Final Report

Prepared for

Morris County Department of Planning & Development
Division of Transportation
P.O. Box 900
Morristown, NJ 07963-0900

North Jersey Transportation Planning Authority
One Newark Center, 17th Floor
Newark, NJ 07102

Prepared by

Vanasse Hangen Brustlin, Inc.
One Gateway Center, 15th Floor
Newark, NJ 07102

In association with

4WARD PLANNING

NJ 124 Corridor
Transit Access Improvement Study

June 2013

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The *NJ 124 Corridor Transit Access Improvement Study* was conducted under the leadership of the 2013 Morris County Board of Chosen Freeholders.

Thomas J. Mastrangelo, Director
David Scapicchio, Deputy Director
Douglas R. Cabana
John Cesaro
Ann F. Grossi
John Krickus
Hank Lyon

About the MCDOT

The Morris County Division of Transportation (MCDOT) is part of the Morris County Department of Planning & Development.

MCDOT serves the county through regional transportation planning, implementation, and coordination of various modes of transportation. The Division secures federal and state funds for road, bridge, railroad, bicycle, and pedestrian projects. The Division conducts studies and coordinates planning efforts with state agencies, municipalities, county departments, and the North Jersey Transportation Planning Authority. Two Freeholder appointed boards, the Morris County Board of Transportation and the Morris County Freight Rail Advisory Committee, advise the Division on its activities. MCDOT directs efforts toward the best use of transportation resources to benefit the region.

For transportation information in Morris County and beyond, visit www.MorrisDOT.org.

This report has been prepared as part of the North Jersey Transportation Planning Authority's Subregional Studies Program with financing by the Federal Transit Administration and the Federal Highway Administration of the U.S. Department of Transportation. This document is disseminated under the sponsorship of the U.S. Department of Transportation in the interest of information exchange. The United States Government assumes no liability for its contents or its use thereof.

NJTPA

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Executive Summary

Background

The NJ 124 Transit Access Improvement Study is a 14-month comprehensive analysis of the current utilization and accessibility of three commuter rail stations – Chatham, Madison, and Convent – along the Morristown branch of NJ TRANSIT's Morris & Essex Line within the NJ 124 corridor. This study was funded through the North Jersey Transportation Planning Authority's Subregional Studies Program. The project study area, depicted in Figure ES-1, encompasses six municipalities along NJ 124 including Chatham Borough, Madison Borough, Morris Township, Chatham Township, Florham Park Borough and Harding Township. Chatham Borough, Madison Borough and Morris Township are the host communities for the three rail stations studied in this report. This report examines existing and future transportation conditions in the study area. The potential for properties within the three station areas to redevelop as denser, mixed use residential and commercial land uses (also known as transit-oriented development or TOD) is also studied in this report. Policy and infrastructure recommendations to improve station access for all transportation modes and all users to meet future transit ridership demand are provided.

