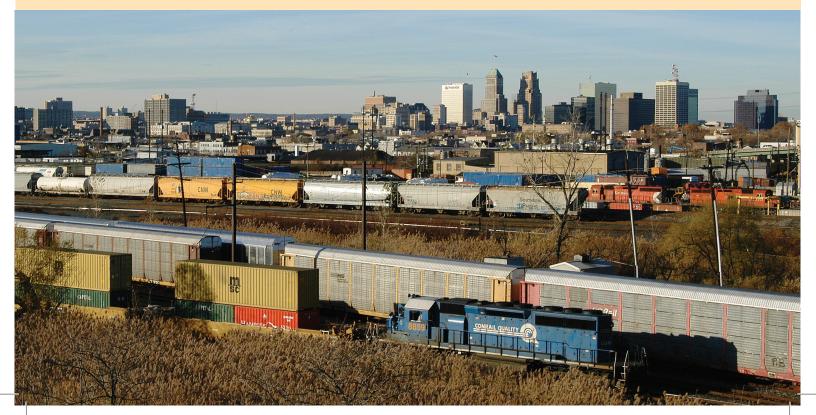


# RAIL FREIGHT CAPACITY AND NEEDS ASSESSMENT TO THE YEAR 2040

# Final Report | March 2013

Prepared by HDR Engineering, Inc. in association with Cheng Solutions, LLC., Egan Consulting Group and Northeast Logistics Systems



Disclaimer

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# SECTION 1. INTRODUCTION AND OVERVIEW

Freight issues are extremely important in the North Jersey Transportation Planning Authority (NJTPA) planning Region, which includes thirteen counties in Northern New Jersey and the major cities of Newark and Jersey City. The Region hosts: the Port of New York and New Jersey, one of the nation's top three ports on the basis of tonnage and containers; heavily-used local, regional, and interstate truck corridors and crossings; significant national and international air cargo facilities; heavy concentrations of intermodal and non-intermodal rail activity and hundreds of millions of square feet of warehouse/distribution space. In addition it is home to the northern most and 2<sup>rd</sup> largest refinery on the East Coast and the major terminus for two major product pipelines from the U.S. Gulf. These freight networks and facilities are essential to the economic and transportation well-being of 6.6 million residents in the NJTPA Region and 20 million in the NY/NJ metropolitan statistical area. Understanding the effects and importance of rail freight is therefore critical – not only to ensure the accuracy of the regional transportation planning process, but also to effectively communicate the importance of freight movement to the Region's freight stakeholders, businesses, communities, residents, and funding decision-makers.

*The Rail Freight Capacity and Needs Assessment to Year 2040* assesses the capacity of the rail network in the NJTPA Region to handle projected increases in freight rail traffic. A key purpose is to establish a baseline of physical characteristics for the rail network and assess operations over the network. Current and future demand is also provided to shed light on how the Region's dedicated freight and shared freight/passenger rail network can accommodate the projected growth. Finally, issues affecting capacity and potential mitigating strategies are also provided. The HDR Team, consisting of HDR Engineering, Egan Consulting Group, Cheng Solutions, and Northeast Logistics Systems (NELS) completed the following tasks as part of the rail freight capacity and needs assessment conducted for the NJTPA:

- Inventory of current rail system conditions
- Rail demand forecasts
- Identification of corridor constraints
- Public outreach
- New rail corridor possibility and needs analysis

The Study focuses primarily on the key corridor lines, as defined in the initial Study Request for Proposal. The primary corridor lines in the NJTPA Region are as follows:

- Norfolk Southern Lehigh Line
- CSX Trenton Line
- Conrail Lehigh Line
- Conrail Passaic & Harsimus Branch
- Conrail National Docks Branch
- Conrail Northern Branch



#### CSX River Line

The freight mainlines along with connecting trackage owned or operated by the major Class I railroads or regional shortline railroads was examined as an integrated network under both current conditions and future operating scenarios at ten year intervals. This effort determined the current train traffic (and class of commodity) for each major line in the Region and determined when each major line segment will reach capacity, or exceed it, based on current infrastructure. This is essential in a congested freight area that currently averages 150 freight trains per day with a projected unconstrained growth of 90 percent by 2040.

Major contributions of the study includes an inventory of current rail system conditions, development of rail demand forecasts for both freight and passenger rail for the corridor lines in the NJTPA Region, identification of potential constraints in and an assessment of, the feasibility of new freight/passenger rail corridors.

Developed during the study was a major validation of an existing rail geodatabase containing rail line geometries and associated attribute tables. The database validation was performed using Microsoft Access as the main platform; for each line relevant to the study, multiple tables of attributes were cross-referenced against railroad sources such as time tables and track charts. In many instances, tables were found to contain incorrect or missing data, resulting in many hours dedicated to completing data for priority lines, including site visits and interviews.

The validated database was shared with NJDOT and New Jersey Transit. It will also be shared as a tool for future regional and inter-regional studies.

The NJTPA wishes to thank its subregional members, New Jersey Transit, Amtrak, the New Jersey Short Line Association and the Class One Railroads in the NJTPA Region for their support in completing this undertaking.



# SECTION 2. CURRENT RAIL SYSTEM CONDITIONS

As per the scope of this Study, the current rail system conditions assessment is a focused analysis of capacity constraints on key line segments. The HDR Team researched available data and relied on information from databases and libraries, which included railroad track charts, employee timetables, and maps of the Region. The HDR Team also interviewed key railroad officials to determine the railroad perspective on the existing rail system, and sought input from other key stakeholders to identify system elements. The HDR Team conducted field visits as needed to confirm current conditions.

#### 2.1 Methodology for Assessing Current Rail System Conditions

The following details the approach used by the HDR Team to assess the current rail system conditions within the NJTPA Region.

#### 2.1.1 Data Validation

The NJTPA provided the HDR GIS team with a rail geodatabase containing information regarding rail line attributes. The database validation was performed using Microsoft Access as the main platform; for each line relevant to the study, multiple tables of attributes were cross-referenced against railroad sources such as timetables and track charts. In many instances, tables were found to contain incorrect or missing data, resulting in a significant effort dedicated to completing data for the corridor lines. The tables with the most missing data were over/underpasses. After the main validation was complete, metadata were created for the database to follow the NJTPA's data quality standards. The following indicates which tables have been validated and updated:

- Bridges (overpasses)
- Grade Crossings
- Height Limits
- Number of Tracks
- Speed Limits
- Underpasses
- Weight Limits
- Vertical Clearances
- Features relating to train control (Interlockings, Control Points, etc.)
- Rail Yards (location only)

Appendix D to this report contains tables that include the attributes for each of these parameters and summarizes the updated/validated information in tabular format. The HDR Team has provided the updated GIS database to the NJTPA, and this has been distributed to NJDOT and other stakeholders.



#### 2.1.2 Site Visits and Interviews

In addition to data collection and validation, the HDR Team conducted interviews with numerous railroads and stakeholders in the Region, including representatives from the following entities:

- CSX Transportation (CSXT)
- Norfolk Southern (NS) Corporation
- Conrail (CR)
- New Jersey Transit
- Amtrak
- Port Authority of New York and New Jersey
- New Jersey Department of Transportation
- New York Susquehanna and Western Railroad
- Several short line railroads in the NJTPA Region

For each of these interviews, the HDR Team provided an overview of the Study to provide a context for what the information requested and how the information would be used. The questions Study Overview are provided in Appendix A.

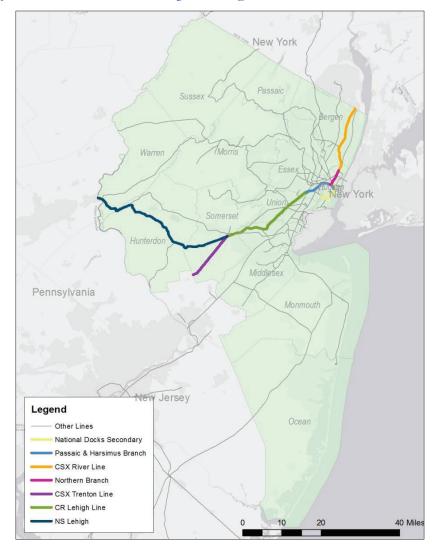
#### 2.2 Study Area Definition

This Study focuses primarily on the corridor lines, as defined in the initial Study Request for Proposal. The primary corridor lines in the NJTPA Region are as follows:

- Norfolk Southern Lehigh Line
- CSX Trenton Line
- Conrail Lehigh Line
- Conrail Passaic & Harsimus Line
- Conrail National Docks Branch
- Conrail Northern Branch
- CSX River Line

The segments of these corridor lines as they exist within the NJTPA Region are shown on Figure 1. Three of the key corridor lines, the NS Lehigh Line, the CSX Trenton Line and the CSX River Line extend significantly beyond the NJTPA Region. This study did not focus on capacity constraints on lines beyond the NJTPA Region. Rather, the focus was on identifying capacity constraints within the Region at current traffic levels and at projected traffic levels between now and 2040.





#### Figure 1: Study Corridor Lines within NJTPA Region

Based on the information contained in the HDR Team's existing databases/libraries, as well as the information gathered during the interviews, an assessment of the infrastructure for each of the corridor lines has been developed and is summarized in the following sections. It is worth noting that in order to accommodate a mix of railroad and lay audience, the information is provided using compass directions and not using railroad directions.

#### 2.3 Norfolk Southern (NS) Lehigh Line

The NS Lehigh Line is owned and operated by Norfolk Southern. While the line extends from Allentown, PA, east, in the NJTPA Region, the line runs from Phillipsburg, New Jersey, on the Delaware River to Manville, New Jersey, and connects with the CSX Trenton Line and the Conrail Lehigh Line at CP Port Reading Junction. The portion of the NS Lehigh Line located in the NJTPA Region is approximately 40.2 miles long and runs from MP 35.8 to MP 76. The NS Lehigh Line provides the principal point of access for NS' 20,000 mile rail system to the northern



New Jersey/New York City market and provides access from points south and west. The figure below shows the NS Lehigh Line highlighted within the NJTPA Region. All descriptions of this line below are geographic direction west to east.

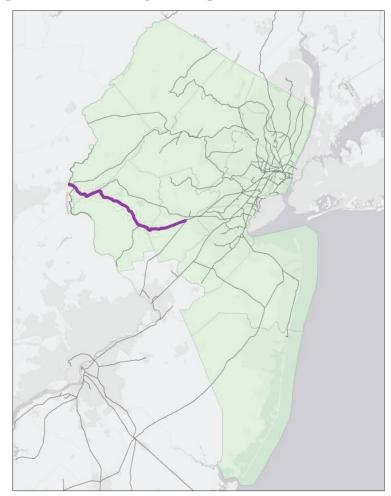


Figure 2: NS Lehigh Line within the NJTPA Region

#### 2.3.1 *Physical Characteristics – NS Lehigh Line*

The NS Lehigh Line is primarily single-tracked<sup>1</sup>; there are three segments of double track or passing sidings on this line within the NJTPA Region. These are located at mileposts (all mileposts on the NS Lehigh Line are designated with the alpha primitive LE) LE 67.1 to LE 64.5 (west of Musconetcong Tunnel), LE 64.0 (east of Musconetcong Tunnel) to LE 62.3, and between LE 53.6 to LE 51.0 at Flemington. Double-track operation is also accomplished by utilizing the Royce Running Track between LE 38.2 and CP Port Reading Junction near Manville Yard.

<sup>&</sup>lt;sup>1</sup> Detailed information regarding the location of the number of tracks on all corridor Lines is provided in Appendix *C*.



The NS Lehigh Line has 18 grade crossings within the NJTPA Region. These grade crossings are shown in the appendix and are as follows:

#### Table 1: Grade Crossings on NS Lehigh Line

|    | Grade Crossing               | Town                  |  |
|----|------------------------------|-----------------------|--|
| 1  | Still Valley Road            | Pohatcong Township    |  |
| 2  | 1 Private Road               | Bloomsbury Borough    |  |
| 3  | Perryville Road              | Union Township        |  |
| 4  | Landsdown Road               | Franklin Township     |  |
| 5  | Hampden Road                 | Clinton Township      |  |
| 6  | 2 Private Road               | Clinton Township      |  |
| 7  | Kiceniuk Road                | Clinton Township      |  |
| 8  | Stanton Station Road         | Readington Township   |  |
| 9  | 3 Private Road               | Readington Township   |  |
| 10 | Rockafellows Mill Road       | Readington Township   |  |
| 11 | Main Street                  | Readington Township   |  |
| 12 | Lehigh Road                  | Branchburg Township   |  |
| 13 | Stala Farm Road <sup>2</sup> | Branchburg Township   |  |
| 14 | Beekman Lane                 | Hillsborough Township |  |
| 15 | Auten Road                   | Hillsborough Township |  |
| 16 | Valley Road                  | Hillsborough Township |  |
| 17 | Roycefield Road              | Hillsborough Township |  |
| 18 | 13 <sup>th</sup> Street      | Manville Borough      |  |

The entire NS Lehigh Line has a vertical clearance limit of 20'3" and is cleared for 286,000 lbs weight on rail.

There is only one yard, the Manville Yard located in Manville, NJ.

• Manville Yard is owned and operated by CSX and is located at the junction of the CSX Trenton Line, NS Lehigh Line and Conrail Lehigh Line. Manville Yard is a local serving yard. General merchandise and a significant amount of waste traffic is shipped and received at this yard. While this is a CSX facility, both Conrail and NS have a presence in this yard.

<sup>&</sup>lt;sup>2</sup> Stala Farm Road is a private crossing that allows a farmer to cross the tracks to access other fields. The farm was preserved by Somerset County through its Farmland Preservation Program.



#### 2.3.2 Operational Characteristics – NS Lehigh Line

The NS Lehigh Line operates up to 24 trains on this line on a daily (Monday through Friday) basis.<sup>34</sup> These trains include the following<sup>5</sup>:

- 2 auto trains
- 15 intermodal trains
- 2 municipal solid waste trains
- 3 merchandise trains
- 2 ethanol trains

The NS Lehigh Line speed limits vary between 40 and 50 miles per hour, as shown on the map in Appendix *C*, but most of the line can accommodate speeds of 50 mph.

#### 2.4 CSX Trenton Line

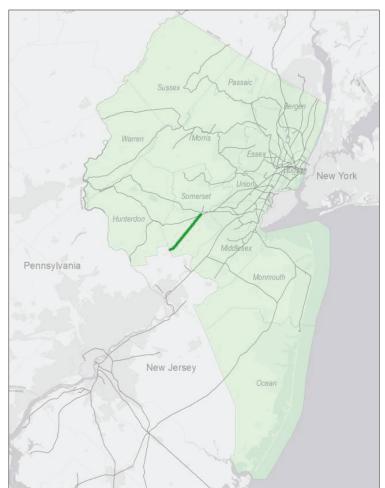
The CSX Trenton Line is owned and operated by CSX Transportation. The line connects to the NS Lehigh Line and the Conrail Lehigh Line at Control Point (CP) Port Reading Junction near Manville Yard and with the SEPTA West Trenton Line at Ewing, New Jersey. The portion of the CSX Trenton Line located in the NJTPA Region is approximately 26.6 miles long and runs from MP 31.2 to MP 57.3 (at CP Port Reading Junction). The Trenton Line provides CSX access to the NJTPA Region via Philadelphia for movements to and from the south and west. SEPTA controls between CP Wing and CP Wood on the Trenton Line. The figure below shows the CSX Trenton Line highlighted within the NJTPA Region. Note that while the CSX Trenton Line extends outside of the NJTPA Region, the information provided in this Study pertains only to the portion of the Trenton Line that is within the boundaries of the NJTPA Region. All descriptions of this line below are covered in geographic direction south to north.

<sup>&</sup>lt;sup>3</sup> All train counts in this Study are counted in one direction, e.g., one round trip is counted as two trips.

<sup>&</sup>lt;sup>4</sup> On an approximately 5-day per week schedule.

<sup>&</sup>lt;sup>5</sup> The estimated train numbers per day include road trains only, and do not include local or yard trains.





#### Figure 3: CSX Trenton Line within the NJTPA Region

#### 2.4.1 *Physical Characteristics – CSX Trenton Line*

The CSX Trenton Line is primarily a single-tracked<sup>6</sup> route leading into the core of the NJTPA freight rail network, as shown in Appendix C. There is one passing siding located on this line under SEPTA control, from MP 31.2 to MP 35.7.There is a storage track under CSX control between mileposts QA 45.8 (Skillman) and QA 48.4 (Harlengen). The CSX Trenton Line has seven grade crossings within the NJTPA Region. These grade crossings are shown in the appendix and are as follows:

<sup>&</sup>lt;sup>6</sup> Detailed information regarding the location of the number of tracks on all corridor Lines is provided in Appendix *C*.



#### Table 2: Grade Crossings on CSX Trenton Line

|   | Grade Crossing     | Town                  |
|---|--------------------|-----------------------|
| 1 | 1 Private Road     | Hopewell Borough      |
| 2 | Louellen Ave       | Hopewell Township     |
| 3 | Province Line Road | Montgomery Township   |
| 4 | Spring Hill Road   | Montgomery Township   |
| 5 | Hollow Road        | Montgomery Township   |
| 6 | Route 601          | Montgomery Township   |
| 7 | Sunnymeade Road    | Hillsborough Township |

Appendix C shows the height clearance limits on the CSX Trenton Line; the entire line has a vertical clearance limit of 20'2". A map is also included in Appendix C that shows the weight limits. Note that the entire Trenton Line is cleared for 286,000 lbs weight on rail.

The only yard along the CSX Trenton Line is the Manville Yard.

• Manville Yard is owned and operated by CSX. General merchandise, including a significant amount of waste traffic, is shipped and received at this yard. This yard also lies along the Lehigh Line. CSX, Conrail and NS all utilize this CSX controlled yard.

#### 2.4.2 Operational Characteristics – CSX Trenton Line

The CSX Trenton Line is a freight-only line, with no passenger or commuter traffic currently on the line or within any shared right-of-way., except for SEPTA traffic around Trenton. CSX operates up to approximately 20 trains on the Trenton Line on a daily, Monday through Friday, basis. These trains include the following:

- 4 intermodal trains
- 8 merchandise trains
- 4 municipal solid waste trains
- 2 ethanol trains
- 2 orange juice trains

The CSX Trenton Line speed limits vary between 50 and 60 miles per hour, as shown in Appendix C.

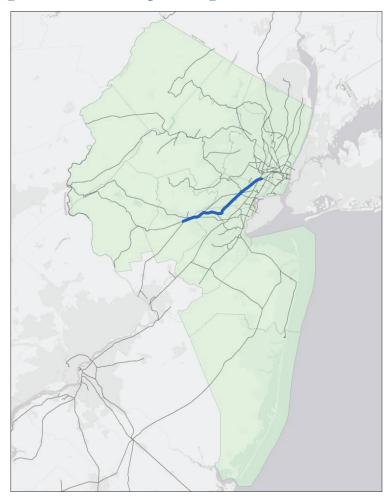
#### 2.5 Conrail (CR) Lehigh Line

The CR Lehigh Line is owned and operated by Conrail Shared Assets Operations. The Conrail Lehigh Line is entirely located within the NJTPA Region, and is approximately 26.5 miles long and runs from MP 36.32 at Manville, New Jersey, to MP 9 at CP Pike, in Newark, New Jersey. Figure 4 shows the Conrail Lehigh Line highlighted within the NJTPA Region. The Lehigh Line provides connection to the Chemical Coast Secondary, the National Docks Branch, the P&H



Line, the Raritan Valley Line and the Northeast Corridor. All descriptions of this line below are geographic direction west to east.

Figure 4: CR Lehigh Line within the NJTPA Region



## 2.5.1 Physical Characteristics – Conrail (CR) Lehigh Line

The CR Lehigh Line is double-tracked for the entire route<sup>7</sup>. The CR Lehigh Line has 14 grade crossings within the NJTPA Region. These grade crossings are shown on Appendix C and are as follows:

<sup>&</sup>lt;sup>7</sup> Detailed information regarding the location of the number of tracks on all corridor Lines is provided in Appendix *C*.



#### Table 3: Grade Crossings on the CR Lehigh Line

|    | Grade Crossing    | Town                     |  |
|----|-------------------|--------------------------|--|
| 1  | 1 Private road    | Bridgewater Township     |  |
| 2  | 2 Private road    | Bridgewater Township     |  |
| 3  | Cedar Ave         | Middlesex Borough        |  |
| 4  | South Ave         | Middlesex Borough        |  |
| 5  | Prospect Ave      | Piscataway Township      |  |
| 6  | New Market Road   | Piscataway Township      |  |
| 7  | New Brunswick Ave | Piscataway Township      |  |
| 8  | Clinton Street    | South Plainfield Borough |  |
| 9  | Front Street      | South Plainfield Borough |  |
| 10 | Tingley Road      | Edison Township          |  |
| 11 | Inman Ave         | Edison Township          |  |
| 12 | 2 Private Road    | Clark Township           |  |
| 13 | 3 Private Road    | Westfield                |  |
| 14 | Rahway Ave        | Westfield                |  |

Appendix C shows the height clearance limits on the CR Lehigh Line; the entire line has a vertical clearance limit of 20'2". Appendix C also shows the weight limits; note that the entire CR Lehigh Line is authorized for 286,000 lbs weight on rail.

There are two major yard facilities along the CR Lehigh Line, Manville Yard located on the western end of the line and Oak Island at the eastern end of the line.

- Manville Yard is owned and operated by CSX. General merchandise, including a significant amount of waste traffic, is shipped and received at this yard. This yard is along the Lehigh Line and also lies along the Trenton Line.
- Oak Island Yard is the major freight yard serving the North Jersey Region. It is operated by Conrail as part of the Conrail Shared Assets Operations. It is located north of Port Newark-Elizabeth Marine Terminal and north and east of Newark International Airport. This yard includes a classification yard, engine house, auto unloading terminal, and maintenance facilities. It has ten receiving tracks, 30 classification tracks and nine departure tracks.

#### 2.5.2 Operational Characteristics – CR Lehigh Line

The CR Lehigh Line shares its tracks with New Jersey Transit from the junction with NJ Transit's Raritan Valley Line at CP Aldene in Cranford, New Jersey, to the junction with the Northeast Corridor in Newark, New Jersey, at CP Newark (approximately 6 miles). NJ Transit operates approximately 60 trains per day over this stretch of railroad.



Up to 44 combined NS and CSX freight trains are operated on the CR Lehigh Line on a daily, Monday through Friday, basis<sup>8</sup>. These trains include the following:

- 2 automobile trains
- 19 intermodal trains
- 11 merchandise trains
- 4 ethanol trains
- 6 MSW trains
- 2 orange juice trains

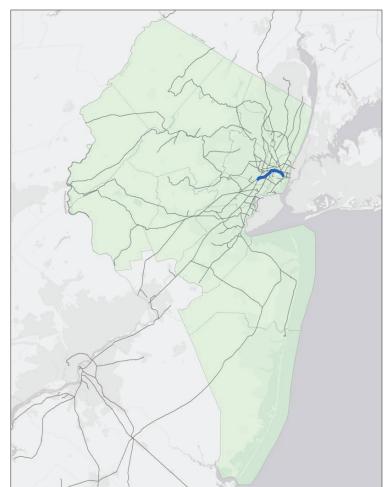
Speed limits on the CR Lehigh Line are variable, as shown in Appendix C. Most of the line is suitable for 50 mph operation. East of CP Aldene, however, the speed limit is 60 mph until you approach CP NK. At that point, speeds drop to 30 mph.

#### 2.6 Conrail P&H Branch

The Conrail Passaic & Harsimus (P&H) Line is owned and operated by Conrail Shared Assets Operations. The Conrail P&H Line is located entirely within the NJTPA Region and runs west to east from MP 7.7 at Waverly Yard on the Northeast Corridor Line in Newark, New Jersey, to CP Waldo at MP 0.0 in Jersey City, New Jersey. The P&H Line connects with the Lehigh Line at CP Stock and the Conrail Northern Branch at CP Hack. The figure below shows the Conrail P&H Line highlighted within the NJTPA Region.

<sup>&</sup>lt;sup>8</sup> Note that this refers to trains that are operating between Bound Brook and Port Reading Junction. Some of these trains may divert from the CR Lehigh Line via the Port Reading Secondary.





#### Figure 5: Conrail P&H Line within the NJTPA Region

## 2.6.1 Physical Characteristics – Conrail P&H Line

Appendix C shows the height clearance limits on the Conrail P&H Line; the line has a vertical clearance limit of 20'2" from WA-5 (MP 7.7) to CP Hack (MP 1.6). The P&H Line intersects with the Conrail Northern Branch at MP 1.6, and from that point to MP 0.0 (the Waldo Running Track), the P&H has a height clearance limit of 17'8". Appendix C shows the weight limits; note that the entire Conrail P&H Line is authorized for 286,000 lbs weight on rail.

The Conrail P&H Line is primarily double-tracked except for a single-track stretch between CP Kearny and CP Hack<sup>9</sup>, as shown in Appendix C. The Conrail P&H Line has no grade crossings. Kearny Yard is located along the Conrail P&H Line and is described below.

• Kearny Yard is owned and operated by CSX. It is an intermodal facility primarily focused on domestic intermodal, but there is a mixture of domestic and international business handled there.

<sup>&</sup>lt;sup>9</sup> Detailed information regarding the location of the number of tracks on all corridor Lines is provided in Appendix *C*.



#### 2.6.2 Operational Characteristics – Conrail P&H Line

The Conrail P&H Line is a freight-only line, with no passenger or commuter traffic on or within any shared right-of-way. Up to approximately 29 trains are operated on the Conrail P&H Line on a daily basis. These trains include the following:

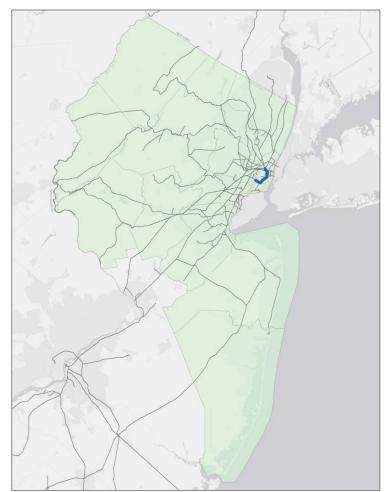
- 17 intermodal trains
- 8 merchandise trains
- 4 MSW trains

The Conrail P&H Line speed limitations vary between 15 and 30 miles per hour, as shown in Appendix C.

2.7 Conrail National Docks Secondary

The Conrail National Docks Secondary is owned and operated by Conrail Shared Assets Operations. The National Docks Secondary is located entirely within the NJTPA Region and runs from MP 7.2 at Upper Bay, the interlocking at the east end of Oak Island, crosses the Upper Bay draw-bridge and continues to MP 0.0 at CP Croxton in Jersey City, New Jersey. Figure 6 shows the Conrail National Docks Secondary highlighted within the NJTPA Region.





### Figure 6: CR National Docks Secondary within the NJTPA Region

## 2.7.1 Physical Characteristics – Conrail (CR) National Docks Secondary

Conrail National Docks Secondary is entirely single-tracked<sup>10</sup>, as shown in Appendix C. There is only one grade crossing on the line, Chapel Avenue, located on the southern end of the line in Jersey City, NJ.

There has been a recent clearance project on the National Docks Secondary and, as shown in Appendix C, the height clearance limits on the line were raised to 20'2". The entire CR National Docks Secondary is authorized to handle 286,000 lbs weight on rail.

There are no yards located directly on the National Docks Secondary; however, CP Green provides the connection from the National Docks Secondary to Greenville Yard. One end of the National Docks is at the geographic east end of Oak Island Yard.

 $<sup>^{10}</sup>$  Detailed information regarding the location of the number of tracks on all corridor Lines is provided in Appendix E



#### 2.7.2 Operational Characteristics – Conrail National Docks Secondary

The Conrail National Docks Secondary is located within Conrail's North Jersey Shared Assets Area and is available to both CSX and Norfolk Southern. Up to 18 trains are operated on the Conrail National Docks Secondary on a daily, Monday through Friday, basis. These trains include the following:

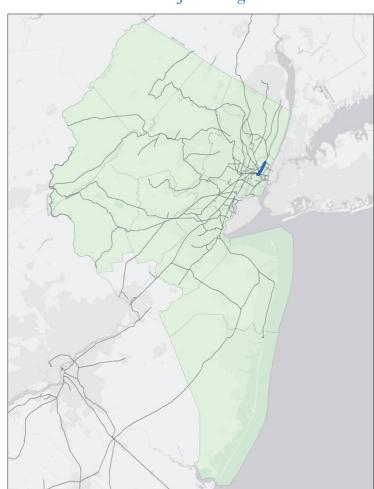
- 2 automobile trains
- 6 intermodal trains
- 4 merchandise trains
- 2 ethanol trains
- 2 MSW trains
- 2 orange juice trains

The Conrail National Docks Secondary is primarily limited to 25 mph operation, though speeds are restricted to 10 mph toward the northern end of the line. Speeds increase to 15 mph as the line passes under the NJ Transit Morristown Line (Appendix C).

#### 2.8 Conrail Northern Branch

The Conrail Northern Branch is owned and operated by Conrail Shared Assets Operations. The portion of the Conrail Northern Branch considered as part of this Study extends from MP 6 where it joins the P&H Branch at Marion Junction (CP Hack) to MP 1.6 where it connects with the CSX River Line (adjacent to North Bergen Yard). The total mileage is 4.4 miles. The figure below shows the Conrail Northern Branch Line highlighted within the NJTPA Region.





#### Figure 7: CR Northern Branch within the NJTPA Region

#### 2.8.1 Physical Characteristics – Conrail (CR) Northern Branch

The Conrail Northern Branch Line is double-tracked for most of the route, but consists of a single track between CP Hack and CP Marion (0.6 miles)<sup>11</sup>. The CR Northern Branch has a single grade crossing at St. Paul's Avenue, and the northern end of the line is adjacent to CSX North Bergen Yard. The entire Northern Branch has a vertical clearance of 20'2" and is authorized for 286,000 lbs weight on rail.

North Bergen Yard on the northern end of the Northern Branch under consideration is the only yard actually on the line, though the NS Croxton Yard sits immediately west of the CR Northern Branch at CP Croxton. Both yards are described below.

• North Bergen Yard is owned and operated by CSX. It is primarily a domestic intermodal yard and is the interchange between NYS&W and CSX for merchandise freight.

<sup>&</sup>lt;sup>11</sup> Detailed information regarding the location of the number of tracks on all corridor Lines is provided in Appendix C.



• Croxton Yard is owned and operated by Norfolk Southern. It is a domestic intermodal facility, a transload facility and a freight yard servicing the Region. NYSW interchanges with NS at Croxton Yard.

#### 2.8.2 Operational Characteristics – CR Northern Branch

The CR Northern Branch is a freight-only line, with no passenger or commuter traffic on or within any shared right-of-way. Up to approximately 36 trains are operated on the CR Northern Branch on a daily basis<sup>12</sup>. These trains include the following:

- 2 automobile trains
- 20 intermodal trains
- 10 merchandise trains
- 2 MSW trains
- 2 ethanol trains

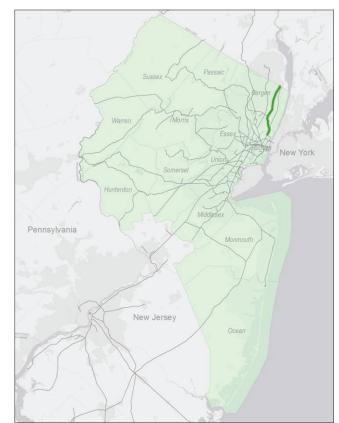
Speed on the CR Northern Branch Line is restricted to 15 mph.

#### 2.9 CSX River Line

The portion of the CSX River Line located in the NJTPA Region is approximately 18.9 miles long and runs from MP 1.47, near North Bergen Yard, to MP 20.4, the New York/New Jersey border. The CSX River Line extends northward from that point to Selkirk Yard, located outside of Albany, New York, which is a major classification yard in the CSX system. Figure 8 shows the CSX River Line highlighted within the NJTPA Region.

<sup>&</sup>lt;sup>12</sup> These numbers include the NS traffic, which uses only about 1 mile of the Northern Branch, between CP Hack and CP Croxton.





#### Figure 8: CSX River Line within the NJTPA Region

#### 2.9.1 *Physical Characteristics – CSX River Line*

The southern half of the CSX River Line is double-tracked but drops down to a single-tracked railroad at Teaneck, New Jersey, as shown in Appendix  $C^{13}$ . The CSX River Line also has a significant number of grade crossings, a total of 21 within the NJTPA Region. These grade crossings are shown in Appendix C and are as follows:

|   | Grade Crossing          | Town                    |
|---|-------------------------|-------------------------|
| 1 | 69 <sup>th</sup> Street | North Bergen Township   |
| 2 | Bergen Tpke             | Ridgefield Park Village |
| 3 | Mt. Vernon Street       | Ridgefield Park Village |
| 4 | Fort Lee Road           | Bogota Borough          |
| 5 | New Bridge Road         | Bergenfield Borough     |
| 6 | Clinton Ave             | Bergenfield Borough     |

#### Table 4: Grade Crossings on CSX River Line

 $^{\rm 13}$  Detailed information regarding the location of the number of tracks on all corridor Lines is provided in Appendix E



|    | Grade Crossing  | Town                    |
|----|-----------------|-------------------------|
| 7  | Main St         | Bergenfield Borough     |
| 8  | Church St       | Bergenfield Borough     |
| 9  | Central Ave     | Bergenfield Borough     |
| 10 | Columbia Ave    | Bergenfield Borough     |
| 11 | Madison Ave     | Bergenfield Borough     |
| 12 | New Milford Ave | Bergenfield Borough     |
| 13 | Haworth Ave     | Haworth Borough         |
| 14 | Durie Ave       | Haworth Borough         |
| 15 | Old Hook Rd     | Closter Borough         |
| 16 | La Roche Ave    | Harrington Park Borough |
| 17 | Harriot Ave     | Harrington Park Borough |
| 18 | Lafayette Ave   | Harrington Park Borough |
| 19 | Blanche Ave     | Norwood Borough         |
| 20 | Broadway        | Norwood Borough         |
| 21 | Clinton Ave     | Northvale Borough       |

The CSX River Line has a vertical clearance limit of 20'2" and is authorized for 286,000 lbs weight on rail.

There are three yards along the CSX River Line. They are:

- Little Ferry Yard, which is owned by CSX and operated by NYS&W crews. It is an intermodal facility.
- Bellman's Yard, which is owned by CSX and operated by CSX crews. It is an automotive facility.
- North Bergen Yard is owned and operated by CSX. It is primarily a domestic intermodal yard and is the interchange between NYS&W and CSX for merchandise freight.

#### 2.9.2 Operational Characteristics – CSX River Line

The CSX River Line is a freight-only line, with no passenger or commuter traffic on the line or within any shared right-of-way. The traffic on the CSX River Line has grown significantly in recent years, and currently CSX operates up to 30 trains on the CSX River Line on a daily basis.



These trains include the following:

- 2 automobile trains
- 14 intermodal trains
- 10 merchandise trains
- 2 MSW trains
- 2 ethanol trains

The CSX River Line speed limits vary between 15 mph and 50 mph, as shown in Appendix C.



# SECTION 3. FREIGHT DEMAND

Freight issues are extremely important in the NJTPA planning Region, which includes thirteen counties in Northern New Jersey. The Region hosts: the Port of New York and New Jersey, one of the nation's top three ports on the basis of tonnage and containers; heavily-used local, regional, and interstate truck corridors and bridge/tunnel crossings; heavy concentrations of freight rail activity; significant national and international air cargo facilities; and hundreds of millions of square feet of warehouse/distribution space. These networks and facilities are essential to the economic and transportation well-being of 6 million residents in the NJTPA Region and 20 million in the NY/NJ metropolitan statistical area, along with thousands of regional businesses. Understanding the effects and importance of freight is therefore critical – not only to ensure the accuracy of the regional transportation planning process, but also to effectively communicate the importance of freight to the Region's freight stakeholders, businesses, communities, residents, and funding decision-makers.

The HDR Team developed rail demand forecasts for the Region at 10 year intervals to a horizon year of 2040. Developing the forecasts of future rail freight demand on the corridors is an essential component of identifying future capacity constraints. It is also vital to determining the potential need of a dedicated rail corridor, and identifying where corridor improvements may be required.

The HDR Team's fundamental approach to estimating rail freight demand has been to build on existing forecasting work carried out by the NJTPA for freight and on New Jersey Transit and Amtrak forecasts for commuter and inter-city passenger rail. In particular, the recently completed 2040 Freight Industry Level Forecasts study was relied upon to provide overall control totals for freight movement within and through the NJTPA region. The focus of HDR's work was to assess and validate underlying assumptions of these forecasts, and to apply a separate modeling step to break out the control totals into rail and truck modes. A mode choice model was developed which will be a tool that will allow generating mode forecasts for scenarios regarding future freight movements as well as assumptions regarding the future capacity of both road and rail networks. As a final check, the HDR Team used its years of institutional railroad knowledge to validate the output of the models. The following discusses freight demand forecasts for the NJTPA Region and passenger demand for the NJTPA Region. Appendix E provides detail on the modeling approach and assumptions.

3.1 Methodology for Developing Freight Demand Forecasts and the Mode Share Model

To provide quantitative estimates of the size of the rail freight market for freight moving in, out and through the NJTPA Region, HDR has developed a freight mode choice model that is designed to estimate the distribution of total tonnage forecasts between truck and rail. Costs include the generalized cost differential between rail and truck for specific origin/destination (OD) pairs. Generalized costs of transport include the aggregation of both transportation and logistics costs. Transportation costs are those incurred once the cargo is loaded aboard the vehicle and may be similarly described as vehicle operating costs. Logistics costs are those incurred in loading and unloading the cargo.

Specifically, HDR has developed regression based estimates of the share of rail and truck freight using a model where the share of each commodity is defined as a function of several key



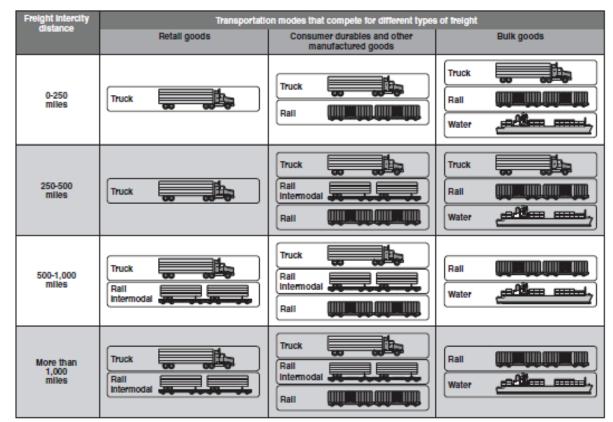
variables. As a first step mode shares for truck and rail were developed for key rail markets (domestic and international carloads, as well as intermodal) by origin and destinations for 2007. These were then matched with generalized transportation cost estimates. A regression based model was developed that specified mode share as function of cost variables and accounted for the different commodity types. Finally, increases in costs were forecast which determined changes in rail mode share in the future.

In addition to shipper-specific and demand considerations, the supply side or capacity of the road and rail network is a critical indirect component in the mode choice dynamic because of its direct impacts on freight rates and travel time, which translates directly to generalized costs of transport. Network capacity is especially critical in regions where rail and passenger traffic share the same rail infrastructure because each must adhere to its own schedule.

#### 3.1.1 Feasibility of Mode Shift

Prior to finalizing the dataset for estimating regression based relationships each commodity code was reviewed to determine its feasibility for carriage by either mode. Those commodities that given their physical characteristics are extremely unlikely to move by rail were removed from the data set. The reasoning is that in freight markets, one mode may have a distinct comparative advantage over another for certain types of shipments, and will thus limit the potential for traffic to shift to rail from truck. For example, carriage of bulk commodities (e.g., coal) relies almost entirely on rail and waterways, while carriage of high-value and very timesensitive commodities is dominated by truck and aviation. Conversely, modes often work as complements to complete a shipment. Intermodal freight is designed to move on multiple modes, using a container that can be moved relatively seamlessly from a truck to a train to a ship without handling any of the freight itself when changing modes. In other cases, the modes may be comparable for certain types of trips and will compete directly for shipments or segments of shipments based on price and performance. For example, some long-haul trucking and rail shipments may be substituted for one another. The General Accounting Office of the US government (GAO) has constructed a guide for the feasibility of commodity-type and distance competition by mode using United States Department of Transportation (USDOT) information. The information is reproduced below.





## Figure 9: Mode Competition for Different Freight Shipping Distances

Source: INTERCITY PASSENGER AND FREIGHT RAIL Better Data and Communication of Uncertainties Can Help Decision Makers Understand Benefits and Trade-offs of Programs and Policies, February 2011, GAO-11-290.

Trucking dominates the transport of retail goods in the 0-500 mile range, beyond which intermodal rail offers competition. Rail and rail intermodal are more competitive in the consumer durables and other manufactured goods classifications across all distance intervals. In the bulk goods class of commodities, including agricultural and extractive industry products, trucking, water and rail compete in the short- to medium-distance market but trucking drops out of the 500 miles and above range. Using the above as a guide, the data was classified as to the likely carriage by either mode. This enabled us to determine whether certain types of freight are likely to be dominated by either truck or rail and will serve as a check on the results of the mode share assignment.

#### 3.1.2 Freight Data

The primary data used to estimate the model and conduct analysis has been Transearch data for the NJTPA Region. The Transearch data contains all freight modes including air, water, rail, truck and pipeline; however, our analysis considers only two transportation modes rail and truck. Data is provided at the 4-digit Standard Transportation Commodity Code (STCC) level by value of cargo, tonnage, origin-destination pairs at the county-level for trucks and at the Bureau of Economic Analysis (BEA) region for rail, for cargo moving into, out of and through the



NJTPA market. Due to the size of the dataset and the added complexity of developing a model at the 4-digit STCC code level the data was summarized at the 2-digit STCC level to develop the freight rail forecasting model. An example is shown below in Table 5 where different kinds of chemicals both organic and inorganic are all classified as Chemicals and Allied Products.

| STCC 4 digit<br>commodity |   | STCC 2 digit<br>commodity |                              |
|---------------------------|---|---------------------------|------------------------------|
| code                      | Commodity Name                                  | code                      | Commodity Name               |
| 2812                      | Potassium or Sodium Compound                    | 28                        | Chemicals or Allied Products |
| 2813                      | Industrial Gases                                | 28                        | Chemicals or Allied Products |
| 2814                      | Crude Product of Coal, Gas, Petroleum           | 28                        | Chemicals or Allied Products |
| 2815                      | Cyclic Intermediates or Dyes                    | 28                        | Chemicals or Allied Products |
| 2816                      | Inorganic Pigments                              | 28                        | Chemicals or Allied Products |
| 2818                      | Misc Industrial Organic Chemicals               | 28                        | Chemicals or Allied Products |
| 2819                      | Misc Industrial Inorganic Chemicals             | 28                        | Chemicals or Allied Products |
| 2821                      | Plastic Materials or Synthetic Fibers           | 28                        | Chemicals or Allied Products |
| 2831                      | Drugs   | 28                        | Chemicals or Allied Products |
| 2842                      | Cleaning Preparations                           | 28                        | Chemicals or Allied Products |
| 2844                      | Cosmetics, Perfumes, etc.                       | 28                        | Chemicals or Allied Products |
| 2851                      | Paints, Lacquers, Etc.                          | 28                        | Chemicals or Allied Products |
| 2861                      | Gum or Wood Chemicals                           | 28                        | Chemicals or Allied Products |
| 2871                      | Fertilizers                                     | 28                        | Chemicals or Allied Products |
| 2879                      | Misc Chemicals                                  | 28                        | Chemicals or Allied Products |
| 2891                      | Adhesives                                       | 28                        | Chemicals or Allied Products |
| 2893                      | Printing Ink                                    | 28                        | Chemicals or Allied Products |
| 2899                      | Chemical Preparations, Not Easily<br>Classified | 28                        | Chemicals or Allied Products |

## Table 5: Aggregation of Commodities

Source: Transearch and the NJTPA 2040 Freight Industry Level Forecasts Study

#### 3.1.3 Generalized Transportation Costs

The proposed mode share model requires generalized cost differentials as an input since costs are critical to the shipper choice of transport mode. These costs served as the primary independent variables in the model to estimate the freight share, and can also be varied to determine the likely impact of rail network improvements (that change rail shipping costs) on rail cargo shares. Cost differentials are difficult to obtain, and therefore need to be estimated or a



suitable "proxy" found. One means of estimating costs was to employ an already established cost model. The Intermodal Transportation and Inventory Cost Model (ITIC)<sup>14</sup> is a spreadsheet based model for calculating the costs associated with shipping freight via alternative modes, namely truck and rail. The model can be used to perform policy analysis of issues concerning long-haul freight movement, such as diversion of freight shipments from truck to rail. The US DOT uses this model for ongoing policy studies, and shares the model, along with some internally developed data, for this purpose.

The HDR team obtained this model and used it to generate cost estimates to transport commodities at the 2 digit STCC code level by origin-destination pair. The model also provided distances over the network for each mode from center of an origin region (State) to center of a destination region (State).

## 3.1.4 Rail Freight Demand Modeling

Using Transearch data which was matched with cost data estimated from the ITIC model the HDR team developed a data-driven approach where the share of rail is determined by cost variables. This method enabled the HDR team to model the choice of mode (rail versus truck) present in the Transearch data as a function of transport cost differentials (by commodity and origin – destination) using linear regression techniques. This approach is often applied in studies of modal shares and in other models of market shares (see Appendix E for technical details).

The HDR team used a cross-sectional approach to model the share of rail in freight movements in and out of the NJTPA area. That is, variation in transport costs were linked to the observed share of rail in the Transearch data for a single base year (2007). To emphasize, the forecasting model uses the latest data on the rail share of freight by commodity and thus future freight growth by mode starts with the existing modal shares. The objective of the model is to determine the quantitative impact of rail costs and cargo value on the share of rail relative to truck in carrying freight in and through the area. The estimated coefficients of the model are then used to predict the share of rail in total forecasted tonnage for the years 2020, 2030 and 2040, as provided by the NJTPA 2040 Freight Industry Level Forecasts Study.

The model is estimated at the two-digit STCC level by origin and destination pairs at the county-level using Transearch data for 2007 and transportation operating cost data for rail estimated using the ITIC model. The dependent variable is the share of a ton of freight rail moving by rail versus truck. As part of the model estimation process data outliers were excluded. This includes STCC codes that: a) were either not observed in the Transearch data moving in and out of the NJTPA area; b) the share of rail is generally 100 per cent such as chemical, petroleum and coal (STCC 28 and STCC 29); or c) where the share of rail is close to zero.

The cost and value coefficients are used to estimate the share of rail in total tonnage for 2020, 2030 and 2040. These forecasts are provided in a base case, where rail operating costs and cargo values rise in line with US fuel costs which are an approximation of transportation operating costs.

<sup>&</sup>lt;sup>14</sup> Details can be accessed at (http://www.fhwa.dot.gov/policy/otps/061012/iticst\_info.htm)



# 3.2 Summary of Total Freight Traffic for the NJTPA Region

Total freight originating in the NJTPA Region is shown in Table 6. In 2007 nearly 240 million tons of freight was outbound from the NJTPA Region with a value of \$776.7 billion. Freight traffic moving within the NJTPA Region accounted for almost 40 percent of that total in terms of value, while almost \$298.6 billion were transported to regions outside the Northeast US.

| Origin<br>Region | Destination<br>Region | NJTPA Area-<br>Level Flow | County-Level Flow | 2007 Tons<br>(thousands) | 2007 Value (\$<br>Millions) |
|------------------|-----------------------|---------------------------|-------------------|--------------------------|-----------------------------|
| NJTPA            | External              | Outbound                  | To/From Zone      | 89,043.8                 | \$298,634                   |
| NJTPA            | Nearby DE             | Outbound                  | To/From Zone      | 2,849.2                  | \$7,706                     |
| NJTPA            | Nearby MD             | Outbound                  | To/From Zone      | 27.5                     | \$84                        |
| NJTPA            | Nearby NY             | Outbound                  | To/From Zone      | 29,356.0                 | \$76,855                    |
| NJTPA            | Nearby PA             | Outbound                  | To/From Zone      | 14,751.4                 | \$34,127                    |
| NJTPA            | NJTPA                 | Internal                  | To/From Zone      | 76,088.6                 | \$271,164                   |
| NJTPA            | NJTPA                 | Internal                  | Within Zone       | 16,533.8                 | \$41,069                    |
| NJTPA            | South Jersey          | Outbound                  | To/From Zone      | 11,860.9                 | \$47,093                    |
| Total            |                       |                           |                   | 240,511.2                | \$ 776,731.2                |

# Table 6: Total Freight Outbound from the NJTPA<sup>15</sup> Region (All Modes)<sup>16</sup>

Source: The NJTPA 2040 Freight Industry Level Forecasts Study

Freight traffic destined for the NJTPA Region totaled 156.6 million tons as show in the table below with a value of \$301.9 billion. Almost 60 percent of that freight originated outside the NJTPA Region and states immediately surrounding it.

| Origin<br>Region | Destination<br>Region | NJTPA<br>Area-Level<br>Flow | County-Level<br>Flow | 2007 Tons<br>(thousands) | 2007 Value (\$<br>Millions) |
|------------------|-----------------------|-----------------------------|----------------------|--------------------------|-----------------------------|
| External         | NJTPA                 | Inbound                     | To/From Zone         | 94,675.0                 | \$195,516                   |
| Nearby DE        | NJTPA                 | Inbound                     | To/From Zone         | 2,707.0                  | \$2,594                     |
| Nearby<br>MD     | NJTPA                 | Inbound                     | To/From Zone         | 102.3                    | \$38                        |
| Nearby<br>NY     | NJTPA                 | Inbound                     | To/From Zone         | 17,475.5                 | \$20,754                    |
| Nearby PA        | NJTPA                 | Inbound                     | To/From Zone         | 16,770.7                 | \$19,794                    |
| South<br>Jersey  | NJTPA                 | Inbound                     | To/From Zone         | 24,876.6                 | \$63,187                    |
| Total            |                       |                             |                      | 156,607.3                | \$ 301,883.0                |

# Table 7: Total Freight Destined for the NJTPA Region (All Modes)<sup>17</sup>

Source: The NJTPA 2040 Freight Industry Level Forecasts Study

<sup>15</sup> NJTPA is the 13 county Region. Nearby New York includes counties such as New York, Richmond, and Suffolk Counties among others. Nearby Pennsylvania includes the counties of Carbon, Chester, Berks and Montgomery amongst others. South Jersey includes counties such as Camden, Gloucester, and Mercer amongst others.

<sup>16</sup> Modes included are Rail (Carload, Intermodal, Not Easily Classified), Truck , Air, Water, Pipeline / Other

<sup>17</sup> Modes included are Rail (Carload, Intermodal, Not Easily Classified), Truck , Air, Water, Pipeline / Other



Through freight traffic as shown in Table 8 accounts for almost similar tonnage and value as traffic originating in the NJTPA Region. During 2007 nearly 265.6 million tons of freight passed through the NJTPA Region with a value of \$754.1 billion. A majority of the through traffic was heading to or from states surrounding the NJTPA Region (such as New York, Pennsylvania, Delaware and Maryland).

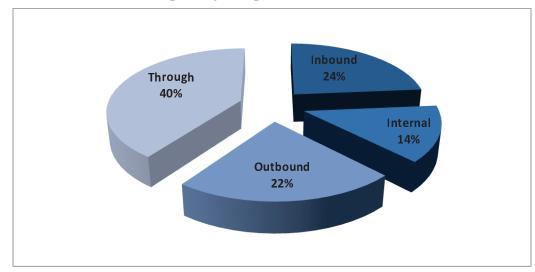
| Origin<br>Region | Destination<br>Region | NJTPA Area-<br>Level Flow | County-Level Flow | 2007 Tons<br>(thousands) | 2007 Value (\$<br>Millions) |
|------------------|-----------------------|---------------------------|-------------------|--------------------------|-----------------------------|
| External         | External              | Through                   | To/From Zone      | 32,120.2                 | \$110,395                   |
| External         | Nearby NJTPA          | Through                   | To/From Zone      | 93,934.5                 | \$265,252                   |
| Nearby<br>NJTPA  | External              | Through                   | To/From Zone      | 59,357.6                 | \$245,338                   |
| Nearby<br>NJTPA  | Nearby NJTPA          | Through                   | To/From Zone      | 70,802.1                 | \$126,591                   |
| Nearby<br>NJTPA  | Nearby NJTPA          | Through                   | Within Zone       | 9,402.8                  | \$6,559                     |
| Total            |                       |                           | 0.1               | 265,617.2                | \$ 754,134.2                |

# Table 8: Total Through Freight for the NJTPA Region (All Modes)<sup>18</sup>

Source: The NJTPA 2040 Freight Industry Level Forecasts Study

Through freight flows accounted for 40 percent of total tonnage for the NJTPA Region as shown in Figure 10 followed by 24 percent share for Inbound freight. Outbound freight accounted for a similar share with 22 percent and internal flow within the NJTPA Region accounted for only 14 percent of total freight tonnage.

#### Figure 10: 2007 Share of Tonnage of by Freight Flow



Source: The NJTPA 2040 Freight Industry Level Forecasts Study

<sup>&</sup>lt;sup>18</sup> Nearby NJTPA includes nearby counties in the States of New York, Pennsylvania, Delaware and Maryland as well as counties in South Jersey (such as Camden)



# 3.3 Summary of Total Freight Forecasts to 2040 for the NJTPA Region

Total Freight forecasts for all modes are presented in Table 9 for the NJTPA Region. Total freight tonnage, which includes outbound inbound and through freight for the NJTPA Region is expected to increase from 662.7 million tons in 2007 to 745.8 million tons in 2020. Total tonnage is expected to reach 936.4 million tons by 2040 at an implied Compound Annual Growth Rate (CAGR) of 1.1 percent for the forecast horizon. Overall freight tonnage flowing through the Region is expected to increase 41 percent during the period from 2007 to 2040.

| Origin<br>Region | Destination<br>Region | NJTPA<br>Area-Level<br>Flow | County-Level<br>Flow | 2007 Tons | 2020 Tons | 2030 Tons | 2040 Tons |
|------------------|-----------------------|-----------------------------|----------------------|-----------|-----------|-----------|-----------|
| Nearby<br>NJTPA  | NJTPA                 | Inbound                     | To/From Zone         | 61,932    | 70,443    | 80,401    | 91,030    |
| External         | NJTPA                 | Inbound                     | To/From Zone         | 94,675    | 107,055   | 121,367   | 135,752   |
| NJTPA            | NJTPA                 | Internal                    | Within Zone          | 16,534    | 19,158    | 21,836    | 24,626    |
| NJTPA            | NJTPA                 | Internal                    | To/From Zone         | 76,089    | 86,535    | 98,368    | 110,746   |
| NJTPA            | Nearby<br>NJTPA       | Outbound                    | To/From Zone         | 58,845    | 66,248    | 73,818    | 80,269    |
| NJTPA            | External              | Outbound                    | To/From Zone         | 89,044    | 98,217    | 110,001   | 121,557   |
| Nearby<br>NJTPA  | Nearby<br>NJTPA       | Through                     | Within Zone          | 9,403     | 10,674    | 12,130    | 13,551    |
| Nearby<br>NJTPA  | Nearby<br>NJTPA       | Through                     | To/From Zone         | 70,802    | 78,605    | 88,301    | 97,001    |
| Nearby<br>NJTPA  | External              | Through                     | To/From Zone         | 59,358    | 67,757    | 77,209    | 86,608    |
| External         | Nearby<br>NJTPA       | Through                     | To/From Zone         | 93,934    | 104,864   | 117,911   | 129,729   |
| External         | External              | Through                     | To/From Zone         | 32,120    | 36,296    | 41,061    | 45,585    |
| Total            |                       |                             | 662,736              | 745,852   | 842,403   | 936,451   |           |

# Table 9: The NJTPA Region Freight Forecasts (thousands of tons)<sup>19</sup>

Source: The NJTPA 2040 Freight Industry Level Forecasts Study

Figure 11 shows CAGR's for the forecast horizon by freight flow type. During the 2007-2020 period internal freight moving within the NJTPA Region is expected to be the fastest growing type with a CAGR of one percent per year. Internal and Inbound freight traffic are the fastest growing segments of freight throughout the forecast horizon. Outbound traffic is the slowest growing throughout the forecast horizon increasing at approximately 0.8 percent per annum during 2007 – 20 and then slightly faster in the later years.

<sup>&</sup>lt;sup>19</sup> Modes included are Rail (Carload, Intermodal, Not Easily Classified), Truck , Air, Water, Pipeline / Other



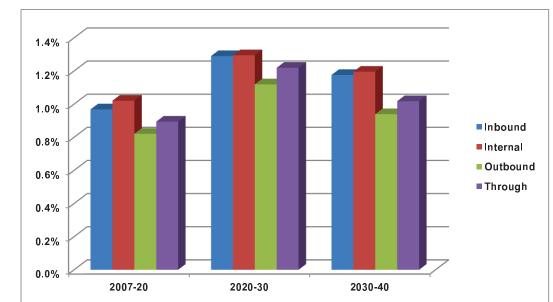


Figure 11: Compound Annual Growth Rate of Tonnage by Freight Flow for the NJTPA Region

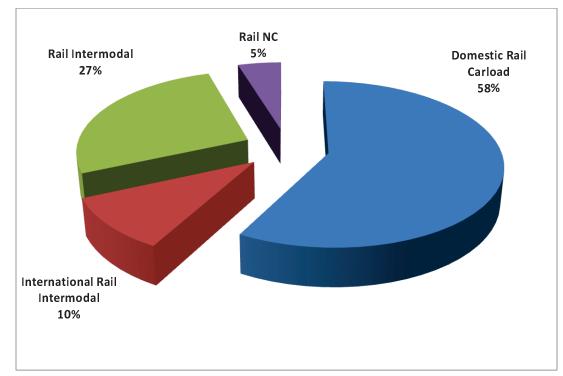
Source: The NJTPA 2040 Freight Industry Level Forecasts Study

#### 3.4 Rail Freight Demand Forecasts to 2040

A regression based model using 2007 Transearch data was developed for three main rail markets. The models were developed to better forecast the choice that shippers face between truck and rail. Rail freight forecasting models were developed for were rail carload (separate models for international and domestic carloads) and rail intermodal<sup>20</sup>.

<sup>&</sup>lt;sup>20</sup> Separate models for international intermodal rail and domestic intermodal rail were investigated. However this approach was abandoned because of the much smaller number of observations for international intermodal (see appendix for details).



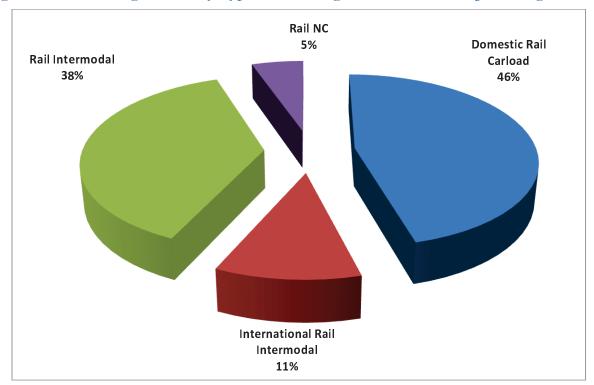


# Figure 12: Rail Tonnage by Type of Rail Freight 2007-10 for the NJTPA Region

Source: The NJTPA 2040 Freight Industry Level Forecasts Study

Freight tonnage shares by type of rail freight are shown in Figure 12 and Figure 13 for current and projected conditions. International rail intermodal and rail not easily classified (Rail NC) are expected to remain at 10 percent and five percent of overall tonnage moving through rail in the NJTPA Region. Rail NC was forecasted assuming that its 2007 share of total rail tonnage would remain constant in the future and growth in Rail NC was expected to follow overall growth in rail and truck tonnage by commodity.





#### Figure 13: Rail Tonnage Shares by Type of Rail Freight in 2040 for the NJTPA Region

Source: HDR Analysis and the NJTPA 2040 Freight Industry Level Forecasts Study

Rail intermodal is expected to grow significantly from 27 percent in 2007 – 10 to 41 percent of overall rail freight tonnage in 2040. The share of domestic rail carload freight is expected to decline from the current 58 percent in 2007 to 44 percent of total rail freight in the NJTPA Region in 2040.

Overall forecasts for rail freight in the NJTPA Region are shown in Table 10. Overall rail tonnage is expected to increase at a CAGR of 0.8 percent per annum during 2007-2040 increasing from 45.6 million tons in 2007 – 10 to 59.7 million tons in 2040. Rail intermodal tonnage is expected to grow the fastest at 2.1 percent CAGR while international rail carloads and rail NC are expected to grow more modestly at 0.8 percent and 1.0 percent per annum, respectively, during 2007 – 2040.



| Year         | Domestic Rail<br>Carload | International<br>Rail Carload | Rail Intermodal | Rail NC | Total Rail<br>Tonnage |
|--------------|--------------------------|-------------------------------|-----------------|---------|-----------------------|
| 2007/10      | 26,452                   | 4,721                         | 12,295          | 2,154   | 45,623                |
| 2020         | 24,435                   | 5,103                         | 15,584          | 2,414   | 47,536                |
| 2030         | 25,329                   | 5,658                         | 18,293          | 2,727   | 52,007                |
| 2040         | 26,099                   | 6,208                         | 21,566          | 3,041   | 56,913                |
| CAGR (07-40) | 0.0%                     | 0.8%                          | 1.7%            | 1.0%    | 0.7%                  |

#### Table 10: Rail Tonnage Forecasts for the NJTPA Region (in thousands)

Source: HDR Analysis and the NJTPA 2040 Freight Industry Level Forecasts Study

#### 3.4.1 Domestic Carload<sup>21</sup>

Total domestic carload freight tonnage flowing through the NJTPA Region is shown in Table 11. Domestic carload volume is expected to decrease slightly from 26.4 million tons in 2007 to 26.0 million tons in 2040. Overall domestic rail carload freight and truck tonnage is expected to increase from 513.9 million tons in 2007 to 734.6 million tons in 2040. Total Domestic freight across all modes is expected to increase from 589.6 million tons to 845.1 million tons. Domestic rail carload share is declining as percentage of total freight share since modeled results suggest increases in cost impact rail share more than they do truck share. The impacts vary by commodity code and origin region of freight.

# Table 11: Total Domestic Rail Carload Tonnage for the NJTPA Region (in Thousands, all modes)<sup>22</sup>

| Year         | Domestic Rail Carload | Total Domestic Rail<br>Carload and Truck<br>Tonnage <sup>23</sup> | Total Domestic Freight |
|--------------|-----------------------|---|------------------------|
| 2007-10      | 26,452                | 513,946   | 589,649                |
| 2020         | 24,435                | 582,152   | 667,530                |
| 2030         | 25,329                | 659,214   | 756,593                |
| 2040         | 26,099                | 734,582   | 845,072                |
| CAGR (07-40) | 0.0%                  | 1.1%  | 1.1%                   |

Source: HDR Analysis and the NJTPA 2040 Freight Industry Level Forecasts Study

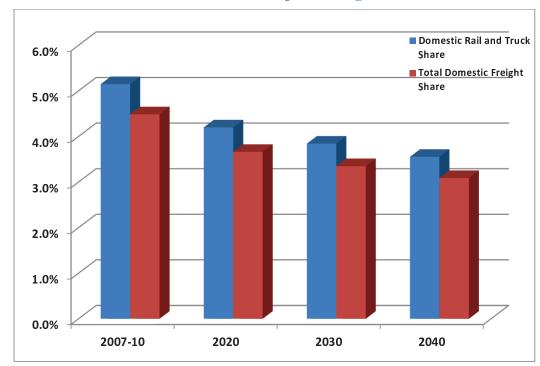
Overall the share of domestic rail carload as a percent of total rail carload and truck freight tonnage flowing through the NJTPA Region is expected to decline slightly over the forecast horizon. The share of domestic rail carload as a percentage of total domestic rail carload and truck tonnage is expected to decline from about 5.1 percent in 2007 to 3.6 percent in 2040.

<sup>&</sup>lt;sup>21</sup> Domestic rail carloads include carload tonnage that are strictly domestic flows between US states and does not include traffic intended for exports, imports or trade between NAFTA countries as classified in Transearch

<sup>&</sup>lt;sup>22</sup> Total domestic freight includes all modes such as Rail (Carload, Intermodal, Not Easily Classified), Truck, Air, Water, Pipeline / Other

<sup>&</sup>lt;sup>23</sup> This domestic rail carloads as defined above and total truck freight for NJTPA Region







Source: HDR Analysis

<sup>&</sup>lt;sup>24</sup> Total domestic freight includes all modes such as Rail (Carload, Intermodal, Not Easily Classified), Truck, Air, Water, Pipeline / Other



# 3.4.2 International Intermodal<sup>25</sup>

Total volume of international freight flowing through the NJTPA Region is shown in Table 12 International rail carload tonnage is expected to increase from 4.7 million tons in 2007 to 6.2 million tons in 2040. Similarly total international freight across all modes is expected to increase from 73 million tons in 2007 to 91.3 million tons in 2040. Model results suggest similar increases in cost impact rail carload share more than they impact the share of truck. Impacts vary for different commodities and by origin region of freight.

| Year         | International Rail<br>Carload | International Rail<br>Carload and Truck Total | Total International<br>Freight |
|--------------|-------------------------------|---|--------------------------------|
| 2007-10      | 4,721                         | 54,838  | 73,087                         |
| 2020         | 5,103                         | 58,939  | 78,321                         |
| 2030         | 5,658                         | 64,824  | 85,810                         |
| 2040         | 6,208                         | 69,595  | 91,379                         |
| CAGR (07-40) | 0.8%                          | 0.7%  | 0.7%                           |

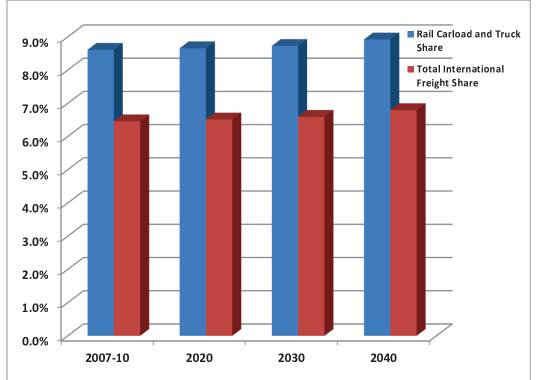
#### Table 12: International Rail Carload Tonnage for the NJTPA Region (in thousands)<sup>26</sup>

Source: HDR Analysis and the NJTPA 2040 Freight Industry Level Forecasts Study

<sup>&</sup>lt;sup>25</sup> International rail carloads include imports, exports to other countries and NAFTA trade flows. They include carload tonnage that flows for example from New Jersey to California but were imports or exports.

<sup>&</sup>lt;sup>26</sup> Total international freight includes all modes such as Rail (Carload, Intermodal, Not Easily Classified), Truck, Air, Water, Pipeline / Other





#### Figure 15: International Rail Carload Share

The share of international rail carload is expected to stay fairly constant throughout the forecasting horizon. The share of international rail carload freight of total international rail carload and truck freight is expected to increase slightly from 8.6 percent in 2007 – 2010 to 8.9 percent in 2040, while the share of international rail carload freight as a percent of total international freight across all modes is expected to also increase slightly from 6.5 percent in 2007 – 2010 to 6.8 percent in 2040.

#### 3.4.3 Rail Intermodal<sup>27</sup>

Rail intermodal freight tonnage is shown in Table 13. Rail intermodal freight is expected to increase from 12.3 million tons in 2007 – 10 to 21.6 million tons in 2040. Total rail intermodal and truck is expected to increase from 549.9 million tons in 2007 – 10 to 777.7 million tons in 2040.

Source: HDR Analysis

<sup>&</sup>lt;sup>27</sup> Base year 2007- 2010 data are from Transearch. Intermodal data includes imports, exports to other countries and NAFTA trade flows. They include intermodal tonnage that flows for example from New Jersey to California.



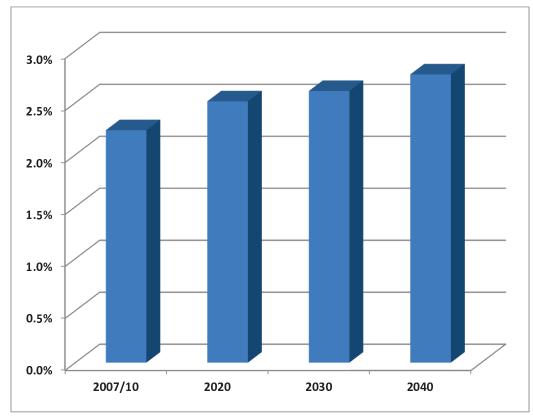
| Year         | Total Rail Intermodal | Total Rail Intermodal and<br>Truck |
|--------------|-----------------------|------------------------------------|
| 2007/10      | 12,295                | 549,907                            |
| 2020         | 15,584                | 619,882                            |
| 2030         | 18,293                | 700,058                            |
| 2040         | 21,566                | 777,687                            |
| CAGR (07-40) | 1.7%                  | 1.1%                               |

#### Table 13: Rail Intermodal Freight Tonnage for the NJTPA Region (thousands)

Source: HDR Analysis and the NJTPA 2040 Freight Industry Level Forecasts Study

Overall share of the rail intermodal freight as a percentage of the total truck and rail intermodal tonnage is expected to increase from 2.1 percent in 2007-10 to 2.8 percent in 2040 as shown in Figure 16. The increase in rail intermodal tonnage that is almost expected to double during the forecast horizon is due to the increasing share as well as the overall expected in increase in rail intermodal and truck tonnage.





Source: HDR Analysis



# 3.5 Anticipated Impacts of Major Economic Trends

The forecasts presented above considered the impacts of rail mode share using the regression based model developed to predict rail mode share as a result of changes in anticipated costs. Another important set of factors that are not directly accounted for through the regression based approach but will nevertheless have a significant impact on freight traffic in the Region are major freight infrastructure investments as well as continuing trends related to globalization and economic growth. The HDR Team evaluated the impacts of several key factors on rail freight moving through the NJTPA Region. Many of these factors have been incorporated qualitatively or through interviews with key personnel at governmental and private agencies.

A commonly discussed historical trend is the transformation of the U.S. economy from a manufacturing-driven economy to today's combined manufacturing, consumer, and service-oriented economy. Industrial employment data trends correspond with those shifts in the number and concentration of workers in those broad industry categories. Given that North Jersey is a primary warehouse and distribution area for the entire mid-Atlantic/Northeast U.S., this historical trend has a significant impact on the NJTPA Region.

Local or regional initiatives to facilitate the increased use of rail can have significant impacts on goods movement patterns. For example, Norfolk Southern's development of their Crescent Corridor linking key markets in the Northeast U.S., Mid-Atlantic, and Central Southeastern U.S. with high quality rail intermodal services will introduce viable competition for truck traffic currently travelling on I-81, I-75 and I-40. Intermodal services in these corridors are largely underdeveloped and thus represent an opportunity for rail freight growth.

