20	Performance Venue Space Developed 0
21	Performance Venue Development Costs \$0
22	Developer Fee \$3,660,744
	Sub-Total Phase I Acquisition, Site, Demo & Infrastructure Costs \$10,729,790
	Sub-Total Phase I Building Construction Costs (Hard and Soft Combined) \$25,877,650
	Total Phase I Costs \$40,268,184

- Assumptions**
- 1 Estimated
 - 2 Represents an estimated acquisition cost
 - 3 Estimated demolition and site clearance costs based on existing character and size of structures present.
 - 4 No residential or business relocation costs are assumed.
 - 5 Placeholder estimate based on limited site work improvements likely required , given the developed nature of the site.
 - 6 Assumes a permitted dwelling unit density of 30 units per acre.
 - 7 Based on estimated per square foot costs, inclusive of all vertical hard and soft costs, and finishes.
 - 8 Assumes a permitted dwelling unit density of 30 units per acre.
 - 9 Based on estimated per square foot costs, inclusive of all vertical hard and soft costs, and finishes.
 - 10 Assumes a limited amount of convenience, specialty retail and allied health services
 - 11 Based on estimated per square foot costs, inclusive of all vertical hard and soft costs, and finishes.
 - 12 Assumes professional service office space (possibly medical office building space), four story low-rise.
 - 13 Based on estimated per square foot costs, inclusive of all vertical hard and soft costs, and finishes.



- 14 Assumes small (less than 200 rooms), limited service, brand loading facility.
- 15 Based on estimated per square foot costs, inclusive of all vertical hard and soft costs, and finishes.
- 16 Based on an assumed parking ratio of 1.25 spaces/dwelling unit and 3.0 spaces per 1,000 s.f. of commercial square
17 footage.
- 18 Assumes an estimated cost of \$20,000/ space, based on inquiries made with parking consultants and local area findings.
19 Based on an assumed parking ratio of 1.25 spaces/ dwelling unit and 3.0 spaces per 1,000 s.f. of commercial square
20 footage.
- 21 Assumes an estimated cost of \$3,500/ space, based on inquiries made with parking consultants and local area findings.
- 22 Assumes an estimated cost of \$180 per square foot.
Source: 4ward Planning LLC, 2012

Chatham Station 50 Dwelling Unit Scenario

1	Acreage Acquired	2.76
2	Property Acquisition Cost	\$6,000,000
3	Demolition Cost	\$140,000
4	Relocation Costs	\$0
5	Site Work Cost	\$500,000
6	Multi-family Residential Units Developed	138
7	Multi-family Residential Development Costs	\$34,914,000
8	Townhouse Residential Units Developed	0
9	Townhouse Residential Development Costs	\$0
10	Retail Square Footage Developed	24,045
11	Retail Development Costs	\$3,005,640
12	Office Square Footage Developed	9,618
13	Office Development Costs	\$1,923,610
14	Lodging Square Footage Developed	0
15	Lodging Development Costs	\$0
16	Parking Spaces - Structured	273
17	Total Structured Parking Costs	\$5,469,790
18	Parking Spaces - Surface	0
19	Total Surface Parking Costs	\$0
20	Performance Venue Space Developed	0
21	Performance Venue Development Costs	\$0
22	Developer Fee	\$5,195,304
	Sub-Total Phase I Acquisition, Site, Demo & Infrastructure Costs	\$12,109,790
	Sub-Total Phase I Building Construction Costs (Hard and Soft Combined)	\$39,843,250
	Total Phase I Costs	\$57,148,344

Assumptions

- 1 Estimated
- 2 Represents an estimated acquisition cost
- 3 Estimated demolition and site clearance costs based on existing character and size of structures present.
- 4 No residential or business relocation costs are assumed.