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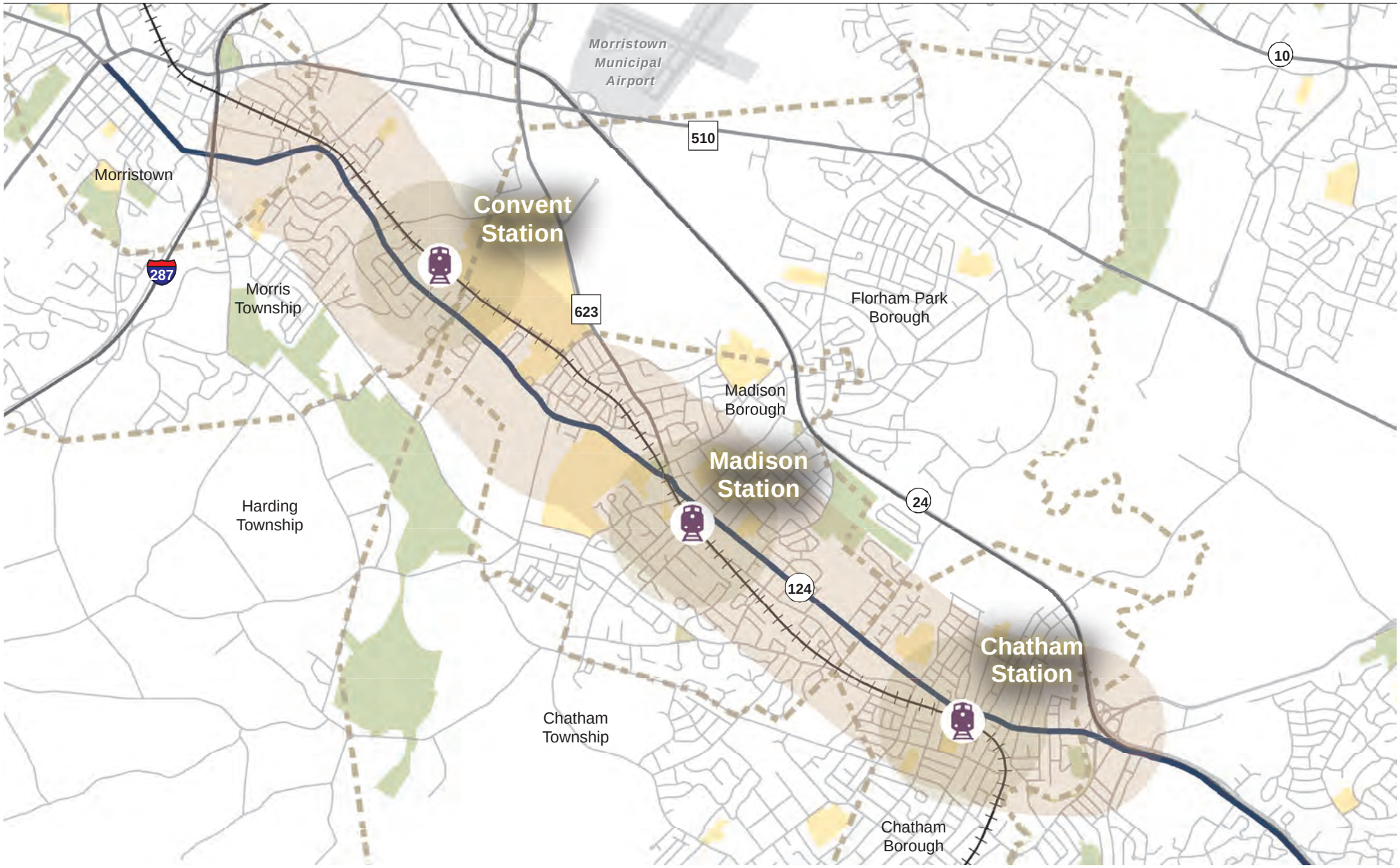


Morris County NJ 124
Transit Access Study

NJ 124 Study Corridor

FIGURE **ES-1**

This report will help the study area's state, regional, county and municipal partners to make informed recommendations as they work to maintain the value of the NJ 124 corridor for years to come.

The NJ 124 Transit Access Improvement Study included a series of Technical Memorandums that informed the findings of this final report. These Technical Memos are detailed below:

- *Literature Search and Review Technical Memo* includes a review of previously prepared reports and studies in the study area that included analysis and recommendations of highway transportation, station parking, bicycle and pedestrian infrastructure, roadway and transit safety, transit infrastructure and operations, and planning and operations data.

- *Stakeholder Interviews and Open House Survey Findings Technical Memo* summarizes the stakeholder interviews and the public open house event that were held as part of the public outreach program for the study.

- *Web Survey Results Technical Memo* presents commute and demographic data of rail riders and non-rail riders from the study area that were collected through a project-specific online survey.

- *ScoreCard Survey Results Technical Memo* presents ridership and commuting characteristics of rail riders using Chatham, Madison, or Convent Stations that were collected by NJ TRANSIT as part of their regular ScoreCard survey efforts.

- *Zoning, Land Use and Market Analysis Technical Memo* investigates study area demographic and land use factors that affect station access.

- *Current and Future Station Access Demand Analysis Technical Memo* provides an analysis of existing and projected rail line patronage for the three stations, enabling an assessment of future access needs. Study area bus patronage is also presented.

- *Parking Capacity Utilization by Station Technical Memo* summarizes the results of a parking utilization and duration study that was conducted at each of the study area rail stations.

- *Access by All Modes Evaluation Technical Memo* evaluates existing and potential station access conditions including transit infrastructure and service, roadway infrastructure and automobile access, bicycle and pedestrian infrastructure and access, and safety analysis.

- *Objectives and Recommendations Technical Memo* recommends strategies and improvements to address the infrastructure, land use, transit service, and other study area station access gaps that were identified previously.

Technical Advisory Committee

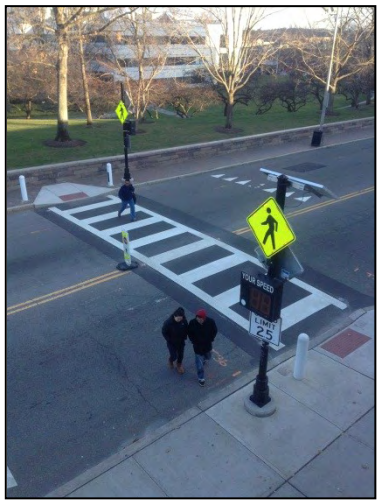
The Technical Advisory Committee for this study included representatives of the following agencies and organizations:

- Chatham Borough
- Chatham Township
- Florham Park Borough
- Harding Township
- Madison Borough
- Morris Township
- Morris County Division of Engineering
- Morris County Division of Transportation
- New Jersey Department of Transportation
- North Jersey Transportation Planning Authority
- NJ TRANSIT
- TransOptions, Inc.