Another example of an important local initiative is the development of PANYNJ's Greenville Yard facility, which will add an Intermodal Container Terminal Facility (ICTF) that is expected to significantly increase intermodal traffic moving through the Region. In addition to the ICTF, the Port Authority has plans to develop a barge-to-rail facility as well as the further development of the existing rail-float operations.

Plans to expand the Panama Canal by 2014 are on schedule and would enable large "Post Panamax" vessels to transit to East Coast ports via the Panama Canal. The Port of NY / NJ along with Port of Houston and several other U.S. Gulf and East Coast ports have planned for or have already made significant infrastructure investments to leverage the transportation economies of these larger vessels.

The increased use of container shipping (globally and domestically) is well documented and Class I railroads have identified intermodal traffic as the fastest growing sector of their market. Globally, the emergence of containerized shipping has led to greater efficiencies across all transportation modes, leading to lower international shipping costs, increased global-level manufacturing and distribution, and concentration of shipping traffic to ports with deep berths, access to domestic markets, and double-stack terminals and routes. As this international container shipping traffic continues to grow, the potential for the use of "shuttle trains" to serve Port Newark/Elizabeth will potentially gain traction. The HDR team has included these impacts into its forecasts.

Positive Train Control was mandated by the U.S. Government under the Railroad Safety Act of 2008. PTC is intended to eliminate virtually all rail accidents caused by train-to-train collisions



or overspeeds. The cost of PTC implementation is currently estimated to exceed \$10 billion (some estimates exceed \$20 billion). This cost, which will be borne by railroads, will have a potential impact on capital spending for capacity and efficiency improvements. Inasmuch as currently legislated PTC initiatives are driven by safety rather than capacity, HDR has assessed the planned application of this technology by each of the entities required to deploy it in the Region.

The transport of waste including Municipal Solid Waste (MSW) is an important and significant contributor of freight traffic in the Region. The HDR team included New Jersey Department Environmental Protection (NJDEP) tonnage estimates by waste characterization (municipal, C&D, etc) as part of its assessments as well as information from New York City Department of Sanitation Solid Waste Management Plan. In addition the HDR team incorporated the impacts of Northeast landfill depletion, increased recycling and reuse and emerging conversion technologies on the amount of waste traffic being transported in the Region.

#### 3.5.1 Review of Port Authority of New York / New Jersey Forecasts

As part of this study Port Authority of New York / New Jersey (the Port) forecasts were reviewed. Overall growth in container trade is expected to increase at 3.7 percent per annum during 2011 to 2030 and total throughput at the Port is expected to double by 2030. Rail throughput at the port is expected to increase even more as the share of rail intermodal is expected to increase in the Region and the Port expects to handle nearly three times the volume it is currently handing.

| Year               | Loaded TEUS | Empty TEUS | Total TEUS | Total Rail<br>TEUS <sup>29</sup> | Rail Share |
|--------------------|-------------|------------|------------|----------------------------------|------------|
| 2011               | 4.30        | 1.20       | 5.50       | 0.718                            | 13%        |
| 2020               | 6.3         | 1.9        | 8.20       | 1.476                            | 18%        |
| 2030               | 8.5         | 2.5        | 11.00      | 2.75                             | 25%        |
| CAGR (2011 – 2030) | 3.6%        | 3.9%       | 3.7%       | 7.3%                             |            |
|                    |             |            |            |                                  |            |
| % Increase in TEUS | 97%         | 109%       | 100%       | 283%                             |            |

#### Table 14: Port Authority of New York / New Jersey TEU Forecast (in Millions)<sup>28</sup>

Source: Port Authority of New York / New Jersey

#### 3.5.2 Rail Freight Forecasts Including Major Economic Trends

Overall tonnage forecasts that include expected impacts from the economic trends discussed above are presented in Table 15. Overall rail tonnage flowing to the NJTPA Region (inbound, outbound and through) would be expected to be 76.2 million tons in 2040 compared to 45.6

<sup>&</sup>lt;sup>28</sup> Based on Transearch data for 2007 an average weight of 12 tons can be assigned to Rail TEUS to convert to tonnage

<sup>&</sup>lt;sup>29</sup> Port Authority data on rail throughput were based on number of containers lifted. During 2011 a total of 0.422 million rail lifts were made. A conversion factor of 1.7 TEUS per rail lift was used to convert lifts to TEUS, i.e. for every 100 container lifts, 30 were assumed to be 20' containers (1 TEU) and 70 were assumed to be 40' containers (2 TEUS).



million tons in 2007 – 10. During 2007 – 10 overall carload tonnage was 68 percent of total rail tonnage and share is expected to decline slightly to 58.8 percent of overall rail tonnage in 2040. The decline in share is primarily due to the much faster growth in intermodal freight. The share of intermodal tonnage moving via rail is expected to increase from 27 percent to 37.2 percent over the forecast horizon. Compared to the cost based approach the forecasts represent an increase of 16. 5 million tons in 2040, most of the increase in tonnage due to increases in domestic carload tonnage. Domestic carload is increasing because of higher growth for products such as coal, chemicals, paper and pulp products and food related products. Intermodal freight is expected to increase faster due primarily to developments at Greenville ICTF30 and other developments related to the Panama Canal expansion as well as PANYNJ initiatives to continue to increase the transport of containers via rail.

| Year                                 | Domestic<br>Rail Carload | International<br>Rail Carload | Rail Intermodal | Rail NC | Total Rail<br>Tonnage |
|--------------------------------------|--------------------------|-------------------------------|-----------------|---------|-----------------------|
| 2007/10                              | 26,452                   | 4,721                         | 12,295          | 2,154   | 45,623                |
| 2020                                 | 30,741                   | 5,232                         | 20,502          | 2,414   | 58,889                |
| 2030                                 | 34,595                   | 5,855                         | 24,067          | 2,727   | 67,244                |
| 2040                                 | 38,357                   | 6,439                         | 28,372          | 3,041   | 76,209                |
| CAGR (07-40)                         | 1.1%                     | 1.0%                          | 2.6%            | 1.1%    | 1.6%                  |
| % Increase in<br>Freight (2007 - 40) | 45.0%                    | 36.4%                         | 130.7%          | 41.1%   | 67.0%                 |

Table 15: Rail Freight Forecasts Incorporating Major Economic Trends<sup>31</sup> (thousands of tons)

Source: HDR Analysis and the NJTPA 2040 Freight Industry Level Forecasts Study

The information in the above table is based on Transearch data, as discussed previously. All forecasts were developed based on the baseline 2007-10 numbers. While these baseline numbers and the forecasts summarized above are informative for assessing the total tonnage and the projected changes in these tonnages over the study period, some of this data varies from actual tonnages that are currently moving by rail in the Region. There are several potential reasons for this, including the fact that the Study team was able to access current (April 2012) data, whereas the Transearch data was from the 2007-2010 period. Also, there is the potential for some variance in the data due to reporting methodologies versus actual freight moving through the Region. Given that the purpose of the Study is to assess the freight rail capacity and the numbers/lengths/frequencies of the trains in the Region, in addition to assessing the Transearch data as described above, the Study Team also gathered information on the total number of trains moving through the NJTPA Region in 2012 through interviews with the railroads in the Region. These numbers are shown in Table 16 below.

<sup>&</sup>lt;sup>30</sup> According to the Port Authority, 1 million new lifts are expected at Greenville, 25% of which are expected to be transported via rail. Lifts were converted to TEUs using an assumption of 21.8% empties (current Port Authority empty percentage) and 70% 40 <sup>c</sup> containers and 30% 20<sup>c</sup> containers. This translates to an additional 4.9 million tons in 2020.

<sup>&</sup>lt;sup>31</sup> Base year 2007- 2010 data are from Transearch. Intermodal data includes imports, exports to other countries and NAFTA trade flows.



#### Table 16: Estimated Number of Trains per Day

| Train Commodities | Estimated number of Trains<br>per Weekday (Current,<br>April 2012) |
|-------------------|--|
| Intermodal        | 33   |
| Merchandise       | 21   |
| Ethanol           | 6  |
| MSW               | 6  |
| Automotive        | 4  |
| Orange Juice      | 2  |

Based on the forecasts described above in the section that includes major economic trends, we have estimated the growth in the average number of trains per day for 2020, 2030 and 2040. These estimates are shown in the table below.

| Train Commodities   | Estimated Number of Trains per Weekday |      |      |      |  |  |  |
|---------------------|--|------|------|------|--|--|--|
|                     | 2012                                   | 2020 | 2030 | 2040 |  |  |  |
| Intermodal          | 33                                     | 55   | 65   | 76   |  |  |  |
| Merchandise         | 21                                     | 23   | 26   | 28   |  |  |  |
| Ethanol (and Crude) | 6                                      | 10   | 11   | 13   |  |  |  |
| MSW                 | 6                                      | 8    | 10   | 11   |  |  |  |
| Automotive          | 4                                      | 4    | 5    | 5    |  |  |  |
| Orange Juice        | 2                                      | 2    | 3    | 3    |  |  |  |

These estimates will be explored further in future aspects of this Study, including assessments of the forecasted number of trains per day for each of the lines as well as the average trailing tonnage for these trains. This data will inform the decision as to the capacity for each of the lines as well as the potential constraints and necessary improvements.



# SECTION 4. SUMMARY OF PUBLIC OUTREACH

New Jersey is a densely populated state with more than 1,000 miles of freight rail lines. In this environment, it is important for transportation planning work to foresee and manage the potential impacts of increased rail transportation. That made public outreach to better understand the on-the-ground impacts that might accompany increased rail freight activity an important component of this study. A multi-pronged approach was taken to capture public feedback:

- A Technical Advisory Committee was convened to guide the HDR team and the NJTPA
- A rail issues survey was conducted among the NJTPA county and city subregions
- County-hosted listening sessions were held with those counties and municipalities facing potential impacts
- A public information session was held to compile overall feedback.

The process, findings and summary of these efforts are described in this report.

#### 4.1 Technical Advisory Committee

A Technical Advisory Committee was convened to provide technical and policy feedback to the consultant team. Freight and transit railroads as well as transportation agencies were asked to participate, as were the NJTPA subregions with major rail freight corridors within their boundaries. The TAC member entities are listed below:

- NJ Transit
- Norfolk Southern Railway
- CSX Transportation
- Amtrak
- New Jersey Shortline Association
- NJDOT
- PANYNJ
- The NJTPA Sub-Regions:
- Morris County
- Somerset County
- Middlesex County
- Union County
- Warren County
- Bergen County



Three meetings were held and guidance was provided to the Team regarding rail capacity issues, passenger transit needs, community issues and strategies that would be most efficient in improving rail capacity.

#### 4.2 Survey Outreach

To canvass the range of issues within the NJTPA area, a survey was sent to all the NJTPA county and city members to gauge support for, rail freight in the subregions and identify general issues and problems. The general questions asked were:

- Where are the problem areas in the city/county with respect to rail freight (community issues, constraints, etc.) and the nature of the community issues? Nature of constraints?
- Are there potential opportunities to improve the rail freight system in the city/county, or alleviate the areas of constraints or community issues?
- In your city/county, are there commercially-zoned properties that are being marketed as freight rail-served industrial properties? Are there rail-served sites that are being locally rezoned?
- To help increase employment, are there potential projects or policies that could help foster rail freight-related development?

Eleven counties/cities responded. A summary of the matters raised are described in the table below.



# Table 18: Summary of Survey Responses

| Subregions        | Community Issues   | Potential Opportunities<br>To Improve Rail Freight  | Rail-Served<br>Properties Being<br>Marketed And Or<br>Rezoned  | Suggested Policies<br>To Foster Rail-<br>Served Development                 |
|-------------------|--|---|--|---|
| Bergen            | Grade Crossings; Noise   | Evaluate Grade Separation   | Yes, 28 Properties   | Explore Tax<br>Incentives/Tax Credits                                       |
| Hudson            | Train Idling;<br>Blocked Grade Crossings;<br>Concern With MSW                                      |   | Yes, Koppers Site  |   |
| Hunterdon         | None   | None, Would Require Target<br>Industry  | Possibly   | Possibly If Encouraged<br>In Lebanon Borough                                |
| Jersey City       | Environmental Justice  | Construction Of A Direct Line<br>From Greenville Yard To<br>Northern Branch Line  | None   | None Likely, Given<br>High Cost Of Land In<br>City                          |
| Middlesex         | Grade Crossings  | Raise Rail Weight Loading To<br>Accommodate Modern<br>Freight   | Yes, Former Ford<br>Plant In Edison  | Support Development<br>Of Raritan Center.                                   |
| Morrís            | Trespassing And Safety<br>Along Rail Lines; Some<br>General Negative<br>Perception Of Rail Freight | Address Height Restriction In<br>Phillipsburg; Eliminate Some<br>Grade Crossings In Dover   | Yes, Former 900-<br>Acres Hercules Site  | Develop Hercules Site<br>For<br>Warehouse/Distribution<br>With Rail Access  |
| City of<br>Newark | Transit Need Is A Higher<br>Concern  | The NJTPA Should Work<br>With NJ Transit  | Yes, In Ironbound<br>Neighborhood  | None At This Time.  |
| Somerset          | Grade Crossings; Need For<br>Quiet Zones; Need To<br>Further Improve Route 601<br>Grade Crossing   | Develop Former VA Depot<br>Site And Adessa Site; Evaluate<br>Raritan Valley Line For<br>Freight Related Development;<br>West Trenton Line<br>Improvement Not To<br>Preclude Future Passenger<br>Service | Yes, 35 Properties   | Redevelop Former VA<br>Depot And Adessa Site                                |
| Sussex            | Potential Community<br>Opposition To Greater<br>Freight Use Of NYS&W<br>Line In Sparta Twp.        | Many Opportunities For<br>Improvement.  | NYS&W Is Marketing<br>Properties In Sparta   | None At This Time.  |
| Union             | Lack Of Support And<br>Funding For County-<br>Managed Rail Freight<br>Development                  | State Funding And<br>Commitment For<br>Improvements To County-<br>Managed Rail Line   | Yes, Rail-Served<br>Properties Are Being<br>Rezoned And Pressure<br>Exists For Rail To<br>Trails On Freight<br>ROW | Additional Local<br>Governmental<br>Coordination To<br>Support Rail Freight |
| Warren            | Community Supportive Of<br>Rail  | Working With Partners To<br>Raise Clearance Constraints   |  | Support For Height<br>Clearance Project                                     |



#### 4.3 Listening Session Outreach

To inform municipalities that may be impacted by the growth in rail freight, the NJTPA county and city subregions were asked to host listening sessions that included municipalities within the counties. These county or city planners were asked to invite the municipal planners and/or officials best able to speak to their issues for the study. These sessions focused on documenting current issues, as well as those that might result from the potential growth of rail freight in the area.

The goal of this task was to gather comprehensive feedback on community issues (among others, per the NJTPA guidance to guide the subsequent tasks of this study and inform any future work on new rail capacity.

Eight counties/cities hosted these sessions and invited planners and other officials from the towns currently most affected by freight movement and/or forecasted to be affected by potential capacity improvements. They were identified as targets for these sessions based on the recommended locations for capacity projects and/or areas where freight diversions might be anticipated as a result of capacity issues.

The listening sessions had two aims:

- Present the study overview and information to date:
- Rail freight bottleneck areas identified with growth to 2040
- Improvements identified by rail agencies and freight railroads as being able to provide capacity.
- Solicit and document responses from municipal planners on the above, in terms of:
  - o Current rail livability issues
  - o Current public tenor concerning rail freight
  - Current land use and economic development policy, and public sentiment
  - Any needed local zoning or other project approvals that might be needed for implementing agencies to undergo construction of the improvements
  - Areas where physical projects or diverted rail traffic might impact sensitive receptors.
  - Potential community concerns, conflicts and/or issues.



The following subregions were briefed on the Study findings to date and their issues are summarized in the table below. The detailed meeting summaries are contained in the appendix.

- Bergen County
- Essex County/Newark and Union County
- Hudson County/Jersey City
- Hunterdon County
- Morris County
- Middlesex County
- Passaic County (via WebEx)
- Somerset County

In addition to the above listening sessions, county-specific briefing packages were prepared for Warren County and for Sussex County, as these counties have ancillary rail freight lines that may see added rail freight activity as freight volumes increase over time.

The following is a summary table of issues discussed at the various listening sessions. The top concerns/issues articulated include grade crossings, noise, safety regarding trespassers, and the desire to see more business use freight rail.



#### Table 19: Listening Session Summary

| Concerns/Issues Articulated                                  | Municipal/County Feedback |                    |             |                  |               |                  |                |                 |
|--|---------------------------|--------------------|-------------|------------------|---------------|------------------|----------------|-----------------|
|  | Bergen                    | Essex/Union/Newark | Jersey City | Hunterdon County | Morris County | Middlesex County | Passaic County | Somerset County |
|  |                           |                    |             |                  |               |                  |                |                 |
| Grade crossing - improve maintenance and safety or eliminate | X                         | Х                  | Х           |                  | Х             | Х                | Х              | Х               |
| Noise  | Х                         |                    | Х           |                  | Х             | Х                | Х              | Х               |
| Rezoning of land adjoining rail                              |                           | Х                  | Х           |                  |               | Х                |                |                 |
| Safety of freight handling/commodity concerns                |                           |                    |             |                  |               | Х                | Х              | Х               |
| Safety regarding trespassers                                 | Х                         | Х                  |             | Х                |               | Х                |                | Х               |
| Improved rail height/weights needed for businesses           |                           |                    |             |                  | Х             | Х                | Х              |                 |
| Need for more coordination in planning                       | X                         | Х                  |             |                  |               |                  | Х              |                 |
| Joint uses in rail right-of-ways to be explored              |                           | Х                  |             |                  |               | Х                |                |                 |
| Encroachments  |                           | Х                  |             |                  | Х             |                  |                |                 |
| Litter in Rail ROWs  |                           | Х                  |             |                  |               |                  |                |                 |
| Need for adequate roadway infrastructure to handle trucks    |                           | Х                  |             | Х                |               |                  |                |                 |
| Need for passenger service                                   | Х                         |                    |             | Х                |               |                  | Х              | Х               |
| Desire to see more businesses use freight rail               |                           | Х                  |             | Х                | Х             | Х                | Х              |                 |

#### 4.4 Public Information Session

To provide members of the general public an opportunity to be briefed on the study and an opportunity to ask questions and offer comments for consideration, a public Open House was convened on Monday, December 17<sup>th</sup> 2012 from 4pm to 7pm at the NJTPA's offices at One Newark Center, Newark, NJ 01702. Information on meeting was provided via email to the NJTPA county partners with the request that the information be distributed to municipalities



and members of the public. Notice of the meeting, as well as a reminder, was also provided by the NJTPA via email to their base of (insert number) subscribers, An announcement of the meeting was also provided via the NJTPA's Twitter feed and Facebook page.

At the Open House, the Team had information boards outlining all phases of the study and study findings and capacity recommendations for review, questions and discussion.

Notification of the meeting, the sign-in sheet and a public comment is attached in Appendix A.



# SECTION 5. KEY CORRIDOR EVALUATION

The HDR Team evaluated existing corridor lines in the NJTPA Region to identify physical and operational constraints, as well as possible improvements that could be made to the corridors that would promote freight rail operational efficiency and allow for the freight rail system to accommodate the projected growth in freight volumes into, out of and through the Region.

Based on the information gathered from interviews, site visits, input from technical experts and the public, the team also evaluated a review of potential new corridors or enhancements to existing corridors to further promote freight handling efficiency.

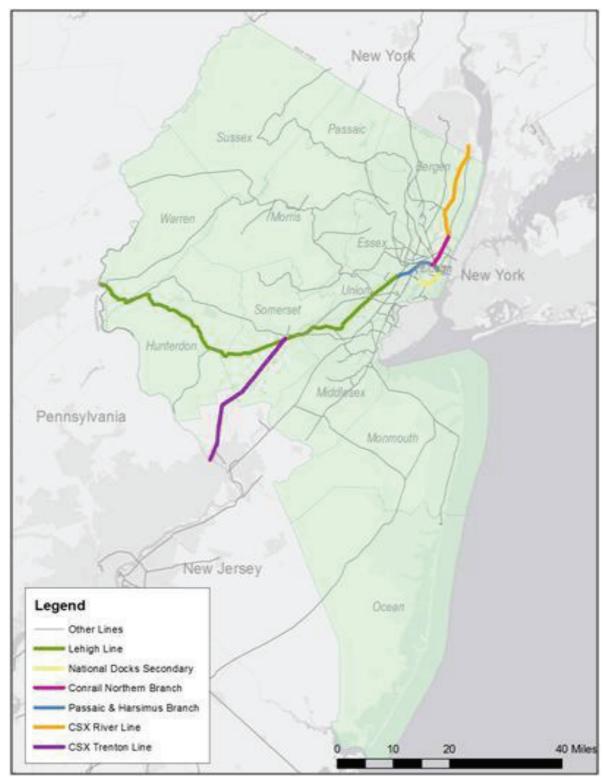
5.1 Primary Corridors

The team's evaluation focuses on the primary corridor lines in the NJTPA Region:

- Conrail National Docks Secondary
- Conrail Northern Branch
- Conrail P&H Branch Line
- CSX River Line
- CSX Trenton Line
- Lehigh Line Norfolk Southern and Conrail

These corridor lines are shown on Figure 17 below.









# 5.2 Freight Railroads Operating on Primary Corridors in the NJTPA Region

Northern New Jersey is served by three major "Class I" railroads: CSX Transportation (CSX), Norfolk Southern (NS) and Canadian Pacific (CP). Two Class I railroads, NS and CSX handle virtually all long-distance intermodal, merchandise, automobile and single-commodity unit trains in the northern New Jersey Region.

NS and CSX jointly own a subsidiary company named Consolidated Rail Corporation (Conrail), which maintains track and operates certain freight yards and rail service within a defined area of Northern New Jersey called the Conrail Shared Assets Operations (CSAO). Specifically, within the CSAO, NS and CSX each operate their own proprietary intermodal terminals, but automobile and merchandise freight facilities are run by Conrail on behalf of both of its parent companies. Similarly, local freight trains within the CSAO are operated by Conrail and provide customers in this area with competitive access to both NS and CSX. Major privately-operated facilities, notably the Port Authority of New York and New Jersey's (PANYNJ's) marine terminals, are also served by both NS and CSX. The freight railroads also maintain their historic rights to operate over and serve freight customers located on lines that were conveyed to passenger agencies, primarily Amtrak and New Jersey Transit. There are 38 active New Jersey Transit miles served by Norfolk Southern. Additionally, there are a number of independent short lines handling local freight within the Region through connections to the larger carriers.

#### 5.3 Analytical Methodology, Rail Corridor Capacity Analysis

To estimate capacity on the relevant rail lines in the NJTPA Region, the HDR Team employed two approaches. The first is based on line-specific data related to track configuration and signaling, the findings of a national study related to freight rail line capacity, and information collected throughout the study. The second is a throughput analysis that considers maximum average speed of the trains, distance between trains, and other factors. Both approaches are described below. The results of each methodology were evaluated by professionals on the study team and conclusions related to freight rail capacity were made.

For both analyses, the following line segments were evaluated to estimate capacity and identify specific constraints:

- Conrail National Docks Secondary
- Conrail Northern Branch
- Conrail P&H Branch Line
- CSX River Line
- CSX Trenton Line
- Lehigh Line Norfolk Southern and Conrail



# 5.3.1 Capacity Estimation Based on Association of American Railroads (AAR) Study

Using the data collected for each of the rail lines as described previously, as well as the results of an AAR report<sup>32</sup> addressing capacity on the national rail network, the HDR team estimated the current capacity of each of the key corridor lines in the NJTPA Region. In general, the key drivers of the capacity analysis were levels of existing train traffic on the lines, type of trains (e.g., merchandise, intermodal) using the line, type of control systems, and number of tracks.

Capacity for each of the rail lines was estimated using information related to tracks (e.g., singleor double-tracked), controls, and mix of train types (e.g., intermodal, merchandise). For trains evaluated in this study, multiple train types use the line and all lines are utilizing Centralized Traffic Control signaling. The lines vary, however, in terms of how many miles are single- versus double-tracked, and this impacts the ability of a particular rail line to support current and future freight volumes. The combination of this information was used to estimate the capacity of the line.

Based on the AAR study, the practical maximum trains per day is 30, if multiple train types use the corridor, signaling is a Centralized Traffic Control/Traffic Control System, and the line is single-tracked. For a double tracked line with the same signaling system and train composition, the maximum number of trains is 75 per day. In the NJTPA Region, all of the key corridors have a combination of single- and double-track. As a result, the HDR Team adjusted the AAR figures to reflect this variation in track configuration. To do this, the team calculated the share of each line that is double-tracked. This share was applied to the difference between AAR's estimate of capacity on a single-track line and a double-track line. This provides an estimate of the additional trains that the line could support given that sections are double-tracked. These additional trains were added to the practical maximum trains per day for a single-tracked rail line to determine each line's capacity.

Volume to Capacity Ratios (VCR)

Using current train traffic and projected train traffic for each of the lines, volume to capacity ratios were calculated. The following table presents the VCRs. A VCR that exceeds a value of 1.0 means that the line's volume exceeds the capacity of that line; that is, the line likely experiences unstable flows and service breakdown conditions, based on the AAR study definitions:

<sup>&</sup>lt;sup>32</sup> "National Rail Freight Infrastructure Capacity and Investment Study," prepared for the Association of American Railroads by Cambridge Systematics, September 2007.



| Table 20: F | reight Volume | to Capacity | Ratios   |
|-------------|---------------|-------------|----------|
| 10010 10011 |               |             | 1.000100 |

|                     | Volume to Capacity Ratio |     |     |     |  |  |  |  |
|---------------------|--------------------------|-----|-----|-----|--|--|--|--|
| Corridor            | 2012 2020 2030 2040      |     |     |     |  |  |  |  |
| CSX Trenton Line    | 0.5                      | 0.7 | 0.8 | 0.9 |  |  |  |  |
| NS Lehigh Line      | 0.7                      | 1.0 | 1.1 | 1.3 |  |  |  |  |
| Conrail Lehigh Line | 0.7                      | 1.1 | 1.2 | 1.4 |  |  |  |  |
| CR P&H Branch Line  | 0.8                      | 1.2 | 1.4 | 1.5 |  |  |  |  |
| CR National Docks   | 0.5                      | 0.7 | 0.8 | 0.9 |  |  |  |  |
| CR Northern Branch  | 0.8                      | 1.1 | 1.3 | 1.5 |  |  |  |  |
| CSX River Line      | 0.7                      | 0.9 | 1.0 | 1.2 |  |  |  |  |

# 5.3.2 Throughput Analysis

A second approach to evaluating capacity considered "throughput," which is the average practical maximum rate of end-to-end movement over a network. This approach considered average maximum allowable speeds and line/segment lengths, as well as other assumptions related to train operations.

A weighted average maximum speed was calculated using speed limits posted every 1/10 of a mile on each of the lines. This weighted average maximum speed was combined with line length to calculate the approximate maximum time it would take a train to traverse the line or segment. The team then added factors to account for estimates of time for headway,<sup>33</sup> as well as divergent train moves. Adjustments based on divergent train moves were specific to the corridors that have multiple railyards and other attributes that result in trains having to slow or stop in order to allow for other trains to pass or to enter into a yard. Using this information, calculations were made to estimate the maximum capacity of the line, given these various factors.

The preliminary estimates from both approaches were reviewed by the study team and adjustments were made to the analysis as appropriate to reflect:

- Information obtained from the technical advisory group meetings
- Findings from interviews with stakeholders
- General knowledge of the Region's rail network

The results of this analysis are presented in the table below and further discussed in the constraints sections of this report. Capacity estimates using both approaches are provided below.

<sup>&</sup>lt;sup>33</sup> Headway is the time interval between two following trains.



|                     | Capa  | Capacity   |      |      | d Trair | IS   | Year Demand Exceeds<br>Capacity  |   |
|---------------------|---|--|------|------|---------|------|----------------------------------|---|
| Corridor            | Maximum<br>Freight<br>Trains on<br>Line –<br>Throughput<br>Analysis | Maximum<br>Freight<br>Trains on<br>Line –<br>AAR<br>Analysis | 2012 | 2020 | 2030    | 2040 | Throughput<br>Analysis<br>Result | Capacity<br>Estimate<br>Based on<br>AAR Study<br>Result |
| CSX Trenton Line    | 45  | 38   | 20   | 27   | 31      | 34   | Not at capacity                  | Not at capacity   |
| NS Lehigh Line      | 47  | 37   | 24   | 36   | 42      | 49   | 2040                             | 2030  |
| Conrail Lehigh Line | 43  | 60   | 44   | 64   | 72      | 83   | 2020                             | 2020  |
| CR P&H              | 36  | 34   | 29   | 41   | 47      | 53   | 2020                             | 2020  |
| CR National Docks   | 45  | 36   | 18   | 24   | 29      | 33   | Not at capacity                  | Not at capacity   |
| CR Northern Branch  | 47  | 48   | 36   | 52   | 60      | 70   | 2020                             | 2020  |
| CSX River Line      | 40  | 46   | 30   | 42   | 48      | 56   | 2020                             | 2030  |

# Table 21: Capacity Estimation Results, Both Approaches

# 5.4 Summary of Approach to Identifying Rail Corridor Constraints

In the following section, the HDR team identifies the physical, policy, and institutional constraints to goods movement and passenger capacity in the NJTPA Region's primary rail corridors based on current and projected demand for freight rail transportation, the existing freight rail infrastructure, and information collected from technical experts and during site visits. Potential problems of at-grade crossings are also highlighted. The identification of the current and future rail corridor constraints involved a four step process, as described below.

#### 5.4.1 Step One – Meetings and Interviews

The HDR Team held interviews and meetings with numerous stakeholders in the Region, including representatives from the following entities:

- CSX Transportation (CSXT)
- Norfolk Southern (NS) Corporation
- Conrail (CR)
- New Jersey Transit
- Amtrak
- Port Authority of New York and New Jersey (PANYNJ)
- New Jersey Department of Transportation
- Several short line railroads in the NJTPA Region



For each of these interviews, the HDR Team provided an overview of the study to provide a context for the information requested and to indicate how the information would be used. Perceived corridor constraints and other issues of relevance to the study were discussed during these meetings. Based on these interviews and meetings with technical experts, the team identified a number of potentially constrained areas along freight rail lines in the NJTPA Region.

# 5.4.2 Step Two – Working Session with Technical Advisory Committee

The Technical Advisory Committee (TAC) for this study consists of the primary stakeholders in the Region, including county representatives, freight railroads, passenger railroads, PANYNJ. There have been three TAC meetings to date, and a three hour working session with the TAC was held on April 25, 2012, and was facilitated by the HDR Team. The purpose of the Working Session was to discuss constraints on the primary corridors, as well as potential improvements. Freight rail related issues, such as weight on rail and vertical clearance, were also discussed. The meeting ended with a discussion of some of the potential new or enhanced existing rail corridors that may be appropriate to consider in an effort to expand existing freight rail capacity in the NJTPA Region. The meeting's agenda and notes are provided in the appendix.

# 5.4.3 Step Three – Data Analysis

Each of the rail lines were evaluated using the rail geo-database constructed in previous tasks. This data, combined with the team's freight rail expertise, study findings, and national studies was used to pinpoint the constraint areas and likely reasons for the constraint.

#### 5.4.4 Step Four – Assessment of New Rail Corridors and Enhancements to Existing Rail Corridors

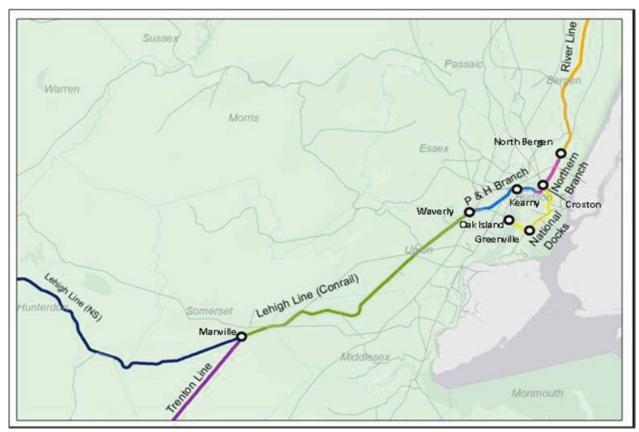
Based on interview and meeting findings, as well as data analysis, the HDR Team conducted a review of where potential new corridors may be possible. In addition, the team identified areas where investments could be made to existing corridors that would potentially reduce constraints on the existing rail network in the NJTPA Region.

A complete description of the data analysis utilized to evaluate the key corridors is described below.

#### 5.5 Data Analysis by Rail Line

The figure below shows the key corridor lines in the NJTPA Region. The Trenton Line and Lehigh Line enter the Region from the west, meeting up at Manville. At Waverly, these rail lines join the P&H Branch. From the north, the River Line and Northern Branch enter the Region, meeting up with National Docks at Croxton.





# Figure 18: Key Corridors in the NJTPA Region's Rail Network

Data were assembled for each of these rail line segments and used to estimate capacity using both approaches described previously. The following section describes the rail lines and offers findings related to each, in terms of capacity. In addition, the analysis isolates key constraint areas that were further evaluated after the initial line segment review.

# 5.5.1 CSX Trenton Line

The Trenton Line is owned by CSX and runs from Park Junction in Philadelphia northeast to Manville, New Jersey. It is CSX's main freight line connecting points to the south (via Philadelphia) to the Northern New Jersey area.

As shown in the figure below, the Trenton Line connects to the Lehigh Line at Port Reading Junction (located in Manville, NJ), which is also the location of a CSX serving yard<sup>34</sup>. The yard is to the south of the Lehigh Line and east of the Trenton Line. To the north of the Lehigh Line, within Port Reading Junction Interlocking limits, there is a connection to the Royce Running Track.

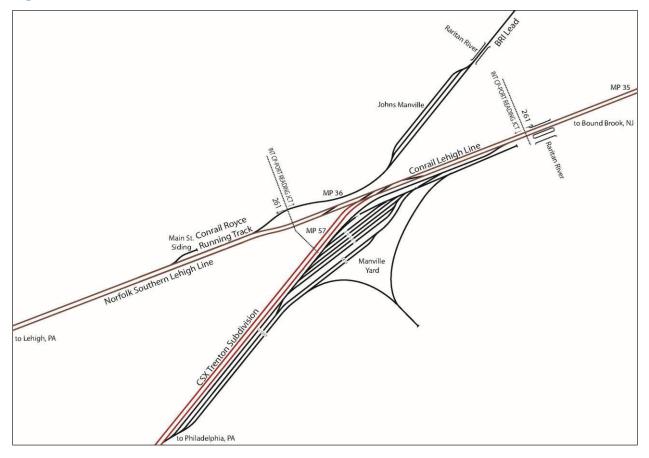
As illustrated in the figure, there is a convergence of three railroad entities – NS, CSX and Conrail – and their respective dispatching districts at Port Reading Junction. The Trenton Line to the south is controlled by CSX. The Lehigh Line east, including Port Reading Junction

<sup>&</sup>lt;sup>34</sup> A serving yard is a yard where local crews report to pick up freight and serve industries within a geographic area.



proper, is controlled by Conrail Shared Assets. West of Port Reading Junction, the Lehigh Line is controlled by Norfolk Southern. Each dispatcher is located at separate physical locations, requiring significant coordination and communication to maintain fluidity through the area.

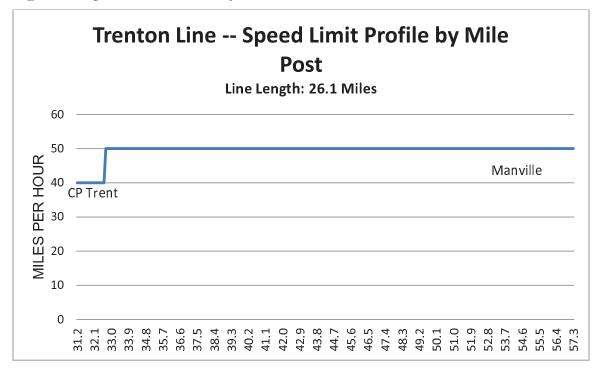
#### Figure 19: Trenton Line and Manville Yard





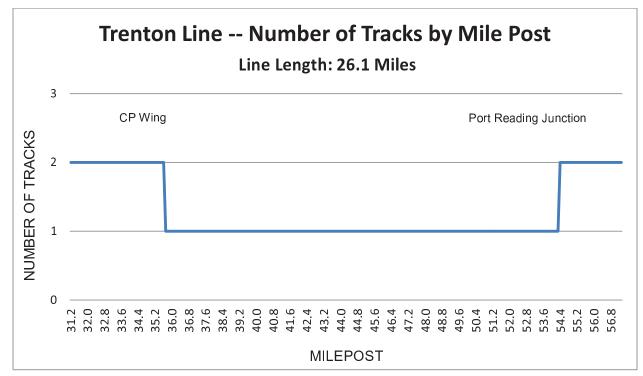
Speed limits on the Trenton Line range from 40 to 50 mph, with all but a very small stretch at 50 mph, as shown in the figure below.

Figure 20: Speed Limit Profile by Mile Post, Trenton Line



As shown in Figure 21, there is a section between milepost 31.2 and 35.2 that is double-tracked, though only one track is dedicated to freight traffic. Completion of the Liberty Corridor project provides an additional double-tracked section between milepost 54.4 and 56.8. In general, however, the Trenton Line is primarily single track. Currently, there is nowhere to "park" a train in Manville; the Sunnymeade second track will alleviate this issue, allowing more fluidity to northbound trains, as well as resolving issues associated with conflicting NS/CR Lehigh Line traffic.





#### Figure 21: Number of Tracks by Mile Post, Trenton Line

In addition to the single-track constraint on this line at Port Reading Junction, there is limited headroom for local switching from the end of Manville Yard without occupying the single main track. This limitation is a potential concern, given that freight volumes on CSX are likely to increase over time. Another factor that may impact capacity is local trains. Additionally, there are typically yards or side tracks where local trains can pull off to clear the main track, and some freight customers may have their own yards. Though not explicitly incorporated in the capacity analysis, it is an issue that may be relevant as lines approach capacity.

Another consideration with respect to the CSX Trenton Line is the possibility that commuter rail service by New Jersey Transit will be resumed in the longer term. This line is a corridor of interest to NJ Transit. An Environmental Assessment was completed in 2007; however, no funds are currently available for advancement of the project. NJ Transit expects to review the project again in the future and will work closely with the freight railroad partners to configure the infrastructure to support a future passenger rail service, while being mindful of the then-current and future forecasted freight capacity requirements. The Environmental Assessment document for this project indicates a base passenger service of 14 daily trips (7 round trips) on this line.

Port Reading Junction is currently configured for a second main track to the south of MP 57.3. Completion of the second track on the Trenton Line will enable more fluid operations over the Lehigh Line and between the CR Lehigh Line and the Trenton Line.

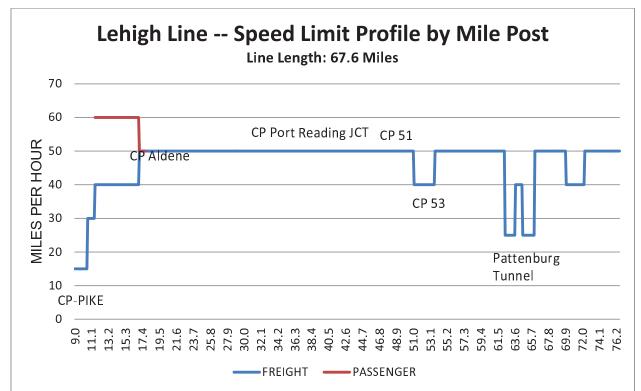


# 5.5.2 Lehigh Line

The Lehigh Line (which for this discussion includes both the NS Lehigh Line and the CR Lehigh Line) is a major corridor running east to west from Allentown, PA, to Newark, NJ. Between the New Jersey State Line and Newark, the ownership of the line is in two segments. It is operated by NS from MP 76.6 at the state line until MP 36.3 at the connection with the CSX Trenton Line at Port Reading Junction in Manville. (Note: a 1.5 mile segment east of the state line (MP 76.6) is owned by NJ TRANSIT, the reminder of the line to MP 36.3 is owned by NS). Conrail owns and dispatches the portion of the Lehigh Line between Manville and Newark. Traffic entering or departing the CSAO via NS utilize the CR Lehigh Line and the NS Lehigh Line. A small amount of traffic utilizes the Port Reading Secondary route from CP Bound Brook to the east; this traffic only operates on the three miles of the Lehigh Line between CP Bound Brook and CP Port Reading Junction.

A six-mile segment of the CR Lehigh Line is utilized by NJ Transit's Raritan Valley Line (RVL) between Aldene and NK. The future long-term Raritan Valley Line (RVL) service plan suggests that this line could carry approximately 100 daily RVL trains (50 each way). NJ Transit, Conrail, CSX and NS agree that increased capacity on this vital route is important to protect the long-run capacity requirements of both freight and passenger service.

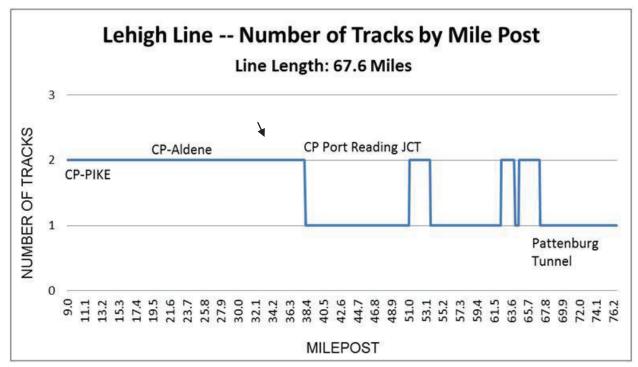
The Lehigh Line is heavily traveled with numerous operational complexities. As shown in the figure below, speed limits are highly variable depending on location on the line segment. From CP-Pike to CP-Aldene, speeds range from 15 to 60 mph for passenger trains. Freight traffic is permitted to travel at speeds ranging from 40 to 50 mph, except in the area of the Pattenburg Tunnel. It is important to note, however, that freight trains typically slow to approximately 20 mph due to the grade in this area and therefore the trains lose more than 5 minutes to travel this segment. This is because slowing a freight train takes several miles in advance of the lower speed limit, and takes several miles at the other end to accelerate again to the desired speed.



# Figure 22: Speed Limit Profile by Mile Post, Lehigh Line

As shown in the figure below, the rail line segment is double-tracked in some areas and singletracked in others, adding to the complexity of this area of the NJTPA Region's rail network. Between CP-Aldene and CP-Port Reading, the line is double-tracked. It then becomes singletracked to MP 51.0. From that point on, most of the line is single-track, with a few areas of double-tracking as trains approach Pattenburg Tunnel. Norfolk-Southern does utilize the Royce Running Track to extend the "double-track" configuration. While it is not true double-track, it does provide utility.





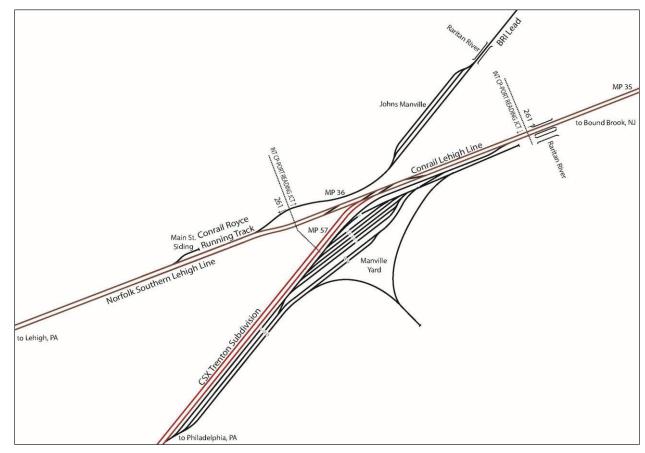
# Figure 23: Number of Tracks by Mile Post, Lehigh Line

#### Manville Yard

As shown in Figure 24, the area around Manville Yard is the convergence of several rail lines, including the Trenton Line and Lehigh Line. Norfolk Southern has invested in upgrading the Royce Running Track and adding other infrastructure to provide passing sidings between the state line and Manville. Upgrades were also made to eliminate an operations bottleneck and curtail idle emissions by increasing capacity from one track to multiple tracks throughout the length of Port Reading Junction.





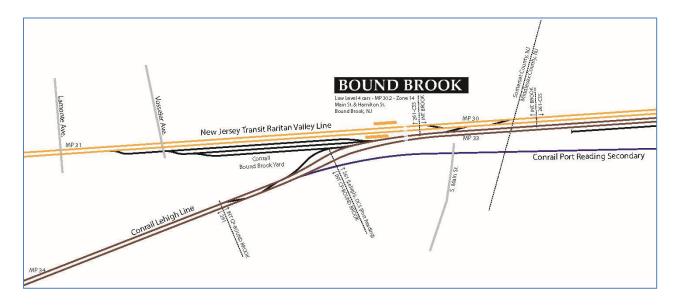


#### Bound Brook

While there is no current capacity constraint at Bound Brook, there is the opportunity to divert freight traffic onto the Port Reading Secondary going east. A discussion of this option is provided later in the report.







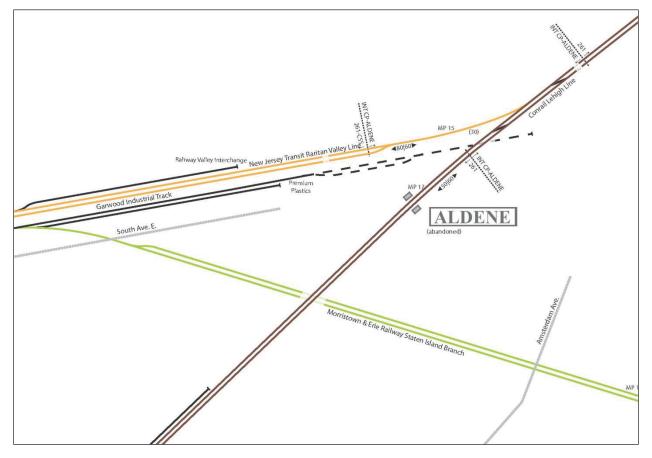
It is also important to note that in 2011, there were two major flood events near Bound Brook, as well as prior major flood events in 2004 and 2006. While the railroads have made adjustments since Hurricane Agnes, and their assets are well maintained and well drained, flooding continues to be a concern. Also, there is an abandoned right of way between Bound Brook and Manville that could be reestablished should use of the Port Reading Line increase to levels requiring additional capacity between Manville and Bound Brook.

#### CP Aldene to CP Newark

Between CP Aldene and CP Newark, freight and passenger trains share the right of way. While this is a two track railroad, it is operated for much of the time as two single track rail lines since NJ Transit service enters and exits from the north side. The CR Lehigh Line accommodates up to approximately 44 freight trains and 60 passenger trains per day over this segment.



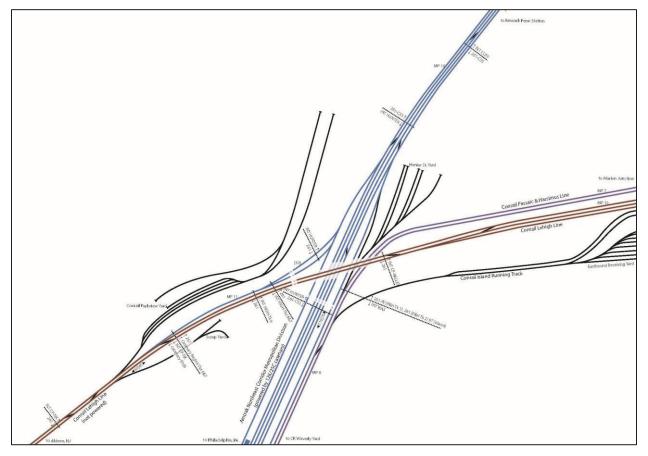
#### Figure 26: Aldene



In addition to the shared use of passenger and freight rail traffic on the CR Lehigh Line, local freight traffic, including traffic to and from Parkview Yard, utilize the line. Track configurations on the Lehigh Line in this area also vary considerably, as shown in the figure below. Overall, the volume of trains operating over this segment, coupled with single-track constraints for passenger convergence onto the Lehigh Line at both ends – Aldene and NK – pose particular operating constraints and concern as to the absorption of additional traffic.



## Figure 27: Newark

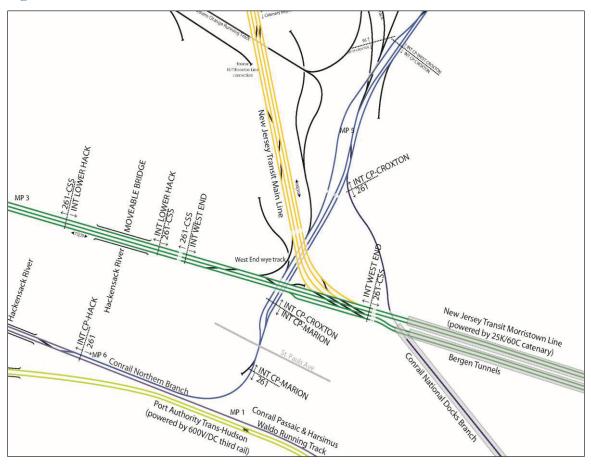


## 5.5.3 Passaic and Harsimus (P&H) Branch

Although a relatively short line segment, the P&H is a major link in the freight network in northern New Jersey. The figure below shows the line in this area, as well as one of the two moveable bridges located on the P&H Line.





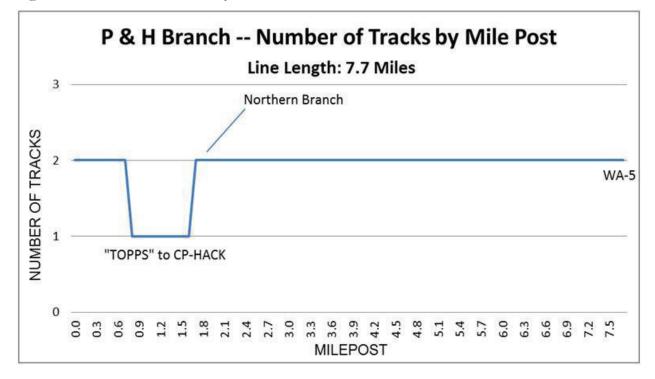


P&H is double-tracked between Waverly Yard and CP-Hack but, effectively, only a single track exists for through freight movements between CP Kearny and CP Hack. The movable bridge is a two-track structure but, for all intents and purposes, the south track is dedicated to the South Kearny intermodal terminal facility when they need to switch trains in and out of the facility.

The remainder is not on the key corridor at this point; it is a connection to CP-Waldo. The figure below shows where the 7.7 mile long P&H Line is single- and double-tracked by milepost marker.

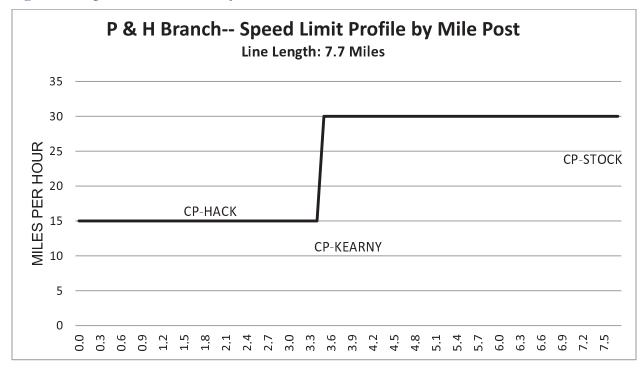


#### Figure 29: Number of Tracks by Mile Post – P&H Branch



Speeds on the P&H vary from 15 to 30 mph, as shown in Figure 30.

Figure 30: Speed Limit Profile by Mile Post, P&H Branch





## 5.5.4 National Docks Secondary

The National Docks Secondary is a freight rail line owned by Conrail and primarily used by CSX. It provides access to maritime, industrial, and distribution facilities at Port Jersey and Constable Hook, as well as carfloat operations at Greenville Yard.

The 7.2 mile long rail line segment is mostly single-tracked, except for a roughly one-mile stretch between Upper Bay and CP-Green, as shown in Figure 31. The line travels through both the Bergen and Waldo Tunnels. The State of New Jersey Department of Transportation as part of the Liberty Corridor Project of National and Regional Significance recently completed work to improve vertical clearances on two tunnels on this railroad route between the Port of New York and New Jersey and the CSX mainline serving the United States rail network. The Bergen and Waldo tunnels limited the height of Intermodal container trains to 19 feet, 2 inches. The improvements will now pass industry standard intermodal container trains of 20 feet, 2 inches in height.<sup>35</sup>

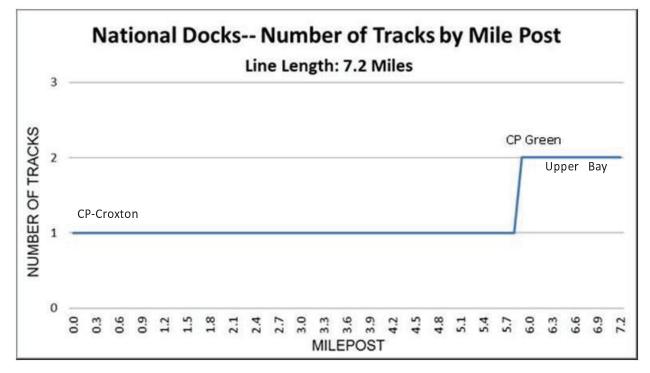
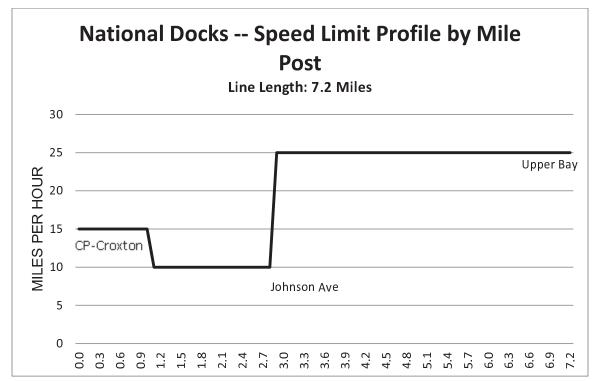


Figure 31: Number of Tracks by Mile Post, National Docks

Speed on the line ranges from 10 to 25 mph, with speed on most of the line set at 25 mph as shown in Figure 32 below.

<sup>&</sup>lt;sup>35</sup> http://www.state.nj.us/transportation/works/libertycorridor/nationaldocks.shtm





### Figure 32: Speed Limit Profile by Mile Post, National Docks

National Docks provides direct access to Greenville Yard from the west, which is planned for redesign. The yard currently houses the Cross Harbor Freight operation, Tropicana, and other merchandise. It historically also hosted auto unloading in the area south of the float operation. Current plans anticipate including intermodal traffic for Global Marine (anticipated at up to a million lifts annually) and the New York City Department of Sanitation generated solid waste from Marine Transfer Stations at Greenville. Close coordination of the various elements will be required to effectively accomplish the proposed growth in traffic at this location.

Figure 33 shows the National Docks rail line, as well as its lack of direct access to Greenville Yard from the north.







Note: The orange circle in the figure above indicates a constraint point.

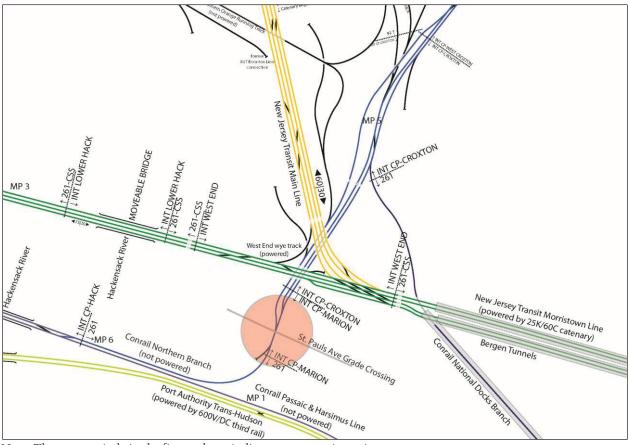
The Upper Bay Bridge is a vertical lift bridge spanning the Newark Bay. It is used by trains when they travel along the National Docks Line, as well as being used for yard operations at the east end of Oak Island Yard. All of the moveable bridges in the NJTPA Region are quite old, and their operations impact the ability of freight to travel freely. A discussion of the moveable bridge impact on rail operations in the Region is provided later in this document.



### 5.5.5 Conrail Northern Branch

The CR Northern Branch is owned and operated by the Conrail Shared Assets Organization, and the rail line connects the P&H Branch, the National Docks Line and the River Line. The figure below shows the CR Northern Branch and Marion Junction.

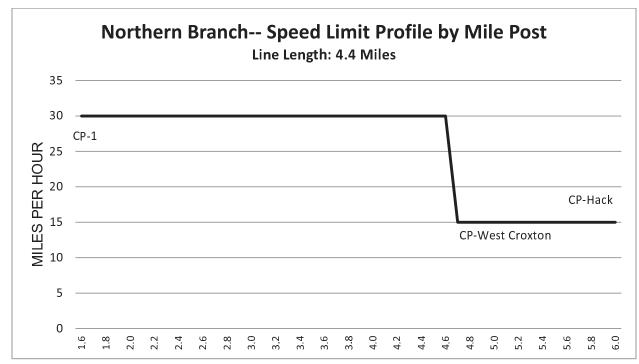




Note: The orange circle in the figure above indicates a constraint point.

As shown in the figure below, speeds range from 15 to 30 mph on the Northern Branch. The maximum allowable speed between CP-Croxton and the moveable bridges crossing the Hackensack River is slower than elsewhere on the line in part because of geometry and in part because of the movable bridges.

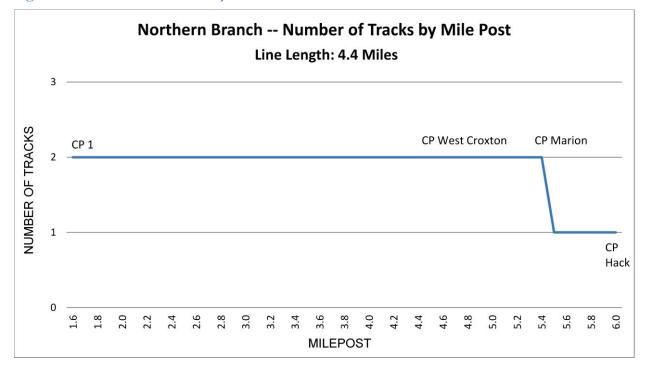




### Figure 35: Speed Limit Profile by Mile Post, Northern Branch

Most of the Northern Branch is double-tracked except for the area from CP-Marion to CP-Hack, as shown in Figure 36.

Figure 36: Number of Tracks by Mile Post, Northern Branch





## 5.5.6 CSX River Line

The portion of the CSX River Line located in the NJTPA Region runs from CP-1, near North Bergen Yard, to the New York/New Jersey border. The CSX River Line extends northward from that point to Selkirk Yard, located outside of Albany, NY, which is a major classification yard in the CSX system.

As shown in the figure below, speeds vary between 30 and 50 mph on the New Jersey segment of this line. Through Teaneck, speeds are limited to 30 mph. Because there are constraints below and at Marion Junction, trains headed southbound on the River Line from Selkirk to Northern New Jersey are often delayed. As a result of these delays, the Teaneck area has community concerns, described later in this report.

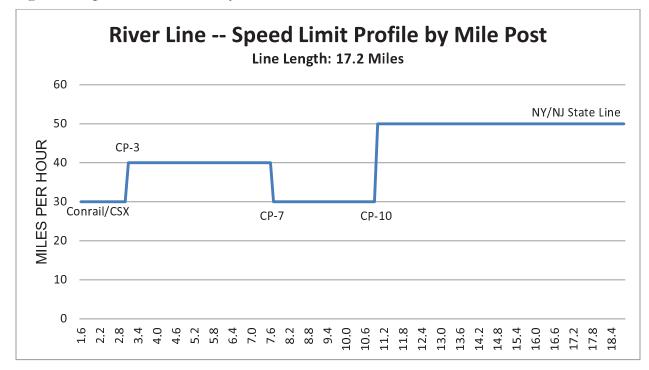
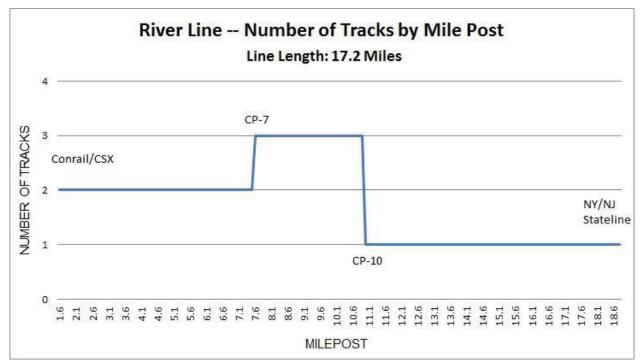


Figure 37: Speed Limit Profile by Mile Post, River Line

Slightly more than half of the River Line in New Jersey is double- or triple-tracked. From CP-7 to CP-10, the line is triple-tracked. Just north of Teaneck, the rail line is single-tracked, as shown in the figure below.





## Figure 38: Number of Tracks by Mile Post, River Line

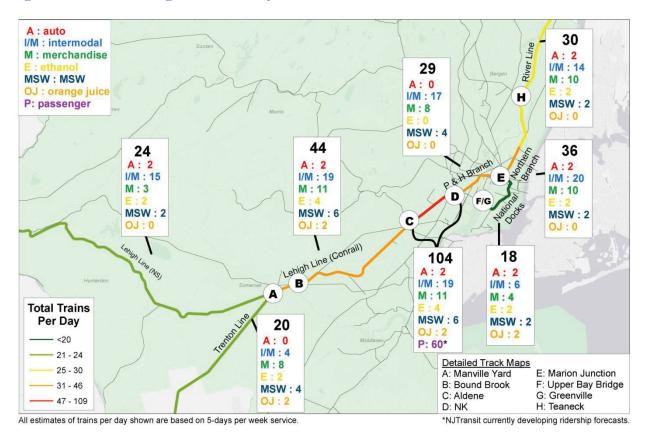
#### 5.6 Identified Current Constraints

Using the two methodologies described previously, as well as the information collected throughout the study from stakeholders and other experts, current constraint points on the rail lines were identified. They include:

- The Conrail Lehigh Line, in particular, Aldene to Newark
- The Conrail Lehigh Line, Manville Area
- The Marion Junction Area
- The CSX River Line, Teaneck
- The moveable bridges in the Region

With respect to the moveable bridges in the Region, most of these issues discussed relate to the key corridor lines (P&H Line and the National Docks). Certain other moveable bridges should be included as areas of concern, however, as they impact fluidity of rail movements. The key constraint areas listed above are illustrated below in the figure.





### Figure 39: Rail Line Segments and Key Constraint Areas, 2012

The following sections describe more completely the identified constraints, the likely reasons for the constraint's existence, and potential ways to mitigate the constraint over time.

## Conrail (CR) Lehigh Line, Aldene to NK

The Conrail Lehigh Line includes a shared use segment between Aldene and NK. This segment is a heavily traveled corridor, accommodating up to approximately 44 freight trains and 60 passenger trains per day. There are several areas on the CR Lehigh Line where either physical constraints or significant rail/community interface exist.

Between Aldene and NK, there are two main tracks. While passenger and freight trains can operate on either track when traversing this section of the Lehigh Line, the entry and exit of passenger trains is limited to convergence via single-track connections to the Lehigh Line at both ends. The primary constraints on this line relate to the heavy traffic and shared use aspects of the corridor. Based on the capacity analysis completed by the team and based on the national study and key variables such as signaling type and track configuration, freight volume by 2020 will require 100 percent of the estimated capacity (VCR=1.0). This means that this segment of the Lehigh Line is reaching its capacity to accommodate maintenance and recover from incidents. It is important to note that between Aldene and NK, there is a "fleeting" of trains to account for the weekday morning and afternoon rush hours. Freight trains are limited during these hours, and this limitation has a ripple effect throughout the rail network in the Region.



The line has a wide right of way, however, which could potentially facilitate two separate parallel double-track corridors, (potentially one pair of tracks for passenger trains and one pair of tracks for freight). By separating the different train types, capacity on each segment would be increased.

One potential solution that would provide fluidity for NJ Transit, Conrail, NS and CSX on the Lehigh Line would be accomplished by independent freight and passenger rights-of-way between CP-NK and CP-Aldene. There is also an opportunity to initiate the construction of a third track within the existing corridor, parallel to the existing rail alignment. This potential project would fit within the existing right-of-way and would be completely grade-separated. Completion of this project would mitigate the current restrictions imposed on both rail freight and passenger services, which prevent either service from freely serving their existing and projected customer demands. Based on the AAR-study-based approach utilized by the team to assess capacity, a third track would result in this stretch of the Lehigh Line being able to accommodate the freight volume anticipated beyond 2040.

#### Conrail (CR) Lehigh Line, Manville Area

The CR Lehigh Line currently accommodates up to 44 through trains per day, primarily intermodal and merchandise trains. Based on both approaches utilized to estimate capacity, freight volume is coming close to exceeding the line's capacity. It is expected that by 2020, volume will exceed the capacity available on the CR Lehigh Line.

In addition to the capacity concerns, grade crossings on this line are not grade separated, which provides some concerns about safety. In fact, just east of Manville at Cedar Avenue, there is a major grade crossing issue as well as flooding issues. This is detailed later in the report.

Just west of Manville, NS has invested in upgrading the Royce Running Track and adding other infrastructure to provide passing sidings between the New Jersey state line and Manville. These improvements address some aspects of the capacity issue, but there are still improvements that could be made to the CR Segment of the Lehigh Line.

At Manville, the Port Reading Junction interlocking is controlled by Conrail. West on the NS Lehigh Line, it is controlled by NS. South of Port Reading Junction, the Trenton Line is controlled by CSX. The convergence of these three dispatching districts is challenging and may contribute to congestion in the area at different times.

#### Marion Junction Area

The general Marion Junction Area is shown in the figure below. Within a short distance there is a convergence of the National Docks and P&H Branch from the south, the Conrail Northern Branch, Croxton Yard, and the Southern Tier from the northeast. In addition, there are several elements in this area that are single-tracked, which further limits the railroads operationally, as documented previously. Other constraints include grade crossings and moveable bridge lifts.



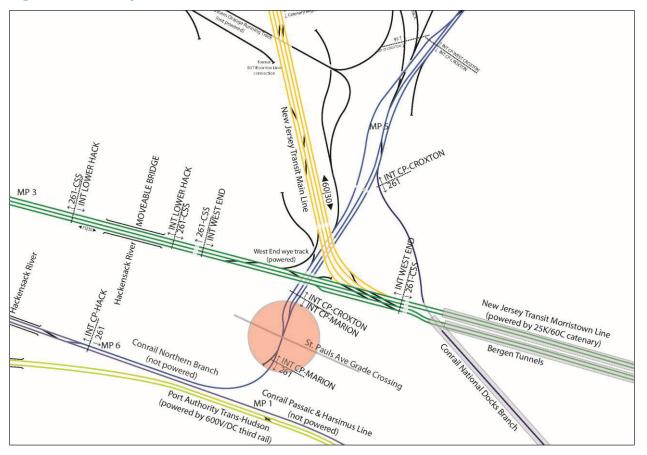
## Figure 40: Marion Junction Area





Based on the capacity analysis completed by the team, the P&H and Northern Branch will be approaching their capacity by 2020. As the volume on these lines continues to increase over time, conditions at Marion Junction are likely to worsen.

#### Figure 41: Marion Junction



#### CSX River Line, Teaneck

CSX operates about 2.6 miles of its River Line in Teaneck Township. That portion of the River Line is grade separated and has two tracks with a passing siding track. Train congestion issues have historically manifested themselves in Teaneck, as trains may be held in this area for several reasons. First, they may be required to wait for space to enter into the rail yards to the south. Second, trains may be held in Teaneck waiting for a slot to enter onto the single-track River Line going to Selkirk, New York. Noise from the resultant train idling negatively impacts residential communities adjoining the trackage in Teaneck. There are also concerns over the security of trains and their cargos. These concerns have been raised to CSX and elected officials. There is room in the rail ROW to add a second track to the River Line to help alleviate this problem. However, CSX does not have a funded project to add capacity in Bergen County at this time.



Thirty trains per day use the River Line currently and slightly more than half of the rail line's length in New Jersey is double-tracked. The capacity analyses suggest that capacity will be reached in the 2020 or 2030 timeframe.

CSX has increased capacity on the River Line north of Teaneck and has put in passing sidings, as well as other improvements, to increase the fluidity. Despite these improvements, however, there are still community concerns related to rail operations in this area of the NJTPA Region.

#### **Moveable Bridges**

As highlighted earlier, there are numerous moveable bridges located in the NJTPA Region. The Upper Bay Bridge is a vertical lift bridge spanning the Newark Bay in northeastern New Jersey. It was built between 1928 and 1930. "Point No Point" and "Hack" are two other moveable bridges that carry freight rail in the NJTPA Region, both of which are also aging. A complete listing of the moveable bridges located in North Jersey is provided later in this report. Bridge openings constrain capacity on the entire rail line. For example, when the moveable bridges on the P&H Line open, the entire P&H is shut down. In addition, Upper Bay Bridge is on the National Docks. Because of the bridge's location, its opening impacts switching in and out of the Oak Island Yard Complex and the facility becomes very inefficient further effecting train movements throughout the area.

Ideally, the bridges would be replaced. This solution would be logistically and financially challenging, however. It would mean the effective closure of the P&H, and have a major impact on Norfolk Southern's ability to get to Croxton Yard, which is their major rail yard in North Jersey.

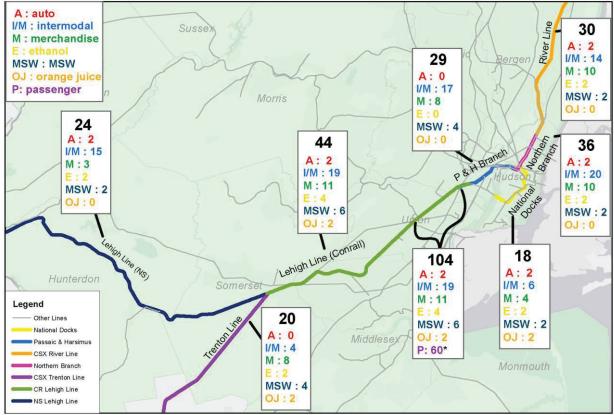
## 5.7 Freight Rail Traffic Growth and Future Constraints

As described previously, there are a number of trends that have the potential to impact the Region's Rail Network significantly in both the near- and longer-term. The study estimates that total freight tonnage for the NJTPA Region will increase from 662.7 million tons in 2007 to 745.8 million tons in 2020. Total tonnage is expected to reach 936.4 million tons by 2040. Overall freight tonnage flowing through the Region is expected to increase 41 percent during the period from 2007 to 2040, with rail tonnage expected to increase from 45.6 million tons in 2007 to 59.7 million tons by 2040.