- 5 Placeholder estimate based on limited site work improvements likely required , given the developed nature of the site.
- 6 Assumes a permitted dwelling unit density of 50 units per acre.
- 7 Based on estimated per square foot costs, inclusive of all vertical hard and soft costs, and finishes.
- 8 Assumes a permitted dwelling unit density of 50 units per acre.
- 9 Based on estimated per square foot costs, inclusive of all vertical hard and soft costs, and finishes.
- 10 Assumes a limited amount of convenience, specialty retail and allied health services
- 11 Based on estimated per square foot costs, inclusive of all vertical hard and soft costs, and finishes.
- 12 Assumes professional service office space (possibly medical office building space), four story low-rise.
- 13 Based on estimated per square foot costs, inclusive of all vertical hard and soft costs, and finishes.
- 14 Assumes small (less than 200 rooms), limited service, brand loading facility.
- 15 Based on estimated per square foot costs, inclusive of all vertical hard and soft costs, and finishes.
- 16 Based on an assumed parking ratio of 1.25 spaces/ dwelling unit and 3.0 spaces per 1,000 s.f. of commercial square footage.
- 17 Assumes an estimated cost of \$20,000 per space, based on inquiries made with parking consultants and local area findings.
- 18 Based on an assumed parking ratio of 1.25 spaces/ dwelling unit and 3.0 spaces per 1,000 s.f. of commercial square footage.
- 19 Assumes an estimated cost of \$3,500 per space, based on inquiries made with parking consultants and local area findings.
- 20 Assumes an estimated cost of \$180 per square foot.

Source: 4ward Planning LLC, 2012



Madison Station 30 Dwelling Unit Scenario

Assumed Zoning Densities		
Retail Floor Area Ratio		SF
Office Floor Area Ratio		SF
Residential Dwelling Units per Acre	30.0	Acre

Acquisition, Demolition & Site Work		
Site Acquisition Cost		\$9,000,000
Demolition Costs per CF		\$7.00
Residential Buildings	20,000	\$0
Office Buildings	15,000	\$0
Retail Buildings	20,000	\$0
Public Buildings	0	\$0
Haz Mat Abatement:		\$0
Site Prep & Grading: Entire Site		\$1,000,000
Site Infrastructure Costs		8.00%

Residential: Multi-Family Rental		
Efficiency Rate	92%	
Avg. Unit Size	1,150	SF
Parking Spaces per Unit	1.25	spaces
Construction Costs: Low-Rise	\$185	per SF
Construction Costs: Mid-Rise	\$220	per SF
Average Rent per SF/Month	\$2.00	
Vacancy Rate: Rental	5.00%	
Operating Expenses per SF	\$3.00	per SF

Retail: Ground Floor		
Efficiency Rate	90%	
Parking Spaces per 1,000 SF	3	spaces
Construction Costs: Shell	\$100	per SF
Construction Costs: Fit Out	\$25	per SF
Construction Costs: Shell + Fit Out	\$125	per SF
Rent per SF: Triple Net	\$25	per SF
Vacancy Rate: Retail	5.00%	
Operating Expenses per SF	\$4.00	per SF

Office: Class A		
Efficiency Rate	90%	
Parking Spaces per 1000 SF	3.00	spaces
Construction Costs: Inclusive of shell and fit-up	\$200	per SF
Rent per SF	\$25.00	
Vacancy Rate: Class A	5.00%	
Operating Expenses per SF	\$6.00	per SF



NJ 124 Corridor Transit Access Improvement Study

Final Report

Parking		
SF per Space: Structured	400	SF
SF per Space: Surface	300	SF
Construction Costs: Structured	\$20,000	per space
Construction Costs: Surface, New	\$3,500	per space
Construction Costs: Surface, Existing	\$2,000	per space

Misc		
Sales Cost	5.00%	
Hold Period	15	years
Investment Return Goal: Unleveraged	8%	
Inflation Factor	2.20%	
Estimate of Annual Real Property Taxes	\$2.50	per SF

Cap Rates		
Residential	7.00%	
Retail	7.50%	
Office	8.00%	

Madison Station: 50 Dwelling Unit Scenario

Assumed Zoning Densities		
Retail Floor Area Ratio	1.0	SF
Office Floor Area Ratio	4.0	SF
Residential Dwelling Units per Acre	50.0	Acre