Key Findings

- The roadways (especially NJ 124) that are used to access the study area rail stations are congested due to geometric constraints, multi-modal usage, parking maneuvers, roadway striping and intersection controls (traffic signals and stop signs).

- Pedestrian and bicycle accessibility to the stations are secondary to automobile traffic. Improvements to the existing pedestrian and bicycle infrastructure could improve the safety, efficiency, and reliability of access by these modes to the NJ TRANSIT stations in the study area. These improvements could result in more commuters accessing the stations without an automobile.



- Drivers typically arrive early on weekday mornings and park for extended periods of time at all three stations. The average parking duration observed in the study corridor exceeds ten hours at nearly all of the commuter lots. There is little opportunity for parking spaces to be reused during the typical weekday.

- Parking at Chatham and Madison Stations is very close to capacity; however, Convent Station has some excess parking capacity in its various lots. Both permit and daily spaces are close to capacity, which results in limited ability to adjust parking policies to improve parking utilization at the stations.

- The existing bus service in the corridor cannot be consistently used to access the eastbound train in the morning (and vice versa in the evening) at the three stations. At Madison and Convent Stations the existing bus service meets westbound trains in the morning (and vice versa in the evening), which allows for commuters to travel the "last mile" from the train stations to the study area's businesses and corporate parks.

- There are underutilized properties adjacent to all three train stations. Convent and Madison Stations have the highest potential for properties in the station area to re-develop in a transit-supportive manner (increased density and with mixed land uses).

- Commuters indicated that they would take the train more if access to the stations were improved.

Key Recommendations

A number of infrastructure improvements are documented in the final study report. These recommendations are based on analysis of existing transportation land use conditions as well as stakeholder and public feedback.

Corridor-wide suggestions include:

- Bicycle and pedestrian route mapping;
- Improved distribution of information about how to use and access the train stations including bicycle and pedestrian maps at stations and parking maps; and
- Improved bicycle lane markings and pedestrian access maintenance.

More localized station-area suggestions include:

- Roadway and intersection improvements;
- Road safety improvements such as signage and striping;
- Bicycle and pedestrian infrastructure improvements such as mid-block pedestrian crossings and added bicycle lockers;
- Parking facility expansions; and
- Implementation of shuttle bus routes.

Policies fostering transit-oriented development and encouraging alternatives to driving such as biking, walking, carpooling and drop-offs (kiss and ride) are also recommended in order to improve access throughout the NJ 124 Corridor.

Table ES-1 lists the study recommendations. The implementation of the recommendations will require the commitment and coordination of all of the stakeholders (Technical Advisory Committee members) in the study area, the dedication of existing funding sources, and the identification of new funding sources (including potential partnerships with the private sector).

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Table ES-1 - Summary of Recommended Improvements