Available capacity on all the rail lines included in the NJTPA analysis is projected to decrease through 2040. Train volumes on the NS Lehigh Line are expected to more than double by 2040, and the Northern Branch is expected to increase the number of trains it accommodates by more than 90 percent during that same time period. The other lines and line segments included in the study are projected to increase train volume by 70 to 90 percent within the next 30 years. The following figures show the projected freight rail traffic on the key corridor lines in the NJTPA Region currently, in 2020, in 2030, and 2040.



## Figure 42: Volume of Rail Traffic on the Key Corridor Lines in the NJTPA Region - 2012



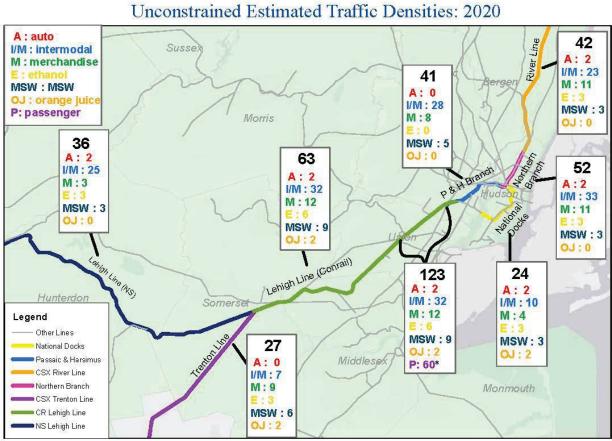
Traffic Densities: 2012

All estimates of trains per day shown are based on 5-days per week service. Train estimates include only road, not local or yard, train data.

\*NJTransit currently developing ridership forecasts.





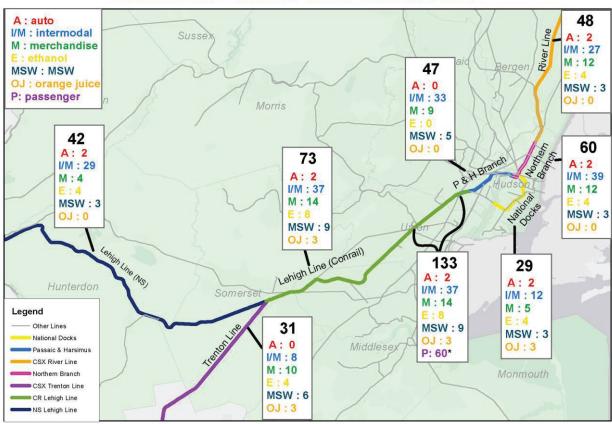


All estimates of trains per day shown are based on 5-days per week service. Train estimates include only road, not local or yard, train data.

\*NJTransit currently developing ridership forecasts.



Figure 44: Estimated Freight Volume of Rail Traffic on the Key Corridor Lines in the NJTPA Region – 2030



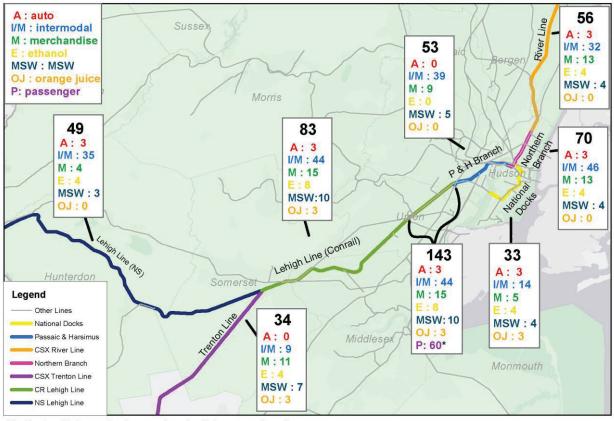
# Unconstrained Estimated Traffic Densities: 2030

All estimates of trains per day shown are based on 5-days per week service. Train estimates include only road, not local or yard, train data.

\*NJTransit currently developing ridership forecasts.



#### Figure 45: Estimated Freight Rail Traffic in the NJTPA Region - 2040



## Unconstrained Estimated Traffic Densities: 2040

## 5.7.1 Land Bridge and Panama Canal

In addition to the freight growth trends described above, other developments related to freight are also likely to impact the NJTPA Region's Rail Network. Both the land bridge and Panama Canal dynamics are changing.

During the 1990's, significant levels of freight rail traffic traveled from the West coast to the East coast of the United States via the land bridge. For example, a significant amount of freight traffic to the northeast United States from Asia arrived via the Port of Long Beach and was shipped by rail to the east coast. More recently, land bridge usage has decreased. More than one-third of containers currently imported through the Port of NY & NJ arrive via all-water routes directly from China and Hong Kong. It is expected that this decline in land bridge use will continue.

With improvements to the Panama Canal, deeper draft and taller marine vessels will be accommodated and some east coast ports, such as Miami, Jacksonville, Savannah, Charleston and Norfolk are expecting increased port traffic once the Panama Canal improvements are

All estimates of trains per day shown are based on 5-days per week service. \*NJTransit currently developing ridership forecasts. Train estimates include only road, not local or yard, train data.



complete. As a backdrop to this, carriers are also looking to expand their services from Asia to the U.S. East Coast via the Suez Canal.

A future increase in all-water containers could further reduce the number of NS and CSX land bridge trains, but have other impacts on freight rail in the Region. For example, there could be more short-haul rail services required to move containers from PANYNJ to inland destinations, such as Harrisburg, Pittsburgh, Buffalo and even points in New Jersey such as the Raritan Center. While the magnitude of these changes on the Region may be uncertain, the manner in which freight flows internationally and domestically is very likely to be altered.

## 5.7.2 Projected Constraints by Line Segment

Based on the trends described above, as well as meetings with the railroads and various stakeholders, interviews, and the capacity analysis, the HDR Team has identified several areas where constraints or other issues are likely to occur in the future due to continued freight rail traffic growth.

### **CSX** Trenton Line

The CSX Trenton Line is impacted by activities at Port Reading Junction, which is where the NS Lehigh Line, the CSX Trenton Line and the CR Lehigh Line converge. Additionally, three miles to the east at CP- Bound Brook, the Port Reading Line connects with the CR Lehigh Line. Activities at Port Reading Junction and Bound Brook will continue to impact Manville and the CSX Trenton Line. Most of the Trenton Line is single-tracked and is expected to be approaching capacity by 2040.

In addition to the single-track limitations of this line, train dispatching is a challenge. For example, there is no holding point for a train on CSX in the West Trenton area, and there is no CSX control on the portion of the line that is subject to SEPTA dispatching. This means that CSX trains traversing New Jersey on the Trenton Line have to do so very quickly.

The Trenton Line is also impacted by growth in other regions. For example, the Philadelphia region is expected to generate expanded intermodal traffic; this will impact the CR Trenton Line out of Philadelphia. Within the NJTPA Region, it is also expected that some of the larger industrial developments being proposed near the Trenton Line will demand more freight rail services, further impacting the ability of this line to handle increased freight capacity.

Fortunately, a key solution to the capacity constraints on this line is now funded and may help handle volume in the future. With combined CSX and federal funding, 13,000 feet of additional track is being built in Manville and Hillsborough Townships.

#### Conrail (CR) Lehigh Line, CP Aldene to CP Newark

The issues described in the current constraints section are relevant to the future of this area of the Lehigh Line as well, and our capacity analysis for the Aldene to Newark segment suggests that this segment is nearing capacity at its current levels of traffic (freight and passenger). This finding is supported by longer term trends that are likely to impact this rail line. For example, it is expected that the demand for commuter traffic from Aldene to Newark will continue to grow, further constraining the CR Lehigh Line.

A second factor affecting growth on this stretch of the line is the NS Crescent Corridor. This corridor runs from Atlanta through several southern states until it turns north and parallels



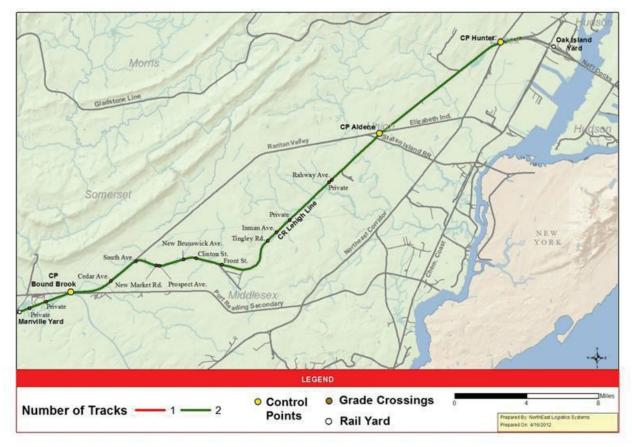
Interstate-81 and Interstate-84. The Crescent Corridor is a marketing initiative that specifically targets truck traffic moving north/south on the I-81 corridor. It is expected that freight rail traffic will continue to grow in this corridor. It is likely that NS will be able to draw a percentage of this traffic from truck to rail. A presentation by Norfolk Southern to the NJTPA FIC in 2010 indicated that the Crescent Corridor would likely add one pair of trains per day in New Jersey. This increased rail traffic would travel on the both the NS and CR Lehigh Line into Northern New Jersey, further affecting the line's capacity.

### Conrail (CR) Lehigh Line, Manville Area

The line is able to handle the freight rail traffic to date, due to creative and efficient train dispatching, fleeting of trains, and other operational measures. As detailed previously, the CR Lehigh Line is close to reaching capacity and is expected to become more capacity constrained. This will continue to impact Manville and all freight rail traffic from Manville north. In addition to the improvements that NS has made in the area, completing the double-tracking between Port Reading Junction and Sunnymeade grade crossing on the CSX Trenton Line would help with capacity. Finally, consideration should be given to using the Port Reading Secondary as an alternative to the Lehigh Line. In addition to helping mitigate capacity concerns in the Manville area, the use of the Port Reading Secondary to access points along the Chemical Coast Secondary may also help with the capacity constraints in the Oak Island/Port Newark segment of the Chemical Coast Secondary, which is a critical operating location that suffers from congestion.



#### Figure 46: CR Lehigh Line



Northern Branch, Marion Junction Area

This area will continue to become more constrained as freight rail traffic into and through the Region continues to increase. The Northern Branch is expected to be at capacity by 2020. This is particularly relevant for freight traveling to or from Croxton Yard. If Norfolk Southern line capacity on the Lehigh Line were to be consumed with traffic terminating at the port or at Oak Island Yard, the severity of the issue at and near Marion Junction would diminish, but the area will continue to be problematic for NS Croxton Traffic and CSX River Line traffic.

#### National Docks Line, Green to Upper Bay

The Port Authority of New York and New Jersey is planning expansion and restructuring of the Greenville Yard complex to develop a major intermodal facility. The redesigned Greenville facility is anticipated to encompass four functions: the current car float operation of NYNJ Railroad (a subsidiary of PANYNJ), the Tropicana operation, the proposed Intermodal Container Transfer Facility and proposed Municipal Solid Waste operations.

While the specific details related to proposed rail growth and this project are still being developed, the proposed traffic growth at Greenville will directly impact the National Docks Line. The lack of a northward connection between National Docks and Greenville will be a significant issue in the future as well.



Based on current train traffic, the line is below capacity and will remain so through 2040, based on freight rail volume projections completed as part of this study. The Intermodal Container Transfer Facility (ICTF) at Greenville Yard is expected to generate up to 250,000 lifts per year once upgrades are complete. Other facilities, such as the Cross Harbor Freight, and the MSW, can be expected to add to this as they are completed.

#### CSX River Line, Teaneck

The constraints near Marion Junction are expected to continue to be a concern for operations on the CSX River Line in Teaneck, and the single tracks of P&H and National Docks mean that train movements are restricted to some extent. The environmental and community concerns articulated in the current constraints section of this report will continue to be an issue in the future.

#### 5.8 Congestion and Capacity Issues at Rail Yards

Line segments on the key corridors are only one aspect of a corridor constraint analysis. Rail yards can also be constrained and unable to handle growing demand. Several yards in particular were identified by the HDR Team as potentially constrained, based on stakeholder interviews, TAC member input, and the AAR-study-based capacity analysis conducted for each of the relevant rail lines. These yards are located near the PANYNJ facilities as shown in Figure 47. Greenville, Kearny, Oak Island, and Croxton Yards are the four rail yards identified by the HDR Team as of the greatest concern with respect to capacity. This section discusses each of those rail yards.





### Figure 47: Port of New York and New Jersey Area Rail Facilities

Source: Port Authority of New York and New Jersey

## 5.8.1 Greenville Yard

Greenville Yard is a 27-acre terminal on the New Jersey waterfront. It is served by the New York New Jersey Rail and Conrail, and it connects directly with CR, NS, CSX and the National Rail System. At this facility, railroad cars are moved on specialized rail barges (carfloats) across the harbor.

The Federal Highway Administration (FHWA) and the Port Authority of New York and New Jersey (PANYNJ) are preparing a National Environmental Policy Act Tier I Environmental Impact Statement (EIS) to evaluate alternatives to improve the movement of goods in the Region by enhancing the transportation of freight across New York Harbor. There is concern that continuing to rely heavily on trucking for freight transportation is not in the Region's best interest, and both FHWA and the Port are looking toward rail and water transportation options to handle some of the Region's anticipated freight growth.



Expansion and reconfiguration of Greenville Yard is expected to improve the facility's ability to provide both rail and barge transportation, but the level of this growth is uncertain. If freight growth meets projections, however, there is a risk of congestion and capacity constraints at the Greenville Yard. At current train traffic levels, the capacity analysis suggests that the National Docks would approach capacity by 2040 (VCR=0.9). Capacity is not expected to be exceeded, however, based on the findings of both estimation approaches. If, however, freight flows increase significantly due to the Greenville Yard redesign, the ability of the National Docks Branch to assume additional capacity would be less certain.

## 5.8.2 Kearny Yard

Kearny Yard is predominantly a domestic intermodal yard, although 30 to 40 percent of traffic is international, trucked to the yard from various facilities in the area. The biggest constraint for Kearny is that there is a single-track running east out of the yard. Simply changing the configuration to double-track, however, will not fully resolve this constraint because rail traffic can also be held up by the Hack drawbridge over the Hackensack River on the southern side of Kearny Yard. The drawbridge is old and operationally unreliable at times, which means that simply double-tracking the rail does not ensure that the flow of traffic into and out of Kearny Yard will be optimized. It should also be noted that even if replaced, this bridge would still need to open for river traffic, further impacting line capacity.

## 5.8.3 Oak Island Yard Complex

Oak Island is the major carload freight yard serving the North Jersey Region. It is operated by Conrail as part of the CSAO. The facility includes a classification yard, engine house, auto unloading terminal, and maintenance facilities. It has ten receiving tracks, 30 classification tracks and nine departure tracks.

Located north of Port Newark-Elizabeth Marine Terminal, Oak Island Yard has a capacity of approximately 2,500 cars. On a typical day, there are approximately 800 to 900 cars in the yard, which represents approximately 30 to 35 percent of the "static" capacity of the Yard. At 30-35 percent of the static capacity, Conrail considers the Yard to be fluid. If they were to approach a 40 to 45 percent factor, they would be at capacity. The other yards in the area (e.g., Bayway, Port Newark and Port Reading) also impact Oak Island if they get backed up with customer traffic. When Oak Island exceeds the 40 percent factor, it is typically due to back-ups at those other three yards.

The Oak Island Complex is a major crossroads for rail lines, in addition to being the biggest carload yard in the Region. The CR Lehigh, National Docks, River and Northern Branch Lines, as well as the Chemical Coast Line are all impacted by the Oak Island Complex. As a result, capacity is constrained in the complex currently, and it is anticipated that it will become more so over time. There are options for addressing the increased capacity at Oak Island. One proposal for improving flexibility and fluidity is construction of the "Waverly Loop." This connection would fly under the Lehigh Line where the P&H Branch parallels the NEC and then swing eastward to enable a progressive connection from the River Line and Northern Branch to Greenville and the Chemical Coast Line.



## 5.8.4 Croxton Yard

Croxton Yard, also known as North Jersey Intermodal Terminal, is a NS full-service terminal designed specifically for double-stack service. It is a domestic intermodal facility, a transload facility and a freight yard servicing the Region. The end of Croxton Yard is located right at Marion Junction, which is the connection of numerous rail lines in the Region and impacted by activity at the yard. As freight rail increases in the Region, it is expected that capacity at Croxton will also be impacted.

Croxton is operating at approximately 50 percent capacity; they could likely handle nearly double the train volume with their existing infrastructure. Additionally, NS has additional land that is available if expansion of the yard was required.

In addition to physically expanding the facility, NS could also respond to increased train traffic by making some operational adjustments. For example, the facility is not currently operating 24 hours per day, seven days per week. NS could consider adding a shift to handle the increased train traffic, if warranted. A second operational adjustment would be to change the timing of the train switches<sup>36</sup> within the yard.

### 5.9 Grade Crossing Issues

Rail Highway grade crossings are a primary interface between the railroad and the public. Impacts on highway traffic, emergency responders, noise and safety, are considerations that must be factored into any assessment of rail traffic increases.

As rail, vehicle and pedestrian traffic increases near grade crossings, the potential for conflicts between these modes also increases. This can result in a desire by communities to restrict train operations in any way that may mitigate the conflict. Any solution that entails changes to rail operations would impact the ability of the rail line to maximize capacity. The preferred solution to minimizing or mitigating conflicts at grade crossings is to monitor the conditions as vehicle or freight rail traffic grows over time and address the situation with the appropriate warning system or infrastructure improvement.

On the key corridor lines in this study, there are a number of grade crossings that should be highlighted as areas of concern. Based on previously completed studies, team knowledge, vehicle and train traffic forecasts, and other data, the team identified certain grade crossings that warrant consideration as rail traffic increases.

## 5.9.1 Evaluation Approach

The NJTPA has previously studied grade crossings in the Region and identified those crossings where interface issues are most significant. This evaluation process led to the ranking of grade crossings in the Region and problem statements were developed for the top five ranked crossings.

Along with other factors, previous studies have included a hazard index in their assessment. NJDOT uses the formula HI = V \* T \* Pf, where V is the Average Daily Traffic (ADT) of the roadway, T is the number of trains per day, and Pf is a factor based on the protection devices used, such that 0.1 is for automatic gates, 0.6 is for flashing lights, and 1.0 for signs only. It is

<sup>&</sup>lt;sup>36</sup> A train switch refers to the switching movements of a locomotive for the purpose of placing cars on tracks, making up trains for departure, etc.



important to note, however, that the HI is not the only measure used by NJDOT to rank crossings. Hazard indices in the state fall into ranges: 0-14,999 (Score=1); 15,000-24,999 (Score=2); 25,000-39,999 (Score=3); 40,000-59,999 (Score=4); 60,000 or greater (Score=5). While a hazard index is useful, it does not necessarily predict crash frequency or take into consideration other issues; for example, sight distance, humped crossings, school buses.

Four of the top five grade crossings identified in the NJTPA study are located on the key corridor lines: Inman Avenue; Cedar Avenue; Old Hook Road; and Route 601. Among the top ten grade crossings ranked in the report, all but one is located on a key corridor line.

As a starting point for evaluating grade crossings from a capacity perspective, the HDR Team focused on the grade crossings identified in the study as among the ten most highly ranked. In addition, two other crossings were added based on site visits and HDR Team expertise related to other grade crossing projects. Ten grade crossings were identified as particularly important to consider as part of this capacity study:

### CSX Trenton Line

• Route 601

## <u>Lehigh Line</u>

- Inman Avenue
- Cedar Avenue
- Rahway Avenue

Conrail Northern Branch

• St. Paul's Avenue

## CSX River Line

- River Street 69th Street
- Old Hook Road
- New Bridge Road
- West Clinton Avenue
- West Fort Lee Road
- Durie Avenue

For each of the grade crossings listed above, vehicle and freight rail traffic growth projections were examined, along with other factors that may impact the ability of the key corridor lines to accommodate the anticipated freight volume increases. The results of the evaluation are provided below. Additionally, potential strategies for mitigating conflict at these grade crossings are proposed.



## 5.9.2 CSX Trenton Line

This single-track line was originally built with two main tracks (four in many locations) and crosses five public roads at grade within Somerset County. The maximum authorized speed is 50 miles per hour (mph), but there is a 30 mph temporary speed restriction underneath Camp Meeting Road at Skillman where the railroad was undercut several years ago to accommodate doublestack shipments of intermodal traffic.<sup>37</sup> Route 601 is impacted by this speed restriction and is the only crossing highlighted by the study team on the Trenton Line.

#### Route 601

Route 601 is a north-south arterial that connects several small towns in southern Somerset County near the border of Somerset County and Mercer County. These towns include Belle Meade, Plainville, Dutchtown, Skillman, and Blawenburg. The Route 601/West Trenton Rail Line crossing is situated about 1.5 miles west of Route 206. The crossing site is located within a low density development area surrounded by open space. Total closure time for this crossing is 54 minutes 53 seconds daily.

Rail traffic through this crossing is expected to grow by 14 trains between 2012 and 2040; from 20 trains in 2012 to 34 trains by 2040. Vehicular traffic using this grade crossing is also expected to increase. The NJTPA traffic data suggests that morning traffic may decrease, but midday to night-time traffic will increase between 19 and 71 percent by 2035, depending on time of day.

A key concern associated with this crossing is that the roadway crosses the tracks at a severe angle. The angle of the road in relationship to the rail results in significant line of sight issues for drivers approaching the crossing. In addition, there are also community concerns regarding train horns. It should be noted that in response to these issues, NJDOT has ordered the installation of four-quadrant gates to account for the severe angle of the crossing. This improvement could be used as a first step in establishing a quiet zone at this crossing, if the community decides to pursue this action. Somerset County has prepared plans to install a median barrier that will allow for the implementation of a Quiet Zone at this location. Once CSX has installed the four quadrant gates at this location, the County will proceed with construction of the median barrier.

Based on the Federal Railroad Administration Guidelines included in the Railroad-Highway Grade Crossing Handbook, this crossing has an FRA Hazard Index of 11,478. Hazard Indices for all crossings in the Grade Crossing Study ranged from a value of 1,500 to 80,000.

## 5.9.3 Lehigh Line

The Lehigh Line is operated by NS west of Port Reading Junction, where the CSX Trenton Subdivision connects. From Port Reading Junction east, the line is operated by Conrail. The NS portion of the line is effectively single-tracked with passing sidings, including the Royce Running Track immediately west of Port Reading Junction.

Train volume on the CR Lehigh Line is expected to increase by 20 daily trains by 2020, resulting in the line being "over capacity." The NS Lehigh Line is anticipated to increase by 12 daily trains

<sup>&</sup>lt;sup>37</sup> "Freight Rail Grade Crossing Assessment Study," prepared by Jacobs Engineering for NJTPA.



by 2020. The team has identified three rail highway grade crossings on the Lehigh Line that warrant specific focus as a result of rail traffic increases.

#### Inman Avenue

Inman Avenue is an east-west arterial in Edison that runs parallel to and near the border between Middlesex County and Union County. The Avenue runs through the town's residential areas, and it intersects two major north-south routes, Old Raritan Road in North Edison to the west and State Route 27 in Perth Amboy and Rahway to the east.

This grade crossing received the highest score in the "Freight Rail Grade Crossing Assessment Study" conducted for the NJTPA, which ranked grade crossings in terms of the need to further investigate the crossing and potentially upgrade it. Its FRA Hazard Index is 22,000. This crossing was examined several years ago by NJDOT with regard to the feasibility of grade separation, and a quiet zone was recently established.

Inman Avenue crosses the railroad at a 60 degree angle, again impacting line of sight issues for drivers. In addition, there are several schools located in the vicinity of this at-grade crossing, which raises concerns for both foot traffic and roadway traffic. During the period 1997 to 2007, there were three crashes at this crossing.

Daily closure time at the crossing was measured at 1 hour, 33 minutes during the NJTPA Grade Crossing Study. Based on the traffic density analysis conducted for this study, it is estimated that the unconstrained level of rail traffic on this line will increase from 44 trains per day in 2012 to as many as 80 by 2040, further increasing the level of vehicular delay.

#### Cedar Avenue

Both the Lehigh Line and NJ TRANSIT's Raritan Valley Line cross Cedar Avenue in close proximity to each other. When one or the other line blocks the roadway (or one, then the other) the impacts can result in trapping traffic between the crossings. Further, there is a railroad equipment detector on the Lehigh Line. Trains that utilize the Lehigh Line and activate the detector in the Borough of Middlesex are required to stop, and the train crew must inspect their train before continuing. In those instances, when the stopped train blocks Cedar Avenue, the crossing can be impacted for extended periods of time while the inspection is occurring.

Cedar Avenue is an extension of Possumtown Road. It provides residents living north and west of Victor Crowell Park and the Lehigh Line tracks with direct access to Interstate 287, as well as to the surrounding street network. It also connects with Lincoln Boulevard, which is a major arterial running close to and parallel with the Lehigh Line corridor through several towns. Commercial and industrial uses are concentrated in the area.

There are intersections near the crossing on both sides of the Lehigh Line, and a major arterial road runs in close proximity to the crossing. From 1997 through 2007, there was one crash at this site. Vehicular traffic is estimated to increase on Cedar Avenue by eight to 15 percent by 2035, depending on time of day. Total duration of delay each day, as measured during the NJTPA Grade Crossing Study, was 2 hours 21 minutes. Based on the traffic density analysis conducted as part of this study, total trains utilizing the two lines at this crossing could increase by as much as 50 percent, with attendant increases in vehicular delay approaching 3 hours 30 minutes.



The crossing's FRA Hazard Index of 80,000 was the highest calculated in the Grade Crossing Study. A hazard index ranks crossings in relative terms (the higher the calculated index, the more hazardous the crossing). Factors that are incorporated into the hazard index include annual average daily traffic, average daily train traffic, and a protection factor.<sup>38</sup>

The State of New Jersey has identified this crossing as one where grade separation is recommended to mitigate the issues associated with Cedar Avenue. The NJTPA's grade crossing study also suggested elevating both the CR and NJ Transit lines through Middlesex.<sup>39</sup>

#### Rahway Avenue

Rahway Avenue crosses the Lehigh Line in a suburban area in Clark Township in Union County. In close proximity to the grade crossing is a mix of industrial, commercial and residential uses, as well as some open space. Rahway Avenue is part of an east-west arterial and also provides access to and across the Garden State Parkway.

Rahway Avenue has a posted speed limit of 25 mph in the vicinity of the railroad. Although there are no traffic signals located at the crossing, there are passive and active traffic control devices present to warn vehicle drivers of oncoming rail traffic. The crossing location is illuminated with a yard light, but sidewalks and gates for pedestrians are not available.

## 5.9.4 Conrail Northern Branch

Only one grade crossing on the Northern Branch is discussed, St. Paul.

### St. Pauls Ave

This at-grade crossing is beneath the Pulaski Skyway and is a heavily traversed industrial area. It is located on a rail line that connects CP Croxton to the P&H Branch via Marion Junction. This segment is expected to see growth in rail traffic under current operating plans and may see additional increases in rail traffic due to possible routing changes. Rail traffic on the single-tracked Northern Branch is expected to grow to 52 trains per day by 2020 and reach 70 trains by 2040. The possibility of construction of a Waverly Loop to support Greenville intermodal traffic would further increase rail traffic on this crossing. Due to the slow speeds and long train lengths, the crossing can be occupied for an extended period. An engineering evaluation may be prudent to determine if a grade separation should be considered.

While auto traffic was low when this crossing was studied, recent improvements as a result of the NJDOT Tonnelle Avenue and Witt Penn Bridge projects have modified the ramp configuration.

<sup>&</sup>lt;sup>38</sup> http://safety.fhwa.dot.gov/xings/com\_roaduser/07010/appenf.htm

<sup>&</sup>lt;sup>39</sup> NJTPA , "Freight Rail Grade Crossing Assessment Study, Appendix B – Description of Grade Crossings," page B-15.



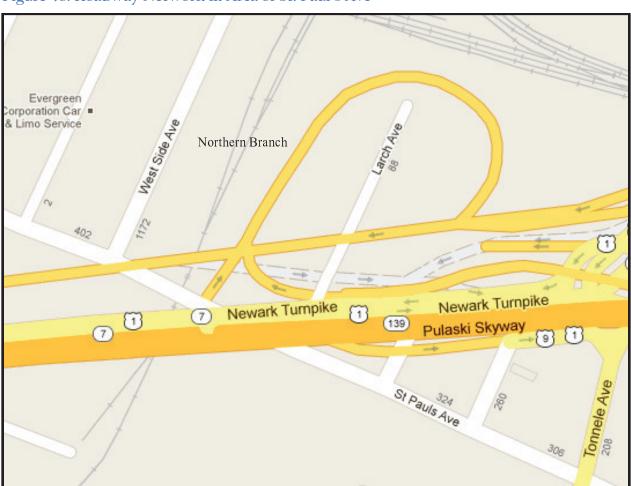


Figure 48: Roadway Network in Area of St. Paul's Ave

Currently, some CSX traffic from the north diverts at CP Croxton to the National Docks Branch. Due to a trackage constraint entering Greenville yard from the National Docks that negates a progressive move, CSX is evaluating a new route utilizing a to-be-constructed 'Waverly Loop" that would reroute Greenville-bound traffic to run via the P&H Branch.

As noted above, the possibility of construction of a Waverly Loop to support Greenville intermodal traffic would further increase rail traffic on this crossing due to the slow speeds and long train lengths, the crossing can be occupied for an extended period. Total delay at this crossing is currently 2 hours 41 minutes each day. The FRA Hazard Index for this crossing is 26,400.

Since this at-grade crossing is located immediately beneath the Pulaski Skyway, there are physical limitations as to the improvements that can be made. A new access ramp is currently under construction at this location. It is uncertain as to whether the construction of the new access ramp will result in increased vehicular traffic or whether there are options to bypass the crossing. Current conditions support further analysis.

An obvious consideration to address the conflicts would be to construct a grade separation. On site visits question the feasibility of a grade separation at this location due to the grades and the



overhead constraints imposed by the Pulaski Skyway. Similarly, specific forecasts of expected crossing volumes resulting from double tracking or rerouting should be considered.

# 5.9.5 CSX River Line

Eight miles of the 17.2 mile long River Line is single-track and it is expected that volumes on this line will increase to 42 trains by 2020 and 56 by 2040. Train traffic along the line is constrained by a number of factors including, track maintenance, congestion caused by a lack of line capacity on CSAO and marine traffic at moveable bridges. The grade crossings of concern to the study team include: River Street – 69<sup>th</sup> Street, Old Hook Road, New Bridge Road, West Clinton Avenue, West Fort Lee Road and Durie Avenue.

### River Street - 69<sup>th</sup> Street

River Street-69<sup>th</sup> Street is a major crossing with a significant amount of vehicular traffic. By 2035, it is expected that vehicular traffic using this grade crossing may increase between 34 and 38 percent, according to the NJTPA traffic data. 69th Street is an east-west, two-way cross street that connects Westside Avenue to JFK Boulevard. In between, it intersects Tonnelle Avenue and crosses at-grade several railroad tracks within the River Line corridor.

69<sup>th</sup> Street runs through an industrial area and carries high volumes of truck traffic. There are six track alignments, including two main line tracks, running across 69th Street. There is also a busy signalized intersection located 400 feet west of the crossing, and truck volumes are high on 69th Street in the vicinity of the crossing.

There are multiple crossings at the north end of North Bergen Yard, and the adjacent CSX main line and adjacent NYS&W mean this crossing is located in an operationally complex area. There are many rail movements at varying speeds and configurations, also impacting this grade crossing. Due to the factors summarized above, the HDR Team supports plans to separate this grade crossing and construction is currently underway to do so.

#### Old Hook Road

Old Hook Road is an east-west route running between Knickerbocker Road and Kinderkamack Road. It is part of the County Route 502 corridor that serves as a major east-west arterial route in northeastern Bergen County providing connections with US 9W near the Hudson River, the Garden State Parkway (Exit 168), SR 17, and Schraalenburgh Road. The road generally traverses suburban residential areas and is heavily traveled by both automobiles and trucks. During the period 1997 to 2007, there was one crash. However, the FRA Hazard index for Old Hook Road crossing was 60,000.

At this crossing, sight lines are obstructed. Traffic is heavy in the vicinity of Old Hook Road and the Schraalenburgh Road intersection. Traffic on this road is not expected to change significantly by 2035; morning traffic is estimated to increase by eight percent, but midday traffic is expected to decrease slightly. Current delay related to this crossing is 1 hour 3 minutes daily.

With respect to freight volumes on the CSX River Line, it is expected that the current 30 trains daily has the potential to increase to 56 by 2040, with attendant increases in vehicular delay.



### New Bridge Road

New Bridge Road is an important east-west arterial running through the southern portion of Bergenfield. It is located in the single track segment of the River Line, just north of CP 10 where the three-track segment ends. The road is an active corridor, particularly for trucks because it travels through an intensively developed commercial zone. New Bridge Road is the first grade crossing where the track goes from single track in the north to three tracks to the south. As mentioned above, the CSX River Line is forecast to experience an increase in freight train volume of 26 trains daily by 2040.

A random on-site survey was conducted at this crossing, and the HDR team observed 800 cars per hour on a weekday morning in clear weather. From gate drop to lift, approximately four minutes passed. After the gate lifted, 50 cars passed over the crossing in the first minute and traffic returned to normal shortly thereafter. Based on this observed rate of closure, total daily delay is currently approaching two hours.

At this crossing, sight lines are obstructed. New Bridge Road is a highly traveled corridor, and pedestrian gates are provided at the crossing. In addition, the road is curved over the tracks. Between 1997 and 2007, there was one fatal accident. The FRA Hazard Index for the New Bridge Road grade crossing is 30,000.

#### West Clinton Avenue

West Clinton Avenue is an east-west collector that dead ends three blocks west of Prospect Avenue to the west and terminates at County Road in Tenafly to the east. The avenue generally traverses a suburban residential area; although commercial uses surround the track corridor at the crossing.

Vehicular traffic is expected to increase modestly from six to 16 percent by 2035, depending on time of day. Most of the traffic increase is expected to occur in the morning hours. At this crossing, however, sight lines are obstructed in all directions and an intersection is located adjacent to the crossing. Based on observations taken at New Bridge Road, total daily delay is approaching 2 hours. The FRA Hazard Index for the New Bridge Road grade crossing is 30,000, but there were no accidents at this grade crossing between 1997 and 2007.

#### West Fort Lee Road

West Fort Lee Road is a pedestrian-only grade crossing that crosses three tracks on the CSX River Line within the Borough of Bogota, NJ, between Milepost 8 (to the north) and Milepost 7 (to the south). The crossing is located approximately 1,500 feet north of the absolute home signal at "CP-7" Interlocking. The third track was originally constructed by Conrail as a holding track for traffic heading south towards North Bergen, and trains are frequently held at this location. Special instructions dictate that trains are to stop short of the crossing.

At this crossing, there is a significant public safety concern because of the number of pedestrians utilizing this crossing where speeds can be up to 50 miles per hour. Currently, the line carries 30 trains per day, and it is expected that daily train volume will increase to 56 by 2040. One potential solution would be the construction of a pedestrian overpass, which would address the public safety concern.



Note that in the aerial photograph below, there is a residential area to the left and the village to the right. It appears that vehicular traffic once moved over this crossing.



This crossing was not listed as a previously studied crossing but was encountered during the mapping of the triple tracked portion of the River Line through Bogota. While not listed as a problem crossing location in the previous grade crossing study, due to the increased volume of rail traffic and the unusual crossing configuration located close to a key Interlocking, the HDR Team believes it was prudent to bring our observations to the NJTPA's attention.

#### Durie Avenue

Durie Avenue is an east-west arterial running between High Street at its eastern terminus and the River Line, where it becomes Lakeshore Drive. It intersects two important north-south routes, including Schraalenburgh Road and Knickerbocker Road. Current closure time at this crossing is 1 hour 3 minutes daily.

At this crossing, sight lines are obstructed because the road crosses the tracks on a curve and on a crest. The FRA Hazard Index for this crossing is 60,000. As mentioned previously, traffic on the CSX River Line is expected to increase from 30 trains in 2012 to 56 in 2040.

#### 5.10 Constraints off the Key Corridor Lines

In addition to the constraints on the lines that have been identified as being on key corridors in the NJTPA Region, there are other rail lines in New Jersey and the Region that are constrained



and have implications on the freight rail system in this part of New Jersey. Future freight growth will not be isolated to just the NJTPA Region corridor lines, and the implications on other elements of the regional and national rail network will impact northern New Jersey. The following describes constraints on corridor lines of relevance to the NJTPA, but not identified as key corridors.

# 5.10.1 Washington Secondary and Philipsburg

The Washington Secondary is off the key corridor lines, and its potential for freight service is severely limited due to vertical clearance issues with the over-grade bridge in Philipsburg. While the key corridor line, the Lehigh Line, off which the Washington Secondary diverges at the Philipsburg Interlocking, has had clearance enhancements at the Phillipsburg location, the Washington Secondary is left most likely in its original design when passing under South Main Street bridge in Phillipsburg. The vertical clearance of 15'06" allows Plate *C* cars, which are more the exception than the rule as to standard freight car height. Standard clearance for freight rail service is Plate F, which is 17 feet high.

The Washington Secondary branches off the Lehigh Line at the Philipsburg Interlocking diverging through a left hand switch, which is situated in a curve just a few feet east of a railroad trestle. This arrangement alone does not present the most reliable and maintenance free situation. The curvature off the Number 8 switch on the Washington Secondary is low speed and tracks immediately east of the switch suffer from poor drainage which is likely due to the drainage characteristics of the South Main Street Bridge which the tracks pass under (see photograph below).

The "Phillipsburg Bridge" is actually two separate bridges. One crosses over the NJ Transitowned, and Norfolk Southern operated line typically referred to as the Lehigh Line. The second crosses over the NS Washington Secondary rail line. The bridge consists of two spans, one consisting of a steel truss (Lehigh Line) and the other being a single span, concrete encased multi steel beam simple span (Washington Secondary) with concrete deck as its surface. Each span has its own abutments at the ends and share a larger single abutment (one can consider this middle abutment as a land mass) where the two spans meet.

Known as the "Phillipsburg Bridge" in this report, the street that it carries is County Road 678, South Main Street. The steel truss portion of the bridge has been given the name Kenneth "Red" Vandergrift Bridge as called out on its memorial plaque. The concrete span portion of this bridge is the section which interferes with clearance on the Washington Secondary. The steel truss portion of the bridge meets clearance requirements for the Lehigh Line.





Raising the South Main Street Bridge, which will be a difficult task as it ties into existing building elevations and the old Station House, will solve the clearance issue. The current geometry, however, is low speed and the track geometry lends itself to high maintenance as the many gage rods now in the track indicate.



Raising the span over the Norfolk Southern-Washington Secondary has complications. The surface of the bridge ties into private buildings, a rail museum, and a commercial interest.



The figure below shows and describes some concepts as to how to improve this area, thereby eliminating the clearance and low speed issues that limit the modern day and future growth potential of the Washington Secondary.

#### Concept 1: Raise the South Main Street Bridge

For a variety of reasons, this option may not be feasible. The former railroad station (currently a rail museum) is an historic structure and the plaza leading to the station is an integral part of the structure supporting the bridge. There are also other historic structures in proximity to the bridge including the remains of a rail turntable. As pointed out, the South Main Street Bridge is, in fact, two structures in close proximity (one over the Washington Secondary and one over the NJ Transit-owned line currently operated by Norfolk Southern). One bridge cannot be raised without having an impact on the second. While the South Main Street Bridge over the Washington Secondary is in poor condition and ultimately requires considerable rehabilitation or replacement, this is a far greater undertaking than may initially meet the eye.



#### Concept 2: Lower the Washington Secondary Track

This option would keep the Washington Secondary on its existing alignment. It would also retain the existing switch at its current undesirable location on a curve in the NJ Transit-owned line. In addition to undercutting the track, work would be required on the bridge foundation. Drainage in this area is already problematic, as indicated by the number of gage rods observed in this area of the right-of-way. In addition to undercutting, considerable drainage improvements would be needed.

#### Concept 3: New Low Speed Connection to the Washington Secondary Track

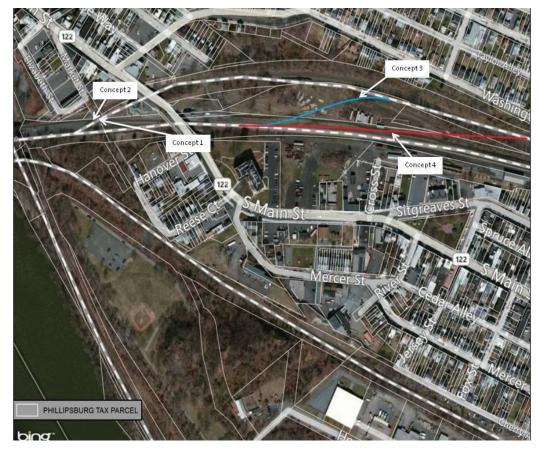
This option would construct a new connection to the Washington Secondary just east of the steel truss bridge over the NJ Transit line. This would be a low speed (15 mph) connection designed to contain as much as possible of the new connector track on municipally-owned land. This switch location is more desirable than the existing location as it relocates the switch from a curve to tangent track. Since the steel truss bridge already has adequate clearance above the NJ Transit-owned line, the height clearance issue on the Washington Secondary is resolved by this option. The remaining Washington Secondary trackage between the new connection and the old switch could be removed or retained for railcar storage/display by the railroad museum. This option does, depending on switch location, bring the proposed connector track in close proximity with the remains of the historic turntable and roundhouse.

#### Concept 4: New High Speed Connection to the Washington Secondary

Similar to Option 3, this version would create a new connection to the Washington Secondary to the east of the steel truss bridge. This would be a high speed connection (30 – 40 mph) and provides the same benefits of adequate clearances while relocating the switch from a curve to tangent track. As indicated, this option would have a greater impact on NJ TRANSIT-owned property. Depending on the switch location, however, it may present a greater likelihood of avoiding the historic remains of the roundhouse, though it would still be in close proximity.



# Figure 49: Phillipsburg Bridge Concepts



As shown in the figure below, there are numerous public owners in and around the area of the bridge, including NJ Transit and the Town of Phillipsburg.





#### Figure 50: Phillipsburg Bridge Area Property Owners

# 5.10.2 Chemical Coast

The Chemical Coast Line is a heavily used, single-tracked line with some overhead clearance issues. The Chemical Coast Line is particularly constrained south of Elizabethport where a single-track segment is sandwiched between the NJ Turnpike and residential neighborhoods. Although portions of the line are constrained, there exists space within the existing ROW to add an additional track. This could help accommodate any additional freight growth on this line.

The Raritan Logistics Center is located near the Chemical Coast. Alternatives and improvements to provide additional rail access to the Raritan Logistics Center – a facility that includes warehousing, transloading and packaging services – are being evaluated. Port and highway access to the Center are also currently available. A TIGER IV application was submitted by NJDOT that would complete the Chemical Coast Line connection with the Raritan Industrial Track through construction of a direct southbound-to-westbound turnout and rehabilitation of the Perth Amboy Secondary Line providing an alternative service route to Raritan Center. This would improve rail access to the Center and provide access to 286,000 lb rail cars for industries located there.

As is the case with some of the key corridor lines, bridge operations impact this facility's ability to handle freight. Specifically, the proposed increased maritime usage to Raritan Center would



require more openings of the New Jersey Transit Raritan River Drawbridge on the North Jersey Coast Line. This bridge is used by approximately 90 passenger trains every weekday<sup>40</sup>.

# 5.10.3 Northeast Corridor (NEC)

Issues on the NEC are primarily related to shared freight and passenger use. Amtrak Acela, Amtrak Regional, and NJ Transit service all compete with the freight rail serving customers along the line. In addition to the shared use concerns, there are also some vertical clearance issues on the NEC. Because everything is electrified, catenary is all along the line. Weight on rail is limited as well, because the NEC is restricted to 263,000 pound rail.

# 5.11 Other Issues of Importance in Evaluating Corridor Constraint

This section of the study focuses on other factors that are relevant to the ability of the NJTPA key corridor lines to accommodate existing and projected freight volumes. Several are related to physical infrastructure; for example, weight on rail and vertical clearance. Other issues of importance include Positive Train Control (PTC), joint use issues affecting Amtrak and New Jersey Transit, and constraints that are political or administrative. Each of these topics is discussed in this section.

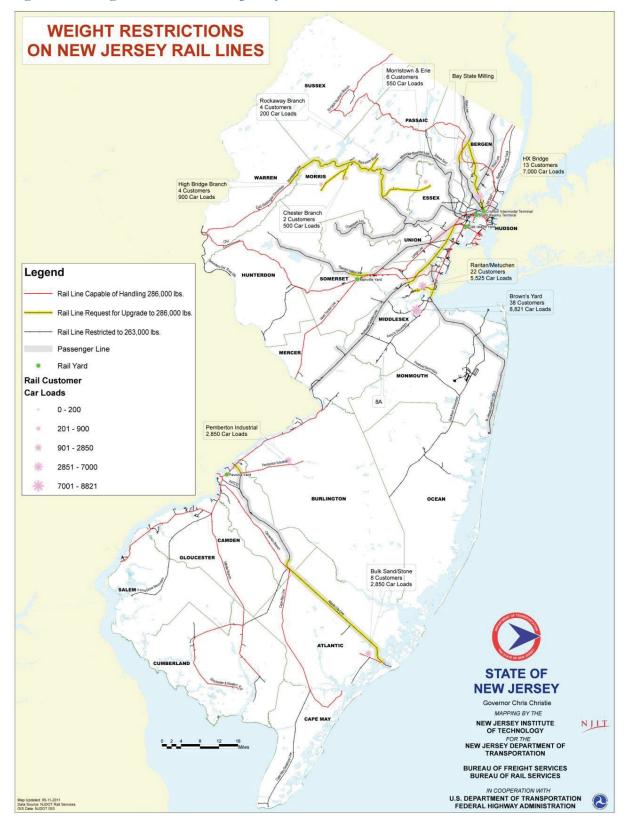
# 5.11.1 Weight on Rail

The issue of weight on rail is part of the New Jersey State Rail Plan, and freight railroads and NJDOT are working together to address the constraint. The issue developed as modern freight car design increased from 263,000 to 286,000 pounds gross weight on four axles (tare weight of car plus net weight of contents). The ability to handle more cargo weight in a single freight car effectively provides a "free" boost in capacity on rail lines that were able to handle the additional weight, and today is a distinct disadvantage where precluded by bridges, rail, or other factors. The figure below shows weight on rail restrictions in the State of New Jersey.

<sup>&</sup>lt;sup>40</sup> New Jersey Transit.



#### Figure 51: Weight on Rail in New Jersey





Although most of the primary freight main lines in the NJTPA Region are capable of handling the higher weight, the Amtrak Northeast Corridor and some New Jersey Transit passenger lines that also carry freight trains are still limited to 263,000 pounds. In addition, some short lines in the State do not have the resources to upgrade their lines and others are handicapped because they connect to the National rail network via a constrained line (e.g. the Raritan Central, whose cars are picked up and delivered by Conrail via the Northeast Corridor). Further, customers of railroads unable to handle heavier cars pay more per pound of freight than competitors who can receive 286,000 lb cars and the older 263,000 lb cars are gradually being retired. Since passenger railroads do not require 286,000 lb capability for their own purposes, a business and financial plan is fundamental to removing weight restrictions in the short term and preserving high weight capability in the long term. Public and private resources must be leveraged to:

- Determine and prioritize remedies;
- Allocate costs among the parties;
- Develop/finance a long-range remedy plan that provides sufficient return on private capital while yielding maximum public benefit.

# 5.11.2 Vertical Clearances

Vertical clearance issues are generally situations where overhead structures restrict use of high rail cars such as doublestack, automobile and other modern equipment. For example, the standard for unrestricted interchange (any railroad) is a height above the rail of 15 '1", whereas modern cars are typically 17' high and doublestack or auto cars are 20'3". That said, there are no vertical clearance issues on any key corridor lines included in the study. Off-key-corridor lines, such as the Washington Secondary, and others do have vertical clearance issues. Similarly, electrified passenger lines in the NJTPA Region, such as Amtrak's Northeast Corridor and much of NJ Transit's North Jersey Coast Line, have clearance restrictions due to overhead wires ("catenary") that prevent passage of high freight cars.

# 5.11.3 Physical Constraints

The primary physical constraints in the area (see above) relate to catenary, bridge superstructure, and some undergrade bridges that are not adequate for moving higher, heavier or longer equipment.

# 5.11.4 Positive Train Control (PTC)

Positive Train Control (PTC) is an active train control system that enforces train speed. It has been mandated by the Federal Railroad Administration (FRA) on lines shared between passenger and freight or where freight includes the transport of certain classifications of hazardous materials Commuter agencies and Amtrak, specifically along the NEC use different PTC system technology than most freight lines. Should there be shared territory that is governed by PTC, it is likely that freight and passenger trains will need to be equipped with the specific PTC technology in place on the shared territory. While this issue is not specific to the state or the NJTPA, it will likely have an impact on the lines within the Region.



# 5.11.5 Joint Use Issues – Amtrak and New Jersey Transit

In terms of joint use issues in the NJTPA among the key corridor lines studied, the area between Aldene and NK is of greatest concern due to capacity constraints. A complete discussion of this segment is provided in both the current constraints and future capacity constraints section of the report. There are also weight and height restrictions that impact freight movement (see above) on several lines shared by passenger and freight trains.

# 5.12 New Rail or Upgraded Corridor Possibility and Needs Analysis

The Team's analysis of existing freight line capacity and the forecast of rail freight traffic volumes by 2040 indicate that, without relief, many of the primary freight lines in the NJTPA Region will exceed their current capacity. Accordingly, the Team identified, and conducted a review of, potential new rail corridors or upgraded corridors where it may be possible to provide capacity sufficient to handle anticipated freight traffic. This evaluation was informed by projected traffic and congestion on existing corridors, as well as observation, data, and the capacity constraints analysis that was completed for the study. In addition, the HDR Team relied on the input of the Technical Advisory Committee (TAC) and the railroads operating in the NJTPA Region.

# 5.12.1 Methodology and Approach

For the purpose of this analysis, the HDR Team assumed that all of the institutional arrangements and federal protections of railroad franchises in place today will remain the same in 2040. That is, both NS and CSX will continue to operate their current rights of way and will not enter into new arrangements to share with each other proprietary routes to inland markets. Within the CSAO, it was assumed that Conrail will continue to operate as it does today, and ownership of operation of NS and CSX intermodal terminals in the Region will also remain the same.

Given these assumptions, any upgraded or new rail corridors through northern New Jersey would necessarily need to connect with existing NS or CSX main freight lines outside of the state (e.g., with the NS Lehigh Line in the vicinity of Easton, PA, or with the CSX West Trenton Line in the vicinity of Yardley, PA). Analysis of alternative rail freight corridors across adjacent states is beyond the scope of this undertaking.

With this in mind, the team considered several approaches to potential additional new rail corridors required to efficiently move goods in and out of northern New Jersey in 2040. Future capacity enhancements could include a combination of two or more of the following; for example, one route to connect with the Norfolk Southern Lehigh Line and another route to connect with the CSX River Line:

- Upgrade existing secondary corridors (e.g. Southern Tier, Port Reading Secondary).
- Upgrade underutilized local routes to handle through train service (e.g. Washington Secondary).
- Reactivate portions of abandoned rights of way (e.g. Lehigh & Hudson River).
- Construct entirely new freight rail corridors.



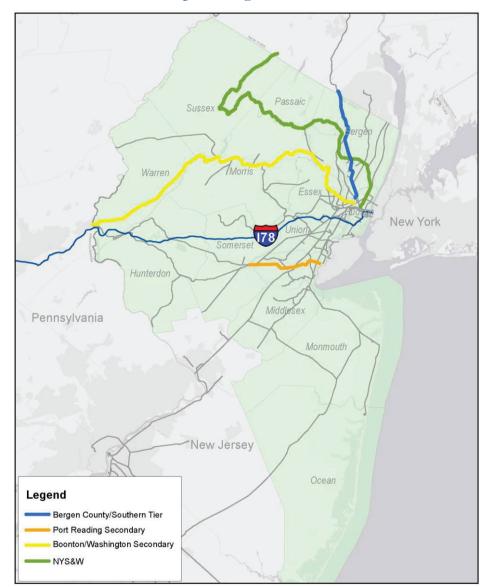
• Upgrade shorter corridors that would remove existing "last mile" impediments in the Region, and/or provide alternate "last mile" access between the northern and southern areas of the State.

A discussion of potential improvements to existing or underutilized rail corridors is provided first in this section. The corridors discussed include the primary corridors evaluated in this study, as well as non-primary corridors including:

- Bergen County/Southern Tier
- Port Reading Secondary
- Boonton/Washington Secondary
- New York, Susquehanna and Western (NYS&W)

A map showing the location of these non-primary corridors is provided in the figure below.





# Figure 52: Alternate Routes in the NJTPA Region

In addition to the existing corridors, the HDR Team also considered the potential for developing new freight rail corridors. Detail related to this evaluation follows the existing rail corridor discussion.

# 5.12.2 Primary Freight Rail Corridors in the NJTPA Region

# Norfolk Southern Lehigh Line

This is Norfolk Southern's primary main line in the NJTPA Region, extending east-west between Newark, via Bound Brook, and the Pennsylvania border at Phillipsburg (connecting with the entire NS network). The Lehigh Line is shared with NJ Transit between Newark and Aldene, and with CSX between Newark and Manville (see West Trenton Line, below). There are two tracks between Newark and Manville, and a single-track line between Manville and



Phillipsburg, NJ. Canadian Pacific (CP), which does not own trackage in New Jersey, operates intermodal trains via trackage rights over the Lehigh Line between its Newark intermodal terminal and Phillipsburg (and beyond to inland markets).

The Newark-Aldene segment was the subject of a request for funds under the TIGER Discretionary Grant Program. The application sought some \$116 million to construct approximately 4.5 miles of a new third track that would have covered most of the segment shared by freight and passenger trains.

Ultimate improvements would include four tracks on the freight-passenger segment between Newark and Aldene; double track the Lehigh and West Trenton Lines to the borders with Pennsylvania. Highway grade crossings in populated areas (primarily east of Manville) would be eliminated.

#### **CSX** River Line

CSX's primary intermodal route between New Jersey and inland markets also handles merchandise, automotive and unit trains. The line runs between North Bergen, via Teaneck, and the NJ-NY border near Tappan, NY and beyond to Albany. It is single-track between North Jersey and Albany, NY then two tracks beyond. A series of long sidings between New Jersey and Albany allow trains to pass each other and CSX has been adding and/or extending these as needed. These types of improvements are expected to help handle the likely freight rail volume increases on this corridor.

#### CSX Trenton Line

This is a CSX freight line linking New Jersey primarily with markets in the southeast. This route connects with the Lehigh Line at Manville, NJ, and is shared with Norfolk Southern and others between Manville and Newark (see Lehigh Line above). Between Manville and the Pennsylvania border at West Trenton, it is a single-track CSX freight line (though a section beyond West Trenton is shared with Philadelphia commuter trains). Overhead clearance restrictions prevent operation of doublestack trains south of Philadelphia, so the line has limited utility for intermodal trains though it handles other types of long-haul freight.

The Trenton Line has been the subject of a discussion to re-establish commuter service between West Trenton and Manville, where passenger trains would cross to the existing NJ Transit Raritan Valley Line. A long range vision would also see a second track added to the West Trenton Line to accommodate increased train traffic. Similarly, reestablishment of the abandoned right of way between Manville and Bound Brook would ease volumes from the Trenton Line on the Lehigh Line and also extend access to the Port Reading Secondary directly to the Trenton Line.



# 5.12.3 Other Existing Freight Rail Corridors

#### Bergen County/Southern Tier Line

This is Norfolk Southern's second main line extending between the Croxton (Secaucus) Yard and the NJ - NY border between Mahwah, NJ, and Suffern, NY. This line extends as a single track via Binghamton to Buffalo, NY, and beyond. It is suitable for doublestack and other freight trains between New Jersey and Midwest markets, but is shared with NJ Transit east of Port Jervis, NY, with the heaviest commuter traffic east of Suffern, NY. Few through freight trains currently operate east of the Maybrook, NY, area. Additional use of this line may be an option; this is an example of a partial alternative which might accommodate four to six trains per day.

#### New York, Susquehanna and Western (NYS&W)

NYS&W is a regional freight railroad that maintains its own proprietary line through North Jersey generally between Secaucus and Sparta. Beyond Sparta, through a combination of lines owned by itself and others, the NYS&W operates over the NS Southern Tier Line and can connect with CP at Binghamton, NY, or CSX at Syracuse, NY. Prior to NS and CSX acquisition of Conrail, NYS&W operated intermodal trains between the Little Ferry and Resources terminals in North Jersey and Buffalo, NY, for connections to the Midwest. More recently, most intermodal trains have been handled by CSX and NS with only occasional movements via NYS&W. This line has also been the subject of discussion for possible future commuter service east of Sparta, NJ. With train volume projected to increase significantly on the River Line, the NYS&W may be a viable alternative route for some traffic.

NYS&W competes with both NS and CSX, so freight rail traffic diversion from the primary corridors would likely require three-way negotiations. While the NYS&W would be potentially favorable for NS use, it may not be optimal for CSX and this could affect these discussions.

# Chemical Coast Line/Port Reading Secondary

These lines together form an alternative freight route to the section of the Lehigh Line between Newark and Manville, connecting at Manville with the NS Lehigh and the CSX West Trenton Lines. The line runs east-west between Port Reading Junction near Manville and Port Reading, NJ. At Port Reading, it connects with the north-south Chemical Coast Line where trains can operate to Port Newark or the Oak Island Yard. The Port Reading Secondary is largely singletrack with one passing siding at Durham. The segment of the Lehigh Line between NK and Aldene is expected to be at capacity by 2020 and above capacity by 2040. As a result, increased use of the Port Reading Secondary may be a possibility as railroads attempt to avoid the most congested areas of the NJTPA Region.

The use of the Port Reading Secondary to access points along the Chemical Coast Secondary can also mitigate capacity constraints in the Oak Island/Port Newark segment of the Chemical Coast Secondary, which is a critical operating location that suffers from congestion.

The Chemical Coast Line is largely single-track between the Port Reading Line and Elizabethport, then double-track to Oak Island. The Chemical Coast Line is particularly constrained south of Elizabethport where a single-track segment is sandwiched between the NJ



Turnpike and residential neighborhoods. This portion of the line is elevated with a series of bridges passing over local streets which would have to be rebuilt for a second track.

# 5.12.4 Existing Local Routes that Might be Upgraded

Currently, access from the west is limited to the Lehigh Line and access from the North is limited to the River Line. The narrative below outlines potential enhancements to alternate routes or strategic redundant routes to enable more fluidity and capacity as freight volumes grow over time.

#### Boonton Line/Washington Secondary

Part of the original Delaware, Lackawanna & Western Railroad main line prior to construction of the Lackawanna Cutoff in the early 1900s, the Boonton Line/Washington Secondary is still in use as a secondary freight route. The NS Lehigh Line, as well as the other east-west rail lines examined in this study, is expected to experience increased train volumes. Specifically, the NS Lehigh Line is estimated to reach capacity by 2040 and possibly by 2030. To expand use of this line, double-tracking of the Boonton Line for freight and passenger may be required, and it may be possible to raise overhead catenary between Denville and Dover, as well as upgrade the Washington Secondary west of Dover.

# Reactivating Portions of Abandoned Rights of Way (ROW)

The most feasible ROW reactivation in the NJTPA Region would be the reconstruction of the Lehigh & Hudson River right of way west of Sparta to connect with the NS Lehigh Line. The NYS&W could be used to Sparta in this scenario. A second project option, as described earlier in the report, might be a "fly-under" on the Garwood Industrial Track that could potentially tie into the Lehigh Line.

# 5.12.5 Constructing Entirely New Freight Rail Corridors

Entirely new freight corridor development is potentially the most difficult option for managing the capacity constraints in the NJTPA Region. Based on the experience of the HDR Team, we concluded that building an entirely new railroad is likely to encounter numerous obstacles that would make this option infeasible in the NJTPA Region. Due to the congestion and development in this Region, the environmental permitting process alone would most likely take more than 10 years to complete. In addition to the environmental/regulatory hurdles, there are numerous other issues that would need to be addressed that, in the NJTPA Region, would make an entirely new corridor challenging in the study timeframe.



These issues include:

- Community objections
- Physical space/geographical limitations
- Public/private benefit
- Competitive issues
- Political issues
- Environmental
- Violation of Federal Law for commercial enterprises in Interstate Medians
- Cost

Despite the obstacles to constructing a new freight rail corridor, the HDR Team identified one potential option as worthy of additional evaluation. It is described below.

#### I-78 Median

The HDR Team has identified the only existing right-of-way with the general characteristics for use as a rail corridor, without the need for significant property acquisition, would be an interstate highway corridor due to the potential expense of constructing an entirely new rail corridor through populated sections of the region. Because of the difficulty and potential expense and impacts of constructing an entirely new rail corridor through populated sections of the Region, the HDR Team has identified that the only existing right of way with the general characteristics for use as a rail corridor, without the need for significant property acquisition, would be the interstate highway corridor. In this case, I-78 is the only route that could potentially connect major freight customers (e.g. Express Rail and PNCT Rail facilities located in Port Newark) with existing freight lines beyond the borders of New Jersey. It should be noted that construction of commercial enterprises in the median of an Interstate highway is against federal law. Hence, a change in law or some form of exemption would be required. The following discussion assumes that permission could somehow be obtained for this purpose.

Due to the nature of freight trains, a feasible corridor needs to include gradual slopes or grade changes, gentle curves and few grade crossings (or intersections). These are the general characteristics of an interstate highway corridor. The I-78 highway corridor provides a direct connection between Newark and the Bethlehem, PA, area.

The HDR Team evaluated the feasibility of this option. Due to numerous issues, including significant grades along the route, numerous bridges and overpasses and existing uses of the right-of-way in the Newark area, we have determined that this option is not feasible.

# **Corridor Grades**

In general, grades along freight rail corridors are limited to a maximum of two percent. In some cases, the grades can exceed two percent where alternatives are limited and the railroad mitigates the additional grades through the use of additional locomotives. This is generally practiced only in the Western United States, where avoidance of mountain ranges is not possible. Along the I-78 corridor there are many locations where the grades exceed two percent.



Some of these may be avoidable through creation of cut section or fill sections for the rail line. There are, however, a number of locations where the slope of the highway corridor and the current infrastructure would be a challenge to mitigate. A list of engineering challenges, shown by county, location and mile markers, are provided in the following table.

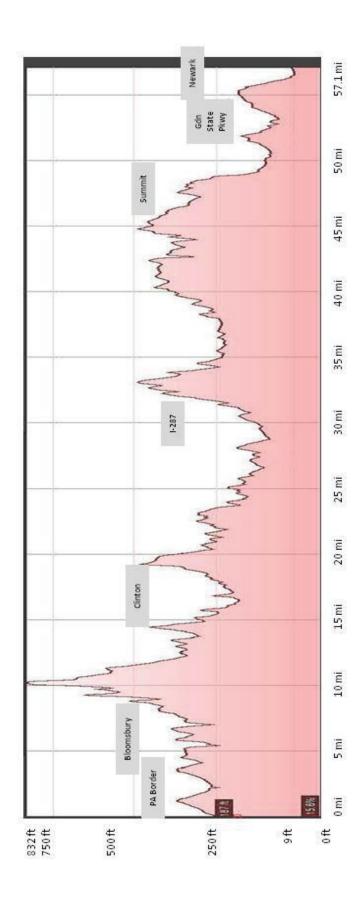
| County    | Location                      | Mile Marker | Engineering Challenges                             |
|-----------|-------------------------------|-------------|--|
| Warren    | Greenwich                     | 0.00-7.03   | Delaware River Crossing                            |
|           | Franklin<br>Townships         |             | Limited median space                               |
| Hunterdon | Bloomsbury                    | 7.46-25.03  | Musconetcong River                                 |
|           | Union/Franklin                |             | Musconetcong Mountains                             |
|           | Clinton/Lebanon               |             | Jugtown Mountain                                   |
|           | Tewksbury                     |             | South Branch River                                 |
|           |                               |             | I-78 Passover of NJ Transit Raritan Valley<br>Line |
| Somerset  | Bedminster                    | 27.11-40.98 | Crosses Watchung Mountain range twice              |
|           | Warren                        |             |  |
| Union     | Berkley                       | 42.22-54.32 | Crosses Second Watchung Mountain                   |
|           | Heights/Summit                |             | Touches Watchung Reservation                       |
|           | Springfield/Union<br>Hillside |             | Wildlife Overpass                                  |
|           | THISICE                       |             | First Watchung Mountain                            |
|           |                               |             | Rt 24 interchange                                  |
|           |                               |             | Limited Median Space east of Rt. 24                |

# Table 22: Engineering Challenges along I-78

One of the more significant challenges is a climb between Newark and Summit where there is a one-mile long four percent grade. There are similar grades just east of the I-287 interchange, and then there are some significantly challenging grades east of Bloomsbury as the highway corridor climbs up and over some terrain with grades in the five percent range. The profile of the corridor is shown in the following figure.



Figure 53: I-78 Corridor Elevation Profile





During construction, the peaks and valleys noted in the figure above will need to be leveled over the length of the rail to allow for efficient and cost effective rail operations. Although not completely identified, it is estimated that the mass haul movement, or earthworks, for this project could exceed 50 percent of the overall cost of development, or about \$540 million dollars.

#### Bridges/Overpasses

Freight rail lines require corridors that are approximately 20 feet wide with 20 feet of vertical clearance with limited at-grade crossings. These space requirements would require that the rail line be located within the median of the highway. The vertical clearances of freight rail lines typically exceed what is provided along Interstate highways. Along the 49-mile corridor between Route 24 and the Pennsylvania border, there are approximately 40 overpasses that would need to be modified and/or rebuilt to accommodate the horizontal and vertical freight clearances. In addition, there are approximately 40 rail bridges that would also need to be constructed to accommodate the rail line, one spanning the second Watchung Mountain to the northwest of the roadway and the Watchung Reservation to the southeast between mile markers 44.52 and 46.72. This area would require the rail line be constructed either on the south side of the eastbound roadway or on the north side of the west bound roadway cutting directly into the rock face adjacent to the roadway.

Figure 54: Wildlife Overpass through Watchung Reservation near Mile Marker 46



The photo above shows the wildlife overpass through the Watchung Reservation area near mile marker 46. This is a good example of the many engineering, environmental, and community challenges that a project of this nature would encounter. This stretch of roadway does not have enough right of way in the median to accommodate a rail corridor. In addition the overpass itself would need to be modified or replaced to allow the rail line to pass underneath.

The photograph below shows the challenges spanning the Delaware River from NJ to PA. Spanning the river will be required or a solution determined to connect to the current rail line running on the east side of the river running north. Should such a connection be possible, it could avoid building an entirely new overpass.



#### Figure 55: Overpasses Spanning the Delaware River in Western NJ



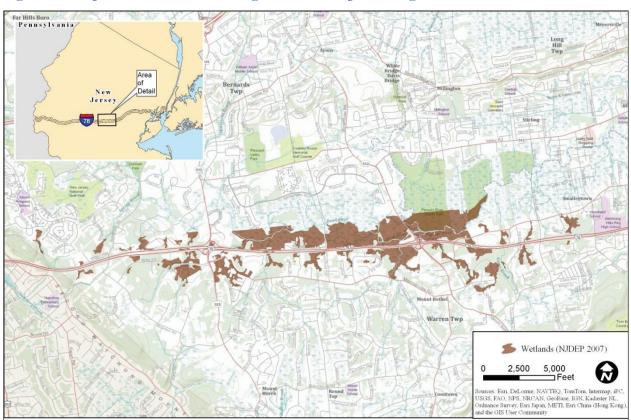
#### Corridor Utilization

In addition to the significant grade and bridge issues, there is an eight-mile long segment between Route 24 and Newark that would require a complete reconstruction of the highway to accommodate a rail line. Furthermore, within this segment there is limited unutilized space available in the corridor and therefore some function, such as the express and or local lanes, would need to be built on structure or the rail line itself elevated over some length.

In addition to these physical limitations, the functionality of a freight rail line would be limited due to the following:

- Capacity of the line would be constrained since much of the corridor may be limited to single track;
- The need for additional "assist" locomotives to maintain acceptable speeds through high grade locations along the line;
- Limited or restricted access by emergency crews along elevated sections of the line in the event of a derailment;
- The new line would divert trains and associated revenues from the existing Lehigh Line and thus affect its viability; and
- Impacts to wetlands within the corridor or at the many bridge locations may be significant (see figure below).





#### Figure 56: Impacts to Wetlands along I-78 in the NJTPA Region

# Order of Magnitude Cost

Order of Magnitude (OOM) cost estimates are used in the preliminary evaluation of a project to determine whether the potential value is sufficient to justify committing to the next stage when expenditure becomes significant. Order of Magnitude estimates rely heavily on the experience and expertise of individuals involved. There is generally no engineering performed and the cost is prepared highly on judgment. In general, Order of Magnitude estimates are usually developed for a "typical" type project and are based on broad and general concepts. The following present the HDR Team's assumptions related to the cost estimates associated with the I-78 project.



#### Cost Estimate Assumptions

- Total project length 70 miles
- Single track design with bypass tracks along the route
- Bridges and overpasses modified and/or replaced
- Significant mass haul movement of material required
- Significant drainage works need to be performed
- No rail maintenance yard planned along the length (due to limited right of way)
- No tie-in to current rail freight line infrastructure estimated
- No environmental mitigation costs included
- No permitting costs included

Because of the high level of uncertainty and lack of engineering definition at this stage, the range of accuracy is estimated to be +/-50 percent. The OOM cost estimate range is provided in the table below. It is estimated that this project would cost between \$728 million and \$1.3 billion to complete.

#### Table 23: +/- 50 Percent Order Of Magnitude Cost Estimate

| Low -50%      | OOM Estimate    | High +50%       |
|---------------|-----------------|-----------------|
| \$728,263,487 | \$1,040,376,409 | \$1,352,489,332 |

The table below provides further details of the major items that comprise the OOM estimate.

#### Table 24 Order of Magnitude Estimate Breakdown by Category

| Order of Magnitude Cost Estimate        | \$ Millions |           |
|---|-------------|-----------|
| Track Earthworks and Civil              |             | \$541.0   |
| Track Construction                      |             | \$130.0   |
| Modifications or Replacement of Bridges |             | \$166.5   |
| Culverts                                |             | \$52.0    |
| Roads                                   |             | \$36.4    |
| Signaling                               |             | \$36.4    |
| Utilities                               |             | \$52.0    |
| Miscellaneous                           |             | \$26.0    |
|   | *TOTAL      | \$1,040.0 |
| *Note: Level of accuracy +/-50%         |             |           |



# 5.12.6 Order of Magnitude Cost Estimates and Investment Impact on Capacity

The HDR Team evaluated existing corridor lines in the NJTPA Region and identified possible improvements that could be made that would promote freight rail operational efficiency and allow for the freight rail system to accommodate the projected growth in freight volumes into, out of and through the NJTPA Region. To understand the feasibility of the proposed improvements, the cost of infrastructure upgrades required to operate the service alternatives were estimated. A simple three-step process was used to estimate capital infrastructure costs. The steps used in the estimation process were:

- Step 1) Estimated Project Scope and Quantities: The Proposed Improvements identified through the study process included concepts for infrastructure improvements. Utilizing these concepts, estimated project scopes were developed to identify the type and amount of work that would be required to develop the Proposed Improvements. The project scopes and quantities were developed based on the concepts, a review of aerial photography of each project site, and an understanding of the work that is typically required for similar projects.
- Step 2) Unit Costs: The unit costs used to estimate the construction costs for each proposed improvement were gathered from a variety of sources and were calculated in 2012 dollar values. The unit cost estimates were based through consultation rail engineers and from unit cost data developed from previous rail planning and design studies in the Northeast.
- Step 3) Contingency & Soft Costs: All infrastructure unit costs have a 10 percent materials contingency. Due to the level of uncertainty regarding the extent of infrastructure upgrades required for the Proposed Improvements a 25 percent unallocated contingency is assumed.