Acquisition, Demolition & Site Work		
Site Acquisition Cost		\$9,000,000
Demolition Costs per CF		\$7.00
Residential Buildings	20,000	\$0
Office Buildings	15,000	\$0
Retail Buildings	20,000	\$0
Public Buildings	0	\$0
Haz Mat Abatement:		\$0
Site Prep & Grading: Entire Site		\$1,000,000
Site Infrastructure Costs		8.00%

Residential: Multi-Family Rental		
Efficiency Rate	92%	
Avg. Unit Size	1,150	SF
Parking Spaces per Unit	1.25	spaces
Construction Costs: Low-Rise	\$185	per SF
Construction Costs: Mid-Rise	\$220	per SF
Average Rent per SF/Month	\$2.00	
Vacancy Rate: Rental	5.00%	
Operating Expenses per SF	\$3.00	per SF



NJ 124 Corridor Transit Access Improvement Study

Final Report

Retail: Ground Floor		
Efficiency Rate	90%	
Parking Spaces per 1,000 SF	3	spaces
Construction Costs: Shell	\$100	per SF
Construction Costs: Fit Out	\$25	per SF
Construction Costs: Shell + Fit Out	\$125	per SF
Rent per SF: Triple Net	\$25	per SF
Vacancy Rate: Retail	5.00%	
Operating Expenses per SF	\$4.00	per SF

Office: Class A		
Efficiency Rate	90%	
Parking Spaces per 1000 SF	3.00	spaces
Construction Costs: Inclusive of shell and fit-up	\$200	per SF
Rent per SF	\$25.00	
Vacancy Rate: Class A	5.00%	
Operating Expenses per SF	\$6.00	per SF

Parking		
SF per Space: Structured	400	SF
SF per Space: Surface	300	SF
Construction Costs: Structured	\$20,000	per space
Construction Costs: Surface, New	\$3,500	per space
Construction Costs: Surface, Existing	\$2,000	per space

Misc		
Sales Cost	5.00%	
Hold Period	15	years
Investment Return Goal: Unleveraged	8%	
Inflation Factor	2.20%	
Estimate of Annual Real Property Taxes	\$2.50	per SF

Cap Rates		
Residential	7.00%	
Retail	7.50%	
Office	8.00%	



Madison Station 30 Dwelling Unit Scenario		
1	Acreage Acquired	5.81
2	Property Acquisition Cost	\$9,000,000
3	Demolition Cost	\$385,000
4	Relocation Costs	\$0
5	Site Work Cost	\$1,000,000
6	Multi-family Residential Units Developed	174
7	Multi-family Residential Development Costs	\$44,097,900
8	Townhouse Residential Units Developed	0
9	Townhouse Residential Development Costs	\$0
10	Retail Square Footage Developed	25,308
11	Retail Development Costs	\$3,163,545
12	Office Square Footage Developed	10,123
13	Office Development Costs	\$2,024,669
14	Lodging Square Footage Developed	0
15	Lodging Development Costs	\$0
16	Parking Spaces - Structured	324
17	Total Structured Parking Costs	\$6,483,402
18	Parking Spaces - Surface	0
19	Total Surface Parking Costs	\$0
20	Performance Venue Space Developed	0
21	Performance Venue Development Costs	\$0
22	Developer Fee	\$6,615,452
	Sub-Total Phase I Acquisition, Site, Demo & Infrastructure Costs	\$16,868,402
	Sub-Total Phase I Building Construction Costs (Hard and Soft Combined)	\$49,286,114
	Total Phase I Costs	\$72,769,968

Assumptions

- 1 Estimated
- 2 Represents an estimated acquisition cost
- 3 Estimated demolition and site clearance costs based on existing character and size of structures present.
- 4 No residential or business relocation costs are assumed.
- 5 Placeholder estimate based on limited site work improvements likely required , given the developed nature of the site.
- 6 Assumes a permitted dwelling unit density of 30 units per acre.
- 7 Based on estimated per square foot costs, inclusive of all vertical hard and soft costs, and finishes.
- 8 Assumes a permitted dwelling unit density of 30 units per acre.
- 9 Based on estimated per square foot costs, inclusive of all vertical hard and soft costs, and finishes.
- 10 Assumes a limited amount of convenience, specialty retail and allied health services
- 11 Based on estimated per square foot costs, inclusive of all vertical hard and soft costs, and finishes.
- 12 Assumes professional service office space (possibly medical office building space), four story low-rise.
- 13 Based on estimated per square foot costs, inclusive of all vertical hard and soft costs, and finishes.
- 14 Assumes small (less than 200 rooms), limited service, brand loading facility.