Map Number	Improvement ID	Improvement	Specific Location	Associated NJ TRANSIT Station	Area of Improvement					Implementation Period	Cost
					Roadway	Parking	Bike/Ped	Safety	Transit	Short - <1 Year	Low - <$25,000 per item
										Medium - <3 Years	Medium $25,000 - $100,000 per item
										Long ->3 Years	Above $100,000 per item
N/A		Improve mapping for all modes			X	X	X		X	Short	Low
N/A		Enhance on-line information			X	X	X		X	Medium	Medium
N/A		Create Preferential parking strategies (carpools etc)				X			X	Medium	Medium
N/A		Create Transit information packages for colleges and universities							X	Short	Low
N/A		Consolidate NJ TRANSIT fare zones							X	Medium	Medium
N/A		Conduct Operation Lifesaver training at area universities and Convent station							X	Short	Low
N/A		Improve train station pedestrian access maintenance (snow removal, other maintenance issues)					X		X	Short	Low
N/A		Adopt a complete streets policy (Borough of Madison & Morris Township)			X	x	X	X	x	Short	Low
N/A		Create a bicycle sharing program with coordinated bicycle maintenance					X			Medium	Medium
N/A		Install enhanced wayfinding and bicycle route signage					X			Short	Low
N/A		Make signage and markings for pedestrians and bicyclists at all three stations consistent with MUTCD and AASHTO Bicycle Guide			X		X	X		Short	Low
N/A		Stripe advanced stop bars eight to ten feet from crosswalks in pedestrianized areas.		Corridor-Wide	X		X	X		Short	Low
N/A		Create bicycle markings and signage along the shoulders of NJ 124		Chatham Station			X			Medium	Low
N/A		Restripe all other bike routes and stencils that are faded and barely visible in Madison	Multiple Locations	Madison Station			X			Short	Low
N/A		Develop a bicycle master plan	Chatham Borough				X			Medium	Medium
Ch - 1	a	Restripe the eastbound and westbound approaches			X					Short	Low
	b	Modify the signal timing	NJ 124 & Hillside Ave.		X						
Ch - 2	a	Provide Signal Timing offsets to coordinate traffic signals	NJ 124 in Chatham		X					Short	Medium
Ch - 3	a	Restripe the eastbound and westbound approaches			X					Short	Low
	b	Modify the signal timing			X						
	c	Install signage to increase the “no turn on red restrictions”			X		X	X			
	d	Remove “State Law: stop for pedestrians in crosswalk sign”			X		X	X			
	e	Install “Turning Vehicles Yield to Pedestrians” sign			X		X	X			
	f	Install advanced pedestrian or school crosswalk signage on all approaches of the intersection			X		X	X			
	g	Install “Share the Road” bicycle signs	NJ 124 & Passaic Ave.		X		X				
Ch-4	a	Add a pedestrian crosswalk	NJ 124 & Washington Ave.				X			Short	Low
Ch-5	a	Restripe the westbound approach of the intersection			X					Short	Low
	b	Modify the signal timing			X						
	c	Install signage to increase the “No Turn on Red” restrictions to all hours and days and add this restriction to westbound and southbound approaches of the intersection			X		X	X			
	d	Remove “State Law: stop for pedestrians in crosswalk sign”			X			X			
	e	Install “Turning Vehicles Yield to Pedestrians” sign			X			X			
	f	Install “Share the Road” bicycle signs	NJ 124 & Fairmount Ave.		X		X				
Ch-6	a	Conduct a signal warrant study at this interesection, if signal is not warranted, repair pedestrian warning flashers and install “State Law: Stop for Pedestrians in Crosswalk” signage	NJ 124 & Coleman Ave./Railroad Plaza North		X		X	X		Short	Low
Ch-7	a	Conduct a signal warrant study	Fairmount Ave and Station Driveway	Chatham Station	X					Short	Low

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										Long ->3 Years	Above $100,000 per item
	a	Install a “No Turn on Red” sign			X		X	X		Short	Low
	b	Remove "Stop for pedestrians in crosswalk sign" and replace with "Turning Vehicles Yield to Pedestrians"			X		X	X			
Ch-8	c	Install a "Share the Road" sign at this intersection	Lafayette and Van Doren Avenues		X		X	X			
	a	Replace “Stop for Pedestrians in Crosswalk” sign with “Turning Vehicles Yield to Pedestrians”			X		X	X		Short	Low
	b	Install “Share the Road” bicycle signage on all approaches of the intersection			X		X	X			
	c	Install new crosswalks on north and south legs of the intersection			X		X				
Ch-9	d	Install "State Law: Stop for Pedestrians in Crosswalk" at intersection	Fairmount Ave and Watchung Ave		X		X				
Ch - 10	a	Install ped ramps on the north and south legs of the intersection	Fairmount Ave and Watchung Ave		X		X			Medium	Medium
Ch - 11	a	Install shared lane markings/sharrows	Fairmount Ave and Red Road		X		X			Short	Low
Ch - 12	a	Install a street-light	Fairmount Ave and Red Road		X		X			Medium	Medium
	a	Install a crosswalk at the south leg of the intersection			X		X	X		Short	Low
	b	Install an advanced pedestrian or school crosswalk signal on all approaches of the intersection			X		X	X			
	c	Install an advanced pedestrian or school crosswalk signal on all approaches of the intersection			X		X	X			
Ch - 13	d	Install shared lane markings/sharrows or parking lane stripes	Fairmount Avenue and 2nd Street		X		X	X			
Ch - 14	a	Install pedestrian ramps at all four corners of the intersection	Fairmount Avenue and 2nd Street				X	X		Medium	Medium
	a	Repair the speed feedback sign			X			X			
Ch - 15	b	Install shared lane markings/sharrows	North Passaic Avenue and Weston Avenue		X		X			Short	Low
Ch - 16	a	Implementation of the Morris County bike map, which includes Fairmount and Watchung Avenues as shared facilities and NJ 124 as a bicycle route	Fairmount and Watchung Avenues				X			Medium	Medium
Ch - 17	a	Develop bicycle facilities	Kings Road and Woodland Road				X			Medium	Medium
Ch - 18	a	Monitor bike facilities to ensure adequate supply	Chatham Station				X			Short	Low
Ch - 19	a	Create a pedestrian and bicycle connection across the sports field south of the station to the driveway to connect to Lum Avenue	Chatham Station				X		X	Medium	Medium
Ch - 20	a	Add coordinated pedestrian signal and lighted crosswalks under the railroad trestle	Various Locations				X			Medium	Medium
Ch - 21	a	Install two additional electronic pay parking stations	Chatham Station Parking Lot			X				Medium	Medium
Ch - 22	a	Provide additional signage to highlight commuter parking availability at nearby municipal lots for Chatham permit holders	Chatham Station Parking Lot			X				Short	Low
Ch - 23	a	Create a new parking lot adjacent to Lot 1 on the site of the athletic field	Chatham Station Parking Lot			X				Long	High
Ch - 24	a	Construct a three-level parking structure on the site of existing lot 1	Chatham Station Parking Lot			X				Long	High
Ch - 25	a	Create two shuttle bus routes at Chatham Station, serving the northern and southern part of the town	Various Locations	Chatham Station					X	Medium	High
	a	Restripe the eastbound and westbound approaches of the intersection			X						
	b	Modify the intersection signal timing			X						
	c	Install pedestrian signals or school crosswalk			X		X	X			
	d	Install “Turning Vehicles Yield to Pedestrians” and "No Turn on Red" at all approaches			X		X	X			
Ma - 1	e	Install “Share the Road” signage on all approaches of the intersection	NJ 124 and Rosedale Avenue/Cross Street	Madison Station	X		X	X		Short	Low