In addition to the infrastructure contingencies, an allowance has been included in the estimate for "soft costs" or professional services. These are project management and engineering costs, which are added to the total cost of each alternative. These soft costs include typical project management and engineering costs and are determined based on a percentage of the projected capital cost. The estimated soft costs are based on the guidebook in TCRP Report 138: Estimating Soft Costs for Major Public Transportation Fixed Guideway Projects..

Based on the descriptions of the Proposed Improvements, which are detailed below, and the cost estimation process identified above, the study team was able to calculate the expected capital costs for infrastructure construction.



The team identified the following possible improvements. These improvements are not in priority order:

- Install second track on the single track sections of the CSX Trenton Line.
- Expand rail head room for local switching at Manville Yard.
- Install a third track on the Conrail Lehigh Line between Aldene and NK.
- Improve interlockings on Conrail Lehigh Line between Aldene and NK.
- Install second track on the single track sections at Marion Junction.
- Install second track on the single track sections of the CSX River Line.
- Make improvement to grade crossings on corridor lines.

The section below identifies the attributes and order of magnitude cost estimates for each of the proposed improvements. These improvements could help mitigate current capacity constraints on the freight rail lines in the NJTPA Region, as well as positively impact the Region's already overcrowded highway system.

# 5.12.7 Install Second Track on Single Track Sections of CSX Trenton Line

The existing segment of single track is approximately 21.5 miles long and stretches from near the Merrill Lynch campus in Pennington to the Manville Yard. The second main line is already planned for the 2.4 mile section from Sunnymeade Road in Hillsborough to Manville Yard as part of a federal grant. The HDR Team estimated the cost to install the second main line on the remaining 19 miles to be in the range of \$68 to \$80 million based on information available about the installation, and HDR's rail planning unit cost database. This would include the cost of design and construction for the track and signals, as well as the improvements necessary to the at-grade crossings and bridges along the corridor to accommodate the second track.

Based on the analysis conducted by the Team, the CSX Trenton Line is not expected to reach capacity by 2040. Double tracking may be desirable over time, but would not be required to handle the capacity anticipated for this line in the next few decades.

# 5.12.8 Expand Rail Head Room for Local Switching at Manville Yard

It appears that this improvement is being advanced in the near future through a project funded in part through a federal government grant. Limited headroom hampers the switching operation. With this improvement, throughput capacity of the yard will be increased.

#### 5.12.9 Install a Third Track on the Conrail Lehigh Line between Aldene and NK

A six-mile segment of the Conrail Lehigh Line is utilized by NJ Transit's Raritan Valley Line (RVL) between Aldene and NK. Freight and passenger trains share the right of way. Specifically, the two track CR Lehigh Line accommodates up to approximately 44 freight trains and 60 passenger trains per day over this segment. Although the right of way of this heavily used segment is generally 100 feet wide or more, there is currently only two tracks along the corridor. The proposed improvement would install a third track along this segment of the line.



The HDR Team estimated the cost to install the third main line on this 6.25 miles segment of railroad to be approximately \$220 to \$260 million<sup>41</sup>. This estimate is based on the information from HDR's rail cost data base and a general understanding of what the project would entail. The improvement project would include widening the railroad embankment (including the construction of retaining walls in some locations), installation of track and signals and the modification of the Union and Roselle Park Station areas. In addition, the project would require the construction of eight bridges along the corridor to accommodate the third track over the many roadways and streams that pass under the railroad.

# 5.12.10 Improve Interlockings on Conrail Lehigh Line between Aldene and Newark

Currently, commuter trains on the Raritan Valley Line move from double-tracks to a singletrack heading east onto the Lehigh Line at CP-Aldene. Short term, it would be beneficial to make interlocking improvements on the shared section of the Lehigh Line between Aldene and NK to enable increased flexibility of the existing two tracks.

Interlocking improvements at CP High and CP Newark could eliminate the single-track passenger line merge from the NEC to the Lehigh line. This would likely result in fewer delays and smoother operations, because some conflicts between passenger and freight rail trains would be eliminated. This would entail approximately \$7 to \$12 million worth of track and signal reconfiguration along the NEC in the area under the Route 21 viaduct.

#### 5.12.11 Install Second Track on Single Track Sections at Marion Junction

There are capacity constraints on the Northern Branch in the area of Marion Junction due to three segments where there is only a single track. These include a half mile long segment, which is in a densely developed area and includes the track passing under the newly built Newark Turnpike bridge before quickly rising on a viaduct over Newark Ave. and Route 9 and under the Pulaski Skyway. Presuming that there are sufficient clearances under the new Newark Turnpike Bridge and the Pulaski Skyway, a second track constructed on a new viaduct would cost approximately \$34 million. Another 0.7 mile single track section is located just to the north and includes a route that crosses the other rail lines in the area. With the assumption that there is sufficient clearance under the existing overhead bridges, double tracking this segment would cost approximately \$8 to \$12 million. Finally, the section of the P&H Branch between CP Hack and CP Kearny will need to add a track in order for this segment to operate as double track railroad all the way through Marion Junction to the Northern Secondary. This work is estimated to cost \$15 million.

# 5.12.12 Install Second Track on Single Track Sections of CSX River Line

Eight miles of the 17.2 mile long River Line is single-track and it is expected that volumes on this line will increase to 42 trains by 2020 and 56 by 2040. The installation of a second track along this line would include the construction of track and a signal system and improvements to 17 atgrade crossings along the corridor and would cost approximately \$37 to \$42 million.

By double tracking the single track portion of the River Line in New Jersey, capacity would be significantly improved. Using the AAR methodology to estimate capacity, the HDR Team

<sup>&</sup>lt;sup>41</sup> All cost estimates in this Study were based only on high level "rule of thumb" cost estimates, HDR's rail cost data base and the team's general understanding of the project requirements. No engineering cost estimates were completed as part of this Study.



would expect that this investment would mitigate all capacity concerns on this line beyond 2040. This improvement would also help mitigate some of the noise and grade crossing blockage issues in Teaneck.

# 5.12.13 Make Improvement to Grade Crossings on Corridor Lines

Improvements have been proposed to the following grade crossings.

#### Route 601

Auto delay at the crossing is reported to occur for two reasons. One is a result of a train slow order in the area resulting from conditions at the Camp Meeting Road Bridge. That bridge is identified for improvements in the near future that should result in a lifting of the slow order. The other reason for auto delay at the crossing is related to train inspections that occur at times due to the location of the train defect detector located at Belle Mead. Relocation of the train detector to a location further north (equidistant between Route 601 and Sunnymeade Road) should limit this occurrence of trains stopped in the crossing. The relocation of the equipment is estimated to cost in the \$100,000 range.

#### Inman Ave

According to previous reports, due to the installation of a second main line in the area traffic delay that was previously experienced should be decreasing. It has been noted that there is not sidewalk across the crossing. A sidewalk, with pedestrian gates, installed along the south side of Inman Ave. through the crossing would cost approximately \$250,000.

#### Cedar Ave

The are two crossings in close proximity to each other at Cedar Ave. that result in cars being trapped between the crossings. A recommended solution for the safety concern is to grade separate the railroads through Middlesex, thereby grade separating both Cedar Ave. and the atgrade portion of the Mountain Ave. crossing. This would result in an elevated section of track that is approximately ½ mile long. The estimated cost for the grade separation project is estimated to be in the range of \$35 to \$40 million.

#### Pedestrian Improvements

There are six at-grade crossings in the area that have been identified as in-need of improvement, due to pedestrian issues. These include:

- Old Hook Road
- New Bridge Road
- West Clinton Ave.
- West Fort Lee Road
- Rahway Avenue
- Durie Ave

To address the particular deficiencies at each crossing, a pedestrian survey and assessment would be required to identify the specific improvements that would be most beneficial at each



crossing. In some locations is could be a grade separated pedestrian bridge, while at others it may be limited to sidewalk construction and additional flashing lights. Generally pedestrian-based improvements to at-grade crossings are limited to the installation of sidewalks, pedestrian gates and additional audible warning (bells), the budget of which is typically \$250,000 to \$400,000. Therefore, a reasonable budget to address pedestrian concerns at each of the six identified crossings is \$1.8 million.

# 5.12.14 Other Improvements

In the NJTPA Region, there are a number of moveable bridges that impact freight rail operations. Many of these bridges are quite old, and their operations impact the ability of freight to travel freely. The replacement or rehabilitation of these moveable bridges could improve freight rail capacity in the Region. The table below lists the moveable bridges located in North Jersey, as well as their railroads they carry, the water bodies they cross, and other general characteristics.

| Raritan Bay Drawbridge                     |  |  |
|--|--|--|
| Other name(s)                              | River Draw   |  |
| Carries                                    | NJ Transit, Conrail  |  |
| Crosses                                    | Raritan River  |  |
| Locale                                     | Perth Amboy - South Amboy NJ                                       |  |
| Owner                                      | New Jersey Transit   |  |
| Design                                     | Swing bridge   |  |
| Opened                                     | 1908   |  |
| Conrail operates daily local trains betwee | en its Oak Island Yard in Newark and Browns Yard in Sayreville, NJ |  |
| Rahway River Bridge (RH)                   | (seasonal operation, closed in winter)                             |  |
| Carries                                    | Conrail/CSX/NS Chemical Coast Secondary                            |  |
| Crosses                                    | Rahway River   |  |
| Locale                                     | Rahway NJ  |  |
| Maintained by                              | Conrail/CSX/NS Chemical Coast Secondary                            |  |
| Design                                     | Bascule  |  |
| Arthur Kill Lift Bridge                    |  |  |
| Carries                                    | Staten Island Railroad   |  |
| Crosses                                    | Arthur Kill  |  |
| Locale                                     | Linden NJ - Staten Island NY                                       |  |
| Owner                                      | New York City  |  |
| Design                                     | Lift   |  |
| Opened                                     | 1959 (reopened 2006)   |  |
| Upper Bay Bridge                           |  |  |
| Other Name(s)                              | Lehigh Valley Drawbridge   |  |
| Carries                                    | Conrail/CSX/NS National Docks Secondary                            |  |

# Table 25: Moveable Bridges in North Jersey<sup>42</sup>

<sup>42</sup> All of these moveable bridges are regulated and details are published in the Code of Federal Regulations (CFR) Title 33, at the following link: http://www.ecfr.gov/cgi-bin/textidx?c=ecfr&tpl=/ecfrbrowse/Title33/33cfr117\_main\_02.tpl





| Crosses  | Newark Bay  |  |
|--|---|--|
| Locale   | Newark and Bayonne, NJ  |  |
| Design   | Lift bridge   |  |
| Opened   | 1930  |  |
| Harsimus Branch Lift Bridge  |   |  |
| Other name(s)  | Conrail Hack Bridge   |  |
| Carries  | P & H Line  |  |
| Crosses  | Hackensack River  |  |
| Locale   | South Kearny - Marion NJ  |  |
| Maintained by  | Conrail   |  |
| Design   | Lift  |  |
| Opened   | 1930  |  |
| South track functions primarily for swite carries the P & H Line between South K | ching intermodal trains at CSX South Kearny terminal; North track<br>earny and Marion Junction, NJ. |  |
| Lower Hack Lift Bridge   |   |  |
| Other name(s)  | Erie Lackawanna Railroad Bridge, Kearny   |  |
| Carries  | New Jersey Transit  |  |
| Crosses  | Hackensack River  |  |
| Locale   | Connecting Kearny and Jersey City, New Jersey   |  |
| Maintained by  | New Jersey Transit  |  |
| Design   | Lift bridge   |  |
| Opened   | 1927  |  |
| DB Draw  | (inactive, maintained in open position)   |  |
| Carries  | One track of lower Boonton Line   |  |
| Crosses  | Hackensack River  |  |
| Locale   | Secaucus and Kearny   |  |
| Maintained by  | Norfolk Southern  |  |
| Design   | Swing bridge  |  |
| Opened   | 1908  |  |
| Closed   | Oct-02  |  |
| Connects to Croxton Yard, could be imp<br>route for Norfolk Southern             | ortant to freight network if Boonton Line is utilized as an alternate                               |  |
| Upper Hack Bridge  |   |  |
| Other name(s)  | Upper Hackensack Lift, Erie Lift, West Secaucus Bridge  |  |
| Carries  | One track of NJ Transit Main Line   |  |
| Crosses  | Hackensack River  |  |
| Locale   | Secaucus and Lyndhurst, New Jersey  |  |
| Maintained by  | NJ Transit  |  |
| Design   | Lift bridge   |  |
| Opened   | Mar-59  |  |
|  |   |  |

The Rail Freight Capacity and Needs Assessment to Year 2040



| Carries        | NJ Transit Bergen County Line and Pascack Valley Line |
|----------------|---|
| Crosses        | Hackensack River                                      |
| Locale         | Secaucus and East Rutherford, New Jersey              |
| Maintained by  | NJ Transit  |
| Design         | Warren through truss bascule bridge                   |
| Opened         | 1911  |
| 0 C (111 D L ( | 2012  |

Source: Compiled by Don Lotz, January 2013

Estimating the costs of making improvements to these bridges would require information and policy decisions that are beyond the scope of this planning study. Other work completed by HDR is useful in better understanding the likely magnitude of costs to repair or rehabilitate a moveable bridge. A previously completed HDR study examined nearly 20 moveable bridges of varying types located across the nation. In that study, the lowest repair cost was \$90,000-\$150,000 to keep a bridge operational but this relatively lower level of repair runs the risk of a major failure that could cause a significant operational outage. On the other end of the spectrum, the study estimated bridge maintenance to be as high as \$3-\$5,000,000, depending on bridge condition and desired level of functionality.

#### Construction of Waverly Loop

The CR Lehigh, National Docks, River and Northern Branch Lines, as well as the Chemical Coast Line utilize the Oak Island Complex. This connection would fly under the Lehigh Line where the P&H Branch parallels the NEC and then swing eastward to enable a progressive connection from the River Line and Northern Branch to Greenville and the Chemical Coast Line.

The Waverly Loop was originally conceived to provide a high-cube doublestack route between the ExpressRail terminals and the CSX River Line. This purpose became less important when it was decided instead to clear the National Docks route with partial funding from the Federal Liberty Corridor initiative. The Waverly Loop would provide redundancy and operational flexibility; for example, the Waverly Loop - P & H Line could be used in one direction for inbound trains, and the National Docks in the other direction for outbound trains. This operating flexibility could become very important in the future, as rail traffic increases.

The current estimate for this improvement, based on information obtained from the Port of New York and New Jersey, is \$27 million.





# **REPORT APPENDICES**

March 2013

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- Public Comment Submitted

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Appendix E: Rail Demand – Detailed Modeling Approach

- Detailed Modeling Approach
- Detailed Model Results
- Forecasting Future Cost Estimates

Appendix F: Passenger Demand and Ridership Forecasts

# APPENDIX A: INTERVIEW QUESTIONS / DISCUSSION ITEMS

#### **Interview Questions**

For all interviews, the HDR team will provide the one page overview (Appendix B) of the study to the people that will be interviewed prior to the interview. When the team meets with the individuals, a general overview of the study, the timeline, objectives, etc. will be provided. After providing this overview, the HDR team will discuss the following items:

- 1. The HDR team will have maps of the railroad's system and will confirm with each of the railroads whether there have been any recent changes in aspects such as:
  - a. Operational control / responsibility on the lines
  - b. Train movement protocols on their major lines
- 2. The HDR team will review the railroad's line (specifically the Corridor Lines), and discuss:
  - a. Number of trains per day
  - b. Summary of the types of traffic (intermodal, chemicals, autos, etc)
  - c. Point-to-point freight (and passenger, if applicable) train routing
  - d. Volume of traffic on each major line
- 3. For NJT and Amtrak, the HDR team will discuss the passenger forecasts
- 4. During meetings with engineering/transportation departments, the team will obtain the following information:
  - a. Track charts
  - b. Operating timetables
  - c. Discuss any recent major improvement projects (double tracking, yard improvements, interlocking upgrades, etc)
  - d. Discuss any planned major improvement projects
  - e. Discuss any problematic grade crossings
  - f. Clearance issues
  - g. Weight restrictions
  - h. Civil restrictions
  - i. Weather-related sensitivities
- 5. Discussion on community issues number of complaints, potential work-arounds, etc
- 6. Discussion on new technologies (recent or planned use of new technologies that might have an impact on corridor capacity)
- 7. Discuss their ideas on capacity constraints
- 8. Discuss their ideas on capacity improvements
- 9. Discuss their ideas on potential locations for new corridors

*Note - Study related meeting minutes are held by the NJTPA* 



# **Rail Freight Capacity and Needs Assessment to Year 2040**

Freight issues are extremely important in the NJTPA planning region, which includes thirteen counties in Northern New Jersey. The region hosts: the Port of New York and New Jersey, one of the nation's top three ports on the basis of tonnage and containers; heavily-used local, regional, and interstate truck corridors and crossings; heavy concentrations of intermodal and non-intermodal rail activity; significant national and international air cargo facilities; and hundreds of millions of square feet of warehouse/distribution space. In addition it is home to the northern most and 2<sup>rd</sup> largest refinery on the East Coast and the major terminus for two major product pipelines from the U.S. Gulf. These freight networks and facilities are essential to the economic and transportation well-being of 6.6 million residents in the NJTPA region and 20 million in the NY/NJ metropolitan statistical area, along with uncounted regional businesses. Understanding the effects and importance of rail freight is therefore critical – not only to ensure the accuracy of the regional transportation planning process, but also to effectively communicate the importance of freight movement to the region's freight stakeholders, businesses, communities, residents, and funding decision-makers.

The primary focus of the Rail Freight capacity and Needs Assessment Study to Year 2040 is the NJTPA Region's major freight Corridor Lines including the CSX River Line, Conrail Northern Branch, P&H Branch, Conrail Lehigh Line, Norfolk Southern Lehigh Line, and CSX West Trenton Line. The freight mainlines along with connecting trackage owned or operated by the major Class I railroads or regional shortline railroads was examined as an integrated network under both current conditions and future operating scenarios at ten year intervals. This effort determined the current train traffic (and class of commodity) for each major line in region and determined when each major line segment will reach capacity, or exceed it, based on current infrastructure. This is essential in a congested freight area that currently averages 150 freight trains per day with a projected unconstrained growth of 90% by 2040.

Major contributions of the study includes an inventory of current rail system conditions, development of rail demand forecasts for both freight and passenger rail for the Corridor Lines in the NJTPA region, identification of potential constraints in and an assessment of, the feasibility of new freight/passenger rail corridors.

Developed during the study was a major validation of an existing rail geodatabase containing rail line geometries and associated attribute tables. The database validation was performed using Microsoft Access as the main platform; for each line relevant to the study, multiple tables of attributes were cross-referenced against railroad sources such as time tables and track charts. In many instances, tables were found to contain incorrect or missing data, resulting in many hours dedicated to completing data for priority lines, including site visits and interviews.

The validated database was shared with NJDOT and New Jersey Transit. It will also be shared as a tool for future regional and inter-regional studies.

It is important to note that the Class One Railroads in the NJTPA Region were very forthcoming in the non-proprietary information garnered.

Public Open House Notification Public Open House Sign-in Sheet Public Comment Submitted



# Re Rail Freight Capacity and Needs Assessment to year 2040 Study- Open House

1 message

#### Dawson, Dave <DDawson@njtpa.org>

Tue, Dec 4, 2012 at 9:40 AM

To: Anthony Gamallo <agamallo@monmouthplanning.com>, Anthony Gambilonghi <Anthony.Gambilonghi@co.middlesex.nj.us>, "Brian Appezzato (bappezzato@co.warren.nj.us)" <bappezzato@co.warren.nj.us>, David Antonio <dantonio@essexcountynj.org>, "dorbach@co.bergen.nj.us" <dorbach@co.bergen.nj.us>, "Doug Greenfeld (douglas@jcnj.org)" <douglas@jcnj.org>, "ebetz@ucnj.org" <ebetz@ucnj.org>, "Hsu Naomi (hsun@jcnj.org)" <hsun@jcnj.org>, Inkyung Englehart <ienglehart@co.monmouth.nj.us>, "Jack M. Nata (nataj@ci.newark.nj.us)" <nataj@ci.newark.nj.us>, "John Lane (jlane@hcnj.us)" <jlane@hcnj.us>, Mark Jehnke <mjehnke@co.ocean.nj.us>, "Michael Gelin (gelinm@ci.newark.nj.us)" <gelinm@ci.newark.nj.us>, "Michael Lysicatos (mlysicatos@passaiccountynj.org)" <mlysicatos@passaiccountynj.org>, "Saleh , Kamal (ksaleh@ucnj.org)" <ksaleh@ucnj.org>, "Sue Dziamara" (sdziamara@co.hunterdon.nj.us)" <sdziamara@co.hunterdon.nj.us>, "Tom Drabic (Tdrabic@sussex.nj.us)" <Tdrabic@sussex.nj.us>, "Ververides George (george.ververides@co.middlesex.nj.us)" <george.ververides@co.middlesex.nj.us>, "vpecchioli@co.ocean.nj.us" <vpecchioli@co.ocean.nj.us>, "Walter Lane (lane@co.somerset.nj.us)" <lane@co.somerset.nj.us> Cc: "Matthews, Ted" <tmatthews@njtpa.org>, "Rowinski, Jakub" <jrowinski@njtpa.org>, "Ritter, Ted" <TRitter@njtpa.org>, "Alice Cheng (acheng@chengsolutions.com)" <acheng@chengsolutions.com>, "Pamela.Yonkin@hdrinc.com" <Pamela.Yonkin@hdrinc.com>

#### Dear Colleagues:

Thank you for your participation in the county surveys on the Rail Freight Capacity and Needs Assessment study as well as your assistance with the county listening sessions that were conducted with counties and municipal representatives with freight rail issues this fall. As the study is coming to a close, we have scheduled a public information open house to provide an opportunity for the general public to learn more about the rail freight capacity study as well as to provide comments and/or ask questions. The details for this meeting are below.

Please share this information and the study overview attached with your municipalities and members of the public. Notice of this meeting will also be circulated with NJTPA's Freight Initiatives Committee and will be publicized through the NJTPA website, Facebook page, and Twitter feed. We thank you again for your tremendous help with this study. We look forward to having a productive public open house.

Sincerely,

#### David Dawson

- Public Information Open House on the NJTPA's Rail Freight Capacity Study

-

Directions: http://www.njtpa.org/About/Contact/DowntownNewarkMap.aspx

-

-

Security: Please be prepared to sign in with the building's security desk with a government-issued form of identification.

RSVP: Please RSVP to acheng@chengsolutions.com or ddawson@njtpa.org.

Rail Freight Capacity 2040 Overview.pdf



# **Rail Freight Capacity and Needs Assessment to Year 2040**

The North Jersey Transportation Planning Authority (NJTPA) is pleased to announce a major new freight planning initiative – the Rail Freight Capacity and Needs Assessment to Year 2040.

Freight issues are extremely important in the NJTPA planning region, which includes thirteen counties in Northern New Jersey. The region hosts: the Port of New York and New Jersey, one of the nation's top three ports on the basis of tonnage and containers; heavily-used local, regional, and interstate truck corridors and crossings; heavy concentrations of intermodal and non-intermodal rail activity; significant national and international air cargo facilities; and hundreds of millions of square feet of warehouse/distribution space. These networks and facilities are essential to the economic and transportation well-being of 6 million residents in the NJTPA region and 20 million in the NY/NJ metropolitan statistical area, along with uncounted regional businesses. Understanding the effects and importance of freight is therefore critical – not only to ensure the accuracy of the regional transportation planning process, but also to effectively communicate the importance of freight to the region's freight stakeholders, businesses, communities, residents, and funding decision-makers.

The primary focus of this study shall be the NJTPA Region's major freight Corridor Lines as follows: CSX River Line, Conrail Northern Branch, P&H Branch, Conrail Lehigh Line, Norfolk Southern Lehigh Line, and CSX West Trenton Line. The freight mainlines along with connecting trackage owned or operated by the major Class I railroads or regional shortline railroads shall be examined as an integrated network under both current conditions and future operating scenarios determining its adequacy and identifying potential upgrades and improvements needed to enable the system to meet projected future freight and passenger demands.

The project is being conducted for NJTPA by a consultant team of HDR Engineering, Inc. with Cheng Solutions LLC, and Egan Consulting Group. Key work tasks include:

- An inventory of current rail system conditions.
- Development of rail demand forecasts for both freight and passenger rail for the Corridor Lines in the NJTPA region.
- Identification of potential constraints in the Corridor Lines.
- An assessment of the feasibility of new freight/passenger rail corridors.
- An evaluation of potential capacity improvements that can be made in the Corridor Lines
- Public outreach effort to gain a better understanding of rail capacity issues facing stakeholders and communities in the NJTPA region.

For further information on this project, please contact Dave Dawson, NJTPA Project Manager at 973-639-8432 or DDawson@njtpa.org.







# Dec. 17 Public Information Open House on the NJTPA's Rail Freight Capacity Study

message

**NJTPA** <bmorris@njtpa.org> Reply-To: NJTPA <bmorris@njtpa.org> To: acheng@chengsolutions.com Thu, Dec 6, 2012 at 8:53 AM

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## Public Information Open House on the NJTPA's Rail Freight Capacity Study - December 17, 2012

The NJTPA will host an open house Dec. 17 to provide an opportunity for the general public to learn more about the Rail Freight Capacity and Needs Assessment to Year 2040 study. Now in its final phase, the study is examining the adequacy of the region's major freight rail corridors and identifying potential improvements needed to position the system to meet future freight and passenger demands. More information on the study is available here: <u>http://www.njtpa.org/Plan/Element/Freight/</u> RailFreightCapacityStudy.aspx. Below are the open house details.

When: Monday, December 17, 2012 4:00 p.m. – 7:00 p.m.

Where: North Jersey Transportation Planning Authority One Newark Center, 17th Floor Corner of Raymond Road and McCarter Highway Newark, NJ 07102

Directions: <u>http://www.njtpa.org/About/Contact/DowntownNewarkMap.aspx</u>

Security: Please be prepared to sign in with the building's security desk with a government-issued form of identification.

RSVP: Please RSVP to <u>acheng@chengsolutions.com</u> or <u>ddawson@njtpa.org</u>.

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# REMINDER: Dec. 17 Public Information Open House on the NJTPA's Rail Freight Capacity Study

1 message

**NJTPA** <bmorris@njtpa.org> Reply-To: NJTPA <bmorris@njtpa.org> To: acheng@chengsolutions.com Mon, Dec 17, 2012 at 9:06 AM

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## **Reminder:**

# Public Information Open House on the NJTPA's Rail Freight Capacity Study - December 17, 2012

The NJTPA will host an open house Dec. 17 to provide an opportunity for the general public to learn more about the Rail Freight Capacity and Needs Assessment to Year 2040 study. Now in its final phase, the study is examining the adequacy of the region's major freight rail corridors and identifying potential improvements needed to position the system to meet future freight and passenger demands. More information on the study is available here: <u>http://www.njtpa.org/Plan/Element/Freight/</u> RailFreightCapacityStudy.aspx. Below are the open house details.

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# Rail Freight Capacity & Needs Assessment Open House Public Meeting December 17, 2012 4:00-7:00 PM

| (Please Print Clearly)            | ember 17, 2012 4:00-7:0       |                               |
|-----------------------------------|-------------------------------|-------------------------------|
| NAME                              | COMPANY/AGENCY<br>AFFILIATION | (EMAIL OR PHONE NUMBER)       |
| 1 Robert DeSando                  | NJDOT                         | robert designde adot stud. M. |
| 2 JOHN KAWE                       | Hypeon Co:                    | JLANE CHENJOUS                |
| 3 Alice Chene                     | Cheng Solutions               | acheng@ Cheng solut.on        |
| 3 Alice Chene<br>4 DON EthrenBeck |                               | DEHIPPBOLI & CHORDSOWIING.    |
| 5 PON LOTZ                        | 11 11                         | PLOTZ CHENGSOLUTIONS          |
| 6 JAKUB ROWINSKI                  | NJTPA                         | JROWINSKI @NJTPA, ORG         |
| 7 JED MATTHEWS                    | NJTPA                         | tmatthews@n;tpa.org           |
| 8 Pamela Yonkin                   | HDR                           | pamela: yonkin@hdrine         |
|                                   | HNC                           | awillner Ohugenewic an        |
| 10 Rich Wigneski                  | NJTRANSIT                     |                               |
| 11 Chris Lamm                     | Cambridge Systematics         | Clanne cansys.con             |
| 12 BILL CONIST                    | WOODTO Jour                   | WCRRLSTECHOODMONT             |
| 13 Led Ritter                     | NJTPA                         | tritter@ nitpe.org            |
| 14 STEVE BROWN                    | PANYNJ                        | SEROWN@ PONYNJ.601            |
| 15 GARY DAVIES                    | AECOM                         | gary davies cacon. Co         |
| 16 Tom Role                       | VHB                           | to tphelane vhb. com          |
| 17                                |                               | J                             |
| 18                                |                               |                               |
| 19                                |                               |                               |
| 20                                |                               |                               |



# NJTPA Rail Freight Capacity and Needs Assessment to the Year 2040

**Public Comment Form** 

(Optional) Andrew Willner Address: Hugo Van Coup, 120524 Ame, Stel, Nrc 1001 Email: awillneve hugonen, com, and ven, willnes & gmailie 12-17-12 Date:

**Please indicate:** 

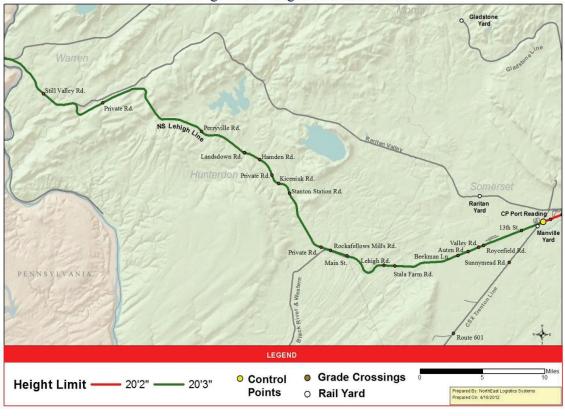
- 🕫 General Comment
- Comment specific to a Rail Line. Specify line or location:

comment(s): I mp tet information, please cartine to keep me informed.

## APPENDIX B: DATA SOURCES

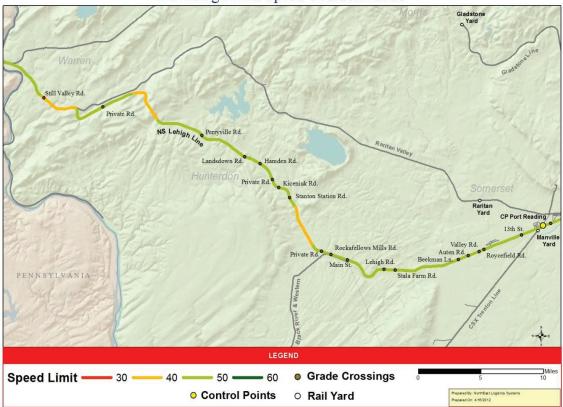
- 1. Amtrak Northeast Corridor ETT 4: November 7, 2011
- 2. Conrail Philadelphia Division Track Chart 1999
- 3. Conrail ETT 9: June 20, 2011
- 4. CSX Albany Division ETT #6: October 15, 2010
- 5. NJTransit ETT 501: April 3, 2010
- 6. NJTransit ETT 601: November 6, 2011
- 7. NS Harrisburg Division Track Chart 2008
- 8. NS Harrisburg ETT 1: August 4, 2008

APPENDIX C: CORRIDOR MAPS

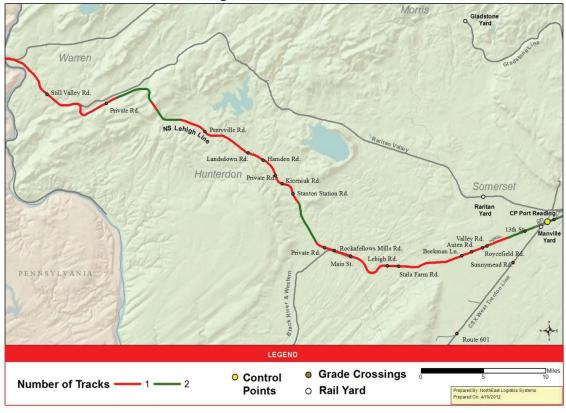


NS Lehigh Line Height Characteristics

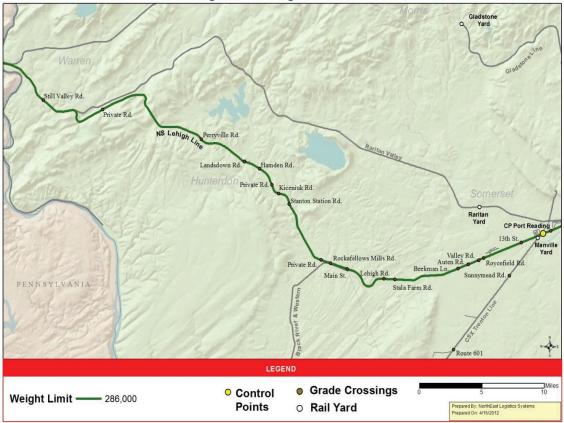
#### NS Lehigh Line Speed Characteristics



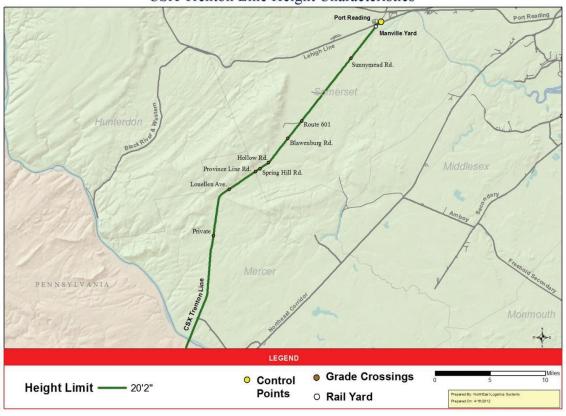
NS Lehigh Line - Number of Tracks



#### NS Lehigh Line Weight Characteristics

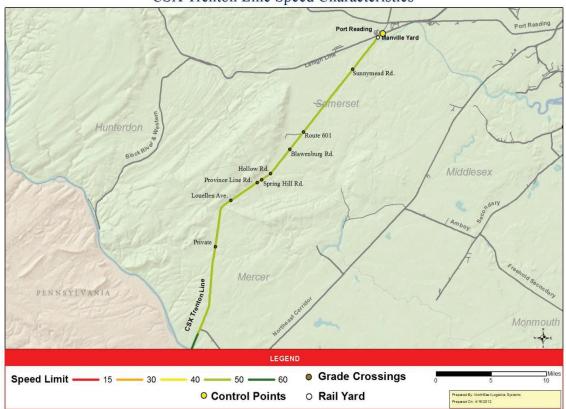


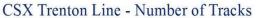
#### **CSX Trenton Line**

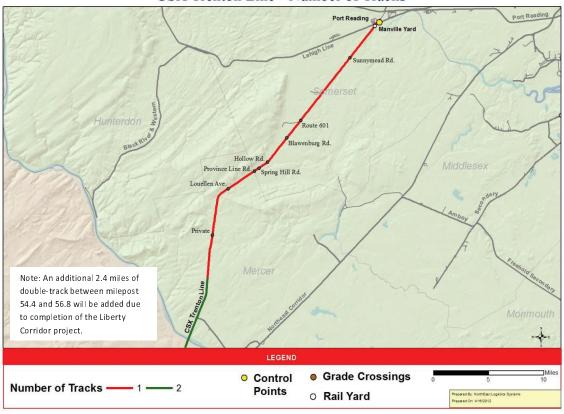


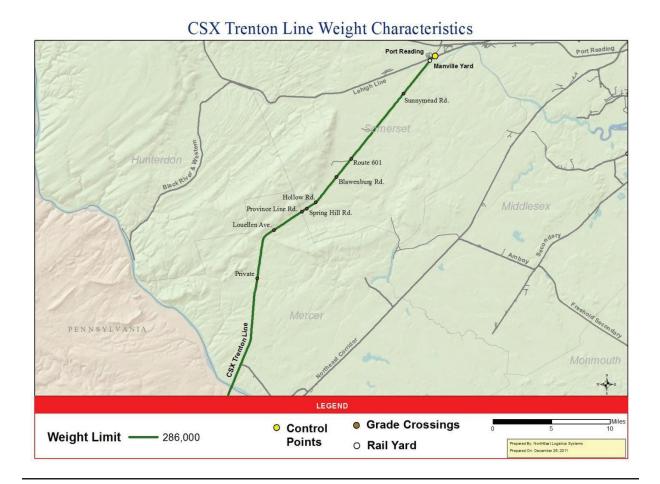




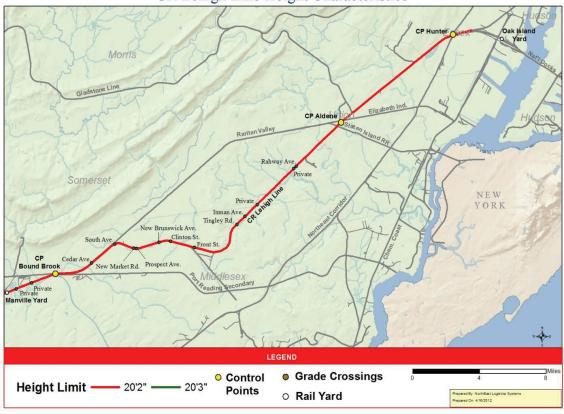






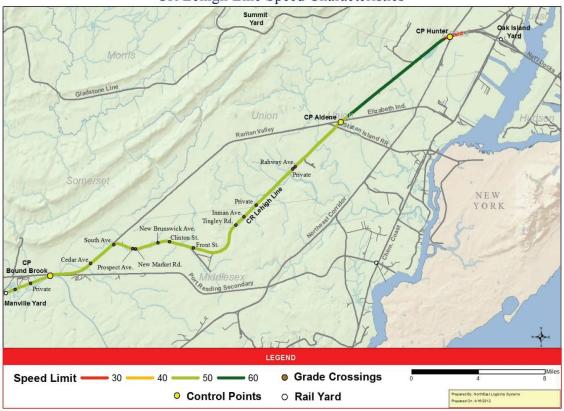


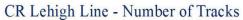
### Conrail Lehigh Line

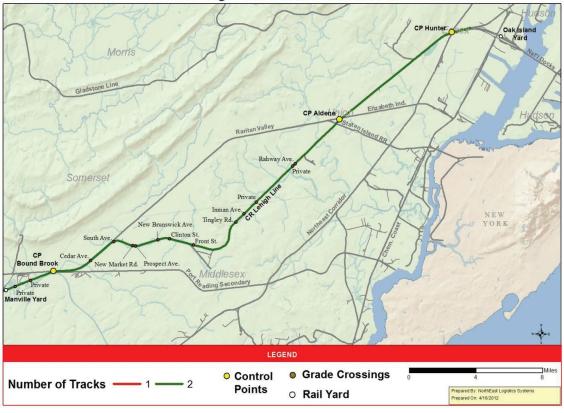


CR Lehigh Line Height Characteristics

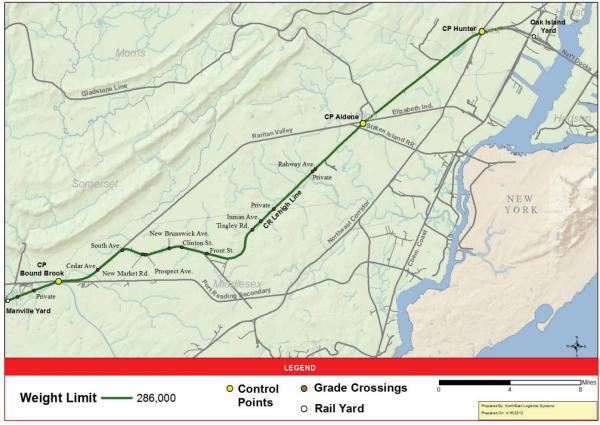
#### CR Lehigh Line Speed Characteristics







#### CR Lehigh Line Weight Characteristics

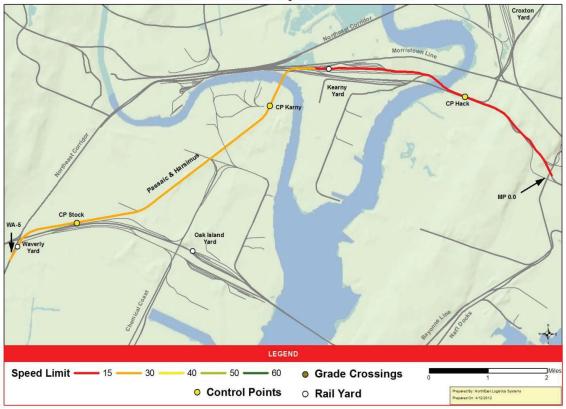


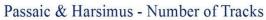
#### Conrail P&H Line



Passaic & Harsimus Height Characteristics

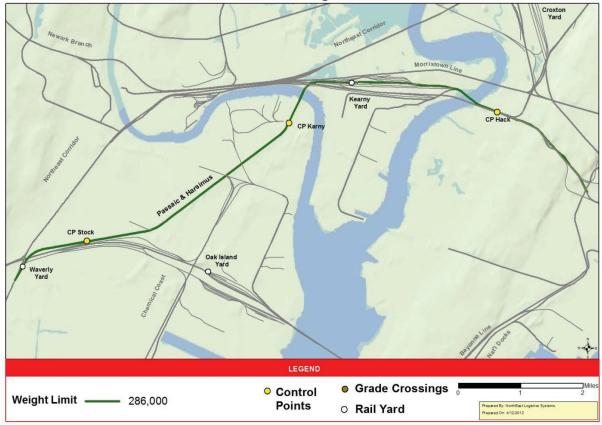
#### Passaic & Harsimus Speed Characteristics









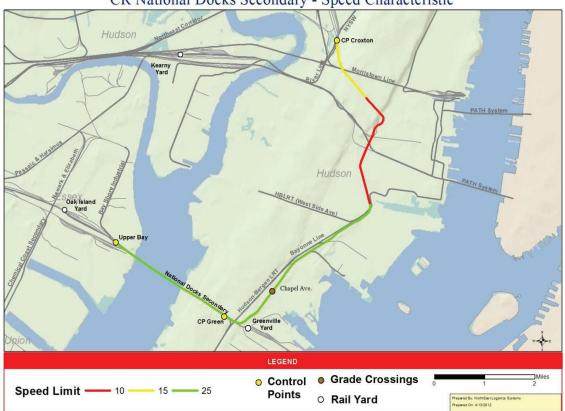


#### **Conrail National Docks Branch**



CR National Docks Secondary - Height Characteristics

#### CR National Docks Secondary - Speed Characteristic





#### CR National Docks Secondary - Number of Tracks

#### CR National Docks Secondary - Weight Characteristics

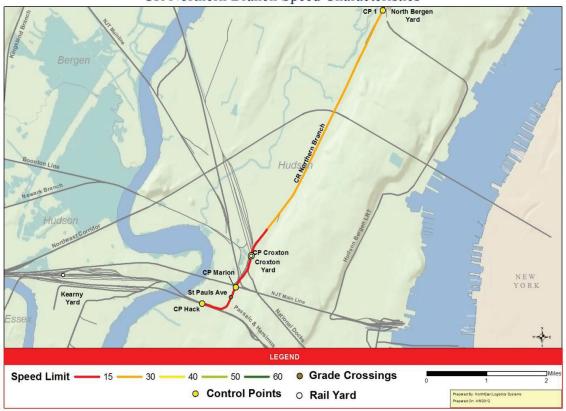


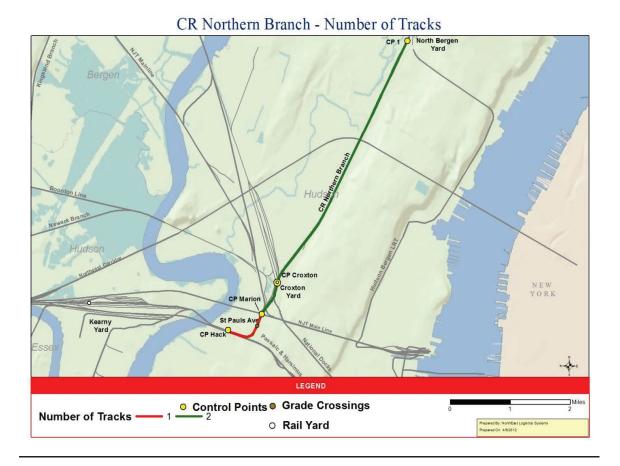
#### **Conrail Northern Branch**



CR Northern Branch Height Characteristics



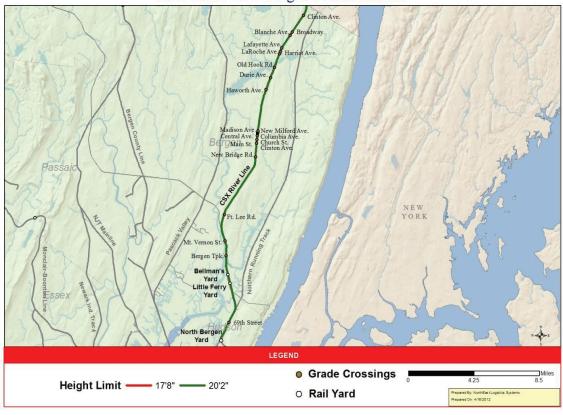




#### CR Northern Branch Weight Characteristics

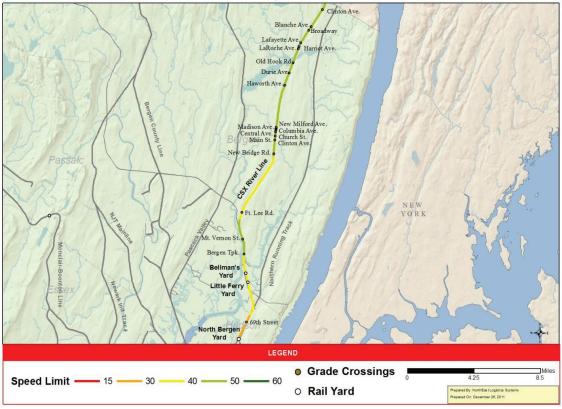


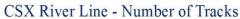
#### **CSX River Line**

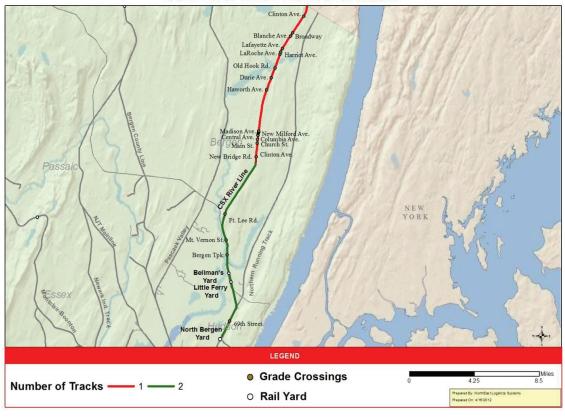


CSX River Line Height Characteristics

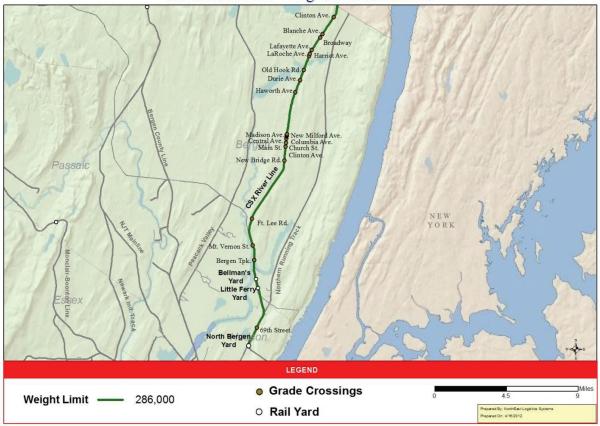
#### CSX River Line Speed Characteristics











APPENDIX D: CORRIDOR ATTRIBUTE TABLES

| Line_Name  | MP    | Structure Name                        | Date Modified | Edited         | Source   | Creation Date |
|--|-------|---------------------------------------|---------------|----------------|--|---------------|
| Pascack Valley Line                                |       | Culvert                               | 12/5/2011     | FALSE          | NJ Transit Physical Characteristics 2011   | ereation bate |
| Pascack Valley Line                                |       | Culvert                               | 12/5/2011     | FALSE          | NJ Transit Physical Characteristics 2011   |               |
| Pascack Valley Line                                | 16.87 | Culvert                               | 12/5/2011     | FALSE          | NJ Transit Physical Characteristics 2011   |               |
| Pascack Valley Line                                | 17.62 | Culvert                               | 12/5/2011     | FALSE          | NJ Transit Physical Characteristics 2011   |               |
| Pascack Valley Line                                |       | Culvert                               | 12/5/2011     | FALSE          | NJ Transit Physical Characteristics 2011   | _             |
| Pascack Valley Line                                |       | Culvert                               | 12/5/2011     | FALSE          | NJ Transit Physical Characteristics 2011   |               |
| Bergen County Line                                 |       | Meadowlands Parkway                   | 12/2/2011     | FALSE          | NJ Transit Physical Characteristics 2011   |               |
| Bergen County Line                                 |       | NJ Tpk                                | 12/2/2011     | TRUE           | NJ Transit Physical Characteristics 2011   | _             |
| Bergen County Line                                 |       | Culvert                               | 12/2/2011     | FALSE          | NJ Transit Physical Characteristics 2011   | _             |
| Bergen County Line                                 |       | Culvert                               | 12/2/2011     | FALSE          | NJ Transit Physical Characteristics 2011   |               |
| Bergen County Line                                 |       | Route 17<br>Route 80                  | 12/2/2011     | FALSE          | NJ Transit Physical Characteristics 2011   |               |
| Bergen County Line<br>Bergen County Line           |       | Route 208                             | 12/2/2011     | FALSE<br>FALSE | NJ Transit Physical Characteristics 2011<br>NJ Transit Physical Characteristics 2011 | -             |
| Montclair-Boonton Line                             |       | Ridgewood Avenue                      | 12/2/2011     | FALSE          | NJ Transit Physical Characteristics 2011   |               |
| Montclair-Boonton Line                             |       | Quarry Road                           | 12/1/2011     | FALSE          | NJ Transit Physical Characteristics 2011   |               |
| Montclair-Boonton Line                             |       | Signal Bridge                         | 12/1/2011     | FALSE          | NJ Transit Physical Characteristics 2011   |               |
| Montclair-Boonton Line                             |       | Ridge Road                            | 12/1/2011     | FALSE          | NJ Transit Physical Characteristics 2011   |               |
| Montclair-Boonton Line                             |       | West Belt Parkway                     | 12/1/2011     | FALSE          | NJ Transit Physical Characteristics 2011   |               |
| Lehigh Line  |       | Route 78 SB                           | 10/21/2011    | FALSE          | Conrail Philadelphia Division Track Chart 1999                                       |               |
| Northeast Corridor Line                            |       | South Broad St                        | ,,            | FALSE          |  |               |
| Northeast Corridor Line                            |       | Bordentown Secondary                  |               | FALSE          |  | 1             |
| Northeast Corridor Line                            |       | Route 33                              |               | FALSE          |  | 1             |
| Northeast Corridor Line                            |       | South Clinton Ave                     | 1             | FALSE          |  | 1             |
| Northeast Corridor Line                            |       | Pedestrian                            |               | FALSE          |  |               |
| Northeast Corridor Line                            | 56.49 | Chestnut Street                       |               | FALSE          |  |               |
| Northeast Corridor Line                            | 56.47 | East State Street                     |               | FALSE          |  |               |
| Chemical Coast Secondary                           | 11.22 | Chelsea Ave                           | 10/26/2011    | TRUE           | Conrail Philadelphia Division Track Chart 1999                                       | 10/26/2011    |
| Northeast Corridor Line                            | 56.38 | Monmouth Street                       |               | FALSE          |  |               |
| Northeast Corridor Line                            | 56.24 | Chambers Street                       |               | FALSE          |  |               |
| Northeast Corridor Line                            | 55.75 | Olden Ave                             |               | FALSE          |  |               |
| Northeast Corridor Line                            | 54.83 | Whithead Road                         |               | FALSE          |  |               |
| Northeast Corridor Line                            |       | Sloan Ave                             |               | FALSE          |  |               |
| Northeast Corridor Line                            |       | Route 295 West                        |               | FALSE          |  |               |
| Northeast Corridor Line                            |       | Route 295 East                        |               | FALSE          |  | _             |
| Northeast Corridor Line                            |       | Youngs Road                           |               | FALSE          |  | _             |
| Northeast Corridor Line                            |       | Quaker Bridge Road                    |               | FALSE          |  | _             |
| Northeast Corridor Line                            |       | Clarksville Road / Route 523          |               | FALSE          |  |               |
| Northeast Corridor Line                            |       | Alexander Road                        |               | FALSE          |  | _             |
| Northeast Corridor Line<br>Northeast Corridor Line |       | Highstown Road                        |               | FALSE          |  | -             |
| Northeast Corridor Line                            |       | Plainsboro Road<br>Scudders Mill Road |               | FALSE<br>FALSE |  |               |
| Northeast Corridor Line                            |       | Schalks Road                          |               | FALSE          |  |               |
| Northeast Corridor Line                            |       | Tower Road                            |               | FALSE          |  |               |
| Northeast Corridor Line                            |       | Ridge Road                            |               | FALSE          |  |               |
| Northeast Corridor Line                            |       | Major Road                            |               | FALSE          |  |               |
| Northeast Corridor Line                            |       | Adams Lane                            |               | FALSE          |  |               |
| Northeast Corridor Line                            | 34.99 | Route 1                               |               | FALSE          |  |               |
| Northeast Corridor Line                            | 33.94 | How Lande                             |               | FALSE          |  |               |
| Northeast Corridor Line                            | 32.16 | Sanford Street                        |               | FALSE          |  |               |
| Northeast Corridor Line                            | 27.78 | C. Kilmer Pedestrian Bridge           |               | FALSE          |  |               |
| Northeast Corridor Line                            |       | Route 287 East                        | ļ             | FALSE          |  |               |
| Northeast Corridor Line                            |       | Route 287 West                        |               | FALSE          |  |               |
| Northeast Corridor Line                            |       | Bridge Street                         |               | FALSE          |  |               |
| Northeast Corridor Line                            |       | Colonia Blvd                          |               | FALSE          |  |               |
| Northeast Corridor Line                            |       | NYS&W Staten Island Branch            |               | FALSE          |  |               |
| Northeast Corridor Line                            |       | Park Ave                              |               | FALSE          |  | +             |
| Northeast Corridor Line                            |       | Hand Place                            | +             | FALSE          |  | +             |
| Northeast Corridor Line<br>Northeast Corridor Line |       | Haynes Ave<br>Route 22                | +             | FALSE          |  | +             |
| Northeast Corridor Line                            |       | Route 22<br>Route 22                  | 1             | FALSE<br>FALSE |  | +             |
| Northeast Corridor Line                            |       | Route 78                              |               | FALSE          |  |               |
| Northeast Corridor Line                            |       | Route 78                              |               | FALSE          |  |               |
| Northeast Corridor Line                            |       | Lehigh Line                           | 1             | FALSE          |  | +             |
| Northeast Corridor Line                            |       | State Highway 21                      | 1             | FALSE          |  | 1             |
| Northeast Corridor Line                            |       | State Highway 21                      | 1             | FALSE          |  | 1             |
| Northeast Corridor Line                            |       | Conrail                               | 1             | FALSE          |  | 1             |
| Northeast Corridor Line                            |       | NJ Turnpike                           | 1             | FALSE          |  | 1             |
| Northeast Corridor Line                            |       | Route 1                               | 1             | FALSE          |  | 1             |
| Main Line  |       | NYSWRY                                | 12/2/2011     | FALSE          | NJTransit ETT 601: November 6, 2011  | 1             |
| Main Line  |       | Lincoln Ave                           | 12/2/2011     |                | NJTransit ETT 601: November 6, 2011  |               |
| Main Line  |       | Route 208                             | 12/2/2011     | FALSE          | NJTransit ETT 601: November 6, 2011  | 1             |
| Main Line  |       | Wycoff Ave                            | 12/2/2011     |                | NJTransit ETT 601: November 6, 2011  | 1             |
| Main Line  |       | Footbridge                            | 12/2/2011     | FALSE          | NJTransit ETT 601: November 6, 2011  |               |
|  |       |                                       |               |                |  |               |

| Line Name                          | MP    | Structure Name                  | Date Modified            | Edited         | Source   | Creation Date |
|------------------------------------|-------|---------------------------------|--------------------------|----------------|--|---------------|
| Main Line                          |       | NYS Thruway                     | 12/2/2011                | FALSE          | NJTransit ETT 601: November 6, 2011  |               |
| Montclair Line                     |       | 7th Ave                         | 12/1/2011                | FALSE          | NJ Transit Physical Characteristics 2011   |               |
| Montclair Line                     |       | N 9th St                        | 12/1/2011                | FALSE          | NJ Transit Physical Characteristics 2011   |               |
| Montclair Line                     | 9.18  | 6th Ave                         | 12/1/2011                | FALSE          | NJ Transit Physical Characteristics 2011   |               |
| Montclair Line                     | 10.54 | Arlington Ave                   | 12/1/2011                | FALSE          | NJ Transit Physical Characteristics 2011   |               |
| Montclair Line                     | 10.92 | Watessing Ave                   | 12/1/2011                | FALSE          | NJ Transit Physical Characteristics 2011   |               |
| Montclair Line                     | 10.96 | Orange St                       | 12/1/2011                | FALSE          | NJ Transit Physical Characteristics 2011   |               |
| Montclair Line                     | 11.14 | Garden State Parkway            | 12/1/2011                | FALSE          | NJ Transit Physical Characteristics 2011   |               |
| Montclair Line                     |       | JFK Boulevard                   | 12/1/2011                | FALSE          | NJ Transit Physical Characteristics 2011   |               |
| Montclair Line                     |       | Ridgewood Ave                   | 12/1/2011                | FALSE          | NJ Transit Physical Characteristics 2011   |               |
| Montclair Line                     |       | Freeman Parkway                 | 12/1/2011                | FALSE          | NJ Transit Physical Characteristics 2011   |               |
| Montclair Line                     |       | Bloomfield Ave                  | 12/1/2011                | FALSE          | NJ Transit Physical Characteristics 2011   |               |
| Morristown Line                    |       | Tonelle Avenue                  | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line<br>Morristown Line |       | Route 7<br>M.M.C. Ped Overpass  | 10/19/2011<br>10/19/2011 | FALSE<br>FALSE | NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005 | <u> </u>      |
| Morristown Line                    |       | New Jersey Turnpike             | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    |       | Amtrak                          | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    | -     | Nesbilt Street                  | 10/19/2011               | TRUE           | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    |       | Clifton Avenue                  | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    |       | Route 58                        | 10/19/2011               | TRUE           | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    |       | Route 280                       | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    |       | Newark Subway                   | 10/19/2011               | TRUE           | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    | 8.57  | 1st Street                      | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    | 8.62  | 2nd Street                      | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    |       | 3rd Street                      | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    |       | 4th Street                      | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    |       | 5th Street                      | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    |       | 6th Street                      | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    |       | 7th Street                      | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    |       | Roseville Avenue                | 10/19/2011               | TRUE           | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    |       | Bathgate Place                  | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    |       | Footbridge                      | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line<br>Morristown Line | -     | Footbridge<br>7th Avenue        | 10/19/2011<br>10/19/2011 | FALSE<br>TRUE  | NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005 | <u> </u>      |
| Morristown Line                    |       | Footbridge                      | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    |       | Footbridge                      | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    |       | Newark Drawbridge Passaic River | 10/19/2011               | TRUE           | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    |       | Montrose Avenue                 | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    |       | Wyoming Avenue                  | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    |       | Summit Avenue                   | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    | 20.11 | Footbridge                      | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    | 20.18 | Maple Avenue                    | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    | 20.34 | Springfield Avenue              | 10/19/2011               | TRUE           | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    | 20.88 | High Street                     | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    | 24.39 | Union Hill Road                 | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    | 24.96 | Samson Road                     | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    | +     | Footbridge                      | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    | -     | Danforth Road                   | 10/19/2011               |                | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    |       | Hanover Avenue                  | 10/19/2011               | 1              | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    |       | Watcing Creek                   | 10/19/2011               |                | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    | +     | Creek                           | 10/19/2011               |                | NJ Transit Physical Characteristics 2005   | <u> </u>      |
| Morristown Line                    | -     | Route 10<br>Franklin Avenue     | 10/19/2011<br>10/19/2011 |                | NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005 |               |
| Morristown Line<br>Morristown Line | -     | Rockaway Road                   | 10/19/2011               | FALSE<br>TRUE  | NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005 |               |
| Morristown Line                    |       | Salem Street                    | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    | -     | Prospect Street                 | 10/19/2011               | 1              | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    | -     | Blackwell Street                | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    | -     | Route 46                        | 10/19/2011               | 1              | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    |       | Conrail                         | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    | -     | Main Street                     | 10/19/2011               | 1              | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    |       | Route 80                        | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    | -     | Landing Road                    | 10/19/2011               |                | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    | 47.72 | Route 206                       | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Morristown Line                    | 55.29 | Bilbys Road                     | 10/19/2011               | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Montclair-Boonton Line             | 22.9  | County Road                     | 12/1/2011                | FALSE          | NJ Transit Physical Characteristics 2011   |               |
| Montclair-Boonton Line             |       | Wooten Street                   | 12/1/2011                | 1              | NJ Transit Physical Characteristics 2011   |               |
| Montclair-Boonton Line             |       | Main Street                     | 12/1/2011                | 1              | NJ Transit Physical Characteristics 2011   |               |
| Montclair-Boonton Line             |       | Fanny Road                      | 12/1/2011                | 1              | NJ Transit Physical Characteristics 2011   |               |
| Montclair-Boonton Line             |       | Foxhill Road                    | 12/1/2011                | 1              | NJ Transit Physical Characteristics 2011   |               |
| Montclair-Boonton Line             |       | Route 80                        | 12/1/2011                | 1              | NJ Transit Physical Characteristics 2011   |               |
| Gladstone Line                     | -     | Footbridge                      | 12/1/2011                | 1              | NJ Transit Physical Characteristics 2011   |               |
| Gladstone Line                     |       | Maple Ave                       | 12/1/2011                | 1              | NJ Transit Physical Characteristics 2011   |               |
| Gladstone Line                     | -     | Springfield Ave                 | 12/1/2011                | 1              | NJ Transit Physical Characteristics 2011   | <u> </u>      |
| Gladstone Line                     |       | Morris Ave                      | 12/1/2011                | FALSE          | NJ Transit Physical Characteristics 2011   | 1             |

| Line_Name  | MP    | Structure Name                     | Date Modified          | Edited         | Source   | Creation Date |
|--|-------|------------------------------------|------------------------|----------------|--|---------------|
| Gladstone Line                                       |       | High Street                        | 12/1/2011              | FALSE          | NJ Transit Physical Characteristics 2011   |               |
| Gladstone Line                                       |       | Springfield Ave                    | 12/1/2011              | FALSE          | NJ Transit Physical Characteristics 2011   |               |
| Gladstone Line                                       |       | Valley Road                        | 12/1/2011              | FALSE          | NJ Transit Physical Characteristics 2011   | _             |
| Gladstone Line                                       |       | Route 512                          | 12/1/2011              | FALSE          | NJ Transit Physical Characteristics 2011   |               |
| Main Line  |       | Amtrak                             | 12/2/2011              | FALSE          | NJTransit ETT 601: November 6, 2011  |               |
| Main Line  |       | NJ Turnpike                        | 12/2/2011              | FALSE          | NJTransit ETT 601: November 6, 2011  | -             |
| Main Line<br>Main Line                               |       | NJ Turnpike<br>Kingsland Tunnel    | 12/2/2011<br>12/2/2011 | FALSE<br>FALSE | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011           |               |
| Main Line  |       | Ridge Road                         | 12/2/2011              | FALSE          | NJTransit ETT 601: November 6, 2011  |               |
| Main Line  |       | Route 3                            | 12/2/2011              | FALSE          | NJTransit ETT 601: November 6, 2011  |               |
| Main Line  |       | Route 3 Ramp                       | 12/2/2011              | FALSE          | NJTransit ETT 601: November 6, 2011  |               |
| Main Line  |       | Broadway                           | 12/2/2011              | FALSE          | NJTransit ETT 601: November 6, 2011  |               |
| Main Line  |       | Route 46                           | 12/2/2011              | FALSE          | NJTransit ETT 601: November 6, 2011  |               |
| Main Line  |       | Garden State Parkway               | 12/2/2011              | FALSE          | NJTransit ETT 601: November 6, 2011  |               |
| Main Line  | 13.42 | Garden State Parkway               | 12/2/2011              | FALSE          | NJTransit ETT 601: November 6, 2011  |               |
| Main Line  | 14.26 | Hazel Street                       | 12/2/2011              | FALSE          | NJTransit ETT 601: November 6, 2011  |               |
| Main Line  | 15.11 | Route 80                           | 12/2/2011              | FALSE          | NJTransit ETT 601: November 6, 2011  |               |
| Raritan Valley Line                                  | 66.51 | Pine Hollow Road                   | 11/12/2011             | FALSE          | NS Harrisburg Division Track Chart 2008  |               |
| Raritan Valley Line                                  | 66.09 | Welsh's Road                       | 11/12/2011             | FALSE          | NS Harrisburg Division Track Chart 2008  |               |
| Raritan Valley Line                                  | 63.86 | Route 78                           | 11/12/2011             | FALSE          | NS Harrisburg Division Track Chart 2008  |               |
| Raritan Valley Line                                  | 63.85 | Route 78                           | 11/12/2011             | FALSE          | NS Harrisburg Division Track Chart 2008  |               |
| Raritan Valley Line                                  | 59.67 | Iron Bridge Road                   | 11/12/2011             | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Raritan Valley Line                                  | 56.55 | Route 31                           | 11/12/2011             | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Raritan Valley Line                                  | 52.89 | Cregar Road                        | 11/12/2011             | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Raritan Valley Line                                  | 49.66 | Route 78 WB                        | 11/12/2011             | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Raritan Valley Line                                  |       | Route 78 EB                        | 11/12/2011             | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Raritan Valley Line                                  |       | Route 22                           | 11/12/2011             | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Raritan Valley Line                                  | 48.9  | Round Valley                       | 11/12/2011             | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Raritan Valley Line                                  | 39.2  | River Road                         | 11/12/2011             | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Raritan Valley Line                                  | 32.87 | Findeme Avenue                     | 11/12/2011             | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Raritan Valley Line                                  | 21.2  | Temill Road                        | 11/12/2011             | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Raritan Valley Line                                  | 20.69 | Central Avenue                     | 11/12/2011             | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Raritan Valley Line                                  |       | Footbridge                         | 11/12/2011             | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Raritan Valley Line                                  |       | Martine Avenue                     | 11/12/2011             | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Raritan Valley Line                                  |       | Tuttle Parkway                     | 11/12/2011             | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| Raritan Valley Line                                  |       | Garden State Parkway               | 11/12/2011             | FALSE          | NJ Transit Physical Characteristics 2005   |               |
| N. Jersey Coast Ln (So.)                             |       | JCP&L Road                         | 12/1/2011              | TRUE           | NJ Transit Physical Characteristics 2011   |               |
| N. Jersey Coast Ln (So.)                             |       | Conrail                            | 12/1/2011              | TRUE           | NJ Transit Physical Characteristics 2011   |               |
| N. Jersey Coast Ln (So.)                             |       | Footbridge                         | 12/1/2011              | TRUE           | NJ Transit Physical Characteristics 2011   | _             |
| N. Jersey Coast Ln (So.)                             |       | Footbridge / John Street           | 12/1/2011              | TRUE           | NJ Transit Physical Characteristics 2011   |               |
| N. Jersey Coast Ln (So.)                             |       | Borderntown Avenue                 | 12/1/2011              | TRUE           | NJ Transit Physical Characteristics 2011   |               |
| N. Jersey Coast Ln (So.)                             |       | Route 35                           | 12/1/2011              | TRUE           | NJ Transit Physical Characteristics 2011   |               |
| N. Jersey Coast Ln (So.)                             |       | Lawerence Road                     | 12/1/2011              | TRUE           | NJ Transit Physical Characteristics 2011   |               |
| N. Jersey Coast Ln (Mid)                             |       | Hall Ave                           | 12/1/2011              | TRUE           | NJ Transit Physical Characteristics 2011   |               |
| N. Jersey Coast Ln (Mid)                             |       | Washington St<br>Perth Amboy Br CR | 12/1/2011              |                | NJ Transit Physical Characteristics 2011   |               |
| N. Jersey Coast Ln (Mid)<br>N. Jersey Coast Ln (So.) |       | Bownes Road                        | 12/1/2011<br>12/1/2011 |                | NJ Transit Physical Characteristics 2011   |               |
|  |       | Park Avenue                        |                        | FALSE          | NJ Transit Physical Characteristics 2011   |               |
| N. Jersey Coast Ln (So.)<br>N. Jersey Coast Ln (So.) |       | Norwood Avenue                     | 12/1/2011<br>12/1/2011 |                | NJ Transit Physical Characteristics 2011<br>NJ Transit Physical Characteristics 2011 | -             |
| N. Jersey Coast Ln (So.)                             |       | Sydney Avenue                      | 12/1/2011              | 1              | NJ Transit Physical Characteristics 2011   | -             |
| N. Jersey Coast Ln (So.)                             |       | Sylvania Aveune                    | 12/1/2011              |                | NJ Transit Physical Characteristics 2011   | -             |
| Pascack Valley Line                                  |       | Foot Bridge                        | 12/1/2011              |                | NJ Transit Physical Characteristics 2011   | 12/05/2011    |
| Pascack Valley Line                                  |       | Paterson Plank Road                | 12/5/2011              | FALSE          | NJ Transit Physical Characteristics 2011   | 12/05/2011    |
| Pascack Valley Line                                  |       | Moonachie Avenue                   | 12/5/2011              | 1              | NJ Transit Physical Characteristics 2011   | 12/05/2011    |
| Pascack Valley Line                                  |       | Route 46                           | 12/5/2011              | FALSE          | NJ Transit Physical Characteristics 2011   | 12/05/2011    |
| Pascack Valley Line                                  |       | Route 80                           | 12/5/2011              | FALSE          | NJ Transit Physical Characteristics 2011   | 12/05/2011    |
| Pascack Valley Line                                  |       | NYS&W Railroad                     | 12/5/2011              | FALSE          | NJ Transit Physical Characteristics 2011   | 12/05/2011    |
| Pascack Valley Line                                  |       | Route 4                            | 12/5/2011              | 1              | NJ Transit Physical Characteristics 2011   | 12/05/2011    |
| Amboy Secondary                                      |       | South River                        | 10/26/2011             | TRUE           | Conrail Philadelphia Division Track Chart 1999                                       | 10/26/2011    |
| Northeast Corridor Line                              |       | Cooper St / Centre St              |                        | FALSE          |  |               |
| Lehigh Line  |       | North Broad St                     | 10/21/2011             | FALSE          | Conrail Philadelphia Division Track Chart 1999                                       | 10/21/2011    |
| Montclair-Boonton Line                               |       | Singac Brook                       | 12/1/2011              | FALSE          | NJ Transit Physical Characteristics 2011   | 12/01/2011    |
| Pascack Valley Line                                  |       | Culvert                            | 12/5/2011              | FALSE          | NJ Transit Physical Characteristics 2011   | 12/05/2011    |
| Morristown Line                                      |       | Scotland Road                      | 10/19/2011             | TRUE           | NJ Transit Physical Characteristics 2005   | 10/19/2011    |
| Morristown Line                                      |       | Morris Avenue                      | 10/19/2011             | TRUE           | NJ Transit Physical Characteristics 2005   | 10/19/2011    |
| Morristown Line                                      |       | Normandy Parkway                   | 10/19/2011             | TRUE           | NJ Transit Physical Characteristics 2005   | 10/19/2011    |
| Morristown Line                                      |       | Dewey Avenue                       | 10/19/2011             | TRUE           | NJ Transit Physical Characteristics 2005   | 10/19/2011    |
| Morristown Line                                      |       | Route 80                           | 10/19/2011             | 1              | NJ Transit Physical Characteristics 2005   | 10/19/2011    |
| Lehigh Line  |       | Route 1/9 NB                       | 10/21/2011             | TRUE           | Conrail Philadelphia Division Track Chart 1999                                       | 10/21/2011    |
| Lehigh Line  |       | Route 1/9 SB                       | 10/21/2011             | TRUE           | Conrail Philadelphia Division Track Chart 1999                                       | 10/21/2011    |
| Lehigh Line  |       | Route 21                           | 10/21/2011             | TRUE           | Conrail Philadelphia Division Track Chart 1999                                       | 10/21/2011    |
| Lehigh Line  |       | Route 78 NB                        | 10/21/2011             | TRUE           | Conrail Philadelphia Division Track Chart 1999                                       | 10/21/2011    |
| Lehigh Line  | 12.73 | Irvingtn BR                        | 10/21/2011             | TRUE           | Conrail Philadelphia Division Track Chart 1999                                       | 10/21/2011    |
| Lehigh Line  | 1745  | Garden State Parkway               | 10/21/2011             | TRUE           | Conrail Philadelphia Division Track Chart 1999                                       | 10/21/2011    |