- 15 Based on estimated per square foot costs, inclusive of all vertical hard and soft costs, and finishes.
Based on an assumed parking ratio of 1.25 spaces/ dwelling unit and 3.0 spaces per 1,000 s.f. of commercial square
16 footage.
- 17 Assumes an estimated cost of \$20,000/ space, based on inquiries made with parking consultants and local area findings.
Based on an assumed parking ratio of 1.25 spaces/dwelling unit and 3.0 spaces per 1,000 s.f. of commercial square
18 footage.
- 19 Assumes an estimated cost of \$3,500/ space, based on inquiries made with parking consultants and local area findings.
- 20 Assumes an estimated cost of \$180 per square foot.

Source: 4ward Planning LLC, 2012

Madison Station 50 Dwelling Unit Scenario

1	Acreage Acquired	5.81
2	Property Acquisition Cost	\$9,000,000
3	Demolition Cost	\$385,000
4	Relocation Costs	\$0
5	Site Work Cost	\$1,000,000
6	Multi-family Residential Units Developed	291
7	Multi-family Residential Development Costs	\$73,496,500
8	Townhouse Residential Units Developed	0
9	Townhouse Residential Development Costs	\$0
10	Retail Square Footage Developed	25,308
11	Retail Development Costs	\$3,163,545
12	Office Square Footage Developed	10,123
13	Office Development Costs	\$2,024,669
14	Lodging Square Footage Developed	0
15	Lodging Development Costs	\$0
16	Parking Spaces - Structured	469
17	Total Structured Parking Costs	\$9,388,402
18	Parking Spaces - Surface	0
19	Total Surface Parking Costs	\$0
20	Performance Venue Space Developed	0
21	Performance Venue Development Costs	\$0
22	Developer Fee	\$9,845,812
	Sub-Total Phase I Acquisition, Site, Demo & Infrastructure Costs	\$19,773,402
	Sub-Total Phase I Building Construction Costs (Hard and Soft Combined)	\$78,684,714
	Total Phase I Costs	\$108,303,928

Assumptions

- 1 Estimated
- 2 Represents an estimated acquisition cost
- 3 Estimated demolition and site clearance costs based on existing character and size of structures present.
- 4 No residential or business relocation costs are assumed.
- 5 Placeholder estimate based on limited site work improvements likely required , given the developed nature of the site.



- 6 Assumes a permitted dwelling unit density of 50 units per acre.
- 7 Based on estimated per square foot costs, inclusive of all vertical hard and soft costs, and finishes.
- 8 Assumes a permitted dwelling unit density of 50 units per acre.
- 9 Based on estimated per square foot costs, inclusive of all vertical hard and soft costs, and finishes.
- 10 Assumes a limited amount of convenience, specialty retail and allied health services
- 11 Based on estimated per square foot costs, inclusive of all vertical hard and soft costs, and finishes.
- 12 Assumes professional service office space (possibly medical office building space), four story low-rise.
- 13 Based on estimated per square foot costs, inclusive of all vertical hard and soft costs, and finishes.
- 14 Assumes small (less than 200 rooms), limited service, brand loading facility.
- 15 Based on estimated per square foot costs, inclusive of all vertical hard and soft costs, and finishes.
- 16 Based on an assumed parking ratio of 1.25 spaces per dwelling unit and 3.0 spaces per 1,000 s.f. of commercial square footage.
- 17 Assumes an estimated cost of \$20,000 per space, based on inquiries made with parking consultants and local area findings.
- 18 Based on an assumed parking ratio of 1.25 spaces per dwelling unit and 3.0 spaces per 1,000 s.f. of commercial square footage.
- 19 Assumes an estimated cost of \$3,500 per space, based on inquiries made with parking consultants and local area findings.
- 20 Assumes an estimated cost of \$180 per square foot.