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	a	Create eastbound and westbound turn lanes			X						
	b	Add southbound left turn signal phase			X						
Ma - 2	c	Add signal actuation for left-turn movements with pedestrian projection	NJ 124 and Greenwood Avenue/Prospect Street		X					Short	Low
Ma - 3	a	Add pedestrian crosswalk and signal across NJ 124	NJ 124 between Greenwood Avenue and Waverly Place		X		X	X		Medium	Medium
	a	Create eastbound and westbound turn lanes			X						
	d	Install “Turning Vehicles Yield to Pedestrians” and advanced pedestrian signage at all approaches of the intersection			X		X	X			
Ma - 4	e	Install “Share the Road” signage at all approaches of the intersection	NJ 124 and Central Avenue/Waverly Place		X		X	X		Short	Low
Ma - 5	a	Add mid-block pedestrian crossing including crosswalk and signage	NJ 124 between Waverly Place/Central Avenue and Green Village Road		X		X	X		Medium	Medium
Ma - 6	a	Add signal actuation for left turn movements with pedestrian protection at intersection	NJ 124 and Central Avenue/Waverly Place		X					Medium	Medium
Ma - 7	a	Modify the intersection signal timing	NJ 124 and Park Avenue		X					Short	Low
	a	Modify the intersection signal timing			X						
	b	Install a west crosswalk advanced pedestrian or school crosswalks and “Turning Vehicles Yield to Pedestrians” signage on all approaches of the intersection			X		X	X			
Ma - 8	c	Install “No turn on red” restrictions on eastbound and northbound approaches of the intersection	NJ 124 and Kings Road		X		X	X		Short	Low
	a	Install pedestrian signals and ramps on all approaches of the intersection									
Ma - 9	b	Extend the bike lanes on NJ 124 through the intersection of the intersection	NJ 124 and Kings Road				X			Medium	Medium
	a	Install crosswalks on the east and west legs with advanced pedestrian or school crosswalk signage on all approaches of the intersection			X		X	X			
Ma - 10	b	Install “State Law: Stop for Pedestrians in Crosswalk”	NJ 124 and Alexander Avenue		X		X	X		Short	Low
	a	Install bike lanes			X		X			Medium	Medium
Ma - 11	b	Install pedestrian signals and ramps on all approaches of the intersection	NJ 124 and Alexander Avenue		X		X			Medium	Medium
	a	Install a north crosswalk			X		X	X			
	b	Install an advanced school crosswalk sign			X		X	X			
	c	Install a “State Law: Stop for Pedestrians in Crosswalk” on the southbound approach			X		X	X			
Ma - 12	d	Install a “share the Road” sign on all approaches of the intersection	Central Avenue and Brittin Street		X		X	X		Short	Low
	a	Install a north crosswalk	Greenwood Avenue and Brittin Street		X		X	X		Short	Low
Ma - 13	b	Remove bike lane markings and install “Share the Road” signs or sharrows. On Street parking should also be prohibited.	Greenwood Avenue and Brittin Street		X		X	X		Short	Low
Ma - 14	a	Install pedestrian ramps on the north side								Medium	Medium
Ma - 15	a	Relocate the share the road sign to improve its visibility	Greenwood Avenue north of NJ 124				X	X		Short	Low
Ma - 16	a	Install a bicycle actuated signal	Danforth Road and NJ 124				X			Medium	Medium
	a	Remove the “State Law: Stop for Pedestrians in Crosswalk” sign and replace with “Turning Vehicles Yield to Pedestrians in Crosswalk”					X	X			
	b	Implement “No Turn on Red” restrictions on the northbound, southbound, and westbound approaches of the intersection			X		X	X			
	c	Install a “Share the Road” sign at all approaches of the intersection			X		X	X			
Ma -17	d	Install advanced pedestrian or school crosswalk on all approaches	Kings Road and Waverly Place	Madison Station	X		X	X		Short	Low