| Line_Name                                    | MP    | Structure Name                        | Date Modified            | Edited       | Source   | Creation Date            |
|--|-------|---------------------------------------|--------------------------|--------------|--|--------------------------|
| Lehigh Line                                  |       | Central Ave                           | 10/21/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/21/2011               |
| Lehigh Line                                  |       | Lake Ave                              | 10/21/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/21/2011               |
| Lehigh Line                                  |       | Oak Tree Ave                          | 10/21/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/21/2011               |
| Lehigh Line                                  |       | Park Ave                              | 10/21/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/21/2011               |
| Lehigh Line                                  |       | Lakeview Ave                          | 10/21/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/21/2011               |
| Lehigh Line                                  |       | Washington Ave                        | 10/21/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/21/2011               |
| Meadows Branch Number 1                      |       | St Hwy RT25<br>Allen Rd               | 2/9/2012<br>2/9/2012     | TRUE<br>TRUE | Conrail Philadelphia Division Track Chart 1999<br>NS Harrisburg Division Track Chart 2008        | 2/09/2012<br>2/09/2012   |
| Washington Secondary<br>Washington Secondary |       | Dirt Rd                               | 2/9/2012                 | TRUE         | NS Harrisburg Division Track Chart 2008  | 2/09/2012                |
| Washington Secondary                         |       | Dirt Rd                               | 2/9/2012                 | TRUE         | NS Harrisburg Division Track Chart 2008  | 2/09/2012                |
| Washington Secondary                         |       | Dirt Rd                               | 2/9/2012                 | TRUE         | NS Harrisburg Division Track Chart 2008  | 2/09/2012                |
| Washington Secondary                         |       | Dirt Rd                               | 2/9/2012                 | TRUE         | NS Harrisburg Division Track Chart 2008  | 2/09/2012                |
| Washington Secondary                         | -     | Brick Yd Rd                           | 2/9/2012                 | TRUE         | NS Harrisburg Division Track Chart 2008  | 2/09/2012                |
| Washington Secondary                         | -     | Farm Cross                            | 2/9/2012                 | TRUE         | NS Harrisburg Division Track Chart 2008  | 2/09/2012                |
| Washington Secondary                         | 65.78 | SR 57                                 | 2/9/2012                 | TRUE         | NS Harrisburg Division Track Chart 2008  | 2/09/2012                |
| Washington Secondary                         | 69.17 | Butternut Rd                          | 2/9/2012                 | TRUE         | NS Harrisburg Division Track Chart 2008  | 2/09/2012                |
| Washington Secondary                         | 75.71 | N Main St                             | 2/9/2012                 | TRUE         | NS Harrisburg Division Track Chart 2008  | 2/09/2012                |
| Washington Secondary                         | 78.05 | RT 22 N                               | 2/9/2012                 | TRUE         | NS Harrisburg Division Track Chart 2008  | 2/09/2012                |
| Washington Secondary                         |       | RT 22 S                               | 2/9/2012                 | TRUE         | NS Harrisburg Division Track Chart 2008  | 2/09/2012                |
| Washington Secondary                         |       | Center St                             | 2/9/2012                 | TRUE         | NS Harrisburg Division Track Chart 2008  | 2/09/2012                |
| Washington Secondary                         |       | S Main St                             | 2/9/2012                 | TRUE         | NS Harrisburg Division Track Chart 2008  | 2/09/2012                |
| Portland Secondary                           | -     | US 22                                 | 2/9/2012                 | TRUE         | NS Harrisburg Division Track Chart 2008  | 2/09/2012                |
| Northern Branch                              | -     | State Hwy Route 25                    | 2/16/2012                | TRUE         | GIS  | 2/16/2012                |
| Northern Branch                              |       | NJ Transit<br>Mountain Ave            | 2/16/2012                |              | GIS<br>Conroll Philadolphia Division Track Chart 1999  | 2/16/2012                |
| Lehigh Line                                  |       |                                       | 10/21/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/21/2011               |
| Lehigh Line<br>Lehigh Line                   |       | Route 287<br>Doremus Ave              | 10/21/2011<br>10/21/2011 | TRUE<br>TRUE | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999 | 10/21/2011<br>10/21/2011 |
| Lehigh Line                                  |       | NJ Turnpike                           | 10/21/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/21/2011               |
| Lehigh Line                                  |       | South Branch Rd                       | 10/25/2011               | TRUE         | NS Harrisburg Division Track Chart 2008  | 10/25/2011               |
| Lehigh Line                                  |       | Higginsville Rd                       | 10/25/2011               | TRUE         | NS Harrisburg Division Track Chart 2008  | 10/25/2011               |
| Lehigh Line                                  |       | Route 202                             | 10/25/2011               | TRUE         | NS Harrisburg Division Track Chart 2008  | 10/25/2011               |
| Lehigh Line                                  |       | Route 523                             | 10/25/2011               | TRUE         | NS Harrisburg Division Track Chart 2008  | 10/25/2011               |
| Lehigh Line                                  |       | Route 31                              | 10/25/2011               | TRUE         | NS Harrisburg Division Track Chart 2008  | 10/25/2011               |
| Lehigh Line                                  | 58.41 | Sidney Road                           | 10/25/2011               | TRUE         | NS Harrisburg Division Track Chart 2008  | 10/25/2011               |
| Lehigh Line                                  | 59.06 | Route 513                             | 10/25/2011               | TRUE         | NS Harrisburg Division Track Chart 2008  | 10/25/2011               |
| Lehigh Line                                  | 61.23 | Route 635                             | 10/25/2011               | TRUE         | NS Harrisburg Division Track Chart 2008  | 10/25/2011               |
| Lehigh Line                                  |       | Route 78 WB                           | 10/25/2011               | TRUE         | NS Harrisburg Division Track Chart 2008  | 10/25/2011               |
| Lehigh Line                                  |       | Route 78 EB                           | 10/25/2011               | TRUE         | NS Harrisburg Division Track Chart 2008  | 10/25/2011               |
| Lehigh Line                                  |       | Church St                             | 10/25/2011               | TRUE         | NS Harrisburg Division Track Chart 2008  | 10/25/2011               |
| Lehigh Line                                  | -     | Milford Rd                            | 10/25/2011               | TRUE         | NS Harrisburg Division Track Chart 2008  | 10/25/2011               |
| Lehigh Line                                  |       | Route 78                              | 10/25/2011               | TRUE         | NS Harrisburg Division Track Chart 2008  | 10/25/2011               |
| Lehigh Line                                  |       | Ped Walkway                           | 10/25/2011               | TRUE         | NS Harrisburg Division Track Chart 2008  | 10/25/2011               |
| Lehigh Line                                  |       | High St                               | 10/25/2011               | TRUE         | NS Harrisburg Division Track Chart 2008  | 10/25/2011               |
| Lehigh Line                                  |       | Kent St                               | 10/25/2011               | TRUE         | NS Harrisburg Division Track Chart 2008  | 10/25/2011<br>10/25/2011 |
| Lehigh Line<br>Passaic & Harsimus Branch     |       | Main St<br>Waldo Ave                  | 10/25/2011<br>10/25/2011 | TRUE<br>TRUE | NS Harrisburg Division Track Chart 2008<br>Conrail Philadelphia Division Track Chart 1999        | 10/25/2011               |
| Passaic & Harsimus Branch                    |       | Chestnut St                           | 10/25/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/25/2011               |
| Passaic & Harsimus Branch                    |       | Baldwin Ave                           | 10/25/2011               |              | Conrail Philadelphia Division Track Chart 1999   | 10/25/2011               |
| Passaic & Harsimus Branch                    |       | Sumit Ave                             | 10/25/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/25/2011               |
| Passaic & Harsimus Branch                    |       | JFK Blvd                              | 10/25/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/25/2011               |
| Passaic & Harsimus Branch                    |       | Tonelle Ave                           | 10/25/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/25/2011               |
| Passaic & Harsimus Branch                    |       | NJ Turnpike                           | 10/25/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/25/2011               |
| Passaic & Harsimus Branch                    |       | South St                              | 10/25/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/25/2011               |
| Passaic & Harsimus Branch                    | 0.22  | Route 21                              | 10/25/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/25/2011               |
| Passaic & Harsimus Branch                    |       | CR ML JC.SR                           | 10/25/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/25/2011               |
| National Docks Secondary                     | 1.21  | NewarkAve                             | 10/25/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/25/2011               |
| National Docks Secondary                     |       | CR P&H                                | 10/25/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/25/2011               |
| National Docks Secondary                     |       | PATH RR                               | 10/25/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/25/2011               |
| National Docks Secondary                     |       | NJ Turnpike                           | 10/25/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/25/2011               |
| Amboy Secondary                              |       | Route 670                             | 10/26/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/26/2011               |
| Amboy Secondary                              | 1     | CR Syrvl Rt                           | 10/26/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/26/2011               |
| Amboy Secondary                              |       | Route 9<br>Washington Rd              | 10/26/2011               |              | Conrail Philadelphia Division Track Chart 1999   | 10/26/2011               |
| Amboy Secondary<br>Amboy Secondary           |       | Washington Rd<br>Garden State Parkway | 10/26/2011<br>10/26/2011 | TRUE<br>TRUE | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999 | 10/26/2011<br>10/26/2011 |
| Amboy Secondary<br>Amboy Secondary           | 1     | Route 18                              | 10/26/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/26/2011               |
| West Trenton Line                            |       | Hopewell Rd                           | 11/10/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               |
| West Trenton Line                            |       | Deaware Ave                           | 11/10/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               |
| West Trenton Line                            |       | Route 30                              | 11/10/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               |
| West Trenton Line                            |       | Route 31                              | 11/10/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               |
| Waterfront Connection                        | 1     |                                       |                          | 1            |  |                          |
| (Reverse Kearny)                             | 0.25  | NJ Turnpike                           | 11/14/2011               | TRUE         | NJ Transit Physical Characteristics 2005   | 11/14/2011               |
| Bloodgood Industrial                         |       | Garden State Parkway                  | 11/14/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               |
| Sayreville Secondary                         |       | Main St                               | 11/14/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               |
|  |       |                                       |                          |              | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               |

| Line_Name  | MP     | Structure Name                            | Date Modified            | Edited       | Source   | Creation Date            |
|--|--------|---|--------------------------|--------------|--|--------------------------|
| ayreville Secondary<br>ayreville Secondary           |        | Route 18<br>Route 1                       | 11/14/2011<br>11/14/2011 | TRUE<br>TRUE | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999 | 11/14/2011<br>11/14/2011 |
| River Line   |        | DEL/DSTEGO                                | 11/14/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               |
| River Line   |        | New Jersey Turnpike                       | 11/14/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               |
| River Line   |        | Route 46                                  | 11/14/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               |
| River Line   |        | Route 80                                  | 11/14/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               |
| River Line   | 8.06   | Main St                                   | 11/14/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               |
| River Line   | 8.92   | Cedar Lane                                | 11/14/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               |
| River Line   | 9.15   | Noname                                    | 11/14/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               |
| River Line   | 9.28   | Grayson Av                                | 11/14/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               |
| River Line   |        | Route 4                                   | 11/14/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               |
| River Line   |        | State St                                  | 11/14/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               |
| River Line   |        | Ivy Ave                                   | 11/14/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               |
| Raritan Valley Line                                  |        | Mountain Rd                               | 11/12/2011               | TRUE         | NJ Transit Physical Characteristics 2005   | 11/12/2011               |
| Raritan Valley Line                                  |        | Route 287                                 | 11/12/2011               | TRUE         | NJ Transit Physical Characteristics 2005   | 11/12/2011               |
| Raritan Valley Line                                  |        | Tuttle Parkway                            | 11/12/2011               | TRUE         | NJ Transit Physical Characteristics 2005   | 11/12/2011               |
| Gladstone Line<br>Bergen County Line                 |        | Mt Airy Rd<br>Route 46                    | 12/1/2011<br>12/2/2011   | TRUE<br>TRUE | NJ Transit Physical Characteristics 2011<br>NJ Transit Physical Characteristics 2011             | 12/1/2011<br>12/2/2011   |
| Main Line  |        | NJ Turnpike                               | 12/2/2011                | TRUE         | NJ Transit Physical Characteristics 2011   | 12/2/2011                |
| Main Line  |        | County Rd                                 | 12/2/2011                | TRUE         | NJ Transit Physical Characteristics 2011   | 12/2/2011                |
| N. Jersey Coast Ln (No.)                             |        | Route 1 & 9                               | 12/1/2011                | TRUE         | NJ Transit Physical Characteristics 2011   | 12/1/2011                |
| V. Jersey Coast Ln (No.)                             |        | Pedestrian Bridge                         | 12/1/2011                | TRUE         | NJ Transit Physical Characteristics 2011   | 12/1/2011                |
| N. Jersey Coast Ln (No.)                             |        | Cutters Dock Rd                           | 12/1/2011                | TRUE         | NJ Transit Physical Characteristics 2011   | 12/1/2011                |
| N. Jersey Coast Ln (No.)                             |        | Conrail                                   | 12/1/2011                | TRUE         | NJ Transit Physical Characteristics 2011   | 12/1/2011                |
| N. Jersey Coast Ln (No.)                             |        | Route 440                                 | 12/1/2011                | TRUE         | NJ Transit Physical Characteristics 2011   | 12/1/2011                |
| N. Jersey Coast Ln (No.)                             |        | Route 440                                 | 12/1/2011                | TRUE         | NJ Transit Physical Characteristics 2011   | 12/1/2011                |
| N. Jersey Coast Ln (No.)                             | 5.29   | Outerbridge Crossing                      | 12/1/2011                | TRUE         | NJ Transit Physical Characteristics 2011   | 12/1/2011                |
| N. Jersey Coast Ln (Mid)                             |        | New Brunswick Ave                         | 12/1/2011                | TRUE         | NJ Transit Physical Characteristics 2011   | 12/1/2011                |
| N. Jersey Coast Ln (Mid)                             | 20.9   | Fayette St                                | 12/1/2011                | TRUE         | NJ Transit Physical Characteristics 2011   | 12/1/2011                |
| N. Jersey Coast Ln (Mid)                             |        | Smith St                                  | 12/1/2011                | TRUE         | NJ Transit Physical Characteristics 2011   | 12/1/2011                |
| N. Jersey Coast Ln (Mid)                             |        | Pedestrian Bridge                         | 12/1/2011                | TRUE         | NJ Transit Physical Characteristics 2011   | 12/1/2011                |
| I. Jersey Coast Ln (Mid)                             |        | Market St                                 | 12/1/2011                | TRUE         | NJ Transit Physical Characteristics 2011   | 12/1/2011                |
| I. Jersey Coast Ln (So.)                             |        | Matawan Rd                                | 12/1/2011                | TRUE         | NJ Transit Physical Characteristics 2011   | 12/1/2011                |
| I. Jersey Coast Ln (So.)                             |        | Lloyd Rd                                  | 12/1/2011                | TRUE         | NJ Transit Physical Characteristics 2011   | 12/1/2011                |
| N. Jersey Coast Ln (So.)<br>N. Jersey Coast Ln (So.) |        | GSP Entrance Ramp<br>GSP Southbound Local | 12/1/2011<br>12/1/2011   | TRUE<br>TRUE | NJ Transit Physical Characteristics 2011<br>NJ Transit Physical Characteristics 2011             | 12/1/2011<br>12/1/2011   |
| Jersey Coast Ln (So.)                                |        | GSP Southbound Express                    | 12/1/2011                | TRUE         | NJ Transit Physical Characteristics 2011   | 12/1/2011                |
| V. Jersey Coast Ln (So.)                             |        | GSP Northbound Express                    | 12/1/2011                | TRUE         | NJ Transit Physical Characteristics 2011   | 12/1/2011                |
| N. Jersey Coast Ln (So.)                             |        | GSP Northbound Local                      | 12/1/2011                | TRUE         | NJ Transit Physical Characteristics 2011   | 12/1/2011                |
| N. Jersey Coast Ln (So.)                             |        | Red Hill Rd                               | 12/1/2011                | TRUE         | NJ Transit Physical Characteristics 2011   | 12/1/2011                |
| Bayway Industrial 1 Track                            |        | NJ Turnpike                               | 2/9/2012                 | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 2/09/2012                |
| Bayway Industrial 1 Track                            |        | Pipelinedch                               | 2/9/2012                 | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 2/09/2012                |
| Bayway Industrial 1 Track                            | 0.35   | Saltwaterle                               | 2/9/2012                 | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 2/09/2012                |
| Bayway Industrial 1 Track                            | 0.48   | Morsescksw                                | 2/9/2012                 | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 2/09/2012                |
| Bayway Industrial 1 Track                            | 1.34   | Pyles Ck                                  | 2/9/2012                 | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 2/09/2012                |
| Bonhamtown Industrial                                |        | SR 27                                     | 2/9/2012                 | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 2/09/2012                |
| Bonhamtown Industrial                                |        | Mill Creek                                | 2/9/2012                 | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 2/09/2012                |
| Bonhamtown Industrial                                |        | NJ Turnpike                               | 2/9/2012                 | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 2/09/2012                |
| Bonhamtown Industrial                                |        | 1 287                                     | 2/9/2012                 | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 2/09/2012                |
| reehold Secondary                                    |        | SR 33                                     | 2/9/2012                 | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 2/09/2012                |
| Freehold Secondary                                   | 16.87  |   | 2/9/2012                 | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 2/09/2012                |
| lightstown Industrial                                |        | NJ Turnpike<br>St Rte 29                  | 2/9/2012<br>2/9/2012     |              | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999 | 2/09/2012<br>2/09/2012   |
| rvington Industrial<br>rvington Industrial           |        | St Rte 29<br>Rte 78                       | 2/9/2012                 | TRUE<br>TRUE | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999 | 2/09/2012                |
| inden Branch   |        | NJ Turnpike                               | 2/9/2012                 | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 2/09/2012                |
| Port Reading Secondary                               |        | Grove Ave                                 | 10/27/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               |
| Port Reading Secondary                               |        | Middlesex Ave                             | 10/27/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               |
| Port Reading Secondary                               |        | Amtrak RR                                 | 10/27/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               |
| Port Reading Secondary                               |        | Route 1                                   | 10/27/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               |
| ort Reading Secondary                                |        | Conrail Bay Head Branch                   | 10/27/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               |
| ort Reading Secondary                                | 18.3   | NJ Turnpike                               | 10/27/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               |
| outhern Secondary                                    | 40.52  | Shrewsbury Ave                            | 10/27/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               |
| outhern Secondary                                    | 41.13  | Tinton Falls Rd                           | 10/27/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               |
| outhern Secondary                                    |        | Garden State Parkway                      | 10/27/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               |
| outhern Secondary                                    |        | Route 18                                  | 10/27/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               |
| outhern Secondary                                    |        | US Navy RR                                | 10/27/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               |
| outhern Secondary                                    |        | Asbury Ave                                | 10/27/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               |
| Southern Secondary                                   |        | Route 33                                  | 10/27/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               |
| Southern Secondary                                   |        | Route 95                                  | 10/27/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               |
| West Trenton Line                                    |        | Bridge St                                 | 11/10/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               |
| Nest Trenton Line                                    |        | Hamilton Rd                               | 11/10/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               |
| West Trenton Line                                    |        | Amwell Rd                                 | 11/10/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               |
| West Trenton Line                                    |        | Homestead Rd                              | 11/10/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               |
| West Trenton Line                                    | 1 5136 | Hilsboro Rd                               | 11/10/2011               | TRUE         | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               |

| Line_Name                | MP    | Structure Name    | Date Modified | Edited | Source   | Creation Date |
|--------------------------|-------|-------------------|---------------|--------|--|---------------|
| West Trenton Line        | 50.11 | Route 206         | 11/10/2011    | TRUE   | Conrail Philadelphia Division Track Chart 1999 | 11/10/2011    |
| West Trenton Line        | 48.48 | Harlengen Rd      | 11/10/2011    | TRUE   | Conrail Philadelphia Division Track Chart 1999 | 11/10/2011    |
| West Trenton Line        | 45.95 | Private Road      | 11/10/2011    | TRUE   | Conrail Philadelphia Division Track Chart 1999 | 11/10/2011    |
| West Trenton Line        | 41.5  | Private Road      | 11/10/2011    | TRUE   | Conrail Philadelphia Division Track Chart 1999 | 11/10/2011    |
| Chemical Coast Secondary | 1.66  | NJTPNBHCEXT       | 10/26/2011    | TRUE   | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    |
| Chemical Coast Secondary | 1.77  | PTSJVIA/WCT       | 10/26/2011    | TRUE   | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    |
| Chemical Coast Secondary | 4.54  | North Ave         | 10/26/2011    | TRUE   | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    |
| Chemical Coast Secondary | 11.27 | Gothoels Bridge   | 10/26/2011    | TRUE   | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    |
| Chemical Coast Secondary | 11.38 | CSX RR            | 10/26/2011    | TRUE   | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    |
| Chemical Coast Secondary | 11.74 | NJ Turnpike       | 10/26/2011    | TRUE   | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    |
| Chemical Coast Secondary | 13.53 | Wood Ave          | 10/26/2011    | TRUE   | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    |
| Chemical Coast Secondary | 14.8  | NJ Turnpike       | 10/26/2011    | TRUE   | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    |
| Chemical Coast Secondary | 18.38 | West Ave          | 10/26/2011    | TRUE   | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    |
| Port Reading Secondary   | 6.33  | Old New Brunswick | 10/27/2011    | TRUE   | Conrail Philadelphia Division Track Chart 1999 | 10/27/2011    |
| Port Reading Secondary   | 8.78  | Hamilton Blvd     | 10/27/2011    | TRUE   | Conrail Philadelphia Division Track Chart 1999 | 10/27/2011    |
| Amboy Secondary          | 12.74 | Bordentown Road   | 10/26/2011    | TRUE   | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    |
| Amboy Secondary          | 14.25 | NJ Turnpike       | 10/26/2011    | TRUE   | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    |
| Amboy Secondary          | 16.67 | Route 130         | 10/26/2011    | TRUE   | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    |

| Line Name                                  | МР    | Cross Street Name                | Control<br>Type | Private  | Source   | Date Modified         | Creation<br>Date | Edited         |
|--|-------|----------------------------------|-----------------|----------|--|-----------------------|------------------|----------------|
| Pascack Valley Line                        | 1     | Union Avenue                     | G               | rivate   | NJTransit ETT 601: November 6, 2011  | 12/5/2011             | Date             | FALSE          |
| Pascack Valley Line                        | 1     | Broad Street                     | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        |       | Berry Avenue                     | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        | 9.68  | Anderson Avenue                  | F               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        | 10.74 | Malcolm Avenue                   | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        | 12.27 | Lo di Street                     | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        |       | Essex Street                     | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        | -     | Atlantic Street                  | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        | -     | Beech Street                     | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        |       | Central Avenue                   | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        |       | Berry Street                     | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        | -     | Passaic Street                   | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        |       | Anderson Street                  | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line<br>Pascack Valley Line |       | Clinton Place<br>Euclid Avenue   | G               |          | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011 | 12/5/2011             |                  | FALSE<br>FALSE |
| Pascack Valley Line                        | 1     | Main Street                      | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        |       | Temple Avenue                    | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        |       | Grand Avenue                     | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        |       | Main Street                      | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        |       | P&P Plating                      | Ť               | Р        | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        |       | Riverside Way                    | G               | ť –      | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        |       | Riverside Road                   | G               | 1        | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        | 1     | New Milford Avenue               | G               | 1        | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        |       | Oradell Avenue                   | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        | 18.13 | Water Company                    |                 | Р        | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        | 19.42 | Kinderkamack Road                | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        | 19.46 | Linwood Avenue                   | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        | 19.57 | Lincoln Boulevard                | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        | 20.51 | First Street                     | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        | 20.64 | Westwood Avenue                  | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        |       | Irvington Street                 | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        | 1     | Lake Street                      | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        |       | Industrial Road                  | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        | 1     | Washington Avenue                | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        |       | Hillsdale Avenue                 | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        |       | Park Avenue                      | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             | 2/0/2012         | FALSE          |
| Third Branch                               |       | Private Xing                     | G               |          | Conrail Philadelphia Division Track Chart 1999                             | 2/9/2012<br>12/5/2011 | 2/9/2012         | TRUE           |
| Pascack Valley Line<br>Pascack Valley Line |       | Orchard Street<br>Parkview Drive | G               |          | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011 | 12/5/2011             |                  | FALSE<br>FALSE |
| Pascack Valley Line                        |       | Barone Drive                     | G               | Р        | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        |       | Woodcliff Avenue                 | G               | ľ        | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        | 1     | Park Avenue                      | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        |       | Madison Avenue                   | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        | 24.3  | Grand Avenue                     | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Pascack Valley Line                        |       | Kinderkamack Road                | G               |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011             |                  | FALSE          |
| Bergen County Line                         | 8.48  | Park Avenue                      | G               |          | NJTransit ETT 601: November 6, 2011  | 12/2/2011             |                  | FALSE          |
| Bergen County Line                         | 9.22  | Central Avenue                   | G               |          | NJTransit ETT 601: November 6, 2011  | 12/2/2011             |                  | FALSE          |
| Bergen County Line                         | 9.4   | Paterson Avenue                  | G               |          | NJTransit ETT 601: November 6, 2011  | 12/2/2011             |                  | FALSE          |
| Bergen County Line                         | 11.3  | Hobart Place                     | G               |          | NJTransit ETT 601: November 6, 2011  | 12/2/2011             |                  | FALSE          |
| Bergen County Line                         | 11.49 | Somerset Street                  | G               |          | NJTransit ETT 601: November 6, 2011  | 12/2/2011             |                  | FALSE          |
| Bergen County Line                         |       | Monroe Street                    | G               |          | NJTransit ETT 601: November 6, 2011  | 12/2/2011             |                  | FALSE          |
| Bergen County Line                         |       | Van Winkle Avenue                | G               |          | NJTransit ETT 601: November 6, 2011  | 12/2/2011             |                  | FALSE          |
| Bergen County Line                         |       | Outwater Lane                    | G               |          | NJTransit ETT 601: November 6, 2011  | 12/2/2011             |                  | FALSE          |
| Bergen County Line                         |       | Midland Avenue                   | G               |          | NJTransit ETT 601: November 6, 2011  | 12/2/2011             |                  | FALSE          |
| Bergen County Line                         |       | Market Street                    | G               | I        | NJTransit ETT 601: November 6, 2011  | 12/2/2011             |                  | FALSE          |
| Bergen County Line                         |       | Midland Avenue<br>Morlot Avenue  | G<br>G          |          | NJTransit ETT 601: November 6, 2011  | 12/2/2011             |                  | FALSE<br>FALSE |
| Bergen County Line<br>Bergen County Line   |       | Berdan Avenue                    | G               |          | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011 | 12/2/2011             |                  | FALSE          |
| Bergen County Line<br>Bergen County Line   |       | Fairlawn Avenue                  | G               | 1        | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011 | 12/2/2011             |                  | FALSE          |
| Bergen County Line                         |       | Harristown Road                  | G               |          | NJTransit ETT 601: November 6, 2011  | 12/2/2011             |                  | FALSE          |
| Bergen County Line                         |       | Roack Road                       | G               | <u> </u> | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011 | 12/2/2011             |                  | FALSE          |
| Montclair-Boonton Line                     |       | Walnut Street                    | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011             |                  | FALSE          |
| Montclair-Boonton Line                     |       | Fullerton Street                 | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011             |                  | FALSE          |
| Montclair-Boonton Line                     |       | Bellevue Avenue                  | G               | 1        | NJTransit ETT 601: November 6, 2011  | 12/1/2011             |                  | FALSE          |
| Montclair-Boonton Line                     |       | Lorraine Avenue                  | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011             |                  | FALSE          |
| Montclair-Boonton Line                     |       | Jerome Place                     | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011             |                  | FALSE          |
| Montclair-Boonton Line                     |       | Laurel Place                     | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011             |                  | FALSE          |
| Montclair-Boonton Line                     | 14.65 | Hebron Road                      | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011             |                  | FALSE          |
| Montclair-Boonton Line                     | 14.89 | Normal Avenue                    | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011             |                  | FALSE          |
| Montclair-Boonton Line                     | 17.05 | Francisco Avenue                 | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011             |                  | FALSE          |
| Montclair-Boonton Line                     | 18.01 | E. Lindsley Street               | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011             |                  | FALSE          |
| Montclair-Boonton Line                     |       | Stevens Avenue                   | G               | <u> </u> | NJTransit ETT 601: November 6, 2011  | 12/1/2011             |                  | FALSE          |
| Montclair-Boonton Line                     | 1     | Center Avenue                    | G               | L        | NJTransit ETT 601: November 6, 2011  | 12/1/2011             |                  | FALSE          |
| Montclair-Boonton Line                     | 10.75 | Montclair Avenue                 | G               | 1        | NJTransit ETT 601: November 6, 2011  | 12/1/2011             |                  | FALSE          |

| Line Name                                  | МР    | Cross Street Name                        | Control   | Drivete  | Fourse   | Data Madified              | Creation   | Edited          |
|--|-------|--|-----------|----------|--|----------------------------|------------|-----------------|
| Line_Name<br>Montclair-Boonton Line        |       | Cross_Street_Name<br>Dewey Avenue        | Type<br>G | Private  | Source<br>NJTransit ETT 601: November 6, 2011                                      | Date_Modified<br>12/1/2011 | Date       | Edited<br>FALSE |
| Montclair-Boonton Line                     |       | Main Street                              | G         |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011                  |            | FALSE           |
| Main Line                                  | -     | Valley Brook Road                        | G         |          | NJTransit ETT 601: November 6, 2011  | 12/2/2011                  |            | FALSE           |
| Main Line                                  | -     | Fifth Avenue                             | G         |          | NJTransit ETT 601: November 6, 2011  | 12/2/2011                  |            | FALSE           |
| Main Line                                  | 19.48 | Rock Road                                | G         |          | NJTransit ETT 601: November 6, 2011  | 12/2/2011                  |            | FALSE           |
| Main Line                                  | 22.14 | Pedestrian Xing                          | G         |          | NJTransit ETT 601: November 6, 2011  | 12/2/2011                  |            | FALSE           |
| Main Line                                  | 22.21 | Warren Ave                               | G         |          | NJTransit ETT 601: November 6, 2011  | 12/2/2011                  |            | FALSE           |
| Main Line                                  | 22.51 | Hollywood Ave                            | G         |          | NJTransit ETT 601: November 6, 2011  | 12/2/2011                  |            | FALSE           |
| Main Line                                  |       | Chestnut St                              | G         |          | NJTransit ETT 601: November 6, 2011  | 12/2/2011                  |            | FALSE           |
| Main Line                                  |       | Main St                                  | G         |          | NJTransit ETT 601: November 6, 2011  | 12/2/2011                  |            | FALSE           |
| Main Line                                  | -     | Central Ave                              | G         |          | NJTransit ETT 601: November 6, 2011  | 12/2/2011                  |            | FALSE           |
| Morristown Line                            | -     | Convent Road                             | G         | D        | NJTransit ETT 501: April 3, 2010   | 10/19/2011<br>10/19/2011   |            | FALSE           |
| Morristown Line<br>Morristown Line         |       | Kahn Road<br>Powder Mill Road            | G         | ٢        | NJTransit ETT 501: April 3, 2010<br>NJTransit ETT 501: April 3, 2010               | 10/19/2011                 |            | FALSE<br>FALSE  |
| Morristown Line                            |       | Station Road                             | G         |          | NJTransit ETT 501: April 3, 2010   | 10/19/2011                 |            | FALSE           |
| Morristown Line                            |       | Lackawanna Avenue                        | G         |          | NJTransit ETT 501: April 3, 2010   | 10/19/2011                 |            | FALSE           |
| Morristown Line                            |       | Esting Lake Road                         | G         |          | NJTransit ETT 501: April 3, 2010   | 10/19/2011                 |            | FALSE           |
| Morristown Line                            | -     | S. Morris Street                         | G         |          | NJTransit ETT 501: April 3, 2010   | 10/19/2011                 |            | FALSE           |
| Morristown Line                            | 38.6  | Orchard Street                           | G         |          | NJTransit ETT 501: April 3, 2010   | 10/19/2011                 |            | FALSE           |
| Morristown Line                            | -     | Main Street                              | G         |          | NJTransit ETT 501: April 3, 2010   | 10/19/2011                 |            | FALSE           |
| Morristown Line                            | 48.23 | Furnace Street                           | G         |          | NJTransit ETT 501: April 3, 2010   | 10/19/2011                 |            | FALSE           |
| Morristown Line                            |       | Lovers Lane                              | G         |          | NJTransit ETT 501: April 3, 2010   | 10/19/2011                 |            | FALSE           |
| Morristown Line                            |       | Clark Drive                              | G         |          | NJTransit ETT 501: April 3, 2010   | 10/19/2011                 |            | FALSE           |
| Morristown Line                            |       | Black Rock Road                          | G         |          | NJTransit ETT 501: April 3, 2010   | 10/19/2011                 |            | FALSE           |
| Morristown Line                            | 1     | Stanhope Waterloo Road                   | G         |          | NJTransit ETT 501: April 3, 2010   | 10/19/2011                 |            | FALSE           |
| Morristown Line                            |       | Waterloo Valley Road                     | G         | -        | NJTransit ETT 501: April 3, 2010   | 10/19/2011                 |            | FALSE           |
| Morristown Line                            |       | Saxton Falls Sand and Gravel             | G         | Р        | NJTransit ETT 501: April 3, 2010   | 10/19/2011                 |            | TRUE            |
| Morristown Line                            |       | Willow Grove Avenue                      | G<br>G    |          | NJTransit ETT 501: April 3, 2010   | 10/19/2011                 |            | FALSE           |
| Morristown Line<br>Morristown Line         |       | High Street<br>Main Street               | G         |          | NJTransit ETT 501: April 3, 2010<br>NJTransit ETT 501: April 3, 2010               | 10/19/2011<br>10/19/2011   |            | FALSE<br>FALSE  |
| Morristown Line                            |       | Beatty Street                            | G         |          | NJTransit ETT 501: April 3, 2010   | 10/19/2011                 |            | FALSE           |
| Princeton Branch                           | -     | Ped Xing                                 | G         |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011                  |            | FALSE           |
| Princeton Branch                           |       | Parking Lot                              | G         |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011                  |            | FALSE           |
| Princeton Branch                           |       | Faculty Road                             | G         |          | NJTransit ETT 601: November 6, 2011  | 12/5/2011                  |            | FALSE           |
| Raritan Valley Line                        |       | Farm Crossing                            |           | Р        | NS Harrisburg Division Track Chart 2008  | 11/12/2011                 |            | FALSE           |
| Raritan Valley Line                        | 64.9  | Church Street                            | G         |          | NS Harrisburg Division Track Chart 2008  | 11/12/2011                 |            | FALSE           |
| Raritan Valley Line                        | 64.33 | Farm Crossing                            |           | Р        | NS Harrisburg Division Track Chart 2008  | 11/12/2011                 |            | FALSE           |
| Raritan Valley Line                        | 64.18 | Farm Crossing                            |           | Р        | NS Harrisburg Division Track Chart 2008  | 11/12/2011                 |            | FALSE           |
| Raritan Valley Line                        | 64.05 | Driveway                                 |           | Р        | NS Harrisburg Division Track Chart 2008  | 11/12/2011                 |            | FALSE           |
| Raritan Valley Line                        | 63.26 | Private                                  |           | Р        | NS Harrisburg Division Track Chart 2008  | 11/12/2011                 |            | FALSE           |
| Raritan Valley Line                        |       | Driveway                                 |           | Р        | NS Harrisburg Division Track Chart 2008  | 11/12/2011                 |            | FALSE           |
| Raritan Valley Line                        | -     | Wecdco                                   |           | Р        | NS Harrisburg Division Track Chart 2008  | 11/12/2011                 |            | FALSE           |
| Raritan Valley Line                        | -     | Farm Crossing                            | _         | P        | NS Harrisburg Division Track Chart 2008  | 11/12/2011                 |            | FALSE           |
| Raritan Valley Line                        | -     | Farm Crossing                            | -         | P<br>P   | NS Harrisburg Division Track Chart 2008  | 11/12/2011                 |            | FALSE           |
| Raritan Valley Line                        | -     | Farm Crossing                            | -         | Р        | NS Harrisburg Division Track Chart 2008  | 11/12/2011                 |            | FALSE           |
| Raritan Valley Line<br>Raritan Valley Line | -     | Valley Station Road<br>Patternburgh Road |           |          | NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008 | 11/12/2011<br>11/12/2011   |            | FALSE<br>FALSE  |
| Raritan Valley Line                        |       | Driveway                                 | r -       | Р        | NS Harrisburg Division Track Chart 2008  | 11/12/2011                 |            | FALSE           |
| Raritan Valley Line                        | -     | Driveway                                 |           | P        | NS Harrisburg Division Track Chart 2008  | 11/12/2011                 |            | FALSE           |
| Raritan Valley Line                        | -     | Driveway                                 |           | P        | NS Harrisburg Division Track Chart 2008  | 11/12/2011                 |            | FALSE           |
| Raritan Valley Line                        |       | Bells Crossing                           | F         |          | NS Harrisburg Division Track Chart 2008  | 11/12/2011                 |            | FALSE           |
| Raritan Valley Line                        | -     | Private                                  |           | Р        | NJTransit ETT 601: November 6, 2011  | 11/12/2011                 |            | FALSE           |
| Raritan Valley Line                        | 50.43 | Annandale Crossing                       |           | Р        | NJTransit ETT 601: November 6, 2011  | 11/12/2011                 |            | FALSE           |
| Raritan Valley Line                        |       | Central Ave                              | G         |          | NJTransit ETT 601: November 6, 2011  | 11/12/2011                 |            | TRUE            |
| Raritan Valley Line                        |       | Old Mountain Road                        | G         |          | NJTransit ETT 601: November 6, 2011  | 11/12/2011                 |            | FALSE           |
| Raritan Valley Line                        |       | Private                                  |           | Р        | NJTransit ETT 601: November 6, 2011  | 11/12/2011                 | 11/12/2011 | TRUE            |
| Raritan Valley Line                        |       | Flemington Road                          | G         | I        | NJTransit ETT 601: November 6, 2011  | 11/12/2011                 |            | FALSE           |
| Raritan Valley Line                        | -     | School Road                              | G         |          | NJTransit ETT 601: November 6, 2011  | 11/12/2011                 |            | FALSE           |
| Raritan Valley Line                        | -     | Coddington Road                          | G         | I        | NJTransit ETT 601: November 6, 2011  | 11/12/2011                 |            | FALSE           |
| Raritan Valley Line<br>Raritan Valley Line |       | Ridge Road                               | G<br>G    | <u> </u> | NJTransit ETT 601: November 6, 2011  | 11/12/2011<br>11/12/2011   |            | FALSE           |
| Raritan Valley Line<br>Raritan Valley Line | -     | County Line Road<br>Vollers              |           | Р        | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011         | 11/12/2011                 |            | FALSE<br>FALSE  |
| Montclair-Boonton Line                     | -     | Fairfield Road                           | G         | Ľ        | NJTransit ETT 601: November 6, 2011  | 12/1/2011                  |            | FALSE           |
| Montclair-Boonton Line                     |       | Route 202                                | G         | 1        | NJTransit ETT 601: November 6, 2011  | 12/1/2011                  |            | FALSE           |
| Montclair-Boonton Line                     |       | Ryerson Road                             | G         |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011                  |            | FALSE           |
| Montclair-Boonton Line                     | -     | Beaverbrook Road                         | G         | 1        | NJTransit ETT 601: November 6, 2011  | 12/1/2011                  |            | FALSE           |
| Montclair-Boonton Line                     | 1     | Pedestrian                               | G         |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011                  |            | FALSE           |
| Montclair-Boonton Line                     | -     | Abbott Road                              | F         | l        | NJTransit ETT 601: November 6, 2011  | 12/1/2011                  |            | FALSE           |
| Montclair-Boonton Line                     | -     | Fulton Street                            | G         |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011                  |            | FALSE           |
| Montclair-Boonton Line                     | 33.98 | Parking Lot                              | G         |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011                  |            | FALSE           |
| Gladstone Line                             | 22.98 | Livingston & Central                     | G         |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011                  |            | FALSE           |
| Gladstone Line                             | -     | Foley Place                              | G         | <u> </u> | NJTransit ETT 601: November 6, 2011  | 12/1/2011                  |            | FALSE           |
| Gladstone Line                             | -     | Spring St. (Ped. Xing)                   | G         | L        | NJTransit ETT 601: November 6, 2011  | 12/1/2011                  |            | FALSE           |
| Gladstone Line                             | 24.21 | Union Ave                                | G         |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011                  |            | FALSE           |

| Line Neme  | MP    | Cross Street Name                  | Control   | Drivata | Sauraa  | Data Madified              | Creation | Edited          |
|--|-------|------------------------------------|-----------|---------|---|----------------------------|----------|-----------------|
| Line_Name<br>Gladstone Line                          |       | Cross_Street_Name<br>Snyder Avenue | Type<br>G | Private | Source<br>NJTransit ETT 601: November 6, 2011 | Date_Modified<br>12/1/2011 | Date     | Edited<br>FALSE |
| Gladstone Line                                       |       | Plainfeild Avenue                  | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| Gladstone Line                                       |       | Mountain Avenue                    | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| Gladstone Line                                       |       | Morristown Road                    | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| Gladstone Line                                       |       | Main Street                        | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| Gladstone Line                                       |       | Northfield Road                    | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| Gladstone Line                                       |       | Division Street                    | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| Gladstone Line                                       |       | Main Street                        | F         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| Gladstone Line                                       |       | Pond Hill Road                     | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| Gladstone Line                                       |       | Lake Road                          | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| Gladstone Line                                       |       | Ridge Road                         | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| Gladstone Line                                       |       | Depot Place                        | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| Gladstone Line                                       |       | Ferrantes                          | G         | D       | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| Gladstone Line                                       |       | Meadowbrook Farms                  |           | г<br>D  | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| Gladstone Line                                       |       | Meadowbrook Farms                  |           | г<br>D  |   | 12/1/2011                  |          | FALSE           |
|  |       |                                    | 6         | ٢       | NJTransit ETT 601: November 6, 2011           |                            |          |                 |
| Gladstone Line                                       |       | Meeker Road                        | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| Gladstone Line                                       |       | Whitenack Road                     | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| Gladstone Line                                       |       | Route 202                          | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| Gladstone Line                                       |       | Holland Ave                        | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| Gladstone Line                                       |       | Park Avenue                        | F         | -       | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| Gladstone Line                                       |       | Private                            | -         | Р       | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| Raritan Valley Line                                  |       | Readington Road                    | G         |         | NJTransit ETT 601: November 6, 2011           | 11/12/2011                 |          | FALSE           |
| Raritan Valley Line                                  |       | Station Road                       | G         |         | NJTransit ETT 601: November 6, 2011           | 11/12/2011                 |          | TRUE            |
| Raritan Valley Line                                  | 35.93 | Anderson Street                    | G         |         | NJTransit ETT 601: November 6, 2011           | 11/12/2011                 |          | FALSE           |
| Raritan Valley Line                                  |       | Thompson Street                    | G         |         | NJTransit ETT 601: November 6, 2011           | 11/12/2011                 |          | FALSE           |
| Raritan Valley Line                                  |       | Egan's Crossing                    | G         |         | NJTransit ETT 601: November 6, 2011           | 11/12/2011                 |          | FALSE           |
| Raritan Valley Line                                  | 32.11 | Polhemus Lane                      | G         |         | NJTransit ETT 601: November 6, 2011           | 11/12/2011                 |          | FALSE           |
| Raritan Valley Line                                  | 31.24 | STS                                | G         |         | NJTransit ETT 601: November 6, 2011           | 11/12/2011                 |          | TRUE            |
| Raritan Valley Line                                  | 30.95 | Lamonte Avenue                     | G         |         | NJTransit ETT 601: November 6, 2011           | 11/12/2011                 |          | FALSE           |
| Raritan Valley Line                                  | 30.72 | Vosseler Avenue                    | G         |         | NJTransit ETT 601: November 6, 2011           | 11/12/2011                 |          | FALSE           |
| Raritan Valley Line                                  | 28.54 | Cedar Avenue                       | G         |         | NJTransit ETT 601: November 6, 2011           | 11/12/2011                 |          | FALSE           |
| Raritan Valley Line                                  | 15.22 | Hy-Rail Set Off                    |           | Р       | NJTransit ETT 601: November 6, 2011           | 11/12/2011                 |          | FALSE           |
| N. Jersey Coast Ln (So.)                             | 1.34  | Augusta Street                     | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | TRUE            |
| N. Jersey Coast Ln (So.)                             | 1.49  | John Street                        | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | TRUE            |
| N. Jersey Coast Ln (So.)                             | 5.21  | Country Road                       | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | TRUE            |
| N. Jersey Coast Ln (So.)                             |       | Cliffwood Avenue                   | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | TRUE            |
| N. Jersey Coast Ln (So.)                             |       | Main Street                        | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (So.)                             |       | Atlantic Avenue                    | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (So.)                             |       | Beers Street                       | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (So.)                             |       | Holmdel Road                       | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (So.)                             |       | Bethany Road                       | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (So.)                             |       | Centerville Road                   | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (So.)                             |       | Church Street                      | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (So.)                             |       | Oak Hill Road                      | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (So.)                             |       | Navesink River Road                | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (So.)                             |       | Shrewsbury Avenue                  | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (So.)                             |       | Bridge/Mountain Street             | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
|  |       |                                    | G         |         |   |                            |          | FALSE           |
| N. Jersey Coast Ln (So.)                             |       | Chestnut Street                    | _         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          |                 |
| N. Jersey Coast Ln (So.)                             |       | West Bergen Place                  | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (So.)                             |       | Broad Street (Route 35)            | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (So.)                             |       | White Road                         | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (So.)                             |       | Sycamore Avenue                    | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (So.)                             |       | Oceanport Avenue                   | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (So.)                             |       | Silverside Avenue                  | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  | <u> </u> | FALSE           |
| N. Jersey Coast Ln (So.)                             |       | Leonard Avenue                     | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (Mid)                             |       | Port Au-Peck Avenue                | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (Mid)                             |       | Racetrack                          | G         | ٢       | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (Mid)                             |       | Branchport Avenue                  | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (Mid)                             |       | Joline Avenue                      | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (Mid)                             |       | Broadway                           | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (Mid)                             | 1     | Chelsea/5th Avenue                 | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (So.)                             |       | Westwood Avenue                    | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (So.)                             |       | Ped Xing                           | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (So.)                             | 22.64 | Beth Avenue                        | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (So.)                             | 23.09 | West End Avenue                    | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (So.)                             | 23.17 | Brighton Avenue                    | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (So.)                             |       | Cedar Avenue                       | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (So.)                             | 25.09 | Roosevelt Avenue                   | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (So.)                             |       | Grant Avenue                       | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (So.)                             |       | Sherman Avenue                     | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| N. Jersey Coast Ln (So.)                             |       | Roseld Avenue                      | G         | İ       | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
|  |       | Dummond Avenue                     | G         | 1       | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |
| IN. Jersey Coast Ln (So.)                            |       |                                    |           |         |   | , , •                      |          |                 |
| N. Jersey Coast Ln (So.)<br>N. Jersey Coast Ln (So.) |       | Spier Avenue                       | G         |         | NJTransit ETT 601: November 6, 2011           | 12/1/2011                  |          | FALSE           |

| Line Name  | МР    | Cross Street Name                    | Control<br>Type | Private  | Source   | Date Modified | Creation<br>Date         | Edited         |
|--|-------|--------------------------------------|-----------------|----------|--|---------------|--------------------------|----------------|
| N. Jersey Coast Ln (So.)                             |       | Allen Avenue                         | G               | ·····uic | NJTransit ETT 601: November 6, 2011  | 12/1/2011     | Dute                     | FALSE          |
| N. Jersey Coast Ln (So.)                             | +     | Grassmere Avenue                     | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             | 27.27 | Sixth Avenue                         | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             | 27.35 | Sunset Avenue                        | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             | 27.44 | Fifth Avenue                         | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             | -     | Fourth Avenue                        | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             | -     | Third Avenue                         | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             | -     | Second Avenue                        | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             | -     | First Avenue                         | G<br>G          |          | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011                       | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)<br>N. Jersey Coast Ln (So.) |       | Asbury Avenue<br>Monroe Avenue       | G               |          | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011                       | 12/1/2011     |                          | FALSE<br>FALSE |
| N. Jersey Coast Ln (So.)                             |       | Summerfield Avenue                   | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             |       | Bangs Avenue                         | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             |       | Lake Avenue                          | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             |       | Cordies Avenue/Route 35              | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             | 28.67 | 11th Avenue                          | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             | 29.01 | Lareine Avenue                       | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             | 29.08 | Brinley Avenue                       | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             | 29.22 | Fourth Avenue                        | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             | 29.35 | Evergreen Avenue                     | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             | 1     | Seventh Avenue                       | G               | I        | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             |       | Eigth Avenue                         | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             | 1     | Tenth Avenue                         | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             |       | 12th Avenue                          | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             |       | 13th Avenue                          | G<br>G          |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             | +     | 16th Avenue                          |                 |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)<br>N. Jersey Coast Ln (So.) |       | 17th Avenue<br>18th Avenue           | G<br>G          |          | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011                       | 12/1/2011     |                          | FALSE<br>FALSE |
| N. Jersey Coast Ln (So.)                             | -     | Wall Road                            | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             | +     | Church Street                        | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             |       | Ludlow Avenue                        | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             | -     | Clair Avenue                         | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             | 32.47 | Brighton Avenue                      | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             |       | Warren Avenue                        | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             | 33.29 | Ocean Avenue                         | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             | 33.42 | Shore Road                           | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             | 33.67 | Beacon Boulevard                     | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             | 34.26 | Washington Avenue                    | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             |       | Stockton Lake Boulevard              | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             | 34.92 | Main Street                          | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             |       | Fisk Avenue                          | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             | -     | Green Avenue                         | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             | -     | Broadway                             | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             | +     | Arnold Avenue                        | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             | +     | Forman Avenue                        | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)<br>N. Jersey Coast Ln (So.) |       | Atlantic Avenue<br>New Jersey Avenue | G<br>G          |          | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011                       | 12/1/2011     |                          | FALSE<br>FALSE |
| N. Jersey Coast Ln (So.)                             |       | Washington Avenue                    | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             |       | Ocean House Rose/Route 35            | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             |       | Osborne Avenue                       | G               |          | NJTransit ETT 601: November 6, 2011  | 12/1/2011     |                          | FALSE          |
| Morristown Line                                      | - 1   | Private Road                         | -               | Р        | NJTransit ETT 501: April 3, 2010   |               | 10/19/2011               | TRUE           |
| Morristown Line                                      |       | Pedestrian                           | G               |          | NJTransit ETT 501: April 3, 2010   |               | 10/19/2011               | TRUE           |
| Morristown Line                                      | 57.3  | Private                              |                 | Р        | NJTransit ETT 501: April 3, 2010   | 10/19/2011    | 10/19/2011               | TRUE           |
| Lehigh Line  | 20.05 | Rahway Ave                           |                 |          | Conrail Philadelphia Division Track Chart 1999   | 10/21/2011    | 10/21/2011               | TRUE           |
| Lehigh Line  | 20.19 | Private                              |                 | Р        | Conrail Philadelphia Division Track Chart 1999   | 10/21/2011    | 10/21/2011               | TRUE           |
| Lehigh Line  | 22.44 | Private                              |                 | Р        | Conrail Philadelphia Division Track Chart 1999   |               | 10/21/2011               | TRUE           |
| Lehigh Line  | 23.69 | Tingley Road                         |                 |          | Conrail Philadelphia Division Track Chart 1999   |               | 10/21/2011               | TRUE           |
| Lehigh Line  |       | Inman Avenue                         |                 |          | Conrail Philadelphia Division Track Chart 1999   |               | 10/21/2011               | TRUE           |
| Lehigh Line  | -     | Front Street                         |                 |          | Conrail Philadelphia Division Track Chart 1999   |               | 10/21/2011               | TRUE           |
| Lehigh Line  | - 1   | Clinton Street                       |                 |          | Conrail Philadelphia Division Track Chart 1999   | 1             | 10/21/2011               | TRUE           |
| Lehigh Line  |       | New Brunswick Ave                    | +               | I        | Conrail Philadelphia Division Track Chart 1999   | 1             | 10/21/2011               | TRUE           |
| Lehigh Line  |       | New Market Road                      | +               |          | Conrail Philadelphia Division Track Chart 1999   |               | 10/21/2011               | TRUE           |
| Lehigh Line  | - 1   | Prospect Ave                         | +               | <u> </u> | Conrail Philadelphia Division Track Chart 1999   |               | 10/21/2011<br>10/21/2011 | TRUE           |
| Lehigh Line<br>Lehigh Line                           | - 1   | South Ave<br>Cedar Ave               | +               | ł        | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999 | 1             | 10/21/2011               | TRUE<br>TRUE   |
| Lehigh Line  |       | Private                              |                 | Р        | Conrail Philadelphia Division Track Chart 1999   |               | 10/21/2011               | TRUE           |
| Lenigh Line<br>Lehigh Line                           |       | Private                              | 1               | P        | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999 | 1             | 10/21/2011               | TRUE           |
| Lehigh Line  |       | 13th Street                          | +               | ľ –      | NS Harrisburg Division Track Chart 2008  |               | 10/21/2011               | TRUE           |
| Lehigh Line  |       | Roycefield Road                      | 1               | 1        | NS Harrisburg Division Track Chart 2008  |               | 10/25/2011               | TRUE           |
| Lehigh Line  | - 1   | Valley Rd                            | 1               | 1        | NS Harrisburg Division Track Chart 2008  | 1             | 10/25/2011               | TRUE           |
| Lehigh Line  |       | Auten Rd                             | 1               | 1        | NS Harrisburg Division Track Chart 2008  |               | 10/25/2011               | TRUE           |
| Lehigh Line  |       | Beekmans Ln                          | 1               | 1        | NS Harrisburg Division Track Chart 2008  |               | 10/25/2011               | TRUE           |
| Lehigh Line  | - 1   | Stala Farm                           | 1               | Р        | NS Harrisburg Division Track Chart 2008  | 1             | 10/25/2011               | TRUE           |
|  |       |                                      |                 |          |  |               |                          |                |

|  |       |                                     | Control |         |  |               | Creation                 |              |
|--|-------|-------------------------------------|---------|---------|--|---------------|--------------------------|--------------|
| Line Name  | MP    | Cross_Street_Name                   | Туре    | Private | Source   | Date Modified | Date                     | Edited       |
| Lehigh Line                                      | 48.61 | Main St                             |         |         | NS Harrisburg Division Track Chart 2008  |               | 10/25/2011               | TRUE         |
| Lehigh Line                                      | 49.66 | Rockafellows Mills Rd               |         |         | NS Harrisburg Division Track Chart 2008  |               | 10/25/2011               | TRUE         |
| Lehigh Line                                      | _     | Private                             |         | Р       | NS Harrisburg Division Track Chart 2008  |               | 10/25/2011               | TRUE         |
| Lehigh Line                                      | -     | Stanton Station Rd                  |         |         | NS Harrisburg Division Track Chart 2008  |               | 10/25/2011               | TRUE         |
| Lehigh Line<br>Lehigh Line                       | -     | Kiceniuk Rd<br>Private              |         | Р       | NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008               |               | 10/25/2011<br>10/25/2011 | TRUE<br>TRUE |
| Lehigh Line                                      | _     | Hamden Rd                           |         | F       | NS Harrisburg Division Track Chart 2008  |               | 10/25/2011               | TRUE         |
| Lehigh Line                                      | -     | Landsdown Rd                        |         |         | NS Harrisburg Division Track Chart 2008  |               | 10/25/2011               | TRUE         |
| Lehigh Line                                      |       | Route 137                           |         |         | NS Harrisburg Division Track Chart 2008  |               | 10/25/2011               | TRUE         |
| Lehigh Line                                      | 60.77 | Perryville Rd                       |         |         | NS Harrisburg Division Track Chart 2008  | 10/25/2011    | 10/25/2011               | TRUE         |
| Lehigh Line                                      | _     | Private                             |         | Р       | NS Harrisburg Division Track Chart 2008  |               | 10/25/2011               | TRUE         |
| Lehigh Line                                      | -     | Still Valley Road                   |         |         | NS Harrisburg Division Track Chart 2008  |               | 10/25/2011               | TRUE         |
| National Docks Secondary                         |       | Chapel Ave                          |         |         | Conrail Philadelphia Division Track Chart 1999   |               | 10/25/2011               | TRUE         |
| Amboy Secondary<br>Amboy Secondary               |       | Cheesequake<br>Browns Hill          |         |         | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999 |               | 10/26/2011<br>10/26/2011 | TRUE<br>TRUE |
| Amboy Secondary                                  | -     | Matawan Rd                          |         |         | Conrail Philadelphia Division Track Chart 1999   |               | 10/26/2011               | TRUE         |
| Amboy Secondary                                  |       | Bloomfield                          |         |         | Conrail Philadelphia Division Track Chart 1999   |               | 10/26/2011               | TRUE         |
| Amboy Secondary                                  |       | Main St                             |         |         | Conrail Philadelphia Division Track Chart 1999   |               | 10/26/2011               | TRUE         |
| Amboy Secondary                                  | 9.34  | Vilets Lane                         |         |         | Conrail Philadelphia Division Track Chart 1999   | 10/26/2011    | 10/26/2011               | TRUE         |
| Amboy Secondary                                  | 9.5   | Snowhill Road                       |         |         | Conrail Philadelphia Division Track Chart 1999   |               | 10/26/2011               | TRUE         |
| Amboy Secondary                                  |       | Private                             |         | Р       | Conrail Philadelphia Division Track Chart 1999   |               | 10/26/2011               | TRUE         |
| Amboy Secondary                                  |       | Private                             |         | Р       | Conrail Philadelphia Division Track Chart 1999   |               | 10/26/2011               | TRUE         |
| Washington Secondary                             | _     | Airport Rd                          |         |         | NS Harrisburg Division Track Chart 2008  |               | 2/9/2012                 | TRUE         |
| Washington Secondary                             | -     | Hazen Rd                            |         |         | NS Harrisburg Division Track Chart 2008  |               | 2/9/2012<br>2/9/2012     | TRUE         |
| Washington Secondary<br>Washington Secondary     |       | Blav Rd<br>Thomas Rd                | _       |         | NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008               |               | 2/9/2012                 | TRUE<br>TRUE |
| Washington Secondary                             | -     | Railroad Ave                        |         |         | NS Harrisburg Division Track Chart 2008  |               | 2/9/2012                 | TRUE         |
| Washington Secondary                             |       | Broad St                            |         |         | NS Harrisburg Division Track Chart 2008  |               | 2/9/2012                 | TRUE         |
| Washington Secondary                             | 67.69 | Lincoln Ave                         |         |         | NS Harrisburg Division Track Chart 2008  |               | 2/9/2012                 | TRUE         |
| Washington Secondary                             | 68.69 | Mill Pond Rd                        |         |         | NS Harrisburg Division Track Chart 2008  |               | 2/9/2012                 | TRUE         |
| Washington Secondary                             | -     | Mineral Spg Rd                      |         |         | NS Harrisburg Division Track Chart 2008  |               | 2/9/2012                 | TRUE         |
| Washington Secondary                             |       | Baylors Xing                        |         |         | NS Harrisburg Division Track Chart 2008  |               | 2/9/2012                 | TRUE         |
| Washington Secondary                             |       | Broadway                            |         |         | NS Harrisburg Division Track Chart 2008  |               | 2/9/2012                 | TRUE         |
| Washington Secondary<br>Washington Secondary     |       | Private Xing<br>Private Xing        |         |         | NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008               |               | 2/9/2012<br>2/9/2012     | TRUE<br>TRUE |
| Washington Secondary                             |       | Private Xing                        |         |         | NS Harrisburg Division Track Chart 2008  |               | 2/9/2012                 | TRUE         |
| Washington Secondary                             | 1     | Scot Mt Rd                          |         |         | NS Harrisburg Division Track Chart 2008  |               | 2/9/2012                 | TRUE         |
| Washington Secondary                             | 75.69 | Warren St                           |         |         | NS Harrisburg Division Track Chart 2008  | 2/9/2012      | 2/9/2012                 | TRUE         |
| Washington Secondary                             | 77.63 | Strykers Rd                         |         |         | NS Harrisburg Division Track Chart 2008  | 2/9/2012      | 2/9/2012                 | TRUE         |
| Washington Secondary                             | -     | Hensfoot Rd                         |         |         | NS Harrisburg Division Track Chart 2008  |               | 2/9/2012                 | TRUE         |
| Washington Secondary                             |       | Roseberry Ave                       |         |         | NS Harrisburg Division Track Chart 2008  |               | 2/9/2012                 | TRUE         |
| Portland Secondary                               |       | Union Square                        |         |         | NS Harrisburg Division Track Chart 2008  |               | 2/9/2012                 | TRUE         |
| Portland Secondary<br>Portland Secondary         | -     | JT Baker Chemical<br>Private Xing   |         |         | NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008               |               | 2/9/2012<br>2/9/2012     | TRUE<br>TRUE |
| Portland Secondary                               |       | Harmony St                          |         |         | NS Harrisburg Division Track Chart 2008  |               | 2/9/2012                 | TRUE         |
| Portland Secondary                               | -     | Water Co                            |         |         | NS Harrisburg Division Track Chart 2008  |               | 2/9/2012                 | TRUE         |
| Portland Secondary                               |       | Harmony Terr                        |         |         | NS Harrisburg Division Track Chart 2008  |               | 2/9/2012                 | TRUE         |
| River Line                                       | 0.23  | St. Paul's                          |         |         | Conrail Philadelphia Division Track Chart 1999   | 2/15/2012     | 2/15/2012                | TRUE         |
| Northern Branch                                  | 1     | Saint Paul Avenue                   |         |         | Extrapolated from GIS  |               | 02/16/2012               | TRUE         |
| Port Reading Secondary                           |       | Bakelite Rd                         |         |         | Conrail Philadelphia Division Track Chart 1999   |               | 10/27/2011               | TRUE         |
| Port Reading Secondary                           |       | Private                             |         | Р       | Conrail Philadelphia Division Track Chart 1999   |               | 10/27/2011               | TRUE         |
| Port Reading Secondary<br>Port Reading Secondary | 1     | Washington Ave<br>New Brunswick Ave |         |         | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999 |               | 10/27/2011<br>10/27/2011 | TRUE<br>TRUE |
| Port Reading Secondary                           | _     | South Clinton Ave                   | _       |         | Conrail Philadelphia Division Track Chart 1999   |               | 10/27/2011               | TRUE         |
| Port Reading Secondary                           | -     | Helen St                            |         |         | Conrail Philadelphia Division Track Chart 1999   |               | 10/27/2011               | TRUE         |
| Port Reading Secondary                           |       | South Ave                           |         |         | Conrail Philadelphia Division Track Chart 1999   |               | 10/27/2011               | TRUE         |
| Port Reading Secondary                           | _     | Talmadge Rd                         |         |         | Conrail Philadelphia Division Track Chart 1999   |               | 10/27/2011               | TRUE         |
| Port Reading Secondary                           |       | Private                             |         | Р       | Conrail Philadelphia Division Track Chart 1999   |               | 10/27/2011               | TRUE         |
| Port Reading Secondary                           |       | Private                             |         | Р       | Conrail Philadelphia Division Track Chart 1999   |               | 10/27/2011               | TRUE         |
| Port Reading Secondary                           | 1     | St George                           |         |         | Conrail Philadelphia Division Track Chart 1999   |               | 10/27/2011               | TRUE         |
| Port Reading Secondary<br>Port Reading Secondary | 14.85 | Rahway Ave                          |         |         | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999 |               | 10/27/2011<br>10/27/2011 | TRUE<br>TRUE |
| Southern Secondary                               | -     | West Bergen Pl                      | -       |         | Conrail Philadelphia Division Track Chart 1999   |               | 10/27/2011               | TRUE         |
| Southern Secondary                               | 1     | Newman Springs Rd                   |         |         | Conrail Philadelphia Division Track Chart 1999   |               | 10/27/2011               | TRUE         |
| Southern Secondary                               | -     | Patterson Ave                       |         |         | Conrail Philadelphia Division Track Chart 1999   | 1             | 10/27/2011               | TRUE         |
| Southern Secondary                               | -     | Sycamore Ave                        |         |         | Conrail Philadelphia Division Track Chart 1999   |               | 10/27/2011               | TRUE         |
| Southern Secondary                               | 41.47 | Lewis Ave                           |         |         | Conrail Philadelphia Division Track Chart 1999   |               | 10/27/2011               | TRUE         |
| Southern Secondary                               |       | Hope Rd                             |         |         | Conrail Philadelphia Division Track Chart 1999   |               | 10/27/2011               | TRUE         |
| Southern Secondary                               |       | Pinebrook Rd                        |         |         | Conrail Philadelphia Division Track Chart 1999   |               | 10/27/2011               | TRUE         |
| Southern Secondary                               |       | Wayside Rd                          |         |         | Conrail Philadelphia Division Track Chart 1999   |               | 10/27/2011               | TRUE         |
| Southern Secondary                               | 43.45 | Hamilton Rd                         |         |         | Conrail Philadelphia Division Track Chart 1999   | 1             | 10/27/2011               | TRUE<br>TRUE |
|  | 10 61 | Achury Rd                           |         |         |  |               |                          |              |
| Southern Secondary<br>Southern Secondary         |       | Asbury Rd<br>Megill Rd              |         |         | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999 | 10/27/2011    | 10/27/2011               | TRUE         |