Source: 4ward Planning LLC, 2012

Convent Station 30 Dwelling Unit Scenario

Assumed Zoning Densities		
Retail Floor Area Ratio		SF
Office Floor Area Ratio		SF
Residential Dwelling Units per Acre	30.0	Acre

Acquisition, Demolition & Site Work		
Site Acquisition Cost		\$3,000,000
Demolition Costs per CF		\$7.00
Residential Buildings	0	\$0
Office Buildings	5,000	\$0
Retail Buildings	0	\$0
Public Buildings	0	\$0
Haz Mat Abatement:		\$0
Site Prep & Grading: Entire Site		\$500,000
Site Infrastructure Costs		8.00%

Residential: Multi-Family Rental		
Efficiency Rate	92%	
Avg. Unit Size	1,150	SF
Parking Spaces per Unit	1.25	spaces
Construction Costs: Low-Rise	\$185	per SF
Construction Costs: Mid-Rise	\$220	per SF
Average Rent per SF/Month	\$2.00	
Vacancy Rate: Rental	5.00%	
Operating Expenses per SF	\$3.00	per SF



NJ 124 Corridor Transit Access Improvement Study

Final Report

Retail: Ground Floor		
Efficiency Rate	90%	
Parking Spaces per 1,000 SF	3	spaces
Construction Costs: Shell	\$100	per SF
Construction Costs: Fit Out	\$25	per SF
Construction Costs: Shell + Fit Out	\$125	per SF
Rent per SF: Triple Net	\$25	per SF
Vacancy Rate: Retail	5.00%	
Operating Expenses per SF	\$4.00	per SF

Office: Class A		
Efficiency Rate	90%	
Parking Spaces per 1000 SF	3.00	spaces
Construction Costs: Inclusive of shell and fit-up	\$200	per SF
Rent per SF	\$25.00	
Vacancy Rate: Class A	5.00%	
Operating Expenses per SF	\$6.00	per SF

Parking		
SF per Space: Structured	400	SF
SF per Space: Surface	300	SF
Construction Costs: Structured	\$20,000	per space
Construction Costs: Surface, New	\$3,500	per space
Construction Costs: Surface, Existing	\$2,000	per space

Misc		
Sales Cost	5.00%	
Hold Period	15	years
Investment Return Goal: Unleveraged	8%	
Inflation Factor	2.20%	
Estimate of Annual Real Property Taxes	\$2.50	per SF

Cap Rates		
Residential	7.00%	
Retail	7.50%	
Office	8.00%	



Convent Station: 50 Dwelling Unit Scenario

Assumed Zoning Densities		
Retail Floor Area Ratio	1.0	SF
Office Floor Area Ratio	4.0	SF
Residential Dwelling Units per Acre	50.0	Acre

Acquisition, Demolition & Site Work		
Site Acquisition Cost		\$3,000,000
Demolition Costs per CF		\$7.00
Residential Buildings	0	\$0
Office Buildings	5,000	\$0
Retail Buildings	0	\$0
Public Buildings	0	\$0
Haz Mat Abatement:		\$0
Site Prep & Grading: Entire Site		\$500,000
Site Infrastructure Costs		8.00%

Residential: Multi-Family Rental		
Efficiency Rate	92%	
Avg. Unit Size	1,150	SF
Parking Spaces per Unit	1.25	spaces
Construction Costs: Low-Rise	\$185	per SF
Construction Costs: Mid-Rise	\$220	per SF
Average Rent per SF/Month	\$2.00	
Vacancy Rate: Rental	5.00%	
Operating Expenses per SF	\$3.00	per SF

Retail: Ground Floor		
Efficiency Rate	90%	
Parking Spaces per 1,000 SF	3	spaces
Construction Costs: Shell	\$100	per SF
Construction Costs: Fit Out	\$25	per SF
Construction Costs: Shell + Fit Out	\$125	per SF
Rent per SF: Triple Net	\$25	per SF
Vacancy Rate: Retail	5.00%	
Operating Expenses per SF	\$4.00	per SF