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	a	Install streetlights at the north, east and west crosswalks	Kings Road and Waverly Place				X			Medium	Medium
Ma - 18	b	Install a west pedestrian ramp	Kings Road and Maple Avenue				X			Medium	Medium
	a	Install a west crosswalk			X		X	X			
	b	Install a “State Law: Stop for Pedestrians in Crosswalk”			X		X	X			
Ma - 19	c	Move the pedestrian crossing across Kings Road to improve connectivity	Kings Road and Maple Avenue		X		X			Short	Low
	a	Remove “Yield to Pedestrians in Crosswalk”			X		X	X			
	b	Install a west crosswalk			X		X				
	c	Install “Turning Vehicles Yield to Pedestrians”			X		X	X			
	d	Install advanced pedestrian or school crosswalk signage			X		X	X			
	e	Add “No Turn on Red” restrictions on all approaches			X		X	X			
Ma - 20	f	Install “Share the Road” signs on all approaches	Park Avenue and Ridgedale Avenue		X		X	X		Short	Low
Ma - 21	a	Install west pedestrian ramps and signals	Park Avenue and Ridgedale Avenue		X		X			Medium	Medium
Ma - 22	a	Install crosswalks, and advanced pedestrian signage on all approaches	Park Avenue and Kinney Street		X		X	X		Short	Low
Ma - 23	a	Install pedestrian ramps on all approaches	Park Avenue and Kinney Street		X		X			Medium	Medium
Ma - 24	a	Extend existing bike routes on Kings Road, Green Village Road, Green Avenue, Prospect Street, Central Avenue, and Greenwood Avenue to the NJ Transit Station	Multiple Locations				X			Medium	Medium
	a	Replace bike markings east of downtown	NJ 124				X				
Ma - 25	b	Restripe all bike stencils and install “Share the Road” signs west of downtown	NJ 124				X			Short	Low
Ma - 26	a	Extend the Traction Line recreation trail to Madison	Multiple Locations				X			Long	High
Ma - 27	a	Improve pedestrian lighting on NJ 124 between Madison Station and Drew University	Multiple Locations				X	X		Medium	Medium
	a	Reduce Speed Limit to 25 MPH						X			
	b	Install advance pedestrian or school crosswalk signage on all approaches			X		X				
	c	Add: "State Law: Stop for Pedestrians in Crosswalk" signage			X		X				
Ma - 28	d	Install "Share the Road signage on all approaches	Central Avenue and Elmer Street/Cook Avenue		X		X			Short	Low
Ma - 29	a	Relocate the station bicycle lockers from their remote location	Madison Station				X			Short	Low
	a	Improve the pedestrian experience along Kings Road from the parking lot, including wider sidewalks and additional pedestrian lighting	Madison Station				X				
Ma - 30	b	Install three to four electronic pay parking stations at Lot 3	Madison Station			X				Medium	Medium
	a	Construct a multi-level parking facility on the site of existing Lot 3	Madison Station			X					
Ma - 31	b	Create a formal kiss-and-ride location on the eastbound side of the station	Madison Station			X				Long	High
Ma - 32	a	Create four shuttle bus route serving Madison Station	Various Locations	Madison Station				X		Medium	High