## Grade Crossings

|  |       |                                    | Control |         |  |                        | Creation   |              |
|--|-------|------------------------------------|---------|---------|--|------------------------|------------|--------------|
| Line_Name                                | MP    | Cross_Street_Name                  | Туре    | Private | Source   | Date_Modified          | Date       | Edited       |
| Southern Secondary                       | 50.63 | Main St                            |         |         | Conrail Philadelphia Division Track Chart 1999                             | 10/27/2011             |            | TRUE         |
| Southern Secondary                       | 50.85 | Central Ave                        |         |         | Conrail Philadelphia Division Track Chart 1999                             | 10/27/2011             | 10/27/2011 | TRUE         |
| Southern Secondary                       | 50.97 | Marl Rd                            |         |         | Conrail Philadelphia Division Track Chart 1999                             | 10/27/2011             | 10/27/2011 | TRUE         |
| Southern Secondary                       | 51.67 | Route 524                          |         |         | Conrail Philadelphia Division Track Chart 1999                             | 10/27/2011             | 10/27/2011 | TRUE         |
| Southern Secondary                       | 53.62 | Maxim Rd                           |         |         | Conrail Philadelphia Division Track Chart 1999                             | 10/27/2011             | 10/27/2011 | TRUE         |
| Southern Secondary                       | 54.32 | Victory Rd                         |         |         | Conrail Philadelphia Division Track Chart 1999                             | 10/27/2011             | 10/27/2011 | TRUE         |
| Southern Secondary                       | 55.05 | Oak Glen Rd                        |         |         | Conrail Philadelphia Division Track Chart 1999                             | 10/27/2011             | 10/27/2011 | TRUE         |
| Southern Secondary                       | 55.87 | Lanes Mill                         |         |         | Conrail Philadelphia Division Track Chart 1999                             | 10/27/2011             | 10/27/2011 | TRUE         |
| Southern Secondary                       | 56.26 | Alexander Av                       |         |         | Conrail Philadelphia Division Track Chart 1999                             | 10/27/2011             | 10/27/2011 | TRUE         |
| Southern Secondary                       | 56.37 | Squankum Rd                        |         |         | Conrail Philadelphia Division Track Chart 1999                             | 10/27/2011             | 10/27/2011 | TRUE         |
| Southern Secondary                       | 57.12 | County Line Rd                     |         |         | Conrail Philadelphia Division Track Chart 1999                             | 10/27/2011             | 10/27/2011 | TRUE         |
| Southern Secondary                       | 57.65 | Seventh St                         |         |         | Conrail Philadelphia Division Track Chart 1999                             | 10/27/2011             | 10/27/2011 | TRUE         |
| Southern Secondary                       | 57.9  | Fourth St                          |         |         | Conrail Philadelphia Division Track Chart 1999                             | 10/27/2011             | 10/27/2011 | TRUE         |
| Southern Secondary                       | 58.06 | Second St                          |         |         | Conrail Philadelphia Division Track Chart 1999                             | 10/27/2011             | 10/27/2011 | TRUE         |
| Southern Secondary                       | 58.24 | Main St                            |         |         | Conrail Philadelphia Division Track Chart 1999                             | 10/27/2011             | 10/27/2011 | TRUE         |
| Southern Secondary                       | 58.9  | Route 9                            |         |         | Conrail Philadelphia Division Track Chart 1999                             | 10/27/2011             | 10/27/2011 | TRUE         |
| Southern Secondary                       | 59.16 | James St                           |         |         | Conrail Philadelphia Division Track Chart 1999                             | 10/27/2011             | 10/27/2011 | TRUE         |
| Southern Secondary                       | 60.68 | Cross St                           |         |         | Conrail Philadelphia Division Track Chart 1999                             | 10/27/2011             | 10/27/2011 | TRUE         |
| Southern Secondary                       | 61.89 | Toms River Rd                      |         |         | Conrail Philadelphia Division Track Chart 1999                             | 10/27/2011             | 10/27/2011 | TRUE         |
| Southern Secondary                       | 62.42 | Private                            |         | Р       | Conrail Philadelphia Division Track Chart 1999                             | 10/27/2011             | 10/27/2011 | TRUE         |
| Southern Secondary                       | 62.67 | Private                            |         | Р       | Conrail Philadelphia Division Track Chart 1999                             | 10/27/2011             | 10/27/2011 | TRUE         |
| Southern Secondary                       | 62.8  | County Rd                          |         |         | Conrail Philadelphia Division Track Chart 1999                             | 10/27/2011             | 10/27/2011 | TRUE         |
| West Trenton Line                        | 54.3  | Sunnymead Rd                       |         |         | CSX Albany Division ETT #6: October 15, 2010                               | 11/10/2011             | 11/10/2011 | TRUE         |
| West Trenton Line                        | 48.9  | Route 601                          |         |         | CSX Albany Division ETT #6: October 15, 2010                               | 11/10/2011             | 11/10/2011 | TRUE         |
| West Trenton Line                        | 47.39 | Blawenburg Rd                      |         |         | CSX Albany Division ETT #6: October 15, 2010                               | 11/10/2011             | 11/10/2011 | TRUE         |
| West Trenton Line                        | 45.29 | Hollow Rd                          |         |         | CSX Albany Division ETT #6: October 15, 2010                               | 11/10/2011             | 11/10/2011 | TRUE         |
| West Trenton Line                        | 44.57 | Spring Hill Rd                     |         |         | CSX Albany Division ETT #6: October 15, 2010                               | 11/10/2011             | 11/10/2011 | TRUE         |
| West Trenton Line                        | 44.2  | Province Line Rd                   |         |         | CSX Albany Division ETT #6: October 15, 2010                               | 11/10/2011             | 11/10/2011 | TRUE         |
| West Trenton Line                        | 42.03 | Louellen Ave                       |         |         | CSX Albany Division ETT #6: October 15, 2010                               | 11/10/2011             | 11/10/2011 | TRUE         |
| West Trenton Line                        | 38.55 | Private                            |         | Р       | CSX Albany Division ETT #6: October 15, 2010                               | 11/10/2011             | 11/10/2011 | TRUE         |
| Waterfront Connection                    |       |                                    |         |         |  | 11/14/2011             |            |              |
| (Reverse Kearny)                         | 0.1   | Point No Point Rd                  |         | Р       | NJTransit ETT 601: November 6, 2011  | 11/14/2011             | 11/14/2011 | TRUE         |
| Center Street Branch                     | 0.55  | 5th St                             |         |         | Conrail Philadelphia Division Track Chart 1999                             | 11/14/2011             | 11/14/2011 | TRUE         |
| Center Street Branch                     | 0.7   | 4th St                             |         |         | Conrail Philadelphia Division Track Chart 1999                             | 11/14/2011             | 11/14/2011 | TRUE         |
| Center Street Branch                     | 0.8   | 3rd St                             |         |         | Conrail Philadelphia Division Track Chart 1999                             | 11/14/2011             | 11/14/2011 | TRUE         |
| Center Street Branch                     | 0.09  | 1st St                             |         |         | Conrail Philadelphia Division Track Chart 1999                             | 11/14/2011             | 11/14/2011 | TRUE         |
| Bloodgood Industrial                     | 0.46  | Raritan Rd                         |         |         | Conrail Philadelphia Division Track Chart 1999                             | 11/14/2011             | 11/14/2011 | TRUE         |
| Orange Branch                            | 8.6   | Highland Ave                       |         |         | Conrail Philadelphia Division Track Chart 1999                             | 11/14/2011             | 11/14/2011 | TRUE         |
| Orange Branch                            | 9.37  | Franklin Ave                       |         |         | Conrail Philadelphia Division Track Chart 1999                             | 11/14/2011             | 11/14/2011 | TRUE         |
| Orange Branch                            | 9.46  | Belmont Ave                        |         |         | Conrail Philadelphia Division Track Chart 1999                             | 11/14/2011             | 11/14/2011 | TRUE         |
| Orange Branch                            | 9.92  | Bloomfield Ave                     |         |         | Conrail Philadelphia Division Track Chart 1999                             | 11/14/2011             | 11/14/2011 | TRUE         |
| Sayreville Secondary                     | 3.95  | Washington Rd                      |         |         | Conrail Philadelphia Division Track Chart 1999                             | 11/14/2011             | 11/14/2011 | TRUE         |
| Sayreville Secondary                     | 5.75  | Jernee Mill                        |         |         | Conrail Philadelphia Division Track Chart 1999                             | 11/14/2011             | 11/14/2011 | TRUE         |
| Sayreville Secondary                     | 6.25  | Whitehead Av                       |         |         | Conrail Philadelphia Division Track Chart 1999                             | 11/14/2011             | 11/14/2011 | TRUE         |
| Sayreville Secondary                     | 6.75  | Willet Ave                         |         |         | Conrail Philadelphia Division Track Chart 1999                             | 11/14/2011             | 11/14/2011 | TRUE         |
| Sayreville Secondary                     |       | Harts Ln                           |         |         | Conrail Philadelphia Division Track Chart 1999                             | 11/14/2011             |            | TRUE         |
| Sayreville Secondary                     | 9.4   | Violet Ter                         |         |         | Conrail Philadelphia Division Track Chart 1999                             | 11/14/2011             | 11/14/2011 | TRUE         |
| Sayreville Secondary                     | 9.92  | Washington Ave                     |         |         | Conrail Philadelphia Division Track Chart 1999                             |                        | 11/14/2011 | TRUE         |
| River Line                               | 2.6   | 69th St                            |         |         | CSX Albany Division ETT #6: October 15, 2010                               |                        | 11/14/2011 | TRUE         |
| River Line                               | _     | Bergen Tpk                         |         |         | CSX Albany Division ETT #6: October 15, 2010                               |                        | 11/14/2011 | TRUE         |
| River Line                               |       | Mt Vernon St                       |         |         | CSX Albany Division ETT #6: October 15, 2010                               |                        | 11/14/2011 | TRUE         |
| River Line                               |       | Ft Lee Rd                          |         |         | CSX Albany Division ETT #6: October 15, 2010                               |                        | 11/14/2011 | TRUE         |
| River Line                               | -     | New Bridge Rd                      |         |         | CSX Albany Division ETT #6: October 15, 2010                               |                        | 11/14/2011 | TRUE         |
| River Line                               | -     | Clinton Ave                        |         | L       | CSX Albany Division ETT #6: October 15, 2010                               |                        | 11/14/2011 | TRUE         |
| River Line                               |       | Main St                            | _       |         | CSX Albany Division ETT #6: October 15, 2010                               |                        | 11/14/2011 | TRUE         |
| River Line                               |       | Church St                          |         | L       | CSX Albany Division ETT #6: October 15, 2010                               |                        | 11/14/2011 | TRUE         |
| River Line                               |       | Central Ave                        |         |         | CSX Albany Division ETT #6: October 15, 2010                               |                        | 11/14/2011 | TRUE         |
| River Line                               | -     | Columbia Ave                       | _       |         | CSX Albany Division ETT #6: October 15, 2010                               |                        | 11/14/2011 | TRUE         |
| River Line                               |       | Madison Ave                        |         | L       | CSX Albany Division ETT #6: October 15, 2010                               |                        | 11/14/2011 | TRUE         |
| River Line                               | 13.1  |                                    |         | L       | CSX Albany Division ETT #6: October 15, 2010                               |                        | 11/14/2011 | TRUE         |
| River Line                               | _     | Haworth Ave                        |         | L       | CSX Albany Division ETT #6: October 15, 2010                               |                        | 11/14/2011 | TRUE         |
| River Line                               |       | Durie Ave                          |         | L       | CSX Albany Division ETT #6: October 15, 2010                               | 11/14/2011             |            | TRUE         |
| River Line                               |       | Old Hook Rd                        |         | I       | CSX Albany Division ETT #6: October 15, 2010                               |                        | 11/14/2011 | TRUE         |
| River Line                               | -     | LaRoche Ave                        |         | L       | CSX Albany Division ETT #6: October 15, 2010                               |                        | 11/14/2011 | TRUE         |
| River Line                               | -     | Harriot Ave                        |         | I       | CSX Albany Division ETT #6: October 15, 2010                               |                        | 11/14/2011 | TRUE         |
| River Line                               | 1     | Lafayette Ave                      |         | I       | CSX Albany Division ETT #6: October 15, 2010                               |                        | 11/14/2011 | TRUE         |
| River Line                               | -     | Blanche Ave                        |         | I       | CSX Albany Division ETT #6: October 15, 2010                               |                        | 11/14/2011 | TRUE         |
| River Line                               |       | Broadway                           |         | I       | CSX Albany Division ETT #6: October 15, 2010                               |                        | 11/14/2011 | TRUE         |
| River Line                               | -     | Clinton Ave                        |         |         | CSX Albany Division ETT #6: October 15, 2010                               |                        | 11/14/2011 | TRUE         |
| Gladstone Line                           |       | East Pedestrian                    | G       | I       | NJTransit ETT 601: November 6, 2011  |                        | 12/1/2011  | TRUE         |
| Gladstone Line                           | 1     | West Pedestrian                    | G       | I       | NJTransit ETT 601: November 6, 2011  |                        | 12/1/2011  | TRUE         |
| Montclair-Boonton Line                   | 22.8  | Pedestrian                         |         |         | NJTransit ETT 601: November 6, 2011  |                        | 12/1/2011  | TRUE         |
|  |       |                                    |         | 1       |  |                        |            |              |
| Bergen County Line<br>Bergen County Line |       | Upper Hack Private<br>Private Xing |         |         | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011 | 12/2/2011<br>12/2/2011 |            | TRUE<br>TRUE |

## Grade Crossings

| bit         Cost Stretchme         First<br>Prote         Stretchme         Cost Mark         Data Mark <thdata mark<="" th="">         Data Mark         <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<></thdata>   |                          |       |                                       |                 |         |  |               |                  |              |
|---|--------------------------|-------|---------------------------------------|-----------------|---------|--|---------------|------------------|--------------|
| Max. Even         1.2.7         Perform         For any Construct Transmission         Space           Interescont to Son         4.5.5         Reletina         F         Maranas (TG) State (Second L)         12/12/10.         12/12/10.           Interescont to Son         3.5         Mediation         F         Maranas (TG) State (Second L)         12/12/11.         12/12/11.           Maxee Construct Son         3.5         Mediation         F         Maranas (TG) State (Second L)         12/12/11.         12/12/11.           Maxee Construct Son         3.5         Mediation         F         Maranas (TG) State (Second L)         12/12/11.<  | line Name                | MP    | Cross Street Name                     | Control<br>Type | Private | Source   | Date Modified | Creation<br>Date | Edited       |
| H. Heney Cosa Lin Sol         2 45 5 Pediadrian         F         Intrast FT Bit Indepha Council Naves for 2011         17/17/11   | -                        | -     |                                       | F               | invate  |  |               |                  | TRUE         |
| Interpret protection         35 Monmourh Areg         F         Interpret TH 601: Movember 2, 2011         1771/011   | N. Jersey Coast Ln (So.) | 8.6   | Hazlet Ave                            | G               |         |  |               |                  | TRUE         |
| Anema /* Rom Track         0.2         West First         Canad Ph. adaptile D. vom Track Cort 1999         2/97/070         2/97/07   | N. Jersey Coast Ln (So.) | 24.55 | Pedestrian                            | F               |         | NJTransit ETT 601: November 6, 2011            | 12/1/2011     | 12/1/2011        | TRUE         |
| Arema X <sup>+</sup> Nu Track         6.2         Prode Sung         Concurrent Production Track Currer 1998         29/7/2021         29/  | N. Jersey Coast Ln (So.) | 33    | Monmouth Ave                          | F               |         | NJTransit ETT 601: November 6, 2011            | 12/1/2011     | 12/1/2011        | TRUE         |
| Area Le <sup>*</sup> , Hun Tack         D.S.         Prote Again         2007012 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>TRUE</td>   |                          |       |                                       |                 |         |  |               |                  | TRUE         |
| Bay Sove Industria         D02         Description         D03         Description         Description <thdescription< th=""></thdescription<>  |                          |       | -                                     |                 |         |  |               |                  | TRUE         |
| Jay Shore industrial         0.2         Proved Symp         Carral Ph. ude ph. Diskins Track Charl 1998         2/37/021         2/   |                          |       | -                                     |                 |         |  |               |                  | TRUE         |
| Bay Shore mightrial         0.3 Protecting         Corral Philodigh a Division Tack Chart 1990         2/19/2012           Bay Shore mightrial         0.00 Protecting         Corral Philodigh a Division Tack Chart 1990         2/19/2012           Bay Shore mightrial         0.00 Protecting         Corral Philodigh a Division Tack Chart 1990         2/19/2012           Bay Shore mightrial         0.01 Briver Mark         Corral Philodigh a Division Tack Chart 1990         2/19/2012           Bay Shore mightrial         0.01 Briver Mark         Corral Philodigh a Division Tack Chart 1990         2/19/2012           Bay Shore mightrial         0.01 Briver Mark         Corral Philodigh a Division Tack Chart 1990         2/19/2012           Bay Shore mightrial         0.21 Briver Mark         Corral Philodigh a Division Tack Chart 1990         2/19/2012           Bay Bay Shore mightrial         0.21 Briver Mark         Corral Philodigh a Division Tack Chart 1990         2/19/2012           Bay Bay Shore mightrial         0.21 Briver Mark         Corral Philodigh a Division Tack Chart 1990         2/19/2012           Bay Bay Shore mightrial         0.21 Briver Mark         Corral Philodigh a Division Tack Chart 1990         2/19/2012           Bay Bay Shore mightrial         0.21 Briver Mark         Corral Philodigh a Division Tack Chart 1990         2/19/2012           Bay Bay Shore mightrial         0.21 Briver  |                          |       |                                       |                 |         | · · · · · · · · · · · · · · · · · · ·          |               |                  | TRUE         |
| ary Store Industri         0.62 Protect Nagin         Corrar Philade pha Division Tack Chair 1999         2/2/2012           Ary Store Industri         0.59 Projek X ag         Corrar Philade pha Division Tack Chair 1999         2/2/2012           Bawes Industrial Tack         0.51 Break X ag         Corrar Philade pha Division Tack Chair 1999         2/2/2012           Bawes Industrial Tack         0.55 Front SS         Corrar Philade pha Division Tack Chair 1999         2/2/2012           Bawes Industrial Tack         0.55 Front SS         Corrar Philade pha Division Tack Chair 1999         2/2/2012           Barwes Industrial         1.21 Sin Dirigite Area         Corrar Philade pha Division Tack Chair 1999         2/2/2012           Barwes Industrial         1.22 Sin Dirigite Area         Corrar Philade pha Division Tack Chair 1999         2/2/2012           Barbantown Industrial         2.2 Private Nagi         Corrar Philade pha Division Tack Chair 1999         2/2/2012           Barbantown Industrial         2.2 Private Nagi         Corrar Philade pha Division Tack Chair 1999         2/2/2012           Barbantown Industrial         0.2 Private X Ag         Corrar Philade pha Division Tack Chair 1999         2/2/2012           Barbantown Industrial         0.2 Private X Ag         Corrar Philade pha Division Tack Chair 1999         2/2/2012           Barbantown Industrial         0.2 Private X Ag   |                          |       | -                                     |                 |         |  |               |                  | TRUE<br>TRUE |
| ary Shore indistrial         0.79 Wisson Area         Conval Philodgha Division Text Chart 1999         2/19/212 / 29/212           Baywar indistrial Tack         0.31 Beywary Area         Conval Philodgha Division Text Chart 1999         2/19/212 / 29/212           Baywar indistrial Tack         0.51 Beywary Area         Conval Philodgha Division Text Chart 1999         2/19/212 / 29/212           Baywar indistrial Tack         0.75 Front S         Conval Philodgha Division Text Chart 1999         2/19/212 / 29/212           Baywar indistrial Tack         0.75 Front S         Conval Philodgha Division Text Chart 1999         2/19/212 / 29/212           Bah antown indistrial         1.2 Usef         Conval Philodgha Division Text Chart 1999         2/19/212 / 29/212           Bohan town indistrial         2.1 Front S Reg         Conval Philodgha Division Text Chart 1999         2/19/212 / 29/212           Bohan town indistrial         2.1 Front S Reg         Conval Philodgha Division Text Chart 1999         2/19/212 / 29/212           Conval Philodgha Division Text Chart 1999         2/19/212 / 29/212         2/19/212 / 29/212         2/19/212 / 29/212           Conval Philodgha Division Text Chart 1999         2/19/212 / 29/212         2/19/212 / 29/212         2/19/212 / 29/212           Conval Philodgha Division Text Chart 1999         2/19/212 / 29/212         2/19/212 / 29/212           Conval Philodgha Division Text Cha   | ,                        |       | e e e e e e e e e e e e e e e e e e e |                 |         |  |               |                  | TRUE         |
| Say Normal         0.99 Private Ning         Corrar Philodephia Division Tack Chart 1999         2/19/2012           Sawwer Induktrin Tack         0.31 Sawwar Padettin Tack         0.44 S. Front Alee         Corrar Philodephia Division Tack Chart 1999         2/19/2012           Sawwer Induktrin Tack         0.75 S. Front S.         Corrar Philodephia Division Tack Chart 1999         2/19/2012           Sawwer Induktrin Tack         0.75 S. Front S.         Corrar Philodephia Division Tack Chart 1999         2/19/2012           Sahaharoven Induktrin         1.2 US-1         Corrar Philodephia Division Tack Chart 1999         2/19/2012           Sahaharoven Induktrin         1.2 US-1         Corrar Philodephia Division Tack Chart 1999         2/19/2012           Sahaharoven Induktrin         1.2 US-1         Corrar Philodephia Division Tack Chart 1999         2/19/2012           Sahaharoven Induktrin         0.2 US-12 Sakawa         Corrar Philodephia Division Tack Chart 1999         2/19/2012           Sahaharoven Induktrin         0.0 Lip Ale Sa         Corrar Philodephia Division Tack Chart 1999         2/19/2012           Sahaharoven Induktrin         0.0 Lip Ale Sa         Corrar Philodephia Division Tack Chart 1999         2/19/2012           Cartar Philodephia Division Tack Chart 1999         2/19/2012         2/19/2012         2/19/2012           Carrar Philodephia Division Tack Chart 1999   | 1                        |       | ě                                     |                 |         | · · ·  |               | 1 · · ·          | TRUE         |
| Baywy Industri Tack         0.31 Baywy Are         Corral Philedephia Dison Tack Chart 1990         27/87021 27/8020           Baywy Industri Tack         0.5 S. Front SS         Corral Philedephia Dison Tack Chart 1990         27/87021 27/8020           Baywy Industri Tack         0.5 S. Front SS         Corral Philedephia Dison Tack Chart 1990         27/87021 27/87021           Bonhantswin Industri I         1.2 Us-L         Corral Philedephia Dison Tack Chart 1990         27/87021 27/87021           Bonhantswin Industri I         1.2 Us-L         Corral Philedephia Dison Tack Chart 1990         27/87021 27/87021           Bonhantswin Industri I         0.2 Frant SK         Corral Philedephia Dison Tack Chart 1990         27/87021 27/87021           Bonhantswin Industri I         0.2 Frant SK         Corral Philedephia Dison Tack Chart 1990         27/87021 27/87021           Bonhantswin Industri I         0.2 Frant SK         Corral Philedephia Dison Tack Chart 1990         27/87021 27/87021           Bonhantswin Industri I         0.2 Frant SK         Corral Philedephia Dison Tack Chart 1990         27/87021 27/87021           Corral Philedephia Dison Tack Chart 1990         27/87021 27/87021 27/87021         27/87021 27/87021 27/87021           Corral Philedephia Dison Tack Chart 1990         27/87021 27/87021 27/87021 27/87021 27/87021 27/87021 27/87021 27/87021 27/87021 27/87021 27/87021 27/87021 27/87021 27/87021 27/87021 27/87021 27/87021 27/87021 27/87021 27   |                          |       |                                       |                 |         |  |               |                  | TRUE         |
| Barway Industriel Tack         0.5 S. Front St.         Corral Philadelphia Dukian Tack Charl 1999.         2/9/2012 [2/9/012           Bonhammevn industriel         1.2 US-1         Corral Philadelphia Dukian Tack Charl 1999.         2/9/2012 [2/9/012           Bonhammevn industriel         1.2 US-1         Corral Philadelphia Dukian Tack Charl 1999.         2/9/2012 [2/9/2012           Bonhammevn industriel         2.2 Private Xing         Corral Philadelphia Dukian Tack Charl 1999.         2/9/2012 [2/9/2012           Bonhammevn industriel         0.5 Industries         Corral Philadelphia Dukian Tack Charl 1999.         2/9/2012 [2/9/2012           Bonhammevn industriel         0.5 Industries         Corral Philadelphia Dukian Tack Charl 1999.         2/9/2012 [2/9/2 |                          |       | -                                     |                 |         |  |               |                  | TRUE         |
| Barway Inductiol Track         0.78         Front St.         Connal Philosophia Duckson Track Charl 1999         2/970012 2/97012           Bonhartswe Inductrial         1.7         Wordbrige Ave         Connal Philosophia Duckson Track Charl 1999         2/970012 2/97012           Bonhartswe Inductrial         2.2         Pred res         Connal Philosophia Duckson Track Charl 1999         2/970012 2/97012           Bonhartsve Inductrial         2.5         Fed gress A         Connal Philosophia Duckson Track Charl 1999         2/970012 2/97012           Bonhartsve Inductrial         0.5         Damp At         Connal Philosophia Duckson Track Charl 1999         2/970012 2/970012           Carleral Britics Branch         0.5         Damp At         Connal Philosophia Duckson Track Charl 1999         2/970012 2/970012           Carleral Britics Branch         0.87         Point St.         Connal Philosophia Duckson Track Charl 1999         2/970012 2/970012           Carleral Britics Branch         0.87         Point St.         Connal Philosophia Duckson Track Charl 1999         2/970012 2/970012           Carleral Philosophia Duckson Track Charl 1999         2/970012 2/970012         2/970012 2/970012         2/970012 2/970012           Createl Philosophia Duckson Track Charl 1999         2/970012 2/970012         2/970012 2/970012         2/970012 2/970012           Createl Philosophia Duckson   | Bayway Industrial Track  | 0.44  | S. Front Ave                          |                 |         | Conrail Philadelphia Division Track Chart 1999 | 2/9/2012      | 2/9/2012         | TRUE         |
| Darbattery         12         12         15-1         Carral Philod Phila Division Tract Charl 1999         19/70012         19/2012  | Bayway Industrial Track  | 0.5   | S. Front St                           |                 |         | Conrail Philadelphia Division Track Chart 1999 | 2/9/2012      | 2/9/2012         | TRUE         |
| Sonhamove induktral         1.2         WoodBridge Ave         Conral Philologhan Dunison Track Charl 1999         2/9/2012         2/9/2012           Sonhamove induktral         2.5         Fieldcreat A         Conral Philologhan Dunison Track Charl 1999         2/9/2012         2/9/2012           Sonhamove induktral         0.2         Fieldcreat A         Conral Philologhan Dunison Track Charl 1999         2/9/2012         2/9/2012           Carter Datis E Branch         0.3         Dunin Rd         Conral Philologhan Dunison Track Charl 1999         2/9/2012         2/9/2012           Carter Datis E Branch         0.3         Yood Tiane         Conral Philologhan Dunison Track Charl 1999         2/9/2012         2/9/20   |                          |       |                                       |                 |         |  |               |                  | TRUE         |
| Bonhamown industral         2.2 Prada Ying         Corvar IPh addepha Davison Track Chrit 1999         2/9/2012 [29/2012           Bonhamown industral         0.2 High St.         Corvar IPh addepha Davison Track Chrit 1999         2/9/2012 [29/2012           Carters Branch         0.9 Dunp RI         Corvar IPh addepha Davison Track Chrit 1999         2/9/2012 [29/2012           Centrol District Branch         0.12 York St.         Corvar IPh addepha Davison Track Chrit 1999         2/9/2012 [29/2012           Centrol District Branch         0.97 Farmount Aee         Corvar IPh addepha Davison Track Chrit 1999         2/9/2012 [29/2012           Centrol District Branch         0.67 Farmount Aee         Corvar IPh addepha Davison Track Chrit 1999         2/9/2012 [29/2012           Treebold Scondary         6.63 Bucklew Are         Corvar IPh addepha Davison Track Chrit 1999         2/9/2012 [29/2012           Treebold Scondary         6.03 Parines Rd         Corvar IPh addepha Davison Track Chrit 1999         2/9/2012 [29/2012           Treebold Scondary         9.03 Parines Rd         Corvar IPh addepha Davison Track Chrit 1999         2/9/2012 [29/2012           Treebold Scondary         9.03 Parines Rd         Corvar IPh addepha Davison Track Chrit 1999         2/9/2012 [29/2012   |                          |       |                                       |                 |         |  |               |                  | TRUE         |
| Senhartswin industrial         2.5. Fielderset A         Corrar Philadelpha Division Track Chart 1999         2/9/2012 [2/9/2012           Carters Branch         0.9. Durps Rd         Corrar Philadelpha Division Track Chart 1999         2/9/2012 [2/9/2012           Cartral District Branch         0.3.7 farmount Ave         Corrar Philadelpha Division Track Chart 1999         2/9/2012 [2/9/2012           Cartral District Branch         0.3.7 farmount Ave         Corrar Philadelpha Division Track Chart 1999         2/9/2012 [2/9/2012           Trenehold Secondary         6.8.3 farmer Ave         Corrar Philadelpha Division Track Chart 1999         2/9/2012 [2/9/2012           Trenehold Secondary         6.46 Backiew Ave         Corrar Philadelpha Division Track Chart 1999         2/9/2012 [2/9/2012           Trenehold Secondary         9.06 Plerines Rd         Corrar Philadelpha Division Track Chart 1999         2/9/2012 [2/9/2012           Trenehold Secondary         9.06 Plerines Rd         Corrar Philadelpha Division Track Chart 1999         2/9/2012 [2/9/2012           Trenehold Secondary         10.91 Prvate Sing         Corrar Philadelpha Division Track Chart 1999         2/9/2012 [2/9/2012           Trenehold Secondary         11.21 Socden St.         Corrar Philadelpha Division Track Chart 1999         2/9/2012 [2/9/2012           Trenehold Secondary         11.21 Socden St.         Corrara Philadelpha Division Track Chart 1999   |                          |       |                                       |                 |         | · · ·  |               |                  | TRUE         |
| Senhamtwn ndustrai         0.2 Hegh SI.         Corrar Bharddepha Dixson Tack Char 1399         2/9/2012           Cartret Bruch         0.9 Dunge Rd         Corrar Philaddepha Dixson Tack Char 1399         2/9/2012           Cartret Bruch         0.7 Farmourt Ave         Corrar Philaddepha Dixson Tack Char 1399         2/9/2012           Cartret Bruch         0.97 Woodruff Lene         Corrar Philaddepha Dixson Tack Char 1399         2/9/2012           Cartret Bruch         0.97 Woodruff Lene         Corrar Philaddepha Dixson Tack Char 1399         2/9/2012           Cartret Bruch         6.25 Church St         Corrar Philaddepha Dixson Tack Char 1399         2/9/2012           Treebold Secondary         6.45 Dixtek Ave         Corrar Philaddepha Dixson Tack Char 1399         2/9/2012           Treebold Secondary         9.39 Hoffman Ave         Corrar Philaddepha Dixson Tack Char 1399         2/9/2012           Treebold Secondary         9.01 Pixtek Nig         Corrar Philaddepha Dixson Tack Char 1399         2/9/2012           Treebold Secondary         9.01 Pixtek Nig         Corrar Philaddepha Dixson Tack Char 1399         2/9/2012           Treebold Secondary         10.73 Tacy Station         Corrar Philaddepha Dixison Tack Char 1399         2/9/2012           Treebold Secondary         11.53 Mi Venn Ave         Corrar Philaddepha Dixison Tack Char 1399         2/9/2012 <td></td> <td></td> <td>-</td> <td></td> <td> </td> <td></td> <td></td> <td></td> <td>TRUE</td>   |                          |       | -                                     |                 |         |  |               |                  | TRUE         |
| Cartese Fanch         0.9         Dump Rd         Concel Phindephia Dwison Track Charl 1999         2/9/2021  |                          | -     |                                       |                 |         | · · · · · · · · · · · · · · · · · · ·          |               |                  | TRUE<br>TRUE |
| Central District Branch         0.12         Orx St.         Concril Philodiphia Dvision Track Charl 1999         2/9/2012           Central District Branch         0.97         Woodruff Lane         Concril Philodiphia Dvision Track Charl 1999         2/9/2012           Central District Branch         0.97         Woodruff Lane         Concril Philodiphia Dvision Track Charl 1999         2/9/2012           Freebold Scondary         6.25         Guruch St.         Concril Philodiphia Dvision Track Charl 1999         2/9/2012           Freebold Scondary         6.36         Builtow Ave         Concril Philodiphia Dvision Track Charl 1999         2/9/2012           Freebold Scondary         9.05         Private Xing         Concril Philodiphia Dvision Track Charl 1999         2/9/2012           Freebold Scondary         9.05         Private Xing         Conril Philodiphia Dvision Track Charl 1999         2/9/2012           Freebold Scondary         10.78         Track Station         Conril Philodiphia Dvision Track Charl 1999         2/9/2012           Freebold Scondary         11.21         Sodon Station         Conril Philodiphia Dvision Track Charl 1999         2/9/2012           Freebold Scondary         11.21         Ingh Bridge Rd         Conril Philodiphia Dvision Track Charl 1999         2/9/2012           Freebold Scondary         11.21         Ingh Bridg   |                          |       | -                                     | -               |         | · · · · · · · · · · · · · · · · · · ·          |               | 1 1              | TRUE         |
| Central District Branch         0.87         Extreme Ave         Conral Philodighta Division Track Chart 1999         2/9/2012           Central District Branch         0.97         Wondfulf Lane         Conral Philodighta Division Track Chart 1999         2/9/2012           Treebold Scondary         5.8         5.8         Conral Philodighta Division Track Chart 1999         2/9/2012           Treebold Scondary         6.45         Sci Dhurch St         Conral Philodighta Division Track Chart 1999         2/9/2012           Treebold Scondary         8.95         Ioffman Ave         Conral Philodighta Division Track Chart 1999         2/9/2012           Treebold Scondary         9.06         Fernes Rd         Conral Philodighta Division Track Chart 1999         2/9/2012           Treebold Scondary         9.01         Fraystat King         Conral Philodighta Division Track Chart 1999         2/9/2012           Treebold Scondary         10.73         Tracy Station         Conral Philodighta Division Track Chart 1999         2/9/2012           Treebold Scondary         11.58         Mtven Ave         Corral Philodighta Division Track Chart 1999         2/9/2012           Treebold Scondary         12.4         Mtven Ave         Corral Philodighta Division Track Chart 1999         2/9/2012           Treebold Scondary         12.8         Mtven Ave         Co  |                          |       |                                       | -               |         |  |               |                  | TRUE         |
| Central District Branch         0.97         Woodryff Lane         Concal Philodighia Division Track Charl 1999         2/9/2021           Freehold Scondary         6.25         Gurturn Ave         Concal Philodighia Division Track Charl 1999         2/9/2012           Freehold Scondary         6.45         Gurturn St.         Concal Philodighia Division Track Charl 1999         2/9/2012           Freehold Scondary         9.83         Ioffman Ave         Concal Philodighia Division Track Charl 1999         2/9/2012           Freehold Scondary         9.91         Freehold Scondary         10.27         Track Station         Conrait Philodighia Division Track Charl 1999         2/9/2012         2/9/2012         2/9/2012         Freehold Scondary         11.21         Sodom Station         Conrait Philodighia Division Track Charl 1999         2/9/2012         Freehold Scondary         11.21         Sodom Station         Conrait Philodighia Division Track Charl 1999         2/9/2012         Freehold Scondary         11.21         Freehold Scondary         11.21         Freehold Scondary         11.21         Freehold Scondary         11.21         Freehold Scondary   |                          |       |                                       |                 |         |  |               | 1 · · ·          | TRUE         |
| Freehold Secondary         5.8 Garmer Ave         Consul Philadepha Durson Track Chart 1999         29/2012 [29/2012           Freehold Secondary         6.46 Bucklew Ave         Consul Philadepha Durson Track Chart 1999         29/2012 [29/2012           Freehold Secondary         9.06 Pienter RI         Consul Philadepha Durson Track Chart 1999         29/2012 [29/2012           Freehold Secondary         9.06 Pienter RI         Consul Philadepha Durson Track Chart 1999         29/2012 [29/2012           Freehold Secondary         9.01 Pienter RI         Consul Philadepha Durson Track Chart 1999         29/2012 [29/2012           Freehold Secondary         0.03 Arget State         Consul Philadepha Durson Track Chart 1999         29/2012 [29/2012           Freehold Secondary         10.73 Tracy Staton         Consul Philadepha Durson Track Chart 1999         29/2012 [29/2012           Freehold Secondary         11.58 Mt Vean Ave         Consul Philadepha Durson Track Chart 1999         29/2012 [29/2012           Freehold Secondary         11.58 Mt Vean Ave         Consul Philadepha Durson Track Chart 1999         29/2012 [29/2012  |                          |       |                                       |                 |         |  |               |                  | TRUE         |
| Freehold Secondary         6.46 Bucklew Ave         Conral Philadephia Division Track Chart 1999         2/9/2012 [///2012           Freehold Secondary         9.06 Plermes Rd         Conral Philadephia Division Track Chart 1999         2/9/2012 [///2012           Freehold Secondary         9.01 Philadephia Division Track Chart 1999         2/9/2012 [///2012           Freehold Secondary         9.01 Philadephia Division Track Chart 1999         2/9/2012 [///2012           Freehold Secondary         10.73 Tracy Station         Conral Philadephia Division Track Chart 1999         2/9/2012 [///2012           Freehold Secondary         11.21 Sodon St         Conral Philadephia Division Track Chart 1999         2/9/2012 [///2012           Freehold Secondary         11.58 MI Venn Ave         Conral Philadephia Division Track Chart 1999         2/9/2012 [///2012           Freehold Secondary         12.4 High artige Rd         Conral Philadephia Division Track Chart 1999         2/9/2012 [///2012           Freehold Secondary         14.7 2P Iviste Xing         Conral Philadephia Division Track Chart 1999         2/9/2012 [///2012           Freehold Secondary         16.8 Private Xing         Conral Philadephia Division Track Chart 1999         2/9/2012 [///2012           Freehold Secondary         16.4 Private Xing         Conral Philadephia Division Track Chart 1999         2/9/2012 [///2012 [///2012 [///2012 ]///2012 [///2012 ]//2012 [///2012 ]//2012 [///2012 ]//201  | Freehold Secondary       | 5.8   | Gatzmer Ave                           |                 |         |  | 2/9/2012      | 2/9/2012         | TRUE         |
| Freebold scondary         9.9         Informan Avec         Conrail Philadephin Division Track Chart 1999         7/9/2012 (2)/2012           Freehold Scondary         9.91         Private Xing         Conrail Philadephin Division Track Chart 1999         2/9/2012 (2)/2012           Freehold Scondary         6.08         Augusta St         Conrail Philadephin Division Track Chart 1999         2/9/2012 (2)/2012           Freehold Scondary         10.03         Track Y Station         Conrail Philadephin Division Track Chart 1999         2/9/2012 (2)/2012           Freehold Scondary         11.21         Scoden St         Conrail Philadephin Division Track Chart 1999         2/9/2012 (2)/2012           Freehold Scondary         11.21         Scoden St         Conrail Philadephin Division Track Chart 1999         2/9/2012 (2)/2012           Freehold Scondary         11.21         High Bridge Rd         Conrail Philadephin Division Track Chart 1999         2/9/2012 (2)/2012 (2)/2012           Freehold Scondary         12.4         Main St         Conrail Philadephin Division Track Chart 1999         2/9/2012 (2)/2012   | Freehold Secondary       | 6.25  | Church St                             |                 |         | Conrail Philadelphia Division Track Chart 1999 | 2/9/2012      | 2/9/2012         | TRUE         |
| Freehold secondary         9.06         Perines Rd         Conrail Philadelphia Division Track Chart 1999         2/9/2012 (2/9/2012           Freehold Secondary         6.09         Jugusta St         Conrail Philadelphia Division Track Chart 1999         2/9/2012 (2/9/2012           Freehold Secondary         10.73         Tracy Station         Conrail Philadelphia Division Track Chart 1999         2/9/2012 (2/9/2012           Freehold Secondary         11.73         Natro Station         Conrail Philadelphia Division Track Chart 1999         2/9/2012 (2/9/2012           Freehold Secondary         11.58         Mt Venn Ave         Conrail Philadelphia Division Track Chart 1999         2/9/2012 (2/9/2012           Freehold Secondary         11.24         Main St         Conrail Philadelphia Division Track Chart 1999         2/9/2012 (   | Freehold Secondary       | 6.46  | Bucklew Ave                           |                 |         | Conrail Philadelphia Division Track Chart 1999 | 2/9/2012      | 2/9/2012         | TRUE         |
| Freehold Secondary         9.91         Private Xing         Cornail Philadepha Division Track Chart 1999         2/9/2012 (2/9/2012           Freehold Secondary         10.73         Tracy Station         Cornail Philadepha Division Track Chart 1999         2/9/2012 (2/9/2012           Freehold Secondary         11.21         Sooden ST         Cornail Philadepha Division Track Chart 1999         2/9/2012 (2/9/2012           Freehold Secondary         11.21         Sooden ST         Cornail Philadepha Division Track Chart 1999         2/9/2012 (2/9/2012           Freehold Secondary         11.21         High Bridge Rd         Cornail Philadepha Division Track Chart 1999         2/9/2012 (2/9/2012           Freehold Secondary         11.37         Fement AG         Cornail Philadepha Division Track Chart 1999         2/9/2012 (2/9/2012           Freehold Secondary         11.37         Fement King         Cornail Philadepha Division Track Chart 1999         2/9/2012 (2/9/2012           Freehold Secondary         11.58         Hivate Xing         Cornail Philadepha Division Track Chart 1999         2/9/2012 (2/9/2012 (2/9/2012           Freehold Secondary         11.58         Hivate Xing         Cornail Philadepha Division Track Chart 1999         2/9/2012 (2/9/   |                          |       |                                       |                 |         |  |               |                  | TRUE         |
| Freehold Secondary         6.09 Augusta St.         Conrail Philadelphia Division Track Chart 1999         2/19/2012           Freehold Secondary         11.21 Sooden St.         Conrail Philadelphia Division Track Chart 1999         2/19/2012           Freehold Secondary         11.21 Sooden St.         Conrail Philadelphia Division Track Chart 1999         2/19/2012           Freehold Secondary         11.24 Mit Wenn Ave         Conrail Philadelphia Division Track Chart 1999         2/19/2012           Freehold Secondary         12.45 Main St.         Conrail Philadelphia Division Track Chart 1999         2/19/2012           Freehold Secondary         14.72 Private Xing         Conrail Philadelphia Division Track Chart 1999         2/19/2012           Freehold Secondary         15.8 Private Xing         Conrail Philadelphia Division Track Chart 1999         2/19/2012           Freehold Secondary         16.34 Private Xing         Conrail Philadelphia Division Track Chart 1999         2/19/2012           Freehold Secondary         16.84 Bowne Ave         Conrail Philadelphia Division Track Chart 1999         2/19/2012           Freehold Secondary         16.84 Bowne Ave         Conrail Philadelphia Division Track Chart 1999         2/19/2012           Freehold Secondary         17.36 Broad St.         Conrail Philadelphia Division Track Chart 1999         2/19/2012           Freehold Secondary         17.36   |                          | -     |                                       |                 |         |  |               |                  | TRUE         |
| Freehold Secondary         10.73 Tracy Station         Conrail Philadelphia Division Track Chart 1999         2//9/2012           Freehold Secondary         11.21 Sooden St         Conrail Philadelphia Division Track Chart 1999         2//9/2012           Freehold Secondary         11.35 Mt Venn Ave         Conrail Philadelphia Division Track Chart 1999         2//9/2012           Freehold Secondary         12.4 High Bridge Rd         Conrail Philadelphia Division Track Chart 1999         2//9/2012           Freehold Secondary         13.79 Fennet Rd         Conrail Philadelphia Division Track Chart 1999         2//9/2012           Freehold Secondary         14.72 Private Xing         Conrail Philadelphia Division Track Chart 1999         2//9/2012           Freehold Secondary         16.34 Private Xing         Conrail Philadelphia Division Track Chart 1999         2//9/2012           Freehold Secondary         16.55 Private Xing         Conrail Philadelphia Division Track Chart 1999         2//9/2012           Freehold Secondary         16.54 Bowne Ave         Conrail Philadelphia Division Track Chart 1999         2//9/2012           Freehold Secondary         17.54 Braad St         Conrail Philadelphia Division Track Chart 1999         2//9/2012           Freehold Secondary         17.54 Braad St         Conrail Philadelphia Division Track Chart 1999         2//9/2012           Freehold Secondary         1   |                          |       | -                                     |                 |         |  |               |                  | TRUE         |
| Freehold Secondary         11.21         Souden St         Conrail Philadelphia Division Track Chart 1999         2//9/2012           Freehold Secondary         11.58         Mt Venn Ave         Conrail Philadelphia Division Track Chart 1999         2//9/2012         2//9/2012           Freehold Secondary         12.4         High Bridge Rd         Conrail Philadelphia Division Track Chart 1999         2//9/2012   |                          |       |                                       |                 |         | · · · · · · · · · · · · · · · · · · ·          |               |                  | TRUE         |
| Freebold Secondary         11.58         Mt Venn Ave         Conrail Philadelphia Division Track Chart 1999         2//9/2012         2//9/2012           Freebold Secondary         12.1         High Bridge Rd         Conrail Philadelphia Division Track Chart 1999         2//9/2012         <   |                          |       |                                       |                 |         |  |               |                  | TRUE<br>TRUE |
| Freehold Secondary         12.1 High Bridge Rd         Conral Philadelphia Division Track Chart 1999         2/9/2012   |                          |       |                                       |                 |         | · · · · · · · · · · · · · · · · · · ·          |               |                  | TRUE         |
| Freehold Secondary12.45Main StConral Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary14.72Private XingConral Philadelphia Division Track Chart 19992/9/2012Freehold Secondary15.8Private XingConral Philadelphia Division Track Chart 19992/9/2012Freehold Secondary16.34Private XingConral Philadelphia Division Track Chart 19992/9/2012Freehold Secondary16.34Private XingConral Philadelphia Division Track Chart 19992/9/2012Freehold Secondary16.55Private XingConral Philadelphia Division Track Chart 19992/9/2012Freehold Secondary16.64Momouth AveConral Philadelphia Division Track Chart 19992/9/2012Freehold Secondary17.25Broad StConral Philadelphia Division Track Chart 19992/9/2012Freehold Secondary17.26South StConral Philadelphia Division Track Chart 19992/9/2012Freehold Secondary17.46South StConral Philadelphia Division Track Chart 19992/9/2012Freehold Secondary17.46South StConral Philadelphia Division Track Chart 19992/9/2012Freehold Secondary18.09Private XingConral Philadelphia Division Track Chart 19992/9/2012Freehold Secondary19.11Halk MillsConral Philadelphia Division Track Chart 19992/9/2012Freehold Secondary19.5Private XingConral Philadelphia Division Track Chart 19992/9/2012Freehold Secondary19.5Private Xin   |                          |       |                                       |                 |         |  |               | 1 · · ·          | TRUE         |
| Freehold Secondary13.79Fennet RdConral Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary14.72Prvate XingCorral Philadelphia Division Track Chart 19992/9/2012Freehold Secondary16.34Prvate XingCorral Philadelphia Division Track Chart 19992/9/2012Freehold Secondary16.43Prvate XingCorral Philadelphia Division Track Chart 19992/9/2012Freehold Secondary16.48Bowne AveCorral Philadelphia Division Track Chart 19992/9/2012Freehold Secondary16.44Bowne AveCorral Philadelphia Division Track Chart 19992/9/2012Freehold Secondary17.58Froad StCorral Philadelphia Division Track Chart 19992/9/2012Freehold Secondary17.58Froad StCorral Philadelphia Division Track Chart 19992/9/2012Freehold Secondary17.35Froad StCorral Philadelphia Division Track Chart 19992/9/2012Freehold Secondary17.48Hudson StCorral Philadelphia Division Track Chart 19992/9/2012Freehold Secondary18.62Prvate XingCorral Philadelphia Division Track Chart 19992/9/2012Freehold Secondary18.62Prvate XingCorral Philadelphia Division Track Chart 19992/9/2012Freehold Secondary19.51Halis MilsCorral Philadelphia Division Track Chart 19992/9/2012Freehold Secondary19.51Frivate XingCorral Philadelphia Division Track Chart 19992/9/2012Freehold Secondary19.51Frivate Xing <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>TRUE</td>  |                          |       |                                       |                 |         |  |               |                  | TRUE         |
| Freehold Secondary         15.8         Private Xing         Conrail Philadelphia Division Track Chart 1999         2/9/2012         2/9/2012           Freehold Secondary         16.55         Private Xing         Conrail Philadelphia Division Track Chart 1999         2/9/2012<   |                          |       |                                       |                 |         |  |               |                  | TRUE         |
| Freehold Secondary         16.34         Private Xing         Conrail Philadelphia Division Track Chart 1999         2/9/2012         2/9/2012           Freehold Secondary         16.55         Private Xing         Conrail Philadelphia Division Track Chart 1999         2/9/2012   | Freehold Secondary       | 14.72 | Private Xing                          |                 |         | Conrail Philadelphia Division Track Chart 1999 | 2/9/2012      | 2/9/2012         | TRUE         |
| Freehold Secondary         16.55         Frivate Xing         Conrail Philadelphia Division Track Chart 1999         2/9/2012         2/9/2012           Freehold Secondary         16.64         Mommouth Ave         Conrail Philadelphia Division Track Chart 1999         2/9/2012         2/9/2012           Freehold Secondary         17.15         Broad St         Conrail Philadelphia Division Track Chart 1999         2/9/2012         2/9/2012           Freehold Secondary         17.27         Main/Hrckmr         Conrail Philadelphia Division Track Chart 1999         2/9/2012         2/9/2012           Freehold Secondary         17.48         Hudson St         Conrail Philadelphia Division Track Chart 1999         2/9/2012         2/9/2012           Freehold Secondary         18.62         Private Xing         Conrail Philadelphia Division Track Chart 1999         2/9/2012         2/9/2012           Freehold Secondary         19.1         Hals Milis         Conrail Philadelphia Division Track Chart 1999         2/9/2012         2/9/2012           Freehold Secondary         19.1         Hals Milis         Conrail Philadelphia Division Track Chart 1999         2/9/2012         2/9/2012         2/9/2012         2/9/2012         2/9/2012         2/9/2012         2/9/2012         2/9/2012         2/9/2012         2/9/2012         2/9/2012         2/9/2012         2/9/  | Freehold Secondary       | 15.8  | Private Xing                          |                 |         | Conrail Philadelphia Division Track Chart 1999 | 2/9/2012      | 2/9/2012         | TRUE         |
| Freehold Secondary         16.84         Bowne Ave         Conrail Philadelphia Division Track Chart 1999         2/9/2012         2/9/2012           Freehold Secondary         17.15         Broad St         Conrail Philadelphia Division Track Chart 1999         2/9/2012         2/9/2012           Freehold Secondary         17.7.3         Broad St         Conrail Philadelphia Division Track Chart 1999         2/9/2012         2/9/2012           Freehold Secondary         17.36         South St         Conrail Philadelphia Division Track Chart 1999         2/9/2012         2/9/2012           Freehold Secondary         17.86         Bowth St         Conrail Philadelphia Division Track Chart 1999         2/9/2012         2/9/2012           Freehold Secondary         18.09         Private Xing         Conrail Philadelphia Division Track Chart 1999         2/9/2012         2/9/2012           Freehold Secondary         19.11         Halls Mills         Conrail Philadelphia Division Track Chart 1999         2/9/2012         2/9/2012           Freehold Secondary         19.7         Private Xing         Conrail Philadelphia Division Track Chart 1999         2/9/2012         2/9/2012           Freehold Secondary         19.7         Private Xing         Conrail Philadelphia Division Track Chart 1999         2/9/2012         2/9/2012         2/9/2012         2/9/2012   | Freehold Secondary       | 16.34 | Private Xing                          |                 |         | Conrail Philadelphia Division Track Chart 1999 | 2/9/2012      | 2/9/2012         | TRUE         |
| Freehold Secondary         16.94         Monmouth Ave         Conrail Philadelphia Division Track Chart 1999         2/9/2012         2/9/2012           Freehold Secondary         17.25         Brad St         Conrail Philadelphia Division Track Chart 1999         2/9/2012         2/9/2012           Freehold Secondary         17.36         South St         Conrail Philadelphia Division Track Chart 1999         2/9/2012         2/9/2012           Freehold Secondary         17.48         Hudson St         Conrail Philadelphia Division Track Chart 1999         2/9/2012         2/9/2012           Freehold Secondary         18.62         Private Xing         Conrail Philadelphia Division Track Chart 1999         2/9/2012         2/9/2012           Freehold Secondary         19.11         Halk Mills         Conrail Philadelphia Division Track Chart 1999         2/9/2012         2/9/2012           Freehold Secondary         19.5         Private Xing         Conrail Philadelphia Division Track Chart 1999         2/9/2012         2/9/2012           Freehold Secondary         20.16         Howell Rd         Conrail Philadelphia Division Track Chart 1999         2/9/2012         2/9/2012           Freehold Secondary         21.02         Fairfield Rd         Conrail Philadelphia Division Track Chart 1999         2/9/2012         2/9/2012           Freehold Secondary   | Freehold Secondary       |       |                                       |                 |         | Conrail Philadelphia Division Track Chart 1999 |               |                  | TRUE         |
| Freehold Secondary17.15Broad StConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary17.27Main/HrckmrConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary17.48Hudson StConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary18.09Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary18.62Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary19.61Halls MilisCorrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary19.5Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary19.7Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary19.7Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary20.16Howell RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary21.02Fairfield RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary23.22Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary23.22Private XingConrail Philadelphia Division Track Chart 19992/9/2012  |                          |       |                                       |                 |         | · · · · · · · · · · · · · · · · · · ·          | 1             | 1                | TRUE         |
| Freehold Secondary17.27Main/HrckmrConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary17.36South StConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary18.60Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary18.62Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary19.6Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary19.7Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary19.7Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary21.02Fairfield RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary21.02Fairfield RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary23.22Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary23.22Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary23.22Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary24.35Rt 524Conrail Philadelphia Division Track Chart 19992/9/201  | ,                        |       |                                       |                 |         |  |               |                  | TRUE         |
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| Freehold Secondary17.48Hudson StConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary18.60Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary19.11Halls MillsConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary19.5Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary19.5Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary20.16Howell RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary20.10Fairfield RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary21.02Fairfield RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary23.22Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary23.22Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary24.45Southard AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary24.45Southard AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary24.45Southard AveConrail Philadelphia Division Track Chart 19992/  | ,                        | _     | ,                                     |                 |         | · · · · · · · · · · · · · · · · · · ·          |               |                  | TRUE<br>TRUE |
| Freehold Secondary18.09Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary19.11Halis MilisConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary19.5Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary19.7Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary19.7Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary21.02Fairfield RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary21.95Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary23.22Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary23.22Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary24.35Rt 524Conrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary24.45Southard AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary24.55Southard AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary24.55Southard AveConrail Philadelphia Division Track Chart 19992/9  |                          | _     |                                       |                 |         |  |               |                  | TRUE         |
| Freehold Secondary18.62Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary19.11Halls MillsConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary19.5Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary19.7Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary20.16Howell RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary21.02Fairfield RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary21.95Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary23.22Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary24.35Rt 524Conrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary24.45Southard AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial4.72Crnbry-UnionConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial2.71Ind Pk RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial1.51Forsgate DrConrail Philadelphia Division Track Chart 19992/9  |                          |       |                                       |                 |         | · · · · · · · · · · · · · · · · · · ·          |               |                  | TRUE         |
| Freehold Secondary19.11Halls MillisConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary19.7Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary19.7Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary20.16Howell RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary21.02Faifield RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary23.22Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary23.22Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary24.35Rt 524Conrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary24.45Southard AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial4.72Crhbry-UnionConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial2.71Ind Y RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial2.5Applegarth RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial13.2Frivate XingConrail Philadelphia Division Track Chart 19992  |                          | -1    |                                       |                 |         | 1 · · · · · · · · · · · · · · · · · · ·        |               |                  | TRUE         |
| Freehold Secondary19.5Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary20.16Howell RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary21.02Fairfield RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary21.05Fairfield RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary23.22Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary24.35Rt 524Conrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary24.45Southard AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary24.45Southard AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary24.45Southard AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial4.72Crnbry-UnionConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial2.71Ind Pk RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial1.51Forsgate DrConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Ivington Industrial1.3.2Private XingConrail Philadelphia Division Track Chart 1999  |                          |       |                                       |                 |         |  |               |                  | TRUE         |
| Freehold Secondary20.16Howell RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary21.02Fairfield RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary21.95Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary23.22Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary24.35Rt 524Conrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary24.45Southard AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial4.72Crnbry-UnionConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial2.9Prspct PinsConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial2.5Applegarth RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial1.51Forsgate DrConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial13.22Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial13.24Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial13.92Hillside ReaConrail Philadelphia Division Track Chart 1999   |                          |       |                                       |                 |         |  |               |                  | TRUE         |
| Freehold Secondary21.02Fairfield RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary21.95Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary23.22Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary24.35Rt 524Conrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary24.45Southard AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial4.72Crbry-UnionConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial2.9Prspct PinsConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial2.5Applegarth RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial1.51Forsgate DrConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial13.2Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial13.2Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial13.32Hilside ReaConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.37Chestnut AveConrail Philadelphia Division Track Chart 199   | Freehold Secondary       | 19.7  | Private Xing                          |                 |         | Conrail Philadelphia Division Track Chart 1999 | 2/9/2012      | 2/9/2012         | TRUE         |
| Freehold Secondary21.95Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary23.22Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary24.35Rt 524Conrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary24.45Southard AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial4.72Crbry-UnionConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial2.91Prspet PinsConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial2.71Ind Pk RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial2.51Applegarth RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial1.51Forsgate DrConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial1.3.2Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial1.3.2Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial1.3.9Hillside AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial1.4.47Paine-WinansConrail Philadelphia Division Track Chart   | Freehold Secondary       | 20.16 | Howell Rd                             |                 |         |  |               |                  | TRUE         |
| Freehold Secondary23.22Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary24.35Rt 524Conrail Philadelphia Division Track Chart 19992/9/20122/9/2012Freehold Secondary24.45Southard AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial4.72Crnbry-UnionConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial2.9Prspet PinsConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial2.71Ind Pk RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial2.5Applegarth RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial1.51Forsgate DrConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial13.2Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial13.92Hillside ReaConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial13.92Hillside AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.3Chestnut AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.37Paine-WinansConrail Philadelphia Division Track Chart  |                          |       |                                       |                 |         |  |               |                  | TRUE         |
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| Hightstown Industrial4.72Crnbry-UnionConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial2.9Prspct PinsConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial2.71Ind Pk RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial2.5Applegarth RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial1.51Forsgate DrConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial13.2Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial13.35Hillside ReaConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial13.92Hillside AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.3Chestnut AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.47Paine-WinansConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.78Chancellor AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.78Chancellor AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.78Chancellor AveConrail Philadelphia Div   | ,                        |       | 4                                     |                 |         | · · · · · · · · · · · · · · · · · · ·          |               |                  | TRUE         |
| Hightstown Industrial2.9Prspct PInsConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial2.71Ind Pk RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial2.5Applegarth RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial1.51Forsgate DrConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial13.2Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial13.35Hillside ReaConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial13.92Hillside AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.3Chestnut AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.47Paine-WinansConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.78Chancellor AveConrail Philadelphia D   |                          |       |                                       |                 |         | · · · · · · · · · · · · · · · · · · ·          |               |                  | TRUE<br>TRUE |
| Hightstown Industrial2.71Ind Pk RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial2.5Applegarth RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial1.51Forsgate DrConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial13.2Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial13.32Hillside ReaConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial13.92Hillside ReaConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.3Chestnut AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.47Paine-WinansConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.78Chancellor AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.78Chancellor AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012  |                          |       |                                       |                 |         |  | 1             | 1                | TRUE         |
| Hightstown Industrial2.5Applegarth RdConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Hightstown Industrial1.51Forsgate DrConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial13.2Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial13.35Hillside ReaConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial13.92Hillside AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.3Chestnut AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.47Paine-WinansConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.78Chancellor AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.78Chancellor AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012  |                          |       |                                       | -               |         |  |               |                  | TRUE         |
| Hightstown Industrial1.51Forsgate DrConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial13.2Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial13.35Hillside ReaConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial13.92Hillside AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.3Chestnut AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.47Paine-WinansConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.78Chancellor AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.78Chancellor AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012   |                          |       |                                       |                 |         |  |               |                  | TRUE         |
| Irvington Industrial13.2Private XingConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial13.35Hillside ReaConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial13.92Hillside AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.3Chestnut AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.47Paine-WinansConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.78Chancellor AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.78Chancellor AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012   |                          |       |                                       |                 |         |  | 1             | 1                | TRUE         |
| Irvington Industrial13.35Hillside ReaConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial13.92Hillside AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.3Chestnut AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.47Paine-WinansConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.78Chancellor AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012  |                          |       |                                       |                 |         |  |               |                  | TRUE         |
| Irvington Industrial14.3Chestnut AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.47Paine-WinansConrail Philadelphia Division Track Chart 19992/9/20122/9/2012Irvington Industrial14.78Chancellor AveConrail Philadelphia Division Track Chart 19992/9/20122/9/2012  |                          |       |                                       |                 |         | · · · · · · · · · · · · · · · · · · ·          |               |                  | TRUE         |
| Irvington Industrial         14.47         Paine-Winans         Conrail Philadelphia Division Track Chart 1999         2/9/2012         2/9/2012           Irvington Industrial         14.78         Chancellor Ave         Conrail Philadelphia Division Track Chart 1999         2/9/2012         2/9/2012   | rvington Industrial      | 13.92 | Hillside Ave                          |                 |         |  |               |                  | TRUE         |
| Irvington Industrial 14.78 Chancellor Ave Conrail Philadelphia Division Track Chart 1999 2/9/2012 2/9/2012  | -                        |       |                                       |                 |         |  |               |                  | TRUE         |
|   | -                        |       |                                       | _               |         |  |               |                  | TRUE         |
| lirvington Industrial 15 Lyons Ave Chart 1999 2/9/2012 2/9/2012   | -                        |       |                                       |                 |         | · · · · · · · · · · · · · · · · · · ·          |               |                  | TRUE         |
|   | -                        |       |                                       |                 |         | · · · · · · · · · · · · · · · · · · ·          |               |                  | TRUE         |
| Linden Branch         1.07         Lower Rd         Conrail Philadelphia Division Track Chart 1999         2/9/2012   |                          |       |                                       |                 |         |  |               |                  | TRUE<br>TRUE |

## Grade Crossings

|                          | L     |                   |         |         |  |               |            |        |
|--------------------------|-------|-------------------|---------|---------|--|---------------|------------|--------|
|                          |       |                   |         |         |  |               |            |        |
|                          |       |                   | Control |         |  |               | Creation   |        |
| Line_Name                | MP    | Cross_Street_Name | Туре    | Private | Source   | Date_Modified | Date       | Edited |
| Amboy Secondary          | 10.13 | Private           |         | Р       | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    |            | TRUE   |
| Amboy Secondary          | 10.28 | Clearwater        |         |         | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    | 10/26/2011 | TRUE   |
| Amboy Secondary          | 10.52 | Private           |         | Р       | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    | 10/26/2011 | TRUE   |
| Amboy Secondary          | 11.01 | Lake Ave          |         |         | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    | 10/26/2011 | TRUE   |
| Amboy Secondary          | 11.1  | Private           |         | Р       | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    | 10/26/2011 | TRUE   |
| Amboy Secondary          | 11.21 | High Street       |         |         | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    | 10/26/2011 | TRUE   |
| Amboy Secondary          | 11.52 | Maple Street      |         |         | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    | 10/26/2011 | TRUE   |
| Amboy Secondary          | 11.63 | Brookside Pl      |         |         | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    | 10/26/2011 | TRUE   |
| Amboy Secondary          | 11.74 | Willow St         |         |         | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    | 10/26/2011 | TRUE   |
| Amboy Secondary          | 13.3  | Private           |         | Р       | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    | 10/26/2011 | TRUE   |
| Amboy Secondary          | 14.75 | Private           |         | Р       | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    | 10/26/2011 | TRUE   |
| Amboy Secondary          | 14.95 | Cranbury So       |         |         | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    | 10/26/2011 | TRUE   |
| Amboy Secondary          | 16    | Herrod Blvd       |         |         | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    | 10/26/2011 | TRUE   |
| Amboy Secondary          | 16.3  | Stults Road       |         |         | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    | 10/26/2011 | TRUE   |
| Amboy Secondary          | 16.8  | Georges Rd        |         |         | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    | 10/26/2011 | TRUE   |
| Amboy Secondary          | 16.95 | Haypress Rd       |         |         | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    | 10/26/2011 | TRUE   |
| Amboy Secondary          | 17.65 | Culver Rd         |         |         | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    | 10/26/2011 | TRUE   |
| Amboy Secondary          | 17.95 | Private           |         | Р       | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    | 10/26/2011 | TRUE   |
| Amboy Secondary          | 18.5  | Private           |         | Р       | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    | 10/26/2011 | TRUE   |
| Amboy Secondary          | 18.75 | Private           |         | Р       | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    | 10/26/2011 | TRUE   |
| Chemical Coast Secondary | 11.4  | Railroad Ave      |         |         | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    | 10/26/2011 | TRUE   |
| Chemical Coast Secondary | 16.76 | Port Reading      |         |         | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    | 10/26/2011 | TRUE   |
| Chemical Coast Secondary | 17.17 | School St         |         |         | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    | 10/26/2011 | TRUE   |
| Chemical Coast Secondary | 18    | Woodbridge Ave    |         |         | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    | 10/26/2011 | TRUE   |
| Chemical Coast Secondary | 19.09 | Woodbridge Ave    |         |         | Conrail Philadelphia Division Track Chart 1999 | 10/26/2011    | 10/26/2011 | TRUE   |
| Port Reading Secondary   | 0.47  | Main St           |         |         | Conrail Philadelphia Division Track Chart 1999 | 10/27/2011    | 10/27/2011 | TRUE   |

# Height Limits

|                           |         |        | Height |        | Date       |  |               |
|---------------------------|---------|--------|--------|--------|------------|--|---------------|
| Line Name                 | From MP | To MP  | Limit  | Edited | Modified   | Source                                       | Creation Date |
| Chemical Coast Secondary  | 1.4     | 11.9   | 20'2"  | TRUE   | 10/26/2011 | Conrail ETT 9: June 20, 2011                 |               |
| Morristown Line           | 0       | 29.8   | 15'5"  | TRUE   | 10/19/2011 | NJTransit ETT 501: April 3, 2010             | 10/19/2011    |
| Morristown Line           | 29.8    | 36.3   | 15'6"  | TRUE   | 10/19/2011 | NJTransit ETT 501: April 3, 2010             | 10/19/2011    |
| Morristown Line           | 36.3    | 38.1   | 18'6"  | TRUE   | 10/19/2011 | NJTransit ETT 501: April 3, 2010             | 10/19/2011    |
| Morristown Line           | 38.1    | 39.4   | 16'8"  | TRUE   | 10/19/2011 | NJTransit ETT 501: April 3, 2010             | 10/19/2011    |
| Morristown Line           | 39.4    | 58     | 16'6"  | TRUE   | 10/19/2011 | NJTransit ETT 501: April 3, 2010             | 10/19/2011    |
| Lehigh Line               | 9       | 35.8   | 20'2"  | TRUE   | 10/21/2011 | Conrail ETT 9: June 20, 2011                 | 10/21/2011    |
| Lehigh Line               | 35.8    | 76.65  | 20'3"  | TRUE   | 10/25/2011 | NS Harrisburg ETT 1: August 4, 2008          | 10/25/2011    |
| Passaic & Harsimus Branch | 0       | 1.6    | 17'8"  | TRUE   | 10/21/2011 | Conrail ETT 9: June 20, 2011                 | 10/21/2011    |
| Passaic & Harsimus Branch | 1.6     | 7.7    | 20'2"  | TRUE   | 10/21/2011 | Conrail ETT 9: June 20, 2011                 | 10/21/2011    |
| National Docks Secondary  | 0       | 7.2    | 20'2"  | TRUE   | 10/25/2011 | Conrail ETT 9: June 20, 2011                 | 10/25/2011    |
| Port Reading Secondary    | 0       | 16     | 20'2"  | TRUE   | 10/27/2011 | Conrail ETT 9: June 20, 2011                 | 10/27/2011    |
| West Trenton Line         | 31.207  | 57.731 | 20'2"  | TRUE   | 11/10/2011 | CSX Albany Division ETT #6: October 15, 2010 | 11/10/2011    |
| River Line                | 1.8     | 18.8   | 20'2"  | TRUE   | 11/14/2011 | CSX Albany Division ETT #6: October 15, 2010 | 11/14/2011    |
| Raritan Valley Line       | 14.717  | 66.6   | 17'0"  | TRUE   | 11/12/2011 | NJTransit ETT 601: November 6, 2011          | 11/12/2011    |
| Gladstone Line            | 20.1    | 42.2   | 15'5"  | TRUE   | 12/1/2011  | NJTransit ETT 601: November 6, 2011          | 12/1/2011     |
| Montclair Line            | 9       | 12.9   | 15'5"  | TRUE   | 12/1/2011  | NJTransit ETT 601: November 6, 2011          | 12/1/2011     |
| Montclair-Boonton Line    | 11.7    | 33.9   | 17'10" | TRUE   | 12/1/2011  | NJTransit ETT 601: November 6, 2011          | 12/1/2011     |
| Bergen County Line        | 5.4     | 19     | 22'3"  | TRUE   | 12/2/2011  | NJTransit ETT 601: November 6, 2011          | 12/2/2011     |
| Main Line                 | 2.2     | 7.1    | 16'6"  | TRUE   | 12/2/2011  | NJTransit ETT 601: November 6, 2011          | 12/1/2011     |
| Main Line                 | 7.1     | 8      | 15'6"  | TRUE   | 12/2/2011  | NJTransit ETT 601: November 6, 2011          | 12/2/2011     |
| Main Line                 | 8       | 20     | 17'3"  | TRUE   | 12/2/2011  | NJTransit ETT 601: November 6, 2011          | 12/2/2011     |
| Main Line                 | 20      | 31.3   | 20'3"  | TRUE   | 12/2/2011  | NJTransit ETT 601: November 6, 2011          | 12/2/2011     |
| N. Jersey Coast Ln (No.)  | 0       | 6.7    | 16'6"  | TRUE   | 12/1/2011  | NJTransit ETT 601: November 6, 2011          | 12/1/2011     |
| N. Jersey Coast Ln (Mid)  | 20.1    |        | 16'3"  | TRUE   | 12/1/2011  | NJTransit ETT 601: November 6, 2011          | 12/1/2011     |
| N. Jersey Coast Ln (So.)  | 0       | 2      | 15'8"  | TRUE   | 12/1/2011  | NJTransit ETT 601: November 6, 2011          | 12/1/2011     |
| N. Jersey Coast Ln (So.)  | 2       | 15.9   | 17'0"  | TRUE   | 12/1/2011  | NJTransit ETT 601: November 6, 2011          | 12/1/2011     |
| N. Jersey Coast Ln (So.)  | 15.9    | 38.1   | 16'8"  | TRUE   | 12/1/2011  | NJTransit ETT 601: November 6, 2011          | 12/1/2011     |
| Pascack Valley Line       | 7.7     | 30.7   | 17'0"  | TRUE   | 12/5/2011  | NJTransit ETT 601: November 6, 2011          | 12/5/2011     |
| Pascack Valley Line       | 30.7    | 31.3   | 16'0"  | TRUE   | 12/5/2011  | NJTransit ETT 601: November 6, 2011          | 12/5/2011     |
| Northern Branch           | 1.6     | 6      | 20'2'' | TRUE   | 2/16/2012  | Conrail ETT 9: June 20,2011                  | 2/16/2012     |
| Washington Secondary      | 58      | 80.2   | 16"6   | TRUE   | 3/1/2012   | NS Harrisburg ETT 1: August 4, 2008          |               |