Office: Class A		
Efficiency Rate	90%	
Parking Spaces per 1000 SF	3.00	spaces
Construction Costs: Inclusive of shell and fit-up	\$200	per SF
Rent per SF	\$25.00	
Vacancy Rate: Class A	5.00%	
Operating Expenses per SF	\$6.00	per SF



NJ 124 Corridor Transit Access Improvement Study

Final Report

Parking		
SF per Space: Structured	400	SF
SF per Space: Surface	300	SF
Construction Costs: Structured	\$20,000	per space
Construction Costs: Surface, New	\$3,500	per space
Construction Costs: Surface, Existing	\$2,000	per space

Misc		
Sales Cost	5.00%	
Hold Period	15	years
Investment Return Goal: Unleveraged	8%	
Inflation Factor	2.20%	
Estimate of Annual Real Property Taxes	\$2.50	per SF

Cap Rates		
Residential	7.00%	
Retail	7.50%	
Office	8.00%	

Convent Station 30 Dwelling Unit Scenario

1	Acreage Acquired	6.45
2	Property Acquisition Cost	\$3,000,000
3	Demolition Cost	\$35,000
4	Relocation Costs	\$0
5	Site Work Cost	\$500,000
6	Multi-family Residential Units Developed	194
7	Multi-family Residential Development Costs	\$48,955,500
8	Townhouse Residential Units Developed	0
9	Townhouse Residential Development Costs	\$0
10	Retail Square Footage Developed	25,287
11	Retail Development Costs	\$3,160,823
12	Office Square Footage Developed	11,238
13	Office Development Costs	\$2,247,696
14	Lodging Square Footage Developed	0
15	Lodging Development Costs	\$0
16	Parking Spaces - Structured	351
17	Total Structured Parking Costs	\$7,029,004
18	Parking Spaces - Surface	0
19	Total Surface Parking Costs	\$0
20	Performance Venue Space Developed	0
21	Performance Venue Development Costs	\$0
22	Developer Fee	\$6,492,802
	Sub-Total Phase I Acquisition, Site, Demo & Infrastructure Costs	\$10,564,004



Sub-Total Phase I Building Construction Costs (Hard and Soft Combined)	\$54,364,019
Total Phase I Costs	\$71,420,824

Assumptions

- 1 Estimated
- 2 Represents an estimated acquisition cost
- 3 Estimated demolition and site clearance costs based on existing character and size of structures present.
- 4 No residential or business relocation costs are assumed.
- 5 Placeholder estimate based on limited site work improvements likely required , given the developed nature of the site.
- 6 Assumes a permitted dwelling unit density of 30 units per acre.
- 7 Based on estimated per square foot costs, inclusive of all vertical hard and soft costs, and finishes.
- 8 Assumes a permitted dwelling unit density of 30 units per acre.
- 9 Based on estimated per square foot costs, inclusive of all vertical hard and soft costs, and finishes.
- 10 Assumes a limited amount of convenience, specialty retail and allied health services
- 11 Based on estimated per square foot costs, inclusive of all vertical hard and soft costs, and finishes.
- 12 Assumes professional service office space (possibly medical office building space), four story low-rise.
- 13 Based on estimated per square foot costs, inclusive of all vertical hard and soft costs, and finishes.
- 14 Assumes small (less than 200 rooms), limited service, brand loading facility.
- 15 Based on estimated per square foot costs, inclusive of all vertical hard and soft costs, and finishes.
- 16 Based on an assumed parking ratio of 1.25 spaces/dwelling unit and 3.0 spaces per 1,000 s.f. of commercial square footage.
- 17 Assumes an estimated cost of \$20,000/ space, based on inquiries made with parking consultants and local area findings.
- 18 Based on an assumed parking ratio of 1.25 spaces/ dwelling unit and 3.0 spaces per 1,000 s.f. of commercial square footage.
- 19 Assumes an estimated cost of \$3,500/ space, based on inquiries made with sparking consultants and local area findings.
- 20 Assumes an estimated cost of \$180 per square foot.