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	a	Modify the intersection signal timing	NJ 124 and Convent Road		X						
Co - 1	b	Correct and clarify the mismatched sidewalks and crosswalks	NJ 124 and Convent Road		X		X	X		Short	Low
Co - 2	a	Install new pedestrian signals with countdown timers	NJ 124 and Convent Road		X					Medium	Medium
	a	Conduct a signal warrant study and safety assessment			X						
	b	Assess the effect of restricting left turns from westbound Old Turnpike Road to southbound Punch Bowl Road			X						
	c	Relocate the existing south crosswalk to the intersection			X		X				
Co - 3	d	Install bike lanes or “Share the Road” signage	Old Turnpike Road and Punch Bowl Road		X		X	X		Short	Low
Co - 4	a	Install new traffic signal, realign the northbound approach, and reconstruct the bus turnouts	NJ 124 and Punch Bowl Road		X				X	Long	High
Co - 5	a	Install a pedestrian ramp on the south leg of the southwest corner and install crosswalk	Old Turnpike Road and Punch Bowl Road		X		X	X		Medium	Medium
	a	Install sidewalk on the east side of the south and north legs, on the west side of the north leg, and on the north and south sides of the west leg of the intersection			X		X	X			
	b	Install pedestrian ramps on all approaches			X		X	X			
Co - 6	c	Install sidewalks and other pedestrian amenities	Old Turnpike Road and Convent Road				X			Medium	Medium
	a	Install crosswalks on all four legs			X		X	X			
	b	Install advanced pedestrian signage on all approaches									
	c	Place the eastbound approach under stop control			X			X			
Co - 7	d	Install “Share the Road” signs on all approaches	Old Turnpike Road and Convent Road		X		X	X		Short	Low
Co - 8	a	Extend the bike lane beyond the border of Madison Borough and Morris Township	NJ 124				X			Medium	Medium
Co - 9	a	Create a bike route between the Traction Line Recreation Trail and NJ 124	Convent Road				X			Medium	Medium
Co - 10	a	Implement a bike connection from NJ 124 to Woodlawn Avenue and the Loantaka Reservation	Various Locations				X			Medium	Medium
Co - 11	a	Install bike markings and signage	Old Turnpike Road				X			Short	Low
Co - 12	a	Install a bike route and sidewalks	Punchbowl Road				X			Long	High
Co - 13	a	Provide a direct connection between Convent Station and Park Avenue through the College of St. Elizabeth	Various Locations				X			Long	High
Co - 14	a	Restripe the bike stencils south of Convent Station	Woodlawn Avenue				X			Short	Low
Co - 15	a	Eliminate the stairs along the trail	Traction Line Recreation Trail and Normandy Parkway				X			Medium	Medium
Co - 16	a	Add additional bike lockers	Convent Station				X			Short	Low
Co - 17	a	Create an additional bike/ped connection	Traction Line Recreation Trail and Pilgrim Court/Constitution Way	Convent Station			X			Medium	Medium

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Co - 18	b	Improve lighting between the station and the Fairleigh Dickinson campus	Convent Station				X			Medium	Medium
	a	Connect the two segments of the sidewalk at the west end of the parking lot.	Convent Station				X				
Co - 19	b	Review and simplify parking regulations	Convent Station			X				Short	Low
Co - 20	a	Conduct a review of resident and non-resident waiting lists to possibly re-allocate spaces	Convent Station			X				Medium	Medium
Co - 21	a	Construct a multi-level parking structure on the site of Lot 1	Convent Station			X				Long	High
Co - 22	a	Create two shuttle bus routes at Convent Station, serving the northern and southern part of the town	Various Locations	Convent Station					X	Medium	High

1

Introduction

NJ 124 is a state roadway that enables east-west travel and is the primary access route that connects the communities of Chatham Borough, Madison Borough, and Morris Township in southeastern Morris County. While the parallel NJ 24 provides limited highway access for through trips, NJ 124 traverses the downtown business districts of the three municipalities. Adjacent municipalities, including Florham Park Borough, Harding Township, and Chatham Township also rely upon NJ 124 for local connectivity. Chatham Borough, Madison Borough, and Morris Township surround NJ 124 and comprise this project's study area (Figure 1-1). However, mobility to or through these municipalities from Florham Park, Harding, and Chatham Township was also considered. With street-side parking, high pedestrian activity, multiple traffic signals, and an intersecting but disjointed street network, NJ 124 in the study area is best described as congested. This results in travel delays for all modes that use the corridor.

Paralleling NJ 124 is the Morristown Branch of NJ TRANSIT's Morris & Essex (M&E) commuter rail line. The M&E provides passenger train service from Hackettstown to New York Penn Station and Hoboken Terminal. Three stations directly serve the NJ 124 communities as follows:

- Chatham Station (Chatham Borough)
- Madison Station (Madison Borough)
- Convent Station (Morris Township)

Commuters access these stations via automobile (permit or daily parking), drop off (kiss and ride), walking, or bicycling. Parking at Madison and Chatham Stations is currently and has historically been close to capacity; Convent Station currently has some parking vacancy in certain lots. This condition along with the congestion on NJ 124 has prompted the need to study future methods to enhance multimodal accessibility and meet future demand at the three stations while improving the study area's overall mobility.