## Number of Tracks

|  |              |               | Number    | Date       |  |                          |                |
|--|--------------|---------------|-----------|------------|--|--------------------------|----------------|
| Line Name  | From MP      | To MP         | of Tracks | Modified   | Source   | Creation Date            | Edited         |
| Pascack Valley Line                                  | 7.7          | 8.9           | 2         |            | NJTransit ETT 601: November 6, 2011  |                          | TRUE           |
| Bergen County Line                                   | 3.09         | 19            |           |            | NJTransit ETT 601: November 6, 2011  |                          | FALSE          |
| Montclair-Boonton Line                               | 12           | 15.8          | 2         |            | NJTransit ETT 601: November 6, 2011  |                          | TRUE           |
| Gladstone Line                                       | 20           | 42            | 1         |            | NJTransit ETT 601: November 6, 2011  | -                        | FALSE          |
| Main Line  | 2            | 4.3           | 4         | 11-        | NJTransit ETT 601: November 6, 2011  |                          | TRUE           |
| Main Line  | 4.3<br>5.38  | 5.38<br>20.26 | 1         |            | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011 |                          | TRUE<br>TRUE   |
| Main Line<br>Main Line                               | 20.26        | 20.26         | 3         |            | NJTransit ETT 601: November 6, 2011  | -                        | FALSE          |
| Main Line  | 23.5         | 31.31         | 2         |            | NJTransit ETT 601: November 6, 2011  |                          | FALSE          |
| Montclair Line                                       | 8.97         | 12.73         | 2         |            | NJTransit ETT 501: April 3, 2010   |                          | TRUE           |
| Morristown Line                                      | 1            | 2.17          | 4         |            | NJTransit ETT 501: April 3, 2010   |                          | FALSE          |
| Morristown Line                                      | 2.17         | 7.19          | 3         |            | NJTransit ETT 501: April 3, 2010   |                          | TRUE           |
| Morristown Line                                      | 7.19         | 7.72          | 2         | 10/19/2011 | NJTransit ETT 501: April 3, 2010   |                          | FALSE          |
| Morristown Line                                      | 7.72         | 16.87         | 3         | 10/19/2011 | NJTransit ETT 501: April 3, 2010   |                          | FALSE          |
| Morristown Line                                      | 16.87        | 46            | 2         | 10/19/2011 | NJTransit ETT 501: April 3, 2010   |                          | FALSE          |
| Morristown Line                                      | 46           | 58            | 1         | 10/19/2011 | NJTransit ETT 501: April 3, 2010   |                          | FALSE          |
| Raritan Valley Line                                  | 15           | 37.1          | 2         |            | NJTransit ETT 601: November 6, 2011  |                          | FALSE          |
| Raritan Valley Line                                  | 37.1         | 45.2          | 1         |            | NJTransit ETT 601: November 6, 2011  |                          | TRUE           |
| Raritan Valley Line                                  | 49.6         | 52.07         | 2         |            | NJTransit ETT 601: November 6, 2011  |                          | FALSE          |
| Raritan Valley Line                                  | 52.07        | 67            | 1         |            | NJTransit ETT 601: November 6, 2011  |                          | FALSE          |
| N. Jersey Coast Ln (No.)                             | 0            | 1.1           | 2         |            | NJTransit ETT 601: November 6, 2011  |                          | FALSE          |
| N. Jersey Coast Ln (No.)                             | 1.1          | 2<br>36.09    | 3         |            | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011 | +                        | FALSE<br>FALSE |
| N. Jersey Coast Ln (Mid)<br>N. Jersey Coast Ln (So.) | 36.09        | 36.09         | 1         |            | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011 |                          | FALSE          |
| N. Jersey Coast Ln (So.)                             | 36.09        | 30.25         | 2         |            | NJTransit ETT 601: November 6, 2011  | -                        | FALSE          |
| Montclair-Boonton Line                               | 15.8         | 22            | 1         |            | NJTransit ETT 601: November 6, 2011  | 12/1/2011                | TRUE           |
| Northeast Corridor Line                              | 1.2          | 4             | 2         |            | Amtrak Northeast Corridor ETT 4: November 7, 2011                          | 1-/1/-011                | TRUE           |
| Northeast Corridor Line                              | 4            | 4.7           | 3         |            | Amtrak Northeast Corridor ETT 4: November 7, 2011                          |                          | TRUE           |
| Northeast Corridor Line                              | 4.7          | 6             |           |            | Amtrak Northeast Corridor ETT 4: November 7, 2011                          |                          | TRUE           |
| Northeast Corridor Line                              | 6            | 7.2           | 2         | 11/14/2011 | Amtrak Northeast Corridor ETT 4: November 7, 2011                          |                          | TRUE           |
| Port Reading Secondary                               | 0            | 16            | 1         | 10/27/2011 | Conrail ETT 9: June 20, 2011   |                          | FALSE          |
| Portland Secondary                                   | 0            | 22            | 1         | 2/9/2012   | NS Harrisburg ETT 1: August 4, 2008  |                          | FALSE          |
| Freehold Secondary                                   | 5.6          | 24.6          | 1         | 2/9/2012   | Conrail ETT 9: June 20, 2011   | 2/9/2012                 | TRUE           |
| Lehigh Line  | 9            | 35.8          | 2         |            | Conrail ETT 9: June 20, 2011   | 10/21/2011               | TRUE           |
| Lehigh Line  | 35.8         | 38.2          | 2         |            | NS Harrisburg ETT 1: August 4, 2008  | 10/25/2011               | TRUE           |
| Lehigh Line  | 38.2         | 51            | 1         |            | NS Harrisburg ETT 1: August 4, 2008  | 10/25/2011               | TRUE           |
| Lehigh Line  | 51           | 53.6          | 2         |            | NS Harrisburg ETT 1: August 4, 2008  | 10/25/2011               | TRUE           |
| Lehigh Line  | 62.3<br>64   | 64<br>64.5    | 2         |            | NS Harrisburg ETT 1: August 4, 2008  | 10/25/2011               | TRUE<br>TRUE   |
| Lehigh Line<br>Lehigh Line                           | 64.5         | 67.1          | 1         |            | NS Harrisburg ETT 1: August 4, 2008<br>NS Harrisburg ETT 1: August 4, 2008 | 10/25/2011<br>10/25/2011 | TRUE           |
| Lehigh Line  | 67.1         | 76.6          | 1         |            | NS Harrisburg ETT 1: August 4, 2008  | 10/25/2011               | TRUE           |
| Passaic & Harsimus Branch                            | 07.1         | 0.8           | 2         |            | Conrail ETT 9: June 20, 2011   | 10/21/2011               | TRUE           |
| Passaic & Harsimus Branch                            | 0.8          | 1.6           | 1         |            | Conrail ETT 9: June 20, 2011   | 10/21/2011               | TRUE           |
| Passaic & Harsimus Branch                            | 1.6          | 7.7           |           |            | Conrail ETT 9: June 20, 2011   | 10/21/2011               | TRUE           |
| National Docks Secondary                             | 0            | 5.8           | 1         | 1          | Conrail ETT 9: June 20, 2011   | 10/25/2011               | TRUE           |
| National Docks Secondary                             | 5.8          | 7.2           | 2         |            | Conrail ETT 9: June 20, 2011   | 10/25/2011               | TRUE           |
| Amboy Secondary                                      | 0.2          | 5.9           | 1         | 10/26/2011 | Conrail ETT 9: June 20, 2011   | 10/26/2011               | TRUE           |
| Amboy Secondary                                      | 5.9          | 7.2           | 2         | 10/26/2011 | Conrail ETT 9: June 20, 2011   | 10/26/2011               | TRUE           |
| Amboy Secondary                                      | 7.2          | 19            | 1         |            | Conrail ETT 9: June 20, 2011   | 10/26/2011               | TRUE           |
| Chemical Coast Secondary                             | 1.4          | 4.4           | 3         |            | Conrail ETT 9: June 20, 2011   | 10/26/2011               | TRUE           |
| Chemical Coast Secondary                             | 4.4          | 6.2           |           |            | Conrail ETT 9: June 20, 2011   | 10/26/2011               | TRUE           |
| Chemical Coast Secondary                             | 6.2          | 8             |           |            | Conrail ETT 9: June 20, 2011   | 10/26/2011               | TRUE           |
| Chemical Coast Secondary                             | 8            | 1             |           |            | Conrail ETT 9: June 20, 2011   | 10/26/2011               | TRUE           |
| Chemical Coast Secondary                             | 9            | 1             | 1         |            | Conrail ETT 9: June 20, 2011   | 10/26/2011               | TRUE           |
| Chemical Coast Secondary                             | 13.1         | 14.1          | 2         |            | Conrail ETT 9: June 20, 2011   | 10/26/2011               |                |
| Chemical Coast Secondary<br>Southern Secondary       | 14.1<br>38.3 | 14.8<br>65.9  | 1         |            | Conrail ETT 9: June 20, 2011<br>Conrail ETT 9: June 20, 2011               | 10/26/2011<br>10/27/2011 | TRUE<br>TRUE   |
| West Trenton Line                                    | 31.207       | 35.7          | 2         |            | CSX Albany Division ETT #6: October 15, 2010                               | 11/10/2011               | TRUE           |
| West Trenton Line                                    | 31.207       | 57.731        | 1         | 1          | CSX Albany Division ETT #6: October 15, 2010                               | 11/10/2011               | TRUE           |
| Lehigh Line  | 53.6         | 62.3          | 1         |            | NS Harrisburg ETT 1: August 4, 2008  | 10/25/2011               | TRUE           |
| Waterfront Connection (Reverse                       | 55.0         | 02.0          |           |            |  |                          |                |
| Kearny)  | 0            | 0.8           | 1         | 11/14/2011 | NJTransit ETT 601: November 6, 2011  | 11/14/2011               | TRUE           |
| Sayreville Secondary                                 | 0            | 9.812         | 1         | 11/14/2011 | Conrail Philadelphia Division Track Chart 1999                             | 11/14/2011               | TRUE           |
| River Line   | 1.8          | 10.8          | 2         |            | CSX Albany Division ETT #6: October 15, 2010                               | 11/14/2011               | TRUE           |
| River Line   | 10.8         | 18.8          | 1         |            | CSX Albany Division ETT #6: October 15, 2010                               | 11/14/2011               | TRUE           |
| Northeast Corridor Line                              | 7.2          | 8.5           | 3         |            | Amtrak Northeast Corridor ETT 4: November 7, 2011                          | 11/14/2011               | TRUE           |
|  | 0.5          | 9             |           |            |  | 11/14/2011               | TRUE           |
| Northeast Corridor Line                              | 8.5          | 9             | 6         | 11/14/2011 | Amtrak Northeast Corridor ETT 4: November 7, 2011                          | 11/14/2011               | TROL           |

## Number of Tracks

|                           |         |       | Number    | Date       |   |               |        |
|---------------------------|---------|-------|-----------|------------|---|---------------|--------|
| Line Name                 | From MP | To MP | of Tracks | Modified   | Source  | Creation Date | Edited |
| Northeast Corridor Line   | 10.5    | 12.3  | 6         | 11/14/2011 | Amtrak Northeast Corridor ETT 4: November 7, 2011 | 11/14/2011    | TRUE   |
| Northeast Corridor Line   | 12.3    | 14.7  | 4         | 11/14/2011 | Amtrak Northeast Corridor ETT 4: November 7, 2011 | 11/14/2011    | TRUE   |
| Northeast Corridor Line   | 14.7    | 19.7  | 6         | 11/14/2011 | Amtrak Northeast Corridor ETT 4: November 7, 2011 | 11/14/2011    | TRUE   |
| Northeast Corridor Line   | 19.7    | 55.7  | 4         | 11/14/2011 | Amtrak Northeast Corridor ETT 4: November 7, 2011 | 11/14/2011    | TRUE   |
| Northeast Corridor Line   | 55.7    | 56.7  | 6         | 11/14/2011 | Amtrak Northeast Corridor ETT 4: November 7, 2011 | 11/14/2011    | TRUE   |
| Northeast Corridor Line   | 56.7    | 57.7  | 4         | 11/14/2011 | Amtrak Northeast Corridor ETT 4: November 7, 2011 | 11/14/2011    | TRUE   |
| Raritan Valley Line       | 45.2    | 45.8  | 2         | 11/12/2011 | NJTransit ETT 601: November 6, 2011               | 11/12/2011    | TRUE   |
| Raritan Valley Line       | 45.8    | 66.6  | 1         | 11/12/2011 | NJTransit ETT 601: November 6, 2011               | 11/12/2011    | TRUE   |
| Montclair-Boonton Line    | 22      | 23.3  | 2         | 12/1/2011  | NJTransit ETT 601: November 6, 2011               | 12/1/2011     | TRUE   |
| Montclair-Boonton Line    | 23.3    | 33.9  | 1         | 12/1/2011  | NJTransit ETT 601: November 6, 2011               | 12/1/2011     | TRUE   |
| Pascack Valley Line       | 8.9     | 10.7  | 1         | 12/5/2011  | NJTransit ETT 601: November 6, 2011               | 12/5/2011     | TRUE   |
| Pascack Valley Line       | 10.7    | 11.3  | 2         | 12/5/2011  | NJTransit ETT 601: November 6, 2011               | 12/5/2011     | TRUE   |
| Pascack Valley Line       | 11.3    | 14.3  | 1         | 12/5/2011  | NJTransit ETT 601: November 6, 2011               | 12/5/2011     | TRUE   |
| Pascack Valley Line       | 14.3    | 14.7  | 2         | 12/5/2011  | NJTransit ETT 601: November 6, 2011               | 12/5/2011     | TRUE   |
| Pascack Valley Line       | 14.7    | 25.2  | 1         | 12/5/2011  | NJTransit ETT 601: November 6, 2011               | 12/5/2011     | TRUE   |
| Third Branch              | 0       | 1.3   | 1         | 2/9/2012   | Conrail Philadelphia Division Track Chart 1999    | 2/9/2012      | TRUE   |
| Avenue "A" Run Track      | 0       | 0.8   | 1         | 2/9/2012   | Conrail Philadelphia Division Track Chart 1999    | 2/9/2012      | TRUE   |
| Bay Shore Industrial      | 0       | 1.1   | 1         | 2/9/2012   | Conrail Philadelphia Division Track Chart 1999    | 2/9/2012      | TRUE   |
| Bayway Industrial 1 Track | 10.5    | 11.3  | 1         | 2/9/2012   | Conrail Philadelphia Division Track Chart 1999    | 2/9/2012      | TRUE   |
| Bayway Industrial Track   | 0.709   | 2.27  | 1         | 2/9/2012   | Conrail Philadelphia Division Track Chart 1999    | 2/9/2012      | TRUE   |
| Bonhamtown Industrial     | 0       | 2.7   | 1         | 2/9/2012   | Conrail Philadelphia Division Track Chart 1999    | 2/9/2012      | TRUE   |
| Carlton Hill              | 8.8     | 10.2  | 1         | 2/9/2012   | NS Harrisburg ETT 1: August 4, 2008               | 2/9/2012      | TRUE   |
| Carteret Branch           | 0       | 1.3   | 1         | 2/9/2012   | Conrail Philadelphia Division Track Chart 1999    | 2/9/2012      | TRUE   |
| Hightstown Industrial     | 0.2     | 5.4   | 1         | 2/9/2012   | Conrail Philadelphia Division Track Chart 1999    | 2/9/2012      | TRUE   |
| Irvington Industrial      | 12.7    | 15.5  | 1         | 2/9/2012   | Conrail Philadelphia Division Track Chart 1999    | 2/9/2012      | TRUE   |
| Washington Secondary      | 58      | 80.3  | 1         | 2/9/2012   | NS Harrisburg Division Track Chart 2008           | 2/9/2012      | TRUE   |
| Northern Branch           | 6       | 5.4   | 1         | 2/16/2012  | Conrail ETT 9: June 20, 2011                      | 2/16/2012     | TRUE   |
| Northern Branch           | 5.4     | 1.6   | 2         | 2/16/2012  | Conrail ETT 9: June 20, 2011                      | 2/16/2012     | TRUE   |

#### Other Features

|  | 1            |                               |   | 1             | D-+-             |  | Currentiaur      |
|--|--------------|-------------------------------|---|---------------|------------------|--|------------------|
| Line Name  | МР           | Feature Name                  | Description                                     | Edited        | Date<br>Modified | Source   | Creation<br>Date |
| Bergen County Line                                 |              | Laurel                        | Interlocking                                    | TRUE          |                  | NJTransit ETT 601: November 6, 2011  | Juic             |
| Bergen County Line                                 | 5.4          | НХ                            | Interlocking - moveable bridge                  | FALSE         | 12/2/2011        | NJTransit ETT 601: November 6, 2011  |                  |
| Bergen County Line                                 | 7.6          | Pascack Jct                   | Interlocking - Pascack Valley Line              | FALSE         |                  | NJTransit ETT 601: November 6, 2011  |                  |
| Bergen County Line                                 | 1            | West BJ                       | Control Point                                   | FALSE         |                  | NJTransit ETT 601: November 6, 2011  | _                |
| Bergen County Line                                 | 14.2         | BT                            | Interlocking - NYS&W                            | FALSE         |                  | NJTransit ETT 601: November 6, 2011  | _                |
| Bergen County Line                                 | 19           | -                             | Interlocking - Main Line                        | FALSE         |                  | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011                             |                  |
| Montclair Line<br>Montclair Line                   | 9.2          | Ampere                        | Interlocking<br>Interlocking                    | TRUE          |                  | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011                             |                  |
| River Line   | 1.3          | 1 North Bergen Yard           | Control Point                                   | FALSE         |                  | CSX Albany Division ETT #6: October 15, 2010   |                  |
| River Line   |              | CP-3                          | Interlocking                                    | TRUE          |                  | CSX Albany Division ETT #6: October 15, 2010   |                  |
| River Line   | 5.8          | CP-5                          | Interlocking                                    | TRUE          | 11/22/2011       | CSX Albany Division ETT #6: October 15, 2010   |                  |
| River Line   | 7.6          |                               | Interlocking                                    | TRUE          |                  | CSX Albany Division ETT #6: October 15, 2010   |                  |
| River Line   | 10.9         | CP-10                         | Interlocking                                    | TRUE          |                  | CSX Albany Division ETT #6: October 15, 2010   | _                |
| River Line   | 18.8         | NJ-NY State Line              | Boundary Line                                   | FALSE         | 1                | CSX Albany Division ETT #6: October 15, 2010   | _                |
| Gladstone Line<br>Gladstone Line                   | 20.1         | Summit<br>West Summit         | Interlocking - Morristown Line<br>Control Point | FALSE         |                  | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011                             |                  |
| Gladstone Line                                     | 23.4         | Murray Hill                   | Interlocking - siding                           | TRUE          |                  | NJTransit ETT 601: November 6, 2011  |                  |
| Gladstone Line                                     | 28.5         | Stirling                      | Interlocking - siding                           | FALSE         |                  | NJTransit ETT 601: November 6, 2011  | -                |
| Gladstone Line                                     | 31           | Lyons' Siding                 | 1100 ft   | FALSE         |                  | NJTransit ETT 601: November 6, 2011  |                  |
| Gladstone Line                                     | 34.8         | Bernardsville                 | Interlocking - siding                           | FALSE         | 12/1/2011        | NJTransit ETT 601: November 6, 2011  |                  |
| Gladstone Line                                     | 41.9         | East Gladstone                | Control Point                                   | FALSE         |                  | NJTransit ETT 601: November 6, 2011  |                  |
| Main Line  | 2.2          | West End                      | Interlocking                                    | FALSE         |                  | NJTransit ETT 601: November 6, 2011  | <u> </u>         |
| Main Line  | 4.3          | Laurel                        | Interlocking - BC                               | TRUE          |                  | NJTransit ETT 601: November 6, 2011  |                  |
| Main Line<br>Main Line                             | 5 11.1       | West Secaucus<br>Paterson Jct | Interlocking - Moveable Bridge<br>Interlocking  | TRUE          |                  | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011                             | +                |
| Main Line  | 11.1         | Paterson Jct<br>Suscon        | Interlocking - NYS&W                            | TRUE          |                  | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011                             | +                |
| Main Line  | 23.6         |                               | Interlocking                                    | FALSE         |                  | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011                             | +                |
| Main Line  | 30.5         | SF                            | Interlocking - Suffern                          | FALSE         |                  | NJTransit ETT 601: November 6, 2011  | 1                |
| Main Line  | 21.5         | Camerons                      | Control Point                                   | FALSE         |                  | NJTransit ETT 601: November 6, 2011  |                  |
| Montclair-Boonton Line                             | 33.9         | Denville                      | Interlocking                                    | FALSE         |                  | NJTransit ETT 601: November 6, 2011  |                  |
| Montclair-Boonton Line                             | 22.8         | Lincoln Park                  | Interlocking                                    | FALSE         |                  | NJTransit ETT 601: November 6, 2011  |                  |
| Montclair-Boonton Line                             | 16.4         | Notch                         | Interlocking                                    | FALSE         |                  | NJTransit ETT 601: November 6, 2011  | _                |
| Montclair-Boonton Line<br>Montclair-Boonton Line   | 15.8<br>15.5 | Clove<br>Cedar                | Control Point<br>Interlocking                   | TRUE          |                  | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011                             |                  |
| Morristown Line                                    | 0.1          | Terminal                      | Interlocking                                    | FALSE         |                  | NJTransit ETT 601: November 6, 2011  |                  |
| Morristown Line                                    | 0.1          | East End                      | Interlocking                                    | FALSE         |                  | NJTransit ETT 601: November 6, 2011  | -                |
| Morristown Line                                    |              | West End                      | Interlocking                                    | FALSE         |                  | NJTransit ETT 601: November 6, 2011  |                  |
| Morristown Line                                    | 2.7          | Lower Hack                    | Interlocking                                    | FALSE         | 11/22/2011       | NJTransit ETT 601: November 6, 2011  |                  |
| Morristown Line                                    | 7.7          | Broad                         | Interlocking                                    | FALSE         |                  | NJTransit ETT 601: November 6, 2011  |                  |
| Morristown Line                                    | 16.5         | Millburn                      | Interlocking                                    | FALSE         |                  | NJTransit ETT 601: November 6, 2011  |                  |
| Morristown Line                                    | 20.1         | Summit                        | Interlocking                                    | FALSE         |                  | NJTransit ETT 601: November 6, 2011  | _                |
| Morristown Line<br>Morristown Line                 | 38.1<br>39.4 | Dover<br>Wharton              | Interlocking<br>Control Point                   | FALSE         |                  | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011                             |                  |
| Morristown Line                                    | 39.7         | D&R Jct                       | Junction  | FALSE         |                  | NJTransit ETT 601: November 6, 2011  |                  |
| Morristown Line                                    | 41.4         | Chester Branch                | Junction  | FALSE         |                  | NJTransit ETT 601: November 6, 2011  |                  |
| Morristown Line                                    | 45.2         | Morris                        | Junction  | FALSE         | 11/22/2011       | NJTransit ETT 601: November 6, 2011  |                  |
| Morristown Line                                    | 45.8         | UN                            | Control Point                                   | FALSE         |                  | NJTransit ETT 601: November 6, 2011  |                  |
| Morristown Line                                    | 46.7         | Roxbury                       | Yard Junction                                   | FALSE         |                  | NJTransit ETT 601: November 6, 2011  |                  |
| Morristown Line                                    | 49.8         | Olive                         | Control Point                                   | FALSE         |                  | NJTransit ETT 601: November 6, 2011  |                  |
| Morristown Line                                    | 56.8<br>58   | Cook<br>BILL                  | Control Point<br>CR - NS Division Post          | FALSE         |                  | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011                             | _                |
| Morristown Line<br>N. Jersey Coast Ln (So.)        | 38           |                               | Hand Crossover                                  | FALSE         |                  | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011                             |                  |
| N. Jersey Coast Ln (So.)                           | 2            | Rare                          | Interlocking                                    | TRUE          |                  | NJTransit ETT 601: November 6, 2011  | -                |
| N. Jersey Coast Ln (So.)                           | 0.7          | Essay                         | Interlocking                                    | TRUE          |                  | NJTransit ETT 601: November 6, 2011  |                  |
| N. Jersey Coast Ln (So.)                           | 1.2          | Church                        | Interlocking                                    | TRUE          | 12/1/2011        | NJTransit ETT 601: November 6, 2011  |                  |
| N. Jersey Coast Ln (So.)                           |              | East Matawan                  | Interlocking                                    | TRUE          |                  | NJTransit ETT 601: November 6, 2011  |                  |
| N. Jersey Coast Ln (So.)                           |              | Lloyd                         | Interlocking                                    | TRUE          |                  | NJTransit ETT 601: November 6, 2011  | <u> </u>         |
| Northeast Corridor Line                            | 0.2          |                               | Interlocking                                    | FALSE         |                  | Amtrak Northeast Corridor ETT 4: November 7, 2011  |                  |
| Northeast Corridor Line<br>Northeast Corridor Line |              | NJ-NY State Line<br>MID       | Boundary<br>Control Point                       | FALSE         |                  | Amtrak Northeast Corridor ETT 4: November 7, 2011<br>Amtrak Northeast Corridor ETT 4: November 7, 2011 | +                |
| Northeast Corridor Line                            | 1            | Bergen                        | Interlocking                                    | FALSE         |                  | Amtrak Northeast Corridor ETT 4: November 7, 2011<br>Amtrak Northeast Corridor ETT 4: November 7, 2011 | +                |
| Northeast Corridor Line                            | 4            | Allied                        | Interlocking                                    | FALSE         |                  | Amtrak Northeast Corridor ETT 4: November 7, 2011<br>Amtrak Northeast Corridor ETT 4: November 7, 2011 | +                |
| Northeast Corridor Line                            | 4.7          | Erie                          | Interlocking                                    | FALSE         | 11/21/2011       | Amtrak Northeast Corridor ETT 4: November 7, 2011  |                  |
| Northeast Corridor Line                            |              | Lack                          | Interkocking                                    | FALSE         |                  | Amtrak Northeast Corridor ETT 4: November 7, 2011  |                  |
| Northeast Corridor Line                            |              | Portal                        | Interlocking                                    | FALSE         |                  | Amtrak Northeast Corridor ETT 4: November 7, 2011  |                  |
| Northeast Corridor Line                            |              | Swift                         | Interlocking                                    | FALSE         |                  | Amtrak Northeast Corridor ETT 4: November 7, 2011  |                  |
| Northeast Corridor Line<br>Northeast Corridor Line |              | Hudson                        | Interlocking - IS<br>Interlocking - IS          | FALSE         |                  | Amtrak Northeast Corridor ETT 4: November 7, 2011  | +                |
| Northeast Corridor Line<br>Northeast Corridor Line | 7.8          | REA<br>Harrison               | Interlocking - IS<br>PS                         | TRUE<br>FALSE |                  | Amtrak Northeast Corridor ETT 4: November 7, 2011<br>Amtrak Northeast Corridor ETT 4: November 7, 2011 | +                |
| Northeast Corridor Line                            |              | Cliff                         | Interlocking                                    | FALSE         |                  | Amtrak Northeast Corridor ETT 4: November 7, 2011<br>Amtrak Northeast Corridor ETT 4: November 7, 2011 | +                |
| Northeast Corridor Line                            | 1            | Hunter                        | Interlocking - IS                               | FALSE         |                  | Amtrak Northeast Corridor ETT 4: November 7, 2011  | 1                |
| Northeast Corridor Line                            |              | Haynes                        | Interlocking                                    | FALSE         |                  | Amtrak Northeast Corridor ETT 4: November 7, 2011  |                  |
| Northeast Corridor Line                            | 12.3         | Lane                          | Interlocking                                    | FALSE         | 11/21/2011       | Amtrak Northeast Corridor ETT 4: November 7, 2011  |                  |
| Northeast Corridor Line                            | 1            | Elmora                        | Interlocking                                    | FALSE         |                  | Amtrak Northeast Corridor ETT 4: November 7, 2011  | _ <u> </u>       |
| Northeast Corridor Line                            | 19.7         | Union                         | Interlocking - IS                               | FALSE         |                  | Amtrak Northeast Corridor ETT 4: November 7, 2011  |                  |
| Northeast Corridor Line                            |              | Iselin<br>Monio               | Interlocking                                    | FALSE         |                  | Amtrak Northeast Corridor ETT 4: November 7, 2011  |                  |
| Northeast Corridor Line<br>Northeast Corridor Line | 1            | Menlo<br>Lincoln              | Interlocking<br>Interlocking                    | FALSE         |                  | Amtrak Northeast Corridor ETT 4: November 7, 2011<br>Amtrak Northeast Corridor ETT 4: November 7, 2011 | +                |
| Northeast Corridor Line                            | 26<br>28.1   | Lincoln<br>Edison             | Interlocking<br>Interlocking                    | FALSE         |                  | Amtrak Northeast Corridor ETT 4: November 7, 2011<br>Amtrak Northeast Corridor ETT 4: November 7, 2011 |                  |
| Northeast Corridor Line                            | 32.8         | County                        | Interlocking                                    | FALSE         |                  | Amtrak Northeast Corridor ETT 4: November 7, 2011<br>Amtrak Northeast Corridor ETT 4: November 7, 2011 | +                |
| Northeast Corridor Line                            | 1            | Midway                        | Interlocking                                    | FALSE         |                  | Amtrak Northeast Corridor ETT 4: November 7, 2011<br>Amtrak Northeast Corridor ETT 4: November 7, 2011 |                  |
| Northeast Corridor Line                            |              | Ham                           | Interlocking                                    | FALSE         |                  | Amtrak Northeast Corridor ETT 4: November 7, 2011  |                  |
| Northeast Corridor Line                            | 56.4         |                               | Interlocking                                    | FALSE         |                  | Amtrak Northeast Corridor ETT 4: November 7, 2011  |                  |
| Northeast Corridor Line                            |              | NJ-PA State Line              | Boundary  | FALSE         |                  | Amtrak Northeast Corridor ETT 4: November 7, 2011  |                  |
| Pascack Valley Line                                |              | Pascack Jct                   | Interlocking - Bergen County                    | TRUE          | 1                | NJTransit ETT 601: November 6, 2011  |                  |

#### Other Features

|  | 1     | 1                       |   |              | Date       |  | Creation               |
|--|-------|-------------------------|---|--------------|------------|--|------------------------|
| Line Name                                    | MP    | Feature Name            | Description                             | Edited       | Modified   | Source   | Date                   |
| Port Reading Secondary                       | 0.4   |                         | HCD-E                                   | FALSE        |            |  |                        |
| Port Reading Secondary                       | 14.8  |                         | Interlocking                            | FALSE        |            |  |                        |
| Port Reading Secondary                       | 15.6  | Port Reading            | HCD-W                                   | FALSE        |            |  |                        |
| Raritan Valley Line                          | 60.1  | Division Post           | Central Industrial Track - NS           | FALSE        | 11/12/2011 | NJTransit ETT 601: November 6, 2011  |                        |
| Raritan Valley Line                          | 54    | End of Station Track    | End                                     | FALSE        | 11/12/2011 | NJTransit ETT 601: November 6, 2011  |                        |
| Raritan Valley Line                          | 52.1  | Arch                    | Interlocking                            | FALSE        | 11/12/2011 | NJTransit ETT 601: November 6, 2011  |                        |
| Raritan Valley Line                          | 49.7  | Clinton                 | Interlocking                            | FALSE        | 11/12/2011 | NJTransit ETT 601: November 6, 2011  |                        |
| Raritan Valley Line                          | 37    | Brad                    | Interlocking                            | FALSE        | 11/12/2011 | NJTransit ETT 601: November 6, 2011  |                        |
| Raritan Valley Line                          | 36.1  | Boyd                    | Interlocking                            | FALSE        | 11/12/2011 | NJTransit ETT 601: November 6, 2011  |                        |
| Raritan Valley Line                          | 30    | Brook                   | Interlocking - CR Lehigh Line           | FALSE        | 11/12/2011 | NJTransit ETT 601: November 6, 2011  |                        |
| Raritan Valley Line                          | 23.7  | Plain                   | Control Point                           | FALSE        | 11/12/2011 | NJTransit ETT 601: November 6, 2011  |                        |
| Raritan Valley Line                          | 23.9  | Grant Ave               | Rock Industrial Track                   | FALSE        | 11/12/2011 | NJTransit ETT 601: November 6, 2011  |                        |
| Raritan Valley Line                          | 22.8  | Queen                   | Interlocking                            | FALSE        | 11/12/2011 | NJTransit ETT 601: November 6, 2011  |                        |
| Raritan Valley Line                          | 19.3  | Scotch                  | Control Point                           | FALSE        | 11/12/2011 | NJTransit ETT 601: November 6, 2011  |                        |
| Raritan Valley Line                          | 18.2  | Clark                   | Interlocking - Garwood Industrial Track | FALSE        | 11/12/2011 | NJTransit ETT 601: November 6, 2011  |                        |
| Raritan Valley Line                          | 15    | Aldene                  | Interlocking - CR Lehigh Line           | TRUE         | 11/12/2011 | NJTransit ETT 601: November 6, 2011  |                        |
| Raritan Valley Line                          | 45.2  | Tunk                    | Interlocking                            | TRUE         | 11/12/2011 | NJTransit ETT 601: November 6, 2011  |                        |
| Raritan Valley Line                          | 45.8  | Cush                    | Interlocking                            | TRUE         | 11/12/2011 | NJTransit ETT 601: November 6, 2011  |                        |
| ,<br>Morristown Line                         | 3.9   |                         | Interlocking                            | TRUE         |            | NJTransit ETT 601: November 6, 2011  | 11/22/2011             |
| Morristown Line                              | 4.3   |                         | Interlocking                            | TRUE         |            | NJTransit ETT 601: November 6, 2011  | 11/22/2011             |
| Morristown Line                              | 5.7   |                         | Interlocking                            | TRUE         |            |  | 11/22/2011             |
| Morristown Line                              | 7.1   |                         | Interlocking                            | TRUE         |            | NJTransit ETT 601: November 6, 2011  | 11/22/2011             |
| Morristown Line                              | 9     | Roseville Avenue        | Interlocking                            | TRUE         |            |  | 11/22/2011             |
| Morristown Line                              | 9.5   |                         | Interlocking                            | TRUE         | 11/22/2011 | NJTransit ETT 601: November 6, 2011  | 11/22/2011             |
| Morristown Line                              |       | Baker                   | Interlocking                            | TRUE         |            | NJTransit ETT 601: November 6, 2011  | 11/22/2011             |
| West Trenton Line                            | 57.3  | Port Reading Jct        | Interlocking                            | TRUE         |            | CSX Albany Division ETT #6: October 15, 2010                                       | 11/22/2011             |
| West Trenton Line                            | 35.7  | CP Wing                 | Interlocking                            | TRUE         |            | CSX Albany Division ETT #6: October 15, 2010                                       | 11/22/2011             |
| West Trenton Line                            | 32.6  | -                       | Interlocking                            | TRUE         | 11/22/2011 |  | 11/22/2011             |
| West Trenton Line                            | 31.38 | NJ/PA State Line        | Boundary Line                           | TRUE         | 11/22/2011 |  | 11/22/2011             |
| Northeast Corridor Line                      | 8.5   |                         | Interlocking                            | TRUE         |            | Amtrak Northeast Corridor ETT 4: November 7, 2011                                  | 11/21/2011             |
| Northeast Corridor Line                      | 18.7  | Merck                   | Interlocking                            | TRUE         |            | Amtrak Northeast Corridor ETT 4: November 7, 2011                                  | 11/21/2011             |
| Northeast Corridor Line                      | 20.6  |                         | Interlocking                            | TRUE         |            | Amtrak Northeast Corridor ETT 4: November 7, 2011                                  | 11/21/2011             |
| Gladstone Line                               | 39.1  | Far Hills               | Interlocking - siding                   | TRUE         |            | NJTransit ETT 601: November 6, 2011  | 12/1/2011              |
| Montclair Line                               | 12.4  | Glen                    | Interlocking                            | TRUE         | 12/1/2011  |  | 12/1/2011              |
| Main Line                                    | 20.3  |                         | Interlocking - BC                       | TRUE         |            | NJTransit ETT 601: November 6, 2011  | 12/2/2011              |
| N. Jersey Coast Ln (No.)                     | 0.2   | Graw                    | Interlocking                            | TRUE         |            | NJTransit ETT 601: November 6, 2011  | 12/1/2011              |
| N. Jersey Coast Ln (Mid)                     | 5.2   | Wood                    | Interlocking - Chemical Coast           | TRUE         |            | NJTransit ETT 601: November 6, 2011  | 12/1/2011              |
| N. Jersey Coast Ln (So.)                     | 3.1   | Morgan                  | Interlocking - Moveable Bridge          | TRUE         |            | NJTransit ETT 601: November 6, 2011  | 12/1/2011              |
| N. Jersey Coast Ln (So.)                     | 15.9  | -                       | Interlocking - Southern Secondary       | TRUE         |            | NJTransit ETT 601: November 6, 2011  | 12/1/2011              |
| N. Jersey Coast Ln (So.)                     | 19.8  |                         | Interlocking - Moveable Bridge          | TRUE         |            | NJTransit ETT 601: November 6, 2011  | 12/1/2011              |
| N. Jersey Coast Ln (So.)                     | 21.9  | Branchport              | Interlocking                            | TRUE         |            | NJTransit ETT 601: November 6, 2011  | 12/1/2011              |
| N. Jersey Coast Ln (So.)                     | 21.5  | Long Branch             | Interlocking                            | TRUE         |            | NJTransit ETT 601: November 6, 2011  | 12/1/2011              |
| N. Jersey Coast Ln (So.)                     | 22.7  | Bath                    | Interlocking                            | TRUE         |            | NJTransit ETT 601: November 6, 2011  | 12/1/2011              |
| N. Jersey Coast Ln (So.)                     | 30.4  | Shark                   | Interlocking - Moveable Bridge          | TRUE         | 12/1/2011  | NJTransit ETT 601: November 6, 2011  | 12/1/2011              |
| N. Jersey Coast Ln (So.)                     | 36    |                         | Interlocking - Moveable Bridge          | TRUE         |            | NJTransit ETT 601: November 6, 2011  | 12/1/2011              |
| Pascack Valley Line                          | 8.4   | Sport                   | Interlocking - Sports Line              | TRUE         |            | NJTransit ETT 601: November 6, 2011  | 12/5/2011              |
| Pascack Valley Line                          | 8.9   |                         | Interlocking                            | TRUE         |            | NJTransit ETT 601: November 6, 2011  | 12/5/2011              |
| Pascack Valley Line                          | 9.6   | Seamans                 | Interlocking                            | TRUE         |            | NJTransit ETT 601: November 6, 2011  | 12/5/2011              |
| Pascack Valley Line                          | 10.7  | East Sack               | Interlocking                            | TRUE         |            |  | 12/5/2011              |
| Pascack Valley Line                          | 10.7  |                         | Interlocking                            | TRUE         |            | NJTransit ETT 601: November 6, 2011  | 12/5/2011              |
| Pascack Valley Line                          | 11.3  |                         | Interlocking                            | TRUE         |            | NJTransit ETT 601: November 6, 2011  | 12/5/2011              |
| Pascack Valley Line                          | 14.3  |                         | Interlocking                            | TRUE         |            | NJTransit ETT 601: November 6, 2011  | 12/5/2011              |
| Pascack Valley Line<br>Pascack Valley Line   | 14.7  | Golf                    | Control Point                           | TRUE         |            | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011         | 12/5/2011              |
| Pascack Valley Line<br>Pascack Valley Line   |       | Park                    | Control Point<br>Control Point          | TRUE         |            | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011         | 12/5/2011              |
| Pascack Valley Line                          |       | NJ - NY State Line      | Boundry                                 | TRUE         |            | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011         | 12/5/2011              |
| Washington Secondary                         | 58    |                         | Block Limit                             | TRUE         |            | NS Harrisburg Division Track Chart 2008  | 2/9/2012               |
| Washington Secondary<br>Washington Secondary |       | WASHINGTON              | Block Limit                             | TRUE         |            | NS Harrisburg Division Track Chart 2008  | 2/9/2012               |
| Washington Secondary<br>Washington Secondary | 67.5  | RON                     | Block Limit                             | TRUE         |            | NS Harrisburg Division Track Chart 2008  | 2/9/2012               |
| Washington Secondary<br>Washington Secondary | 80.2  | PHILUPSBURG             | Block Limit                             | TRUE         |            | NS Harrisburg Division Track Chart 2008  | 2/9/2012               |
| Portland Secondary                           |       | EASTON                  | Block Limit                             | TRUE         |            | NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008 | 2/9/2012               |
| Portland Secondary                           |       | PHILIPS                 | Block Limit                             | TRUE         |            | NS Harrisburg Division Track Chart 2008  | 2/9/2012               |
| Portland Secondary<br>Portland Secondary     | 2.4   |                         | Block Limit                             | TRUE         |            | NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008 | 2/9/2012               |
| Portland Secondary<br>Portland Secondary     |       | BRAINARDS               |   |              |            | · · · · ·  |                        |
|  | 7.1   |                         | Block Limit                             | TRUE         |            | NS Harrisburg Division Track Chart 2008  | 2/9/2012               |
| Northern Branch                              | 6     |                         | Control Point                           | TRUE         | 2/16/2012  |  | 2/16/2012              |
| Northern Branch                              | 5.4   |                         | Control Point                           | TRUE         |            | Conrail ETT 9: June 20,2011  | 2/16/2012              |
|  | 5     | CP-Croxton              | Control Point                           | TRUE         | 2/16/2012  | Conrail ETT 9: June 20,2011  | 2/16/2012              |
| Northern Branch                              |       | CD Mart Cr.             | Control Dollar                          | TDUE         | 2/10/2012  | Caracil FTT 0, hug = 20,2011   | 2/10/2012              |
| Northern Branch<br>Northern Branch           | 4.6   | CP-West Croxton<br>CP-1 | Control Point<br>Control Point          | TRUE<br>TRUE |            | Conrail ETT 9: June 20,2011<br>Conrail ETT 9: June 20,2011                         | 2/16/2012<br>2/16/2012 |

## Rail Yards

|        |                             |                        | Operation |        | Date       |   |
|--------|-----------------------------|------------------------|-----------|--------|------------|---|
| MP     | Line Name                   | Yard Name              | Туре      | Edited | Modified   | Source  |
| 20.1   | Morristown Line             | Summit Yard            | P         | FALSE  | 11/22/2011 | NJTransit ETT 601: November 6, 2011               |
| 38.1   | Morristown Line             | Dover Yard             | Р         | FALSE  | 11/22/2011 | NJTransit ETT 601: November 6, 2011               |
| 46     | Morristown Line             | Port Morris Yard       | Р         | FALSE  | 11/22/2011 | NJTransit ETT 601: November 6, 2011               |
| 42.2   | Gladstone Line              | Gladstone Yard         | Р         | FALSE  | 12/1/2011  | NJTransit ETT 601: November 6, 2011               |
| 16.5   | Montclair-Boonton Line      | Great Notch Yard       | Р         | TRUE   | 12/1/2011  | NJTransit ETT 601: November 6, 2011               |
| 30.5   | Main Line                   | Suffern Yard           | Р         | FALSE  | 12/2/2011  | NJTransit ETT 601: November 6, 2011               |
| 23.8   | Main Line                   | Waldwick Yard          | Р         | FALSE  | 12/2/2011  | NJTransit ETT 601: November 6, 2011               |
| 30.9   | Pascack Valley Line         | Woodbine Yard          | Р         | FALSE  | 12/5/2011  | NJTransit ETT 601: November 6, 2011               |
| 22.5   | N. Jersey Coast Ln (So.)    | Long Branch Yard       | Р         | FALSE  | 12/1/2011  | NJTransit ETT 601: November 6, 2011               |
| 36.5   | Raritan Valley Line         | Raritan Yard           | Р         | FALSE  | 11/12/2011 | NJTransit ETT 601: November 6, 2011               |
| 9.6    | Perth Amboy Running Track   | Perth Amboy Yard       | F         | FALSE  | 2/9/2012   | Conrail Philadelphia Division Track Chart 1999    |
| 4.1    | Sayreville Secondary        | Parlin Yard            | F         | FALSE  | 2/9/2012   |   |
| 0      | Bonhamtown Industrial       | Ford Yard              | F         | FALSE  | 2/9/2012   | Conrail Philadelphia Division Track Chart 1999    |
| 15.8   | Port Reading Secondary      | Port Reading Yard      | F         | FALSE  | 2/12/2012  |   |
| 35.561 | Lehigh Line                 | "Weston" Manville Yard | F         | FALSE  | 2/12/2012  |   |
| 57.04  | West Trenton Line           | "Weston" Manville Yard | F         | FALSE  | 2/12/2012  |   |
| 2.5    | Linden Branch               | Stiles Yard            | F         | TRUE   | 2/9/2012   | Conrail Philadelphia Division Track Chart 1999    |
| 15.5   | Elizabeth Industrial        | Elizabeth Port Yard    | F         | FALSE  | 2/12/2012  |   |
| 5.393  | Greenville Running Track    | Garden Yard            | F         | FALSE  | 2/9/2012   |   |
| 6.763  | National Docks Section      | Oak Island Yard        | F         | FALSE  | 2/12/2012  |   |
| 8      | Passaic & Harsimus Branch   | Waverly Yard           | F         | FALSE  | 2/12/2012  |   |
| 3      | Portside Industrial Track   | Portside Yard          | F         | FALSE  | 2/9/2012   |   |
| 5.393  | Greenville Running Track    | Greenville Yard        | F         | FALSE  | 2/12/2012  |   |
| 2.8    | Passaic & Harsimus Branch   | Kearny Yard            | FP        | FALSE  | 2/12/2012  |   |
| 0      | PATH System                 | Kearny Yard            | FP        | FALSE  | 2/12/2012  |   |
| 0      | Morristown Line             | Hoboken Yard           | FP        | TRUE   | 11/22/2011 | NJTransit ETT 601: November 6, 2011               |
| 1.7    | River Line                  | North Bergen Yard      | FP        | FALSE  | 2/12/2012  |   |
| 0      | Hudson-Bergen LRT           | North Bergen Yard      | FP        | FALSE  | 2/12/2012  |   |
| 9.243  | NYS&W                       | Little Ferry Yard      | FP        | FALSE  | 2/9/2012   |   |
| 5      | River Line                  | Bellman's Yard         | FP        | FALSE  | 2/9/2012   |   |
| 3.276  | Pavonia Yard Running Tracks | Pavonia Yard           | FP        | FALSE  | 2/9/2012   |   |
| 13.542 | Penns Grove Secondary       | Paulsboro Yard         | F         | FALSE  | 2/9/2012   |   |
| 4.4    | Main Line                   | Croxton Yard           | F         | FALSE  | 12/2/2011  | NJTransit ETT 601: November 6, 2011               |
| 38.1   | N. Jersey Coast Ln (So.)    | Bay Head Yard          | Р         | TRUE   | 12/1/2011  | NJTransit ETT 601: November 6, 2011               |
| 16     | Port Reading Secondary      | Port Reading Yard      | F         | FALSE  | 2/12/2012  |   |
| 7.8    | Northeast Corridor Line     | Hudson Yard            | Р         | TRUE   | 11/21/2011 | Amtrak Northeast Corridor ETT 4: November 7, 2011 |
| 32.8   | Northeast Corridor Line     | County Yard            | Р         | TRUE   | 11/21/2011 | Amtrak Northeast Corridor ETT 4: November 7, 2011 |
| 26     | Northeast Corridor Line     | Metuchen Yard          | F         | FALSE  | 11/21/2011 | Amtrak Northeast Corridor ETT 4: November 7, 2011 |
| 55.7   | Northeast Corridor Line     | East Barracks Yard     | Р         | TRUE   | 11/21/2011 | Amtrak Northeast Corridor ETT 4: November 7, 2011 |
| 4.3    | Morristown Line             | MMC                    | Р         | TRUE   | 11/22/2011 | NJTransit ETT 601: November 6, 2011               |
|        | Montclair-Boonton Line      | Boonton Yard           | F         | TRUE   | 12/1/2011  | NJTransit ETT 601: November 6, 2011               |
| 0.8    | Avenue "A" Run Track        | Texaco Yard            | F         | TRUE   | 2/9/2012   | Conrail Philadelphia Division Track Chart 1999    |

#### Signal Type

|  |              |                |                |                            |              |                        |  | Creation                 |
|--|--------------|----------------|----------------|----------------------------|--------------|------------------------|--|--------------------------|
| Line Name  | From MP      | To MP          | Signalled      | Signal Rule                | Edited       | Date Modified          | Source<br>NS Harrisburg ETT 1: August 4, 2008  | Date                     |
| Lehigh Line<br>Waterfront Connection (Reverse          | 9            | 75.205         | TRUE           | 261                        | TRUE         | 1                      | NS Harrisburg ETT 1: August 4, 2008  | 02/14/2012               |
| Kearny)  | 0            | 0.427          | TRU E          | 261-CSS                    | TRUE         | 2/14/2012              | NJTransit ETT 601: November 6, 2011  | 02/14/2012               |
| Center Street Branch                                   | 0            |                | _              |                            | TRUE         |                        | Conrail Philadelphia Division Track Chart 1999   | 02/14/2012               |
| Orange Branch  | 8.541        | 12.709         | 1              |                            | TRUE         |                        | NS Harrisburg ETT 1: August 4, 2008  | 02/14/2012               |
| Bayonne Industrial Track<br>Garwood Industrial Track   | -0.553       | 2.69           | FALSE          |                            | TRUE<br>TRUE | 2/14/2012<br>2/14/2012 | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999 | 02/14/2012<br>02/14/2012 |
| Third Branch   | 11.642       | 12.984         |                |                            | TRUE         |                        | Conrail Philadelphia Division Track Chart 1999   | 02/14/2012               |
| West End Wye   | 2.252        | 2.826          | TRU E          | 261-CSS                    | TRUE         |                        | NJTransit ETT 601: November 6, 2011  | 02/14/2012               |
| Kearny Westbound                                       | 0            | 0.627          | TRU E          | 261-CSS                    | TRUE         |                        | NJTransit ETT 601: November 6, 2011  | 02/14/2012               |
| Kearny Eastbound                                       | 0            |                | TRUE           | 261-CSS                    | TRUE<br>TRUE |                        | NJTransit ETT 601: November 6, 2011  | 02/14/2012               |
| Bloomsbury Branch<br>Avenue "A" Run Track              | 0            |                |                |                            | TRUE         |                        | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999 | 02/14/2012               |
| Bay Shore Industrial                                   | 0            | 1.1            |                |                            | TRUE         | 2/14/2012              |  | 02/14/2012               |
| Bayonne Line   | 1.902        | 7              | FALSE          |                            | TRUE         |                        | Conrail Philadelphia Division Track Chart 1999   | 02/14/2012               |
| Bayway Industrial 1 Track                              | 10.5         | 11.3           | FALSE          |                            | TRUE         | 2/14/2012              |  | 02/14/2012               |
| Bayway Industrial Track<br>Belvedere Del. River RR     | 0.709        | 2.27<br>95.7   |                |                            | TRUE<br>TRUE |                        | Conrail Philadelphia Division Track Chart 1999<br>NS Harrisburg ETT 1: August 4, 2008            | 02/14/2012<br>02/14/2012 |
| Bergen County Line                                     | 4.3          | 93.7           |                | 261-CSS                    | TRUE         |                        | NJTransit ETT 601: November 6, 2011  | 02/14/2012               |
| Black River & Western RR                               | 48.3         | 64.7           | FALSE          |                            | TRUE         |                        | NS Harrisburg ETT 1: August 4, 2008  | 02/14/2012               |
| Bloodgood Industrial                                   | 0            | 0.8            | FALSE          |                            | TRUE         |                        | Conrail Philadelphia Division Track Chart 1999   | 02/14/2012               |
| Bonhamtown Industrial                                  | 0            |                |                |                            | TRUE         |                        | Conrail Philadelphia Division Track Chart 1999   | 02/14/2012               |
| Boonton Line   | 4.408        | 11.7           | _              |                            | TRUE         | 2/14/2012              |  | 02/14/2012               |
| Carlton Hill<br>Carteret Branch                        | 8.8          | 10.2<br>1.3    | FALSE<br>FALSE | 1                          | TRUE<br>TRUE |                        | NS Harrisburg ETT 1: August 4, 2008<br>Conrail Philadelphia Division Track Chart 1999            | 02/14/2012<br>02/14/2012 |
| Central District Branch                                | 0            |                |                |                            | TRUE         |                        | Conrail Philadelphia Division Track Chart 1999   | 02/14/2012               |
| Chemical Coast Secondary                               | 1.4          | 6.2            | TRU E          | 261                        | TRUE         | 2/14/2012              | Conrail ETT 9: June 20, 2011   | 02/14/2012               |
| Chemical Coast Secondary                               | 6.2          | 14.8           |                | DCS                        | TRUE         |                        | Conrail ETT 9: June 20, 2011   | 02/14/2012               |
| Central Industrial Track<br>Constable Hook Industrial  | 60.1         | 66.6<br>1.9    | _              |                            | TRUE         | 2/14/2012<br>2/14/2012 | Conrail Philadelphia Division Track Chart 1999   | 02/14/2012               |
| Constable Hook Industrial<br>Elizabeth Industrial      | 9.1          | 1.9            | _              |                            | TRUE<br>TRUE | 2/14/2012<br>2/14/2012 |  | 02/14/2012<br>02/14/2012 |
| Freehold Secondary                                     | 5.6          | 24.6           | _              |                            | TRUE         | 2/14/2012              |  | 02/14/2012               |
| Gladstone Line   | 20.1         | 42.2           | TRU E          | 261-CSS                    | TRUE         | 2/14/2012              | NJTransit ETT 601: November 6, 2011  | 02/14/2012               |
| Greenville Running Track                               | 0            | 3.4            |                | 261                        | TRUE         | 2/14/2012              | Conrail ETT 9: June 20, 2011   | 02/14/2012               |
| HBLRT (West Side Ave)                                  | 14.4         | 15.9           |                | СТС                        | TRUE         | 2/14/2012              |  | 02/14/2012               |
| High Bridge Branch<br>Hightstown Industrial            | 0.2          | 0<br>5.4       |                |                            | TRUE<br>TRUE | 2/14/2012<br>2/14/2012 | Conrail Philadelphia Division Track Chart 1999   | 02/14/2012<br>02/14/2012 |
| Hoboken Terminal                                       | 0.2          |                | TRUE           | 261-CSS                    | TRUE         |                        | NJTransit ETT 601: November 6, 2011  | 02/14/2012               |
| Hudson-Bergen LRT                                      | 4.8          | 19.87          | TRU E          | СТС                        | TRUE         | 2/14/2012              |  | 02/14/2012               |
| Irvington Industrial                                   | 12.7         | 15.5           | FALSE          |                            | TRUE         |                        | Conrail Philadelphia Division Track Chart 1999   | 02/14/2012               |
| Kingsland Branch                                       | 0            |                | FALSE          |                            | TRUE         | 2/14/2012              | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999 | 02/14/2012               |
| Linden Branch<br>Main Line                             | 2.2          | 1.9<br>30.1    | FALSE<br>TRUE  | 261-CSS                    | TRUE<br>TRUE |                        | NJTransit ETT 601: November 6, 2011  | 02/14/2012<br>02/14/2012 |
| Meadows Branch Number 1                                | 2.07         | 4.7            |                | 201 035                    | TRUE         | 2/14/2012              |  | 02/14/2012               |
| Meadows Branch Number 2                                | 2.4          | 3.7            | FALSE          |                            | TRUE         | 2/14/2012              | Conrail Philadelphia Division Track Chart 1999   | 02/14/2012               |
| Montclair Line   | 8.97         | 12.9           |                | 261-CSS                    | TRUE         |                        | NJTransit ETT 601: November 6, 2011  | 02/14/2012               |
| Montclair-Boonton Line                                 | 11.7         | 34<br>20.1     | TRU E<br>TRU E | 261-CSS                    | TRUE<br>TRUE | 2/14/2012<br>2/14/2012 | NJTransit ETT 601: November 6, 2011  | 02/14/2012               |
| Morristown Line<br>Morristown Line                     | 20.1         | 20.1           | _              | 261-CSS<br>562-CSS         | TRUE         |                        | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011                       | 02/14/2012<br>02/14/2012 |
| Morristown Line  | 30           | 36.3           |                | 251-CSS                    | TRUE         |                        | NJTransit ETT 601: November 6, 2011  | 02/14/2012               |
| Morristown Line  | 36.3         | 58             |                | 261-CSS                    | TRUE         |                        | NJTransit ETT 601: November 6, 2011  | 02/14/2012               |
| N. Jersey Coast Ln (Mid)                               | 20.1         | 22             | _              | 261-CSS                    | TRUE         |                        | NJTransit ETT 601: November 6, 2011  | 02/14/2012               |
| N. Jersey Coast Ln (No.)                               | 0            |                |                | 261-CSS                    | TRUE         |                        | NJTransit ETT 601: November 6, 2011  | 02/14/2012               |
| N. Jersey Coast Ln (So.)<br>N. Jersey Coast Ln (So.)   | 22.7         | 22.7<br>38.1   | _              | 261-CSS<br>251-CSS         | TRUE<br>TRUE |                        | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011                       | 02/14/2012<br>02/14/2012 |
| National Docks Secondary                               | 0            |                | TRUE           | 261                        | TRUE         |                        | Conrail ETT 9: June 20, 2011   | 02/14/2012               |
| Newark Branch  | 4.6          | 8.07           | FALSE          |                            | TRUE         | 2/14/2012              | NS Harrisburg ETT 1: August 4, 2008  | 02/14/2012               |
| Newark Industrial Track                                | 0            |                |                |                            | TRUE         |                        | NS Harrisburg ETT 1: August 4, 2008  | 02/14/2012               |
| Northeast Corridor Line                                | 1.2          | 7.8            | TRUE           | 562-CSS                    | TRUE         | 2/14/2012              | Amtrak Northeast Corridor ETT 4: November 7, 2011  | 02/14/2012               |
| Northeast Corridor Line                                | 7.8          | 9.7            | TRUE           | 261-CSS, 251-CSS<br>(Tk 1) | TRUE         | 2/14/2012              | Amtrak Northeast Corridor ETT 4: November 7, 2011  | 02/14/2012               |
| Northeast Corridor Line                                | 9.7          | 9.7            |                | 261-CSS                    | TRUE         | 2/14/2012              | Amtrak Northeast Corridor ETT 4: November 7, 2011  | 02/14/2012               |
|  | 1            |                |                | 261-CSS, 251-CSS           | 1            | 2/14/2012              |  | 1                        |
| Northeast Corridor Line                                | 14.7         | 56.4           |                | (Tk 1&4)                   | TRUE         | 2/14/2012              | Amtrak Northeast Corridor ETT 4: November 7, 2011  | 02/14/2012               |
| Northeast Corridor Line                                | 56.4         | 57.7           |                | 261-CSS                    | TRUE         |                        | Amtrak Northeast Corridor ETT 4: November 7, 2011  | 02/14/2012               |
| Northern Running Track                                 | 7            | 22.5<br>65.5   |                | 171                        | TRUE<br>TRUE |                        | CSX Albany Division ETT #6: October 15, 2010   | 02/14/2012<br>02/14/2012 |
| Washington Secondary<br>Washington Secondary           | 65.5         | 65.5           |                | 93                         | TRUE         |                        | NS Harrisburg ETT 1: August 4, 2008<br>NS Harrisburg ETT 1: August 4, 2008                       | 02/14/2012               |
| Washington Secondary                                   | 67.5         | 80.2           |                | 171                        | TRUE         |                        | NS Harrisburg ETT 1: August 4, 2008  | 02/14/2012               |
| Pascack Valley Line                                    | 7.668        |                | TRUE           | 562-CSS                    | TRUE         |                        | NJTransit ETT 601: November 6, 2011  | 02/14/2012               |
| Passaic & Harsimus Branch                              | 0            |                | _              | 261                        | TRUE         |                        | Conrail ETT 9: June 20, 2011   | 02/14/2012               |
| Passaic & Harsimus Branch<br>Perth Amboy Running Trk 2 | 6.9<br>26.48 | 8.4<br>29.69   |                | 261, 251 (Tk 1)            | TRUE<br>TRUE |                        | Conrail ETT 9: June 20, 2011<br>Conrail Philadelphia Division Track Chart 1999                   | 02/14/2012<br>02/14/2012 |
| Princeton Branch                                       | 20.48        |                |                | DCS                        | TRUE         |                        | NJTransit ETT 601: November 6, 2011  | 02/14/2012               |
| Portland Secondary                                     | 0            |                |                | 93                         | TRUE         |                        | NS Harrisburg ETT 1: August 4, 2008  | 02/14/2012               |
| Portland Secondary                                     | 2.4          |                |                | 171                        | TRUE         |                        | NS Harrisburg ETT 1: August 4, 2008  | 02/14/2012               |
| Raritan Industrial                                     | 19.9         |                |                | 251.057                    | TRUE         |                        | Conrail Philadelphia Division Track Chart 1999   | 02/14/2012               |
| Raritan Valley Line<br>Raritan Valley Line             | 15<br>52.1   | 52.1<br>60.1   |                | 261-CSS                    | TRUE<br>TRUE |                        | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011                       | 02/14/2012<br>02/14/2012 |
| Reformatory Secondary                                  | 52.1         |                | _              |                            | TRUE         |                        | Conrail Philadelphia Division Track Chart 1999   | 02/14/2012               |
| River Line   | -2.738       | 20.429         |                | 261                        | TRUE         |                        | CSX Albany Division ETT #6: October 15, 2010   | 02/14/2012               |
| Southern Secondary                                     | 38.3         | 65             | FALSE          | DCS                        | TRUE         | 2/15/2012              | Conrail ETT 9: June 20, 2011   | 02/14/2012               |
| Totowa Spur  | 38.1         | 41.2           |                |                            | TRUE         |                        | NS Harrisburg ETT 1: August 4, 2008  | 02/14/2012               |
| Trenton Industrial Track                               | 32.7         | 34.4           |                | 261                        | TRUE         |                        | Conrail Philadelphia Division Track Chart 1999   | 02/14/2012               |
| West Trenton Line<br>Belvedere Industrial              | 31.207<br>64 | 57.731<br>75.1 | TRU E<br>FALSE | 261                        | TRUE<br>TRUE |                        | CSX Albany Division ETT #6: October 15, 2010<br>NS Harrisburg ETT 1: August 4, 2008              | 02/14/2012<br>02/14/2012 |
| Newark & Elizabeth                                     | 04           |                |                |                            | TRUE         |                        | Conrail Philadelphia Division Track Chart 1999   | 02/14/2012               |
| Amboy Secondary  | 0.2          | 4.7            | 1              | DCS                        | TRUE         |                        | Conrail ETT 9: June 20, 2011   | 02/14/2012               |
| Amboy Secondary  | 4.7          | 7.2            |                | 93                         | TRUE         |                        | Conrail ETT 9: June 20, 2011   | 02/14/2012               |
| Amboy Secondary  | 7.2          | 19             | FALSE          | DCS                        | TRUE         | 2/15/2012              | Conrail ETT 9: June 20, 2011   | 02/14/2012               |

|  |               |       | Speed          | Date      |  |               |
|--|---------------|-------|----------------|-----------|--|---------------|
| Line Name                                  | From MP       | το ΜΡ | Limit          | Modified  | Source Creation Dat  | e Edited      |
| Bergen County Line                         | 4.3           |       | 40/25          |           | NJTransit ETT 601: November 6, 2011  | TRUE          |
| Bergen County Line                         | 5.48          | 1     | 30/25          |           | NJTransit ETT 601: November 6, 2011  | FALSE         |
| Bergen County Line                         | 5.8           | 8.9   | 70/50          | 12/2/2011 | NJTransit ETT 601: November 6, 2011  | FALSE         |
| Bergen County Line                         | 8.9           | 9.22  | 40/40          | 12/2/2011 | NJTransit ETT 601: November 6, 2011  | FALSE         |
| Bergen County Line                         | 9.22          | 10.4  | 70/50          | 12/2/2011 | NJTransit ETT 601: November 6, 2011  | FALSE         |
| Bergen County Line                         | 10.4          | 11.72 | 50/50          | 12/2/2011 | NJTransit ETT 601: November 6, 2011  | FALSE         |
| Bergen County Line                         | 11.72         |       | 70/50          |           | NJTransit ETT 601: November 6, 2011  | FALSE         |
| Bergen County Line                         | 18.14         |       | 50/50          |           | NJTransit ETT 601: November 6, 2011  | FALSE         |
| Bergen County Line                         | 18.5          |       | 70/50          |           | NJTransit ETT 601: November 6, 2011  | FALSE         |
| Chemical Coast Secondary                   | 1.4           |       | 30             |           | Conrail ETT 9: June 20, 2011   | TRUE          |
| Chemical Coast Secondary                   | 9             |       |                |           | Conrail ETT 9: June 20, 2011   | TRUE          |
| Chemical Coast Secondary<br>Gladstone Line | 9.5           |       | 30<br>60/30    |           | Conrail ETT 9: June 20, 2011   | TRUE          |
| Gladstone Line                             | 20.1          |       | 50/30          |           | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011 | TRUE          |
| Gladstone Line                             | 20.4          | 1     | 60/30          |           | NJTransit ETT 601: November 6, 2011  | TRUE          |
| Gladstone Line                             | 22.4          |       | 45/30          | 1         | NJTransit ETT 601: November 6, 2011  | FALSE         |
| Gladstone Line                             | 22.9          |       | 60/30          |           | NJTransit ETT 601: November 6, 2011  | TRUE          |
| Gladstone Line                             | 23.15         |       | 50/30          |           | NJTransit ETT 601: November 6, 2011  | TRUE          |
| Gladstone Line                             | 23.3          |       | 60/30          |           | NJTransit ETT 601: November 6, 2011  | TRUE          |
| Gladstone Line                             | 24.6          |       | 35/30          |           | NJTransit ETT 601: November 6, 2011  | FALSE         |
| Gladstone Line                             | 25            |       | 60/30          |           | NJTransit ETT 601: November 6, 2011  | TRUE          |
| Gladstone Line                             | 25.5          | 26.2  | 50/30          | 12/1/2011 | NJTransit ETT 601: November 6, 2011  | TRUE          |
| Gladstone Line                             | 26.2          | 29.82 | 60/30          |           | NJTransit ETT 601: November 6, 2011  | TRUE          |
| Gladstone Line                             | 29.82         |       | 45/30          |           | NJTransit ETT 601: November 6, 2011  | FALSE         |
| Gladstone Line                             | 30.47         |       | 60/30          |           | NJTransit ETT 601: November 6, 2011  | FALSE         |
| Gladstone Line                             | 30.9          | 1     | 50/30          |           | NJTransit ETT 601: November 6, 2011  | TRUE          |
| Gladstone Line                             | 32            |       | 60/30          |           | NJTransit ETT 601: November 6, 2011  | FALSE         |
| Gladstone Line                             | 33.8          |       | 50/30          |           | NJTransit ETT 601: November 6, 2011  | TRUE          |
| Gladstone Line                             | 35.4          |       | 45/30          |           | NJTransit ETT 601: November 6, 2011  | TRUE          |
| Gladstone Line                             | 36.3          |       | 60/30          |           | NJTransit ETT 601: November 6, 2011  | TRUE          |
| Gladstone Line<br>Gladstone Line           | 38.6<br>39.1  |       | 50/30          |           | NJTransit ETT 601: November 6, 2011  | TRUE<br>FALSE |
| Gladstone Line                             | 40.09         |       | 45/30<br>50/30 |           | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011 | FALSE         |
| Gladstone Line                             | 40.03         | 1     | 60/30          |           | NJTransit ETT 601: November 6, 2011  | TRUE          |
| Gladstone Line                             | 40.5          |       | 10/10          |           | NJTransit ETT 601: November 6, 2011  | FALSE         |
| Main Line                                  | 2             | 1     | 15/10          |           | NJTransit ETT 601: November 6, 2011  | FALSE         |
| Main Line                                  | 2.19          |       | 60/30          |           | NJTransit ETT 601: November 6, 2011  | FALSE         |
| Main Line                                  | 4.95          | 5.2   | 45/30          | 12/2/2011 | NJTransit ETT 601: November 6, 2011  | TRUE          |
| Main Line                                  | 5.2           | 7.8   | 60/30          | 12/2/2011 | NJTransit ETT 601: November 6, 2011  | FALSE         |
| Main Line                                  | 7.8           | 8.1   | 55/30          | 12/2/2011 | NJTransit ETT 601: November 6, 2011  | FALSE         |
| Main Line                                  | 8.1           | 13.3  | 60/30          | 12/2/2011 | NJTransit ETT 601: November 6, 2011  | TRUE          |
| Main Line                                  | 13.3          |       | 50/30          | 12/2/2011 | NJTransit ETT 601: November 6, 2011  | TRUE          |
| Main Line                                  | 13.6          |       | 60/30          |           | NJTransit ETT 601: November 6, 2011  | TRUE          |
| Main Line                                  | 15            |       | 50/30          |           | NJTransit ETT 601: November 6, 2011  | TRUE          |
| Main Line                                  | 15.3          |       | 60/30          |           | NJTransit ETT 601: November 6, 2011  | TRUE          |
| Main Line                                  | 16            |       | 45/25          |           | NJTransit ETT 601: November 6, 2011  | TRUE          |
| Main Line                                  | 16.2          |       | 60/30<br>50/30 |           | NJTransit ETT 601: November 6, 2011  | TRUE          |
| Main Line<br>Main Line                     | 17.34<br>17.5 | 1     | 50/30<br>60/30 |           | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011 | TRUE<br>FALSE |
| Main Line<br>Main Line                     | 21.8          |       | 50/30          |           | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011 | FALSE         |
| Main Line                                  | 21.8          |       | 60/30          |           | NJTransit ETT 601: November 6, 2011  | FALSE         |
| Main Line                                  | 22.14         |       | 40/30          |           | NJTransit ETT 601: November 6, 2011  | FALSE         |
| Main Line                                  | 23.3          |       | 60/30          |           | NJTransit ETT 601: November 6, 2011  | FALSE         |
| Main Line                                  | 23.8          |       | 70/40          |           | NJTransit ETT 601: November 6, 2011  | FALSE         |
| Main Line                                  | 29            |       | 35/35          |           | NJTransit ETT 601: November 6, 2011  | FALSE         |
| Main Line                                  | 30.66         | 30.9  | 45/40          |           | NJTransit ETT 601: November 6, 2011  | FALSE         |
| Main Line                                  | 30.9          | 31.31 | 65/40          |           | NJTransit ETT 601: November 6, 2011  | TRUE          |
| Montclair Line                             | 8.97          | 1     | 25/10          | 12/1/2011 | NJTransit ETT 601: November 6, 2011  | TRUE          |
| Montclair Line                             | 9.1           |       | 55/30          |           | NJTransit ETT 601: November 6, 2011  | TRUE          |
| Montclair Line                             | 11.7          | 1     | 60/25          |           | NJTransit ETT 601: November 6, 2011  | TRUE          |
| Montclair-Boonton Line                     | 12.03         |       | 45/25          |           | NJTransit ETT 601: November 6, 2011  | FALSE         |
| Montclair-Boonton Line                     | 12.2          |       | 60/25          |           | NJTransit ETT 601: November 6, 2011  | TRUE          |
| Montclair-Boonton Line                     | 15.5          |       | 35/25          |           | NJTransit ETT 501: April 3, 2010   | TRUE          |
| Montclair-Boonton Line                     | 16.4          | 1     | 60/25          |           | NJTransit ETT 501: April 3, 2010   | TRUE          |
| Montclair-Boonton Line                     | 17.3          |       | 35/25          |           | NJTransit ETT 501: April 3, 2010   | TRUE          |
| Montclair-Boonton Line                     | 17.8          |       | 60/25          |           | NJTransit ETT 501: April 3, 2010   | TRUE          |
| Montclair-Boonton Line                     | 21.2          | 21.5  | 30/25          | 12/1/2011 | NJTransit ETT 501: April 3, 2010   | FALSE         |