Source: 4ward Planning LLC, 2012

Convent Station 50 Dwelling Unit Scenario

1 Acreage Acquired	6.45
2 Property Acquisition Cost	\$3,000,000
3 Demolition Cost	\$35,000
4 Relocation Costs	\$0
5 Site Work Cost	\$500,000
6 Multi-family Residential Units Developed	323
7 Multi-family Residential Development Costs	\$81,592,500
8 Townhouse Residential Units Developed	0
9 Townhouse Residential Development Costs	\$0
10 Retail Square Footage Developed	25,287
11 Retail Development Costs	\$3,160,823
12 Office Square Footage Developed	11,238
13 Office Development Costs	\$2,247,696
14 Lodging Square Footage Developed	0
15 Lodging Development Costs	\$0
16 Parking Spaces - Structured	513



NJ 124 Corridor Transit Access Improvement Study

Final Report

17	Total Structured Parking Costs	\$10,254,004
18	Parking Spaces - Surface	0
19	Total Surface Parking Costs	\$0
20	Performance Venue Space Developed	0
21	Performance Venue Development Costs	\$0
22	Developer Fee	\$10,079,002
	Sub-Total Phase I Acquisition, Site, Demo & Infrastructure Costs	\$13,789,004
	Sub-Total Phase I Building Construction Costs (Hard and Soft Combined)	\$87,001,019
	Total Phase I Costs	\$110,869,024

Assumptions

- 1 Estimated
 - 2 Represents an estimated acquisition cost
 - 3 Estimated demolition and site clearance costs based on existing character and size of structures present.
 - 4 No residential or business relocation costs are assumed.
 - 5 Placeholder estimate based on limited site work improvements likely required, given the developed nature of the site.
 - 6 Assumes a permitted dwelling unit density of 50 units per acre.
 - 7 Based on estimated per square foot costs, inclusive of all vertical hard and soft costs, and finishes.
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 - 17 Assumes an estimated cost of \$20,000 per space, based on inquiries made with parking consultants and local area findings.
 - 18 Based on an assumed parking ratio of 1.25 spaces/ dwelling unit and 3.0 spaces per 1,000 s.f. of commercial square footage.
 - 19 Assumes an estimated cost of \$3,500/ space, based on inquiries made with parking consultants and local area findings.
 - 20 Assumes an estimated cost of \$180 per square foot.
- Source: 4ward Planning LLC, 2012



NJ 124 Corridor Transit Access Improvement Study

Final Report

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Appendix D:

Glossary of Terms

(Regional Market Analysis)



GLOSSARY OF TERMS

Household Population: Household population excludes all persons living within dormitories, health facilities (convalescent facilities, long-term healthcare centers), and incarceration/ detention facilities (e.g., prisons, county jails, and youth detention centers).

Family: A family is a group of two or more people (one of whom is the householder) related by birth, marriage, or adoption and residing together; all such people are considered as members of one family. The number of families is equal to the number of family households; however, the count of family members differ from the count of family household members because family household members include any non-relatives living in the household.

Non-Family: A non-family household consists of a householder living alone (a one-person household) or where the householder shares the home exclusively with people to whom he/ she is not related. Does not include students living in campus housing.

Household: A household consists of all the people who occupy a housing unit. A house, an apartment, another group of rooms, or a single room, is regarded as a housing unit when it is occupied or intended for occupancy as separate living quarters. The count of households excludes group quarters and institutions.

Primary Market Area (PMA): For purposes of this analysis, the PMA takes in a 7.5 mile radial area (an approximate 15 minute drive contour) around each station area examined, and is assumed to encompass 70 percent of likely commuter rail patrons for that given station.

Secondary Market Area (SMA): For purposes of this analysis, the SMA represents the area falling immediately outside of the PMA (7.5 mile radial area) but within a 15 mile radial area. It is assumed to approximate nearly 30 percent of likely commuter rail patrons for that given station