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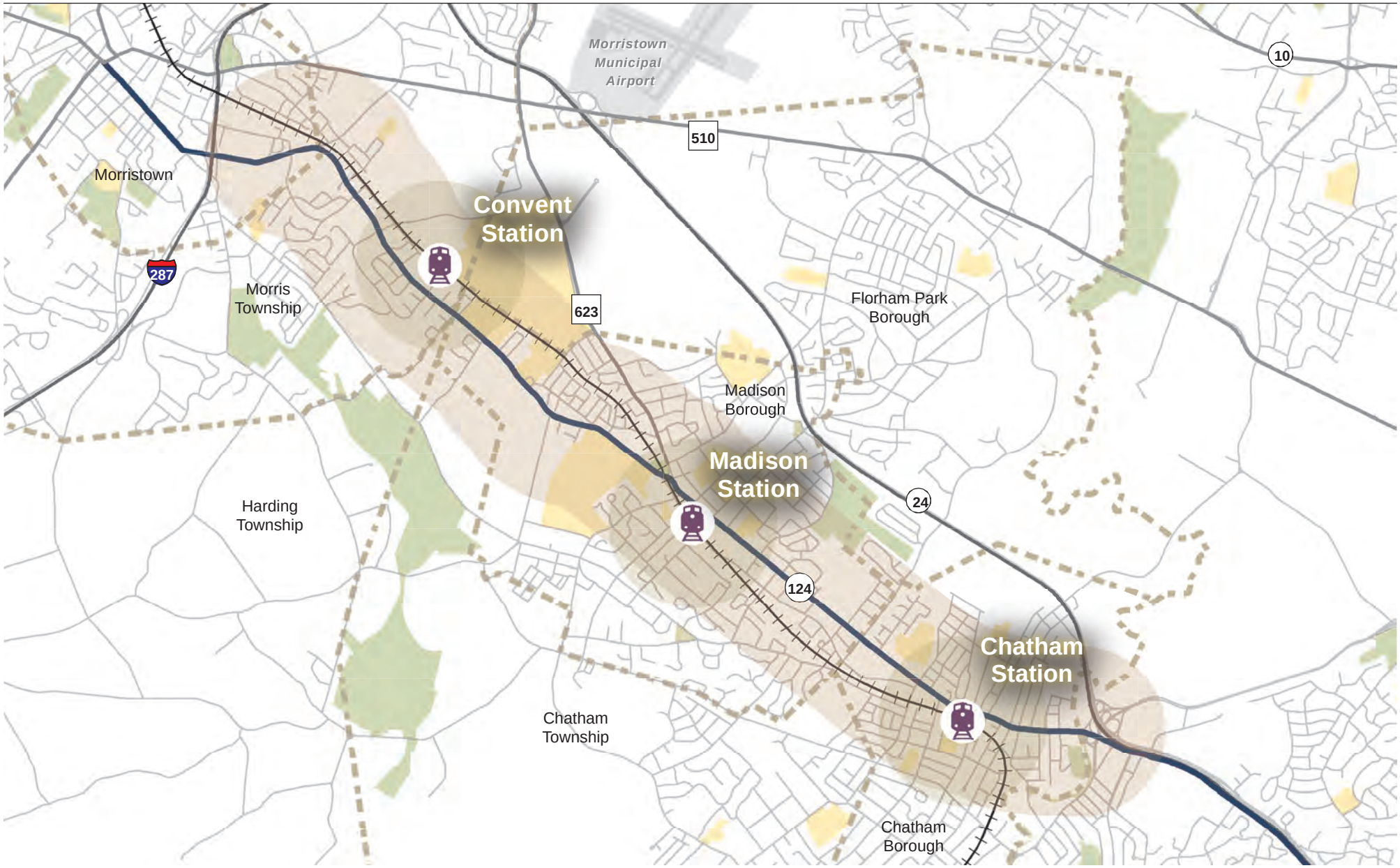

Morris County NJ 124
Transit Access Study

NJ 124 Study Corridor

FIGURE **1-1**

The goal of this study was to determine the most effective and acceptable course of action to improve access to train stations in southeast Morris County for all users of all ages and abilities, including transit dependent populations.

Data collection and technical analyses that are described in Chapters 2 and 3 of this report led to the development of recommendations to improve mobility in the study area and accessibility to the train stations. Recommendations for roadway (and parking), pedestrian, bicycle and transit access are included as well as recommendations related to potential land use modifications. Overarching recommendations include improving the availability and completeness of information regarding station access and measures to increase corridor safety are also included.

This study was completed through the guidance of a Technical Advisory Committee that included representation from the Morris County Division of Transportation, Morris County Division of Engineering, the North Jersey Transportation Planning Authority (NJTPA), NJ TRANSIT, the NJ Department of Transportation, TransOptions and representatives from each of the study area municipalities (Chatham Borough, Madison Borough, Morris Township, Chatham Township, Harding Township, and Florham Park Borough). Details of the stakeholder and public engagement can be found in Chapter 4. Public engagement through a variety of outreach opportunities further informed this study and the recommendations included in Chapter 5.