|  |               |       | Speed          | Date       |  |        |
|--|---------------|-------|----------------|------------|--|--------|
| Line_Name  | From_MP       | To_MP | Limit          | Modified   | Source Creation Date   | Edited |
| Montclair-Boonton Line                               | 21.5          | 25.6  | 70/35          | 12/1/2011  | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Montclair-Boonton Line                               | 25.6          |       | 50/35          |            | NJTransit ETT 501: April 3, 2010   | FALSE  |
| Montclair-Boonton Line                               | 26.15         |       | 60/35          |            | NJTransit ETT 501: April 3, 2010   | FALSE  |
| Montclair-Boonton Line                               | 26.7          |       | 55/35          |            | NJTransit ETT 501: April 3, 2010   | FALSE  |
| Montclair-Boonton Line                               | 27.76         |       | 60/35          |            | NJTransit ETT 501: April 3, 2010   | FALSE  |
| Montclair-Boonton Line<br>Montclair-Boonton Line     | 28.76<br>28.8 |       | 50/35<br>50/35 |            | NJTransit ETT 501: April 3, 2010<br>NJTransit ETT 501: April 3, 2010       | FALSE  |
| Montclair-Boonton Line                               | 28.8          |       | 60/35          | 1          | NJTransit ETT 501: April 3, 2010   | FALSE  |
| Montclair-Boonton Line                               | 33            |       | 55/35          |            | NJTransit ETT 501: April 3, 2010   | FALSE  |
| Montclair-Boonton Line                               | 33.34         |       | 60/35          |            | NJTransit ETT 501: April 3, 2010   | FALSE  |
| Morristown Line                                      | 34.8          |       | 50/40          |            | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line                                      | 36.1          |       | 55/35          |            | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line                                      | 38.1          | 38.6  | 25/15          | 10/19/2011 | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line                                      | 35.9          | 34.1  | 30/20          | 10/19/2011 | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line                                      | 37.3          | 38.1  | 55/20          | 10/19/2011 | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line                                      | 38.6          | 40.8  | 55/40          | 10/19/2011 | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line                                      | 40.8          |       | 60/40          |            | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line                                      | 43.8          |       | 55/40          |            | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line                                      | 45.3          |       | 50/40          | 1          | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line                                      | 48.6          |       | 30/20          |            | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line                                      | 49.8          |       | 50/40          |            | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line                                      | 50.8          |       | 55/40          |            | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line<br>Morristown Line                   | 2.64          |       | 30/15          |            | NJTransit ETT 501: April 3, 2010<br>NJTransit ETT 501: April 3, 2010       | TRUE   |
| Morristown Line                                      | 6.6           |       | 55/15          |            | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line                                      | 7.19          |       | 30/15          | , ,        | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line                                      | 7.8           |       | 55/15          | 1          | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line                                      | 8.9           |       | 35/15          | 1          | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line                                      | 9.1           |       | 60/35          |            | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line                                      | 11.9          | 16    | 70/35          |            | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line                                      | 16            | 16.5  | 60/35          | 10/19/2011 | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line                                      | 16.5          | 19.4  | 50/25          | 10/19/2011 | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line                                      | 19.4          |       | 45/25          |            | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line                                      | 56.6          |       | 20/10          |            | NJTransit ETT 501: April 3, 2010 10/19/2011                                | TRUE   |
| Morristown Line                                      | 20.1          |       | 50/35          |            | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line                                      | 21.1          |       | 55/40          |            | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line                                      | 23.5          |       | 70/40<br>50/40 |            | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line<br>Morristown Line                   | 26.2          |       | 60/40          |            | NJTransit ETT 501: April 3, 2010<br>NJTransit ETT 501: April 3, 2010       | TRUE   |
| Morristown Line                                      | 26.9          |       | 70/40          | <u> </u>   | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line                                      | 28.5          |       | 60/40          | 1          | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line                                      | 29.5          |       | 50/40          |            | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line                                      | 29.9          |       | 60/40          |            | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line                                      | 33.6          |       | 50/40          | 10/19/2011 | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line                                      | 33.8          | 34.4  | 60/40          | 10/19/2011 | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line                                      | 34.1          | 35.2  | 60/35          | 10/19/2011 | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line                                      | 35.2          |       | 50/35          |            | NJTransit ETT 501: April 3, 2010   | TRUE   |
| Morristown Line                                      | 34.4          |       | 40/40          |            | NJTransit ETT 501: April 3, 2010   | TRUE   |
| N. Jersey Coast Ln (Mid)                             | 22            |       | 60/30          | 1          | NJTransit ETT 601: November 6, 2011  | TRUE   |
| N. Jersey Coast Ln (No.)                             | 0             |       | 30/20          |            | NJTransit ETT 601: November 6, 2011  | FALSE  |
| N. Jersey Coast Ln (No.)                             | 0.7           |       | 70/30          |            | NJTransit ETT 601: November 6, 2011  | TRUE   |
| N. Jersey Coast Ln (No.)                             | 1             |       | 75/30          |            | NJTransit ETT 601: November 6, 2011  | TRUE   |
| N. Jersey Coast Ln (No.)<br>N. Jersey Coast Ln (No.) | 4.6           |       | 65/30          |            | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011 | TRUE   |
| N. Jersey Coast Ln (No.)<br>N. Jersey Coast Ln (So.) | 6.8           |       | 60/30<br>60/30 |            | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011 | TRUE   |
| N. Jersey Coast Ln (So.)                             | 8             |       | 80/30          |            | NJTransit ETT 601: November 6, 2011  | FALSE  |
| N. Jersey Coast Ln (So.)                             | 10.2          |       | 70/30          |            | NJTransit ETT 601: November 6, 2011  | FALSE  |
| N. Jersey Coast Ln (So.)                             | 10.2          |       | 80/30          | 1          | NJTransit ETT 601: November 6, 2011  | FALSE  |
| N. Jersey Coast Ln (So.)                             | 15.63         |       | 50/30          |            | NJTransit ETT 601: November 6, 2011  | FALSE  |
| N. Jersey Coast Ln (So.)                             | 16.2          |       | 60/30          |            | NJTransit ETT 601: November 6, 2011  | FALSE  |
| N. Jersey Coast Ln (So.)                             | 17.36         |       | 80/30          |            | NJTransit ETT 601: November 6, 2011  | FALSE  |
| N. Jersey Coast Ln (So.)                             | 19.75         |       | 35/30          |            | NJTransit ETT 601: November 6, 2011  | FALSE  |
| N. Jersey Coast Ln (So.)                             | 19.9          |       | 80/30          |            | NJTransit ETT 601: November 6, 2011  | TRUE   |
| N. Jersey Coast Ln (So.)                             | 22            | 22.9  | 25/10          | 12/1/2011  | NJTransit ETT 601: November 6, 2011  | TRUE   |
| N. Jersey Coast Ln (So.)                             | 22.9          |       | 50/25          |            | NJTransit ETT 601: November 6, 2011  | TRUE   |
| N. Jersey Coast Ln (So.)                             | 23.4          |       | 60/25          |            | NJTransit ETT 601: November 6, 2011  | FALSE  |
| N. Jersey Coast Ln (So.)                             | 24.55         | 30.43 | 40/25          | 12/1/2011  | NJTransit ETT 601: November 6, 2011  | FALSE  |

|  |              |             | Speed          | Date        |  |               |                |
|--|--------------|-------------|----------------|-------------|--|---------------|----------------|
| Line_Name                                  |              | To_MP       | Limit          | Modified    | Source   | Creation Date | Edited         |
| Lehigh Line                                | 9            |             |                |             | Conrail ETT 9: June 20, 2011   | 10/21/2011    | TRUE           |
| N. Jersey Coast Ln (So.)                   | 30.43        |             | 60/25          |             | NJTransit ETT 601: November 6, 2011  |               | FALSE          |
| N. Jersey Coast Ln (So.)                   | 36           |             | 40/25          |             | NJTransit ETT 601: November 6, 2011  | _             | FALSE          |
| N. Jersey Coast Ln (So.)                   | 38           |             | 5/5            |             | NJTransit ETT 601: November 6, 2011  |               | FALSE          |
| Pascack Valley Line                        | 7.668        |             | 60/30          |             | NJTransit ETT 601: November 6, 2011  |               | FALSE          |
| Pascack Valley Line                        | 12           |             | 40/30          |             | NJTransit ETT 601: November 6, 2011  |               | FALSE          |
| Pascack Valley Line<br>Pascack Valley Line | 14.2         |             | 50/40          |             | NJTransit ETT 601: November 6, 2011<br>NJTransit ETT 601: November 6, 2011 |               | TRUE           |
| Pascack Valley Line                        | 17.3<br>17.6 |             | 40/30<br>50/40 |             | NJTransit ETT 601: November 6, 2011  |               | TRUE<br>FALSE  |
| Pascack Valley Line                        | 23.5         | 1           | 50/40          |             | NJTransit ETT 601: November 6, 2011  |               | FALSE          |
| Pascack Valley Line                        | 23.8         | 1           |                |             | NJTransit ETT 601: November 6, 2011  |               | FALSE          |
| Passaic & Harsimus Branch                  | 23.0         |             |                |             | Conrail ETT 9: June 20, 2011   |               | FALSE          |
| Passaic & Harsimus Branch                  | 1.6          |             | 15/15          |             | Conrail ETT 9: June 20, 2011   |               | FALSE          |
| Passaic & Harsimus Branch                  | 3.4          |             | 30/30          |             | Conrail ETT 9: June 20, 2011   |               | FALSE          |
| Port Reading Secondary                     | 0.4          |             |                |             | Conrail ETT 9: June 20, 2011   |               | FALSE          |
| Port Reading Secondary                     | 0            |             |                |             | Conrail ETT 9: June 20, 2011   |               | FALSE          |
| Port Reading Secondary                     | 15.9         |             |                |             | Conrail ETT 9: June 20, 2011   |               | FALSE          |
| Raritan Valley Line                        | 15           | 15.9        | 60/25          | 11/12/2011  | NJTransit ETT 601: November 6, 2011  |               | FALSE          |
| Raritan Valley Line                        | 15.9         | 34.37       | 80/40          | 11/12/2011  | NJTransit ETT 601: November 6, 2011  |               | FALSE          |
| Raritan Valley Line                        | 34.37        | 35.1        | 70/40          | 11/12/2011  | NJTransit ETT 601: November 6, 2011  |               | FALSE          |
| Raritan Valley Line                        | 35.1         |             | 70/40          | 11/12/2011  | NJTransit ETT 601: November 6, 2011  |               | FALSE          |
| Raritan Valley Line                        | 35.6         |             | 70/40          |             | NJTransit ETT 601: November 6, 2011  |               | TRUE           |
| Raritan Valley Line                        | 37           |             | 60/30          |             | NJTransit ETT 601: November 6, 2011  |               | TRUE           |
| Raritan Valley Line                        | 38.7         |             | 70/40          |             | NJTransit ETT 601: November 6, 2011  |               | TRUE           |
| Raritan Valley Line                        | 49.9         |             | 50/30          |             | NJTransit ETT 601: November 6, 2011  |               | TRUE           |
| Raritan Valley Line                        | 50.63        |             | 60/30          |             | NJTransit ETT 601: November 6, 2011  |               | TRUE           |
| Raritan Valley Line                        | 52.22        |             | 10/10          |             | NJTransit ETT 601: November 6, 2011  |               | TRUE           |
| River Line                                 | 1.6          |             | 30             |             | CSX Albany Division ETT #6: October 15, 2010                               |               | TRUE           |
| River Line                                 | 3            |             | 40             |             | CSX Albany Division ETT #6: October 15, 2010                               | _             | TRUE           |
| River Line                                 | 6            |             | 40/50          |             | CSX Albany Division ETT #6: October 15, 2010                               |               | TRUE           |
| River Line                                 | 7.6          |             | 30/40          |             | CSX Albany Division ETT #6: October 15, 2010                               |               | TRUE           |
| River Line                                 | 10.9         | 18.8<br>1.8 |                |             | CSX Albany Division ETT #6: October 15, 2010                               |               | TRUE           |
| Amboy Secondary<br>Amboy Secondary         | 0.2          |             |                |             | Conrail ETT 9: June 20, 2011<br>Conrail ETT 9: June 20, 2011               |               | FALSE<br>FALSE |
| Amboy Secondary                            | 1.8          | 15.4        |                |             | Conrail ETT 9: June 20, 2011   |               | FALSE          |
| Amboy Secondary                            | 13.4         |             |                |             | Conrail ETT 9: June 20, 2011   |               | FALSE          |
| Lehigh Line                                | 10.5         | 11.4        |                | 1           | Conrail ETT 9: June 20, 2011   | 10/21/2011    | TRUE           |
| Lehigh Line                                | 10.5         |             | 60/40          |             | Conrail ETT 9: June 20, 2011   | 10/21/2011    | TRUE           |
| Lehigh Line                                | 16.9         |             |                |             | Conrail ETT 9: June 20, 2011   | 10/21/2011    | TRUE           |
| Lehigh Line                                | 35.8         |             | 50             | <u> </u>    | NS Harrisburg ETT 1: August 4, 2008  | 10/25/2011    | TRUE           |
| Lehigh Line                                | 51           |             | 50/40          |             | NS Harrisburg ETT 1: August 4, 2008  | 10/25/2011    | TRUE           |
| Lehigh Line                                | 53.6         |             |                | <u> </u>    | NS Harrisburg ETT 1: August 4, 2008  | 10/25/2011    | TRUE           |
| Lehigh Line                                | 62.3         | 63.6        | 50/25          | 10/25/2011  | NS Harrisburg ETT 1: August 4, 2008  | 10/25/2011    | TRUE           |
| Lehigh Line                                | 63.6         | 1           |                | 10/25/2011  | NS Harrisburg ETT 1: August 4, 2008  | 10/25/2011    | TRUE           |
| Lehigh Line                                | 64.5         |             | 40/25          | 10/25/2011  | NS Harrisburg ETT 1: August 4, 2008  | 10/25/2011    | TRUE           |
| Lehigh Line                                | 66           |             |                | 10/25/2011  | NS Harrisburg ETT 1: August 4, 2008  | 10/25/2011    | TRUE           |
| Lehigh Line                                | 69.9         |             |                |             | NS Harrisburg ETT 1: August 4, 2008  | 10/25/2011    | TRUE           |
| Lehigh Line                                | 72.2         | 76.6        | 50             | 10/25/2011  | NS Harrisburg ETT 1: August 4, 2008  | 10/25/2011    | TRUE           |
| National Docks Secondary                   | 0            |             | 15             |             | Conrail ETT 9: June 20, 2011   | 10/25/2011    | TRUE           |
| National Docks Secondary                   | 1            |             |                |             | Conrail ETT 9: June 20, 2011   | 10/25/2011    | TRUE           |
| National Docks Secondary                   | 2.8          | 1           |                |             | Conrail ETT 9: June 20, 2011   | 10/25/2011    | TRUE           |
| Southern Secondary                         | 38.3         |             |                |             | Conrail ETT 9: June 20, 2011   | 10/27/2011    | TRUE           |
| Southern Secondary                         | 57.5         |             | 10             |             | Conrail ETT 9: June 20, 2011   | 10/27/2011    | TRUE           |
| Southern Secondary                         | 59           |             |                |             | Conrail ETT 9: June 20, 2011   | 10/27/2011    | TRUE           |
| West Trenton Line                          | 31.207       |             | 60/40          |             | CSX Albany Division ETT #6: October 15, 2010                               | 11/10/2011    | TRUE           |
| West Trenton Line                          | 32.6         | 57.3        | 50/50          | 11/10/2011  | CSX Albany Division ETT #6: October 15, 2010                               | 11/10/2011    | TRUE           |
| Waterfront Connection                      |              |             |                | 11/14/2011  |  |               | .              |
| (Reverse Kearny)                           | 0            | 0.4         | 45/20          | +           | NJTransit ETT 601: November 6, 2011  | 11/14/2011    | TRUE           |
| Waterfront Connection                      |              |             |                | 11/14/2011  |  |               |                |
| (Reverse Kearny)                           | 0.4          | 0.6         | 40/20          | 1 1/14/2011 | NJTransit ETT 601: November 6, 2011  | 11/14/2011    | TRUE           |
|  |              |             | ,              | 1           |  | , ,           |                |
| Waterfront Connection                      |              |             | 45/20          | 11/14/2011  |  | 11/11/2011    | TOUS           |
| (Reverse Kearny)                           | 0.6          |             | 45/20          | 11/14/2000  | NJTransit ETT 601: November 6, 2011  | 11/14/2011    | TRUE           |
| Northeast Corridor Line                    | 1.2          |             |                |             | Amtrak Northeast Corridor ETT 4: November 7, 2011                          | 11/14/2011    | TRUE           |
| Northeast Corridor Line                    | 3.1          | 7.7         |                |             | Amtrak Northeast Corridor ETT 4: November 7, 2011                          | 11/14/2011    | TRUE           |
| Northeast Corridor Line                    | 7.7          |             |                |             | Amtrak Northeast Corridor ETT 4: November 7, 2011                          | 11/14/2011    | TRUE           |
| Northeast Corridor Line                    | 8.3          | 7.8         | 60/45          | 111/14/2011 | Amtrak Northeast Corridor ETT 4: November 7, 2011                          | 11/14/2011    | TRUE           |

|                         |         |       | Speed    | Date       |   |                      |        |
|-------------------------|---------|-------|----------|------------|---|----------------------|--------|
| Line_Name               | From_MP | To_MP | Limit    | Modified   | Source  | <b>Creation Date</b> | Edited |
| Northeast Corridor Line | 7.8     | 8.5   | 45/35    | 11/14/2011 | Amtrak Northeast Corridor ETT 4: November 7, 2011 | 11/14/2011           | TRUE   |
| Northeast Corridor Line | 8.5     | 9     | 35       | 11/14/2011 | Amtrak Northeast Corridor ETT 4: November 7, 2011 | 11/14/2011           | TRUE   |
| Northeast Corridor Line | 9       | 10.5  | 70       | 11/14/2011 | Amtrak Northeast Corridor ETT 4: November 7, 2011 | 11/14/2011           | TRUE   |
| Northeast Corridor Line | 10.5    | 14.7  | 110/90/8 | 11/14/2011 | Amtrak Northeast Corridor ETT 4: November 7, 2011 | 11/14/2011           | TRUE   |
| Northeast Corridor Line | 14.7    | 19.7  | 125/90/7 | 11/14/2011 | Amtrak Northeast Corridor ETT 4: November 7, 2011 | 11/14/2011           | TRUE   |
| Northeast Corridor Line | 19.7    | 26    | 110/90   | 11/14/2011 | Amtrak Northeast Corridor ETT 4: November 7, 2011 | 11/14/2011           | TRUE   |
| Northeast Corridor Line | 26      | 28    | 110/100  | 11/14/2011 | Amtrak Northeast Corridor ETT 4: November 7, 2011 | 11/14/2011           | TRUE   |
| Northeast Corridor Line | 28      | 32.8  | 125/100  | 11/14/2011 | Amtrak Northeast Corridor ETT 4: November 7, 2011 | 11/14/2011           | TRUE   |
| Northeast Corridor Line | 32.8    | 55.7  | 135/110  | 11/14/2011 | Amtrak Northeast Corridor ETT 4: November 7, 2011 | 11/14/2011           | TRUE   |
| Northeast Corridor Line | 55.7    | 57.7  | 110/80   | 11/14/2011 | Amtrak Northeast Corridor ETT 4: November 7, 2011 | 11/14/2011           | TRUE   |
| Montclair-Boonton Line  | 13.7    | 14    | 40/25    | 12/1/2011  | NJTransit ETT 601: November 6, 2011               | 12/1/2011            | TRUE   |
| Montclair-Boonton Line  | 14      | 15.5  | 60/25    | 12/1/2011  | NJTransit ETT 601: November 6, 2011               | 12/1/2011            | TRUE   |
| Washington Secondary    | 58      | 79.7  | 25       | 2/9/2012   | NS Harrisburg ETT 1: August 4, 2008               | 2/9/2012             | TRUE   |
| Washington Secondary    | 79.7    | 80.2  | 10       | 2/9/2012   | NS Harrisburg ETT 1: August 4, 2008               | 2/9/2012             | TRUE   |
| Northern Branch         | 6       | 5.4   | 15       | 2/16/2012  | Conrail ETT 9: June 20, 2011                      | 2/16/2012            | TRUE   |
| Northern Branch         | 5.4     | 4.6   | 15       | 2/16/2012  | Conrail ETT 9: June 20, 2011                      | 2/16/2012            | TRUE   |
| Northern Branch         | 4.6     | 1.6   | 30       | 2/16/2012  | Conrail ETT 9: June 20, 2011                      | 2/16/2012            | TRUE   |

## Trackage Rights

|                           |         | [     |                               |        | Date     |   |
|---------------------------|---------|-------|-------------------------------|--------|----------|---|
| Line Name                 | From MP | To MP | Trackage Rights               | Edited | Modified | Source  |
| Bergen County Line        | 4.3     | 19    | NS Trackage Rights            | TRUE   | 3/1/2012 | NJTransit ETT 601: November 6, 2011               |
| Pascack Valley Line       | 7.7     | 31.3  | NS Trackage Rights            | TRUE   | 3/1/2012 | NJTransit ETT 601: November 6, 2011               |
| Raritan Industrial        | 19.9    | 25.7  | Shared Trackage Rights        | TRUE   | 3/1/2012 | Conrail ETT 9: June 20, 2011                      |
| Montclair Line            | 8.97    | 12.9  | NS Trackage Rights            | TRUE   | 3/1/2012 | NJTransit ETT 601: November 6, 2011               |
| Raritan Valley Line       | 14.717  | 60.1  | NS Trackage Rights            | TRUE   | 3/1/2012 | NJTransit ETT 601: November 6, 2011               |
| Perth Amboy Running Trk 2 | 26.48   | 29.69 | Shared Trackage Rights        | TRUE   | 3/1/2012 | Conrail ETT 9: June 20, 2011                      |
| Northeast Corridor Line   | -1.396  | 57.7  | Conrail Trackage Rights       | TRUE   | 3/1/2012 | Amtrak Northeast Corridor ETT 4: November 7, 2011 |
| N. Jersey Coast Ln (No.)  | 0       | 6.7   | Conrail Trackage Rights       | TRUE   | 3/1/2012 | NJTransit ETT 601: November 6, 2011               |
| N. Jersey Coast Ln (So.)  | 0       | 38.1  | Conrail Trackage Rights       | TRUE   | 3/1/2012 | NJTransit ETT 601: November 6, 2011               |
| N. Jersey Coast Ln (Mid)  | 20.1    | 22    | Conrail Trackage Rights       | TRUE   | 3/1/2012 | NJTransit ETT 601: November 6, 2011               |
| Bayonne Line              | 1.902   | 7     | Shared Trackage Rights        | TRUE   | 3/1/2012 | Conrail ETT 9: June 20, 2011                      |
| Gladstone Line            | 20.1    | 42.2  | NS Trackage Rights            | TRUE   | 3/1/2012 | NJTransit ETT 601: November 6, 2011               |
| Morristown Line           | 1       | 58    | NS Trackage Rights            | TRUE   | 3/1/2012 | NJTransit ETT 601: November 6, 2011               |
| Morristown Line           | 1       | 58    | M & E Trackage Rights         | TRUE   | 3/1/2012 | NJTransit ETT 601: November 6, 2011               |
| Montclair-Boonton Line    | 11.7    | 34    | NS Trackage Rights            | TRUE   | 3/1/2012 | NJTransit ETT 601: November 6, 2011               |
| Montclair-Boonton Line    | 11.7    | 34    | M & E Trackage Rights         | TRUE   | 3/1/2012 | NJTransit ETT 601: November 6, 2011               |
| Main Line                 | 2.2     | 30.1  | NS Trackage Rights            | TRUE   | 3/1/2012 | NJTransit ETT 601: November 6, 2011               |
| Main Line                 | 2.2     | 30.1  | M & E Trackage Rights         | TRUE   | 3/1/2012 | NJTransit ETT 601: November 6, 2011               |
| Bergen County Line        | 4.3     | 19    | M & E Trackage Rights         | TRUE   | 3/1/2012 | NJTransit ETT 601: November 6, 2011               |
| Pleasantville Industrial  | 0       | 0     | SRNJ operates over the bridge | FALSE  | 3/1/2012 |   |
| Cape May Branch           | 53.2    | 80.1  | NJ Transit Trackage Rights    | FALSE  | 3/1/2012 |   |
| Lehigh Line               | 11.4    | 16.9  | NJ Transit Trackage Rights    | TRUE   | 3/1/2012 | NJTransit ETT 601: November 6, 2011               |
| Northeast Corridor Line   | -1.396  | 57.7  | NJ Transit Trackage Rights    | TRUE   | 3/1/2012 | Amtrak Northeast Corridor ETT 4: November 7, 2011 |
| West Trenton Line         | 31.207  | 32.5  | SEPTA Trackage Rights         | TRUE   | 3/1/2012 | CSX Albany Division ETT #6: October 15, 2010      |

#### Weight Limits

| Line Name                 | From MP | To MP  | Weight Limit | Comments  | Date Modified | Source  | Creation Date | Edited |
|---------------------------|---------|--------|--------------|---|---------------|---|---------------|--------|
| Lehigh Line               | 9       | 35.8   | 286,000      | NS  | 10/21/2011    | Conrail ETT 9: June 20, 2011                      |               | TRUE   |
| Bergen County Line        | 19      | 4.3    | 263,000      | NJT/NS  | 12/2/2011     | NJTransit ETT 601: November 6, 2011               |               | FALSE  |
| Chemical Coast Secondary  | 1.4     | 20     | 286,000      | System Instruction EQ-12 applies                      | 10/26/2011    | Conrail ETT 9: June 20, 2011                      |               | FALSE  |
| Chemical Coast Secondary  | 1.4     | 20     | 286,000      | ConRail   | 10/26/2011    | Conrail ETT 9: June 20, 2011                      |               | TRUE   |
| Gladstone Line            | 42.2    | 20     | 263,000      | NJT/NS  | 12/1/2011     | NJTransit ETT 601: November 6, 2011               |               | FALSE  |
| Main Line                 | 31.3    | 2.2    | 263,000      | NJT/NS  | 12/2/2011     | NJTransit ETT 601: November 6, 2011               |               | FALSE  |
| Montclair-Boont on Line   | 34      | 9      | 263,000      | NJT/NS  | 12/1/2011     | NJTransit ETT 601: November 6, 2011               |               | TRUE   |
| Morristown Line           | 1       | 58     | 263,000      | NJT/NS  | 10/19/2011    | NJTransit ETT 501: April 3, 2010                  |               | TRUE   |
| N. Jersey Coast Ln (Mid)  | 20.175  | 22.006 | 263,000      | NJT/AMTRAK/ConRail                                    | 12/1/2011     | NJTransit ETT 601: November 6, 2011               |               | FALSE  |
| N. Jersey Coast Ln (No.)  | 20.175  | 22.006 | 263,000      | AMTRAK/NJT  | 12/1/2011     | NJTransit ETT 601: November 6, 2011               |               | FALSE  |
| N. Jersey Coast Ln (So.)  | 0       | 38.1   | 263,000      | NJT   | 12/1/2011     | NJTransit ETT 601: November 6, 2011               |               | FALSE  |
| Northeast Corridor Line   | 88      | 1      | 263,000      | NJT/AMTRAK/ConRail                                    | 2/15/2012     | Amtrak Northeast Corridor ETT 4: November 7, 2011 |               | FALSE  |
| Pascack Valley Line       | 31.291  | 7.668  | 263,000      | NJT/NS  | 12/5/2011     | NJTransit ETT 601: November 6, 2011               |               | FALSE  |
| Passaic & Harsimus Branch | 0       | 7,7    | 286,000      | Sys. Inst. EQ-12 applies E: 286,000 lbs<br>authorized | 10/21/2011    | Conrail ETT 9: June 20, 2011                      |               | FALSE  |
| Port Reading Secondary    | 0       | 16     | 273,000      | ConRail   | 10/27/2011    | Conrail ETT 9: June 20, 2011                      |               | TRUE   |
| Raritan Valley Line       | 30      | 66.6   | 263,000      | NJT/NS  | 11/12/2011    | NJTransit ETT 601: November 6, 2011               |               | TRUE   |
| Raritan Valley Line       | 15.1    | 30     | 263,000      | NJT/AMTRAK/ConRail                                    | 11/12/2011    | NJTransit ETT 601: November 6, 2011               |               | FALSE  |
| River Line                | 0       | 0      | 286,000      | CSXT  | 12/15/2012    | CSX Albany Division ETT #6: October 15, 2010      |               | FALSE  |
| Southern Secondary        | 38.3    | 65.9   | 263,000      |   |               | Conrail ETT 9: June 20, 2011                      |               | TRUE   |
| Amboy Secondary           | 0.2     | 19     | 263,000      | ConRail   | 10/26/2011    | Conrail ETT 9: June 20, 2011                      |               | TRUE   |
| Lehigh Line               | 35.8    | 76.65  | 286,000      | NS  | 10/25/2011    | NS Harrisburg ETT 1: August 4, 2008               | 10/25/2011    | TRUE   |
| National Docks Secondary  | 0       | 7.2    | 286,000      |   | 10/25/2011    | Conrail ETT 9: June 20, 2011                      | 10/25/2011    | TRUE   |
| West Trenton Line         | 31.207  | 57.731 | 286,000      |   | 11/10/2011    | CSX Albany Division ETT #6: October 15, 2010      | 11/10/2011    | TRUE   |
| Northern Branch           | 1.6     | 6      | 286,000      | ConRail   | 2/16/2012     | Conrail ETT 9: June 20, 2011                      | 2/16/2012     | TRUE   |

| Line Name                | MD    | Structuro Namo               | Date<br>Modified | Source   | Creation | Edited |
|--------------------------|-------|------------------------------|------------------|--|----------|--------|
| Line Name<br>Lehigh Line |       | Structure_Name<br>Locust Ave | Modified         | Source<br>Conrail Philadelphia Division Track Chart 1999                             | Date     | FALSE  |
| Lehigh Line              |       | Pedestrian Tunnel            |                  | Conrail Philadelphia Division Track Chart 1999                                       |          | FALSE  |
| Lehigh Line              |       | Chestnut Street              |                  | Conrail Philadelphia Division Track Chart 1999                                       |          | FALSE  |
| Lehigh Line              | _     | Galloping Hill Road          |                  | Conrail Philadelphia Division Track Chart 1999                                       |          | FALSE  |
| Lehigh Line              | _     | Under Crossing               |                  | Conrail Philadelphia Division Track Chart 1999                                       |          | FALSE  |
| Lehigh Line              | _     | Morris Ave                   |                  | Conrail Philadelphia Division Track Chart 1999                                       |          | FALSE  |
| Lehigh Line              | _     | Elizabeth River              |                  | Conrail Philadelphia Division Track Chart 1999                                       |          | TRUE   |
| Lehigh Line              |       | Long Ave                     |                  | Conrail Philadelphia Division Track Chart 1999                                       |          | FALSE  |
| Lehigh Line              | _     | Route 22                     |                  | Conrail Philadelphia Division Track Chart 1999                                       |          | FALSE  |
| Lehigh Line              |       | Meeker Ave                   |                  | Conrail Philadelphia Division Track Chart 1999                                       |          | FALSE  |
| Lehigh Line              |       | Frelinhuysen Ave             |                  | Conrail Philadelphia Division Track Chart 1999                                       |          | TRUE   |
| Bergen County Line       |       | Hackensack River             |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Bergen County Line       |       | Hackensack Street            |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
|                          |       | S Main Street                |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Bergen County Line       |       | Saddle River                 |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Bergen County Line       |       | Passaic Street               |                  | NJ Transit Physical Characteristics 2011<br>NJ Transit Physical Characteristics 2011 |          | FALSE  |
| Bergen County Line       |       | NYSWRR                       |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Bergen County Line       |       |                              |                  |  |          | -      |
| Bergen County Line       |       | Garden State Parkway         |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Bergen County Line       | _     | Van Ripper Avenue            |                  | NJ Transit Physical Characteristics 2011   | _        | FALSE  |
| Bergen County Line       |       | Broadway - Route4            |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Bergen County Line       | _     | Maple Avenue                 |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Chemical Coast Secondary |       | Rahway Movable Bridge        | , ,              | Conrail Philadelphia Division Track Chart 1999                                       |          | FALSE  |
| Gladstone Line           | _     | Stream                       |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Gladstone Line           |       | Waterway                     |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Gladstone Line           | _     | Maple Street                 |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Gladstone Line           |       | Stream                       |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Gladstone Line           |       | South Street                 |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Gladstone Line           |       | Passaic River                |                  | NJ Transit Physical Characteristics 2011   | _        | FALSE  |
| Gladstone Line           |       | Passaic River                |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Gladstone Line           | 31.69 | Finley Avenue                | 12/1/2011        | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Gladstone Line           | 33.27 | West Oak Street              | 12/1/2011        | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Gladstone Line           | 33.74 | Route 287                    | 12/1/2011        | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Gladstone Line           | 34.98 | Mine Brook                   | 12/1/2011        | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Gladstone Line           | 37.94 | Mine Brook                   | 12/1/2011        | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Gladstone Line           | 40.21 | Raritan River                | 12/1/2011        | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Gladstone Line           | 40.82 | Peapack Brook                | 12/1/2011        | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Irvington Industrial     | 12.99 | Storm Sewer                  | 2/9/2012         | Conrail Philadelphia Division Track Chart 1999                                       |          | TRUE   |
| Main Line                | 8.94  | River Rd                     | 12/2/2011        | NJ Transit Physical Characteristics 2011   |          | TRUE   |
| Main Line                | 15.65 | Ward St                      |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                | 15.83 | Ellison St                   | 12/2/2011        | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                | 15.9  | Van Houten St                | 12/2/2011        | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                | 15.95 | Broadway                     | 12/2/2011        | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                | 16    | Fair St                      | 12/2/2011        | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                | _     | Hamilton Ave                 |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                | 16.2  | Governor St                  |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                |       | Fulton St                    |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                | 16.4  | Montgomery St                |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                |       | Lafayette St                 | , ,              | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                |       | Keen St                      |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                |       | River St                     |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                | _     | Passaic River                |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                |       | Wargraw Road                 |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                |       | Diamond Brook                |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Freehold Secondary       | _     | Manalp Crk                   |                  | Conrail Philadelphia Division Track Chart 1999                                       | 2/9/2012 | TRUE   |
| Main Line                |       | Ackerman Ave                 |                  | NJ Transit Physical Characteristics 2011   | 2/9/2012 | FALSE  |
| Main Line<br>Main Line   | _     |                              |                  |  |          | -      |
|                          |       | Ped Subway                   |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line<br>Main Line   |       | Franklin Ave                 |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                |       | Glen Ave                     |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                |       | Hohokus Creek                |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                | _     | W. Orchard St                |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                |       | Ped Subway                   |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                |       | W. Crescent Ave              |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                |       | Stream                       |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                | _     | Culvert Rd                   |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                |       | Ramapo Ave                   |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                |       | Mahwah Creek                 |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                | _     | Route 202                    |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                |       | Chestnut St                  |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                | 2.19  | Conrail                      | 12/2/2011        | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                | 2.67  | Conrail                      |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                | 4.95  | Hackensack River             | 12/2/2011        | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                | 8.01  | Delafield Ave                | 12/2/2011        | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                | 8.23  | Stuyvesant Ave               |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                |       | Park Ave                     |                  | NJ Transit Physical Characteristics 2011   |          | FALSE  |
| Main Line                |       |                              |                  |  |          |        |

|                        |       |                    | Date       |  | Creation  |        |
|------------------------|-------|--------------------|------------|--|-----------|--------|
| Line Name              | MP    | Structure_Name     | Modified   | Source                                   | Date      | Edited |
| Main Line              |       | Route 507          |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Main Line              |       | Passaic River      |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Main Line              |       | Route 21           |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Main Line              |       | Kingsland Ave      |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Main Line              |       | Delawanna Ave      |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Main Line              |       | Main St            |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Main Line              |       | Brook Ave          |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Main Line              |       | Howard Ave         |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Main Line              |       | Passaic Ave        |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Main Line              |       | Clifton Blvd       |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Main Line              |       | Clifton Ave        |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Main Line              |       | Old RR ROW         |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Main Line              | -     | Main St            |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Main Line              |       | Getty Ave          |            | NJ Transit Physical Characteristics 2011 |           | -      |
| Main Line              |       | Straight St        |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Main Line              |       | 20th St            |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Main Line              |       | Essex St           |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Main Line              | 1     | Market St          |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair Line         |       | 4th Ave            |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair Line         |       | Springdale Ave     |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair Line         |       | Rutledge Ave       |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair Line         |       | N Grove St         |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair Line         |       | Wigwam Ave         |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair Line         |       | Glenwood Ave       |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair Line         |       | Toney's Brook      |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair Line         |       | Clark Street       |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair Line         |       | Hillsdale Ave      |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair Line         |       | 2nd River          |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair-Boonton Line |       | Chestnut Street    |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair-Boonton Line | -     | Park Street        |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair-Boonton Line |       | Valley Road        |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair-Boonton Line |       | Clove Road         |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair-Boonton Line | 17.54 | Little Falls River | 12/1/2011  | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair-Boonton Line |       | Peckman Creek      |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair-Boonton Line | 19.43 | Passiac River      | 12/1/2011  | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair-Boonton Line | 19.5  | Hobson Avenune     | 12/1/2011  | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair-Boonton Line | 19.88 | Route 46 & 23      | 12/1/2011  | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair-Boonton Line | 19.92 | Route 46           | 12/1/2011  | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair-Boonton Line | 19.95 | Route 46 & 23      | 12/1/2011  | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair-Boonton Line | 20.14 | Route 80           | 12/1/2011  | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair-Boonton Line | 21.5  | Stream             | 12/1/2011  | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair-Boonton Line | 21.58 | Meadow River       | 12/1/2011  | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair-Boonton Line | 21.86 | Pequannick River   | 12/1/2011  | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair-Boonton Line | 22.92 | Ped Tunnel         | 12/1/2011  | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair-Boonton Line | 25.01 | Firehouse Road     | 12/1/2011  | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair-Boonton Line | 25.36 | Whitehall Road     | 12/1/2011  | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair-Boonton Line | 26.27 | Route 202          |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair-Boonton Line | 26.67 | Route 287          |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair-Boonton Line | 27.06 | Valhalla Road      |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair-Boonton Line |       | Taylortown Road    | 12/1/2011  | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair-Boonton Line | 29.54 | Rockaway River     | 12/1/2011  | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair-Boonton Line |       | Morris Avenue      |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair-Boonton Line | 31.2  | Midvale Road       |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair-Boonton Line | 32.11 | Route 46           | 12/1/2011  | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair-Boonton Line | 33.81 | Route 53           |            | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Montclair-Boonton Line | 20.18 | Singac Brook       | 12/1/2011  | NJ Transit Physical Characteristics 2011 |           | FALSE  |
| Morristown Line        | 1.89  | Conrail            | 10/19/2011 | NJ Transit Physical Characteristics 2005 |           | FALSE  |
| Morristown Line        | 2.17  | Norfolk Southern   | 10/19/2011 | NJ Transit Physical Characteristics 2005 |           | TRUE   |
| Morristown Line        | 2.19  | Westside Avenue    | 10/19/2011 | NJ Transit Physical Characteristics 2005 |           | FALSE  |
| Morristown Line        | 2.3   | James Avenue       | 10/19/2011 | NJ Transit Physical Characteristics 2005 |           | FALSE  |
| Morristown Line        |       | Duffield Avenue    |            | NJ Transit Physical Characteristics 2005 |           | FALSE  |
| Morristown Line        | 2.64  | Hackensack River   | 10/19/2011 | NJ Transit Physical Characteristics 2005 |           | FALSE  |
| Morristown Line        | 2.88  | Koppers Road       |            | NJ Transit Physical Characteristics 2005 |           | FALSE  |
| Montclair-Boonton Line | 19.29 | Stream             | 12/1/2011  | NJ Transit Physical Characteristics 2011 | 12/1/2011 | TRUE   |
| Morristown Line        | 6.72  | S. 5th Street      | 10/19/2011 | NJ Transit Physical Characteristics 2005 |           | FALSE  |
| Morristown Line        | 6.83  | Frank Rogers Blvd  | 10/19/2011 | NJ Transit Physical Characteristics 2005 |           | TRUE   |
| Morristown Line        |       | Bergen Street      |            | NJ Transit Physical Characteristics 2005 |           | FALSE  |
| Morristown Line        |       | Sussex Street      |            | NJ Transit Physical Characteristics 2005 |           | FALSE  |
| Morristown Line        |       | Warren Street      |            | NJ Transit Physical Characteristics 2005 |           | FALSE  |
| Morristown Line        |       | Jersey Street      |            | NJ Transit Physical Characteristics 2005 |           | FALSE  |
| Morristown Line        | 1     | Harrison Avenue    |            | NJ Transit Physical Characteristics 2005 |           | FALSE  |
| Morristown Line        | 1     | Cleveland Avenue   |            | NJ Transit Physical Characteristics 2005 |           | FALSE  |
| Morristown Line        |       | Hamilton Avenue    |            | NJ Transit Physical Characteristics 2005 |           | TRUE   |
| Morristown Line        |       | Passaic Avenue     |            | NJ Transit Physical Characteristics 2005 |           | FALSE  |
|                        |       | Passaic River      |            | NJ Transit Physical Characteristics 2005 |           | FALSE  |

|                                    |       |                               | Date       |  | Creation |        |
|------------------------------------|-------|-------------------------------|------------|--|----------|--------|
| Line Name                          | MP    | Structure_Name                | Modified   | Source   | Date     | Edited |
| Morristown Line                    |       | Route 21/Ogden Street         |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Broad Street                  |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | University Plaza              |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Ped Subway                    |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Martin Luther King Boulevard  |            | NJ Transit Physical Characteristics 2005   |          | TRUE   |
| Morristown Line                    |       | Footbridge                    |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | 14th Street                   |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | 16th Street                   |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Greenwood Avenue              |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Ped Subway                    |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Grove Street                  |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Oraton Parkway                |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Garden State Parkway          |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Arlington Avenue              |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Walnut Street                 |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | S. Burnet Street              |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | S. Clinton Street             |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Bridge                        |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Halstead Street               |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Harrison Street               |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Oakwood Avenue                |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Hickory Street                |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | S. Center                     |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | S. Day Street                 |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | S. Essex Street               |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Ped Subway                    |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Lincoln Avenue<br>Route 280   |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       |                               |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Glebe Street                  |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Cary Street                   |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Joyce Street                  |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Central Avenue                |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Mitchell Avenue               |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Stetson Avenue                |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Ped Tunnel                    |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Freeman Street                |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Forest Street                 |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Nassau Street                 |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | McChesney Street              |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Christopher Street            |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Tremont Avenue                |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Beach Street                  |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Chestnut Street               |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Argyle Street                 |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Meade Street                  |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | S. Orange Street              |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    | 13.94 |                               |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | 3rd Street                    |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Rahway River<br>Parker Avenue |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       |                               |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Jefferson Avenue              |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Ped Tunnel<br>Ped Tunnel      |            | NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005 |          | FALSE  |
| Morristown Line<br>Morristown Line |       | Ped Tunnel<br>Baker Street    |            |  |          | FALSE  |
|                                    |       |                               |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Ridgewood Street              |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Cypress Street                |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Lackawanna Place              |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Rahway River                  |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Main Street                   |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Pine Terrace                  |            | NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005 |          | FALSE  |
| Morristown Line                    |       | Short Hills Avenue            |            |  |          | TRUE   |
| Morristown Line                    |       | Forest Drive                  |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Taylor Road<br>Morris Avound  |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Morris Aveune                 |            | NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005 |          | FALSE  |
| Morristown Line                    |       | Route 24                      |            | · · · · · · · · · · · · · · · · · · ·  |          | FALSE  |
| Morristown Line                    |       | Springfield Avenue            |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Passaic Avenue                |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | New Providence Avenue         |            | NJ Transit Physical Characteristics 2005   | <u> </u> | FALSE  |
| Morristown Line                    |       | Mt. Vernon Avenue             |            | NJ Transit Physical Characteristics 2005   |          | TRUE   |
| Morristown Line                    |       | Passiac River                 |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | River Road                    |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Watchung Avenue               |            | NJ Transit Physical Characteristics 2005   |          | TRUE   |
| Morristown Line                    |       | Ped Tunnel                    |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    |       | Hillside Avenue               |            | NJ Transit Physical Characteristics 2005   |          | FALSE  |
| Morristown Line                    | 23.39 | Passaic Avenue                | 10/19/2011 | NJ Transit Physical Characteristics 2005   |          | FA     |

| Line Name                    | MP    | Structuro Namo                     | Date       | Source   | Creation   | Editod          |
|------------------------------|-------|------------------------------------|------------|--|------------|-----------------|
| Line Name<br>Morristown Line |       | Structure_Name<br>Fairmount Avenue | Modified   | Source<br>NJ Transit Physical Characteristics 2005 | Date       | Edited<br>FALSE |
| Morristown Line              |       | Washington Avenue                  |            | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              |       | Lafayette Avenue                   |            | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              |       | Kings Road                         |            | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              |       | Prospect Street                    |            | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              |       | Ped Subway                         |            | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              |       | Green Avenue                       |            | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              |       | Green Village Road                 |            | NJ Transit Physical Characteristics 2005           |            | TRUE            |
|                              |       |                                    |            |  |            |                 |
| Morristown Line              |       | Route 124                          |            | NJ Transit Physical Characteristics 2005           |            | TRUE            |
| Morristown Line              |       | Elm Street                         |            | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              |       | Punch Bowl Road                    |            | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              |       | Route 287                          |            | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              |       | Ford Avenue                        |            | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              |       | Lafayette Avenue                   |            | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              |       | Whippany River                     |            | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              |       | M.L.K. Highway                     |            | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              |       | Cory Road                          |            | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              | 32.06 | Route 202                          | 10/19/2011 | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              | 32.57 | Watcing Creek                      | 10/19/2011 | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              | 33.07 | Creek                              |            | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              | 33.34 | Watcong Creek                      | 10/19/2011 | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              | 33.7  | Watcong Creek                      | 10/19/2011 | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              | 34.83 | Spillway                           | 10/19/2011 | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              |       | Esting Lake                        |            | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              | 36.41 | Waterway                           |            | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              |       | Rockaway River                     | 10/19/2011 | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              |       | Rockaway River                     |            | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              |       | Rockaway River                     |            | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              |       | Rockaway River                     |            | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              |       | Mill Road                          |            | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              |       | Conrail                            |            | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              |       | Berkshire Valley Road              |            | NJ Transit Physical Characteristics 2005           |            | TRUE            |
| Morristown Line              |       | Howard Boulevard                   |            | NJ Transit Physical Characteristics 2005           |            | FALSE           |
|                              |       | Shippenport Road                   |            | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              |       |                                    |            |  |            | 1               |
| Morristown Line              |       | Cattle Pass                        |            | NJ Transit Physical Characteristics 2005           |            | TRUE            |
| Morristown Line              |       | Musconetcong River                 |            | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              |       | Waterway                           |            | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              |       | Waterway                           |            | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              |       | Waterway                           |            | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              |       | Ped Tunnel                         |            | NJ Transit Physical Characteristics 2005           | 10/19/2011 | TRUE            |
| Morristown Line              |       | Morris Avenue                      |            | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| Morristown Line              |       | Ped Subway                         |            | NJ Transit Physical Characteristics 2005           |            | FALSE           |
| N. Jersey Coast Ln (So.)     |       | Parkers Creek                      |            | NJ Transit Physical Characteristics 2011           |            | TRUE            |
| N. Jersey Coast Ln (So.)     | 19.8  | Oceanport Creek                    | 12/1/2011  | NJ Transit Physical Characteristics 2011           |            | TRUE            |
| N. Jersey Coast Ln (So.)     | 20.9  | Branchport Creek                   |            | NJ Transit Physical Characteristics 2011           |            | TRUE            |
| N. Jersey Coast Ln (So.)     | 22.8  | Eastborne Avenue                   | 12/1/2011  | NJ Transit Physical Characteristics 2011           |            | TRUE            |
| N. Jersey Coast Ln (So.)     | 0.39  | Raritan River                      | 12/1/2011  | NJ Transit Physical Characteristics 2011           |            | TRUE            |
| N. Jersey Coast Ln (So.)     |       | Travis Creek                       |            | NJ Transit Physical Characteristics 2011           |            | TRUE            |
| N. Jersey Coast Ln (So.)     | 5.94  | Garden State Parkway               | 12/1/2011  | NJ Transit Physical Characteristics 2011           |            | TRUE            |
| N. Jersey Coast Ln (So.)     | 6.41  | Matawan Creek                      | 12/1/2011  | NJ Transit Physical Characteristics 2011           |            | TRUE            |
| N. Jersey Coast Ln (So.)     | 6.97  | Matawan Creek                      | 12/1/2011  | NJ Transit Physical Characteristics 2011           |            | TRUE            |
| N. Jersey Coast Ln (So.)     |       | Laurel Avenue                      |            | NJ Transit Physical Characteristics 2011           |            | TRUE            |
| N. Jersey Coast Ln (So.)     | 3.22  | Cheesequake Creek                  | 12/1/2011  | NJ Transit Physical Characteristics 2011           |            | TRUE            |
| N. Jersey Coast Ln (So.)     |       | US Navy                            | 12/1/2011  | NJ Transit Physical Characteristics 2011           |            | FALSE           |
| N. Jersey Coast Ln (So.)     |       | Field's                            |            | NJ Transit Physical Characteristics 2011           |            | FALSE           |
| N. Jersey Coast Ln (So.)     |       | Navesink River                     |            | NJ Transit Physical Characteristics 2011           |            | FALSE           |
| N. Jersey Coast Ln (So.)     |       | Front Street                       |            | NJ Transit Physical Characteristics 2011           |            | FALSE           |
| N. Jersey Coast Ln (So.)     |       | Takanasse Lake                     |            | NJ Transit Physical Characteristics 2011           |            | FALSE           |
| N. Jersey Coast Ln (So.)     |       | Ped Subway                         |            | NJ Transit Physical Characteristics 2011           |            | FALSE           |
| N. Jersey Coast Ln (So.)     |       | Lincoln Avenue                     |            | NJ Transit Physical Characteristics 2011           |            | FALSE           |
| N. Jersey Coast Ln (So.)     |       | Cedar Street                       |            | NJ Transit Physical Characteristics 2011           |            | FALSE           |
| N. Jersey Coast Ln (So.)     |       | Deal Lake                          |            | NJ Transit Physical Characteristics 2011           |            | FALSE           |
| N. Jersey Coast Ln (So.)     |       | Deal Lake                          |            | NJ Transit Physical Characteristics 2011           |            | FALSE           |
|                              |       |                                    |            |  |            | 1               |
| N. Jersey Coast Ln (So.)     |       | Ped Subway                         |            | NJ Transit Physical Characteristics 2011           |            | FALSE           |
| N. Jersey Coast Ln (So.)     |       | Shark River                        |            | NJ Transit Physical Characteristics 2011           |            | FALSE           |
| N. Jersey Coast Ln (So.)     |       | Shark River                        |            | NJ Transit Physical Characteristics 2011           |            | FALSE           |
| N. Jersey Coast Ln (So.)     |       | Wrack Pond                         |            | NJ Transit Physical Characteristics 2011           |            | FALSE           |
| N. Jersey Coast Ln (So.)     |       | Big Wrack Pond                     |            | NJ Transit Physical Characteristics 2011           |            | FALSE           |
| N. Jersey Coast Ln (So.)     |       | Morris Cove                        |            | NJ Transit Physical Characteristics 2011           |            | FALSE           |
| N. Jersey Coast Ln (So.)     | 35.68 | Debbie's Creel                     |            | NJ Transit Physical Characteristics 2011           |            | FALSE           |
| N. Jersey Coast Ln (So.)     |       | Manasquan River                    | 12/1/2011  | NJ Transit Physical Characteristics 2011           |            | FALSE           |
| N. Jersey Coast Ln (So.)     | 36.01 | Moveable Span                      | 12/1/2011  | NJ Transit Physical Characteristics 2011           |            | FALSE           |
| N. Jersey Coast Ln (So.)     |       | Manasquan River                    |            | NJ Transit Physical Characteristics 2011           |            | FALSE           |
|                              |       | Creek                              |            | NJ Transit Physical Characteristics 2011           |            | FALSE           |
| N. Jersey Coast Ln (So.)     |       |                                    |            |  |            |                 |

| Line Name                | MP    | Structure Name     | Date<br>Modified | Source   | Creation<br>Date | Edited |
|--------------------------|-------|--------------------|------------------|--|------------------|--------|
| N. Jersey Coast Ln (So.) |       | Dorsett Creek      |                  | NJ Transit Physical Characteristics 2011       | Date             | FALSE  |
| Pascack Valley Line      |       | Coles Brook        |                  | NJ Transit Physical Characteristics 2011       |                  | FALSE  |
| Pascack Valley Line      |       | Culvert            |                  | NJ Transit Physical Characteristics 2011       |                  | FALSE  |
| Pascack Valley Line      |       | Culvert            |                  | NJ Transit Physical Characteristics 2011       |                  | FALSE  |
| Pascack Valley Line      |       | Culvert            |                  | NJ Transit Physical Characteristics 2011       |                  | FALSE  |
| Pascack Valley Line      |       | Culvert            |                  | NJ Transit Physical Characteristics 2011       |                  | FALSE  |
| Pascack Valley Line      |       | Musquapsink Creek  |                  | NJ Transit Physical Characteristics 2011       |                  | FALSE  |
| Pascack Valley Line      |       | Pascack Creek      |                  | NJ Transit Physical Characteristics 2011       |                  | FALSE  |
| Pascack Valley Line      |       | Culvert            |                  | NJ Transit Physical Characteristics 2011       |                  | FALSE  |
| Pascack Valley Line      |       | Culvert            |                  | NJ Transit Physical Characteristics 2011       |                  | FALSE  |
| Pascack Valley Line      |       | Culvert            |                  | NJ Transit Physical Characteristics 2011       |                  | FALSE  |
| Port Reading Secondary   |       | Green Brook        |                  | Conrail Philadelphia Division Track Chart 1999 |                  | TRUE   |
| Princeton Branch         |       | Bear Brook         |                  | NJ Transit Physical Characteristics 2011       |                  | FALSE  |
| Princeton Branch         |       | D & R Canal        |                  | NJ Transit Physical Characteristics 2011       |                  | FALSE  |
| Princeton Branch         |       | Stoney Brook       |                  | NJ Transit Physical Characteristics 2011       |                  | FALSE  |
| Raritan Valley Line      |       | Creek              |                  | NS Harrisburg Division Track Chart 2008        |                  | FALSE  |
| Raritan Valley Line      |       | Musconetcong River |                  | NS Harrisburg Division Track Chart 2008        |                  | FALSE  |
| Raritan Valley Line      |       | New Brunswick      |                  | NS Harrisburg Division Track Chart 2008        |                  | FALSE  |
|                          |       |                    |                  |  |                  | FALSE  |
| Raritan Valley Line      |       | Route 173          |                  | NS Harrisburg Division Track Chart 2008        |                  |        |
| Raritan Valley Line      |       | Hoffman's Creek    |                  | NS Harrisburg Division Track Chart 2008        |                  | FALSE  |
| Raritan Valley Line      |       | Iron Bridge Road   |                  | NS Harrisburg Division Track Chart 2008        | _                | FALSE  |
| Raritan Valley Line      |       | Main Steet         |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      |       | Spruce Run Creek   |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      |       | White Hill Road    |                  | NJ Transit Physical Characteristics 2005       | _                | FALSE  |
| Raritan Valley Line      |       | Glengardner Road   |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      |       | Rocky Run Road     |                  | NJ Transit Physical Characteristics 2005       | _                | FALSE  |
| Raritan Valley Line      |       | Rocky Run Creek    |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      | -     | Main Street        |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      |       | Raritan River      |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      | 50.71 | Creek              | 11/12/2011       | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      | 50.63 | West Street        | 11/12/2011       | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      | 49.99 | Beaver Brook       | 11/12/2011       | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      | 48.35 | Creek              | 11/12/2011       | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      | 48.31 | Knox Lane          | 11/12/2011       | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      | 47.92 | Cherry Street      | 11/12/2011       | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      | 47.68 | Creek              | 11/12/2011       | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      | 47.12 | Creek              | 11/12/2011       | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      | 45.82 | Creek              | 11/12/2011       | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      | 45.03 | Creek              | 11/12/2011       | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      | 42.37 | Creek              | 11/12/2011       | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      | 41.59 | Creek              | 11/12/2011       | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      | 40.98 | Creek              | 11/12/2011       | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      | 40.89 | Creek              |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      |       | Creek              |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      |       | Dumont Creek       |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      |       | Raritan River      |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      |       | Milltown Road      |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      |       | Creek              |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      |       | Route 202          |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      |       | Creek              |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      |       | First Avenue       |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      |       | Route 206          |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      |       | Middaugh Street    |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      |       | Somerset Street    |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      |       | Ped Subway         |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
|                          |       |                    |                  | NJ Transit Physical Characteristics 2005       |                  |        |
| Raritan Valley Line      |       | Bridge Street      |                  |  |                  | FALSE  |
| Raritan Valley Line      | 1     | Hamilton Street    |                  | NJ Transit Physical Characteristics 2005       | _                | FALSE  |
| Raritan Valley Line      |       | Peters Brook       |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      | 1     | Loeser Avenue      |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      |       | Cuckold Brook      |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      |       | Plant Driveway     |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      |       | Route 287          |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      |       | Middle Brook       |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      |       | Ped Subway         |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      |       | Main Street        |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      |       | Greens Brook       |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      |       | River Road         |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      | 1     | Ambrose Brook      |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      |       | Bound Brook        |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      |       | Benagaut Brook     |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      | 26.24 | Madison Avenue     | 11/12/2011       | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      | 26.06 | Prospect Avenue    |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      | 25.93 | Washington Avenue  | 11/12/2011       | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      |       | Ped Subway         |                  | NJ Transit Physical Characteristics 2005       |                  | FALSE  |
| Raritan Valley Line      |       | Rock Avenue        |                  | NJ Transit Physical Characteristics 2005       | 1                | FALSE  |

| Line Name<br>Raritan Valley Line<br>Raritan Valley Line<br>Raritan Valley Line<br>Raritan Valley Line |       | Structure_Name Clinton Avenue      |            | Source<br>NJ Transit Physical Characteristics 2005   | Date                     | Edited<br>FALSE |
|---|-------|------------------------------------|------------|--|--------------------------|-----------------|
| Raritan Valley Line<br>Raritan Valley Line  |       |                                    |            | NJ Transit Physical Characteristics 2005   |                          | FALSE           |
| Raritan Valley Line   | 24.08 |                                    |            | NUT SEL LOL STATIONS   |                          | EALCE           |
|   | 22.60 | Grant Avenue<br>Plainfield Avenue  |            | NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005             |                          | FALSE<br>FALSE  |
| manual valicy Line  |       | Liberty Street                     |            | NJ Transit Physical Characteristics 2005   |                          | FALSE           |
| Raritan Valley Line   |       | New Street                         |            | NJ Transit Physical Characteristics 2005   |                          | FALSE           |
| Raritan Valley Line   |       | Central Avenue                     |            | NJ Transit Physical Characteristics 2005   |                          | FALSE           |
| Raritan Valley Line   |       | Madison Avenue                     |            | NJ Transit Physical Characteristics 2005   |                          | FALSE           |
| Raritan Valley Line   | 23.13 | Park Avenue                        |            | NJ Transit Physical Characteristics 2005   |                          | FALSE           |
| Raritan Valley Line   | 23.04 | Ped Subway                         | 11/12/2011 | NJ Transit Physical Characteristics 2005   |                          | FALSE           |
| Raritan Valley Line   | 22.99 | Watchung Avenue                    | 11/12/2011 | NJ Transit Physical Characteristics 2005   |                          | FALSE           |
| Raritan Valley Line   | 22.85 | Roosevelt Avenue                   | 11/12/2011 | NJ Transit Physical Characteristics 2005   |                          | FALSE           |
| Raritan Valley Line   |       | Richmond Street                    |            | NJ Transit Physical Characteristics 2005   |                          | FALSE           |
| Raritan Valley Line   |       | Berkman Street                     |            | NJ Transit Physical Characteristics 2005   |                          | FALSE           |
| Raritan Valley Line   |       | Ped Subway                         |            | NJ Transit Physical Characteristics 2005   |                          | FALSE           |
| Raritan Valley Line   |       | Leland Avenue                      |            | NJ Transit Physical Characteristics 2005   |                          | FALSE           |
| Raritan Valley Line   |       | Hetfield Avenue                    |            | NJ Transit Physical Characteristics 2005   |                          | FALSE<br>FALSE  |
| Raritan Valley Line<br>Raritan Valley Line  | -     | Crossway Place<br>Westfield Avenue |            | NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005             |                          | FALSE           |
| Raritan Valley Line   |       | Ped Subway                         |            | NJ Transit Physical Characteristics 2005   |                          | FALSE           |
| Raritan Valley Line   | -     | Central Avenue                     |            | NJ Transit Physical Characteristics 2005   |                          | FALSE           |
| Raritan Valley Line   |       | Central Avenue                     |            | NJ Transit Physical Characteristics 2005   |                          | FALSE           |
| Raritan Valley Line   |       | Cranford Creek                     |            | NJ Transit Physical Characteristics 2005   |                          | FALSE           |
| Raritan Valley Line   |       | Lincoln Aveune                     |            | NJ Transit Physical Characteristics 2005   | 1                        | FALSE           |
| Raritan Valley Line   |       | Walnut Street                      |            | NJ Transit Physical Characteristics 2005   |                          | FALSE           |
| Raritan Valley Line   | -     | Ped Subway                         |            | NJ Transit Physical Characteristics 2005   |                          | FALSE           |
| Raritan Valley Line   | -     | Rahway River                       |            | NJ Transit Physical Characteristics 2005   |                          | FALSE           |
| Raritan Valley Line   | 15.99 | Centennial Avenue                  |            | NJ Transit Physical Characteristics 2005   |                          | FALSE           |
| Raritan Valley Line   | 44.47 | Creek                              | 11/12/2011 | NJ Transit Physical Characteristics 2005   |                          | TRUE            |
| Raritan Valley Line   | 47.23 |                                    |            | NJ Transit Physical Characteristics 2005   |                          | TRUE            |
| Raritan Valley Line   |       | Willough Brook                     | 11/12/2011 | NJ Transit Physical Characteristics 2005   |                          | TRUE            |
| Southern Secondary  |       | Lafetras Brook                     |            | Conrail Philadelphia Division Track Chart 1999   |                          | TRUE            |
| West Trenton Line   | -     | S Main St                          |            | Conrail Philadelphia Division Track Chart 1999   |                          | TRUE            |
| Amboy Secondary   |       | South River                        |            | Conrail Philadelphia Division Track Chart 1999   | 10/10/2011               | TRUE            |
| Morristown Line   | -     | Luis Marin Blvd.                   |            | NJ Transit Physical Characteristics 2005   | 10/19/2011               | TRUE            |
| Morristown Line   |       | Hoboken Avenue                     |            | NJ Transit Physical Characteristics 2005   | 10/19/2011               | TRUE<br>TRUE    |
| Morristown Line<br>Morristown Line  | -     | Grove Street<br>River Line         |            | NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005             | 10/19/2011<br>10/19/2011 | TRUE            |
| Morristown Line   |       | Cedar Creek                        |            | NJ Transit Physical Characteristics 2005   | 10/19/2011               | TRUE            |
| Morristown Line   |       | Frank Creek                        |            | NJ Transit Physical Characteristics 2005   | 10/19/2011               | TRUE            |
| Morristown Line   |       | Western Viaduct                    |            | NJ Transit Physical Characteristics 2005   | 10/19/2011               | TRUE            |
| Morristown Line   |       | Morris Street                      |            | NJ Transit Physical Characteristics 2005   | 10/19/2011               | TRUE            |
| Morristown Line   |       | Ped Tunnel                         |            | NJ Transit Physical Characteristics 2005   | 10/19/2011               | TRUE            |
| Morristown Line   | -     | Waterway                           |            | NJ Transit Physical Characteristics 2005   | 10/19/2011               | TRUE            |
| Morristown Line   | 17.84 | Ped Tunnel                         | 10/19/2011 | NJ Transit Physical Characteristics 2005   | 10/19/2011               | TRUE            |
| Morristown Line   | 21.55 | Waterway                           | 10/19/2011 | NJ Transit Physical Characteristics 2005   | 10/19/2011               | TRUE            |
| Morristown Line   | 23.53 | Ped Tunnel                         | 10/19/2011 | NJ Transit Physical Characteristics 2005   | 10/19/2011               | TRUE            |
| Morristown Line   | 23.84 | Waterway                           |            | NJ Transit Physical Characteristics 2005   | 10/19/2011               | TRUE            |
| Morristown Line   |       | Franklin Road                      |            | NJ Transit Physical Characteristics 2005   | 10/19/2011               | TRUE            |
| Morristown Line   |       | Waterway                           |            | NJ Transit Physical Characteristics 2005   | 10/19/2011               | TRUE            |
| Morristown Line   |       | Waterway                           |            | NJ Transit Physical Characteristics 2005   | 10/19/2011               | TRUE            |
| Morristown Line   |       | Waterway                           |            | NJ Transit Physical Characteristics 2005   | 10/19/2011               | TRUE            |
| Morristown Line   | _     | Waterway<br>Waterway               |            | NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005             | 10/19/2011               | TRUE<br>TRUE    |
| Morristown Line<br>Morristown Line  |       | Waterway<br>Waterway               |            | NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005             | 10/19/2011<br>10/19/2011 | TRUE            |
| Morristown Line   |       | Waterway                           |            | NJ Transit Physical Characteristics 2005   | 10/19/2011               | TRUE            |
| Morristown Line   |       | Waterway                           |            | NJ Transit Physical Characteristics 2005   | 10/19/2011               | TRUE            |
| Morristown Line   | -     | Cattle Pass                        |            | NJ Transit Physical Characteristics 2005   | 10/19/2011               | TRUE            |
| Morristown Line   |       | Private Farm Road                  |            | NJ Transit Physical Characteristics 2005   | 10/19/2011               | TRUE            |
| Morristown Line   |       | Grand Avenue                       |            | NJ Transit Physical Characteristics 2005   | 10/19/2011               | TRUE            |
| Lehigh Line   |       | Dead Ditch                         |            | Conrail Philadelphia Division Track Chart 1999   | 10/21/2011               | TRUE            |
| Lehigh Line   |       | 10th WD DTH                        |            | Conrail Philadelphia Division Track Chart 1999   | 10/21/2011               | TRUE            |
| Lehigh Line   | 10.79 | Amtrak RR                          | 10/21/2011 | Conrail Philadelphia Division Track Chart 1999   | 10/21/2011               | TRUE            |
| Lehigh Line   |       | Conant Ave                         |            | Conrail Philadelphia Division Track Chart 1999   | 10/21/2011               | TRUE            |
| Lehigh Line   |       | Ped Subway                         |            | Conrail Philadelphia Division Track Chart 1999   | 10/21/2011               | TRUE            |
| Lehigh Line   |       | Faitouteave Ave                    |            | Conrail Philadelphia Division Track Chart 1999   | 10/21/2011               | TRUE            |
| Lehigh Line   |       | Westfield Ave                      |            | Conrail Philadelphia Division Track Chart 1999   | 10/21/2011               | TRUE            |
| Lehigh Line   | _     | Conrail Elizabeth Bridge           |            | Conrail Philadelphia Division Track Chart 1999   | 10/21/2011               | TRUE            |
| Lehigh Line   |       | South Ave                          |            | Conrail Philadelphia Division Track Chart 1999   | 10/21/2011               | TRUE            |
| Lehigh Line   |       | Staten Island RR                   |            | Conrail Philadelphia Division Track Chart 1999   | 10/21/2011               | TRUE            |
| Lehigh Line   |       | Central Ave                        |            | Conrail Philadelphia Division Track Chart 1999   | 10/21/2011               | TRUE            |
| Lehigh Line   |       | Rahway River                       |            | Conrail Philadelphia Division Track Chart 1999   | 10/21/2011               |                 |
|   |       | Folsom Creek                       | 10/21/2011 | Conrail Philadelphia Division Track Chart 1999   | 10/21/2011               | TRUE            |
| Lehigh Line   |       |                                    |            |  |                          | TDUE            |
|   | 21.04 | Lambertsrun<br>Robinson Creek      | 10/21/2011 | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999 | 10/21/2011<br>10/21/2011 | TRUE<br>TRUE    |

| Line NameMFLehigh Line  | 26.43<br>27.15<br>28.28<br>29.67<br>31.88<br>32.83<br>33.59<br>34.03<br>34.58<br>35.38<br>35.38<br>35.38<br>35.38<br>35.38<br>35.38<br>35.38<br>35.38<br>35.38<br>35.38<br>35.38<br>35.38<br>35.39<br>43.85<br>43.98<br>44.24<br>4.24<br>4.22<br>3.85<br>3.69<br>3.25<br>3.08<br>2.99<br>2.83<br>2.26<br>2.31 | Structure_Name         Bound Brook         Stream         Bound Brook         Dismal Brook         Ambrose Brook         Ambrose Brook         Main St         Wollen Creek Road         Middle Brook         Cuckels Brook         Raritan River         South Main St         Route 206         Waterway         CNJ Est RR         Mill Lane         Raritan River         Passaic River         CR Mnfctrs         Lincoln Highway         Foundry St | 10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011 | Source<br>Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999<br>Sonrail Philadelphia Division Track Chart 1999<br>NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008 | Date           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011 | Edited           TRUE           TRUE |
|---|---|---|---|---|---|---|
| Lehigh LineILehigh LineIPassaic & Harsimus BranchIPassaic & Harsimu   | 27.15<br>28.28<br>29.67<br>31.88<br>32.94<br>33.08<br>33.59<br>34.03<br>34.58<br>35.38<br>36.41<br>39.59<br>43.85<br>43.98<br>44.24<br>4.22<br>3.85<br>3.69<br>3.25<br>3.08<br>2.99<br>2.83<br>2.66<br>2.45<br>2.31   | Stream<br>Bound Brook<br>Dismal Brook<br>Ambrose Brook<br>River Road<br>Ambrose Brook<br>Main St<br>Wollen Creek Road<br>Middle Brook<br>Cuckels Brook<br>Cuckels Brook<br>Raritan River<br>South Main St<br>Route 206<br>Waterway<br>CNJ Est RR<br>Mill Lane<br>Raritan River<br>Passaic River<br>CR Mnfctrs<br>Lincoln Highway<br>Foundry St  | 10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011 | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999<br>NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008   | 10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/25/2011<br>10/25/2011<br>10/25/2011  | TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE  |
| Lehigh Line         Passaic & Harsimus Branch         Passaic & Harsi   | 28.28<br>29.67<br>31.88<br>32.94<br>33.08<br>33.59<br>34.03<br>34.58<br>35.38<br>36.41<br>39.59<br>43.85<br>43.98<br>44.24<br>4.22<br>3.85<br>3.69<br>3.25<br>3.08<br>2.99<br>2.83<br>2.66<br>2.45<br>2.31  | Bound Brook<br>Dismal Brook<br>Ambrose Brook<br>River Road<br>Ambrose Brook<br>Main St<br>Wollen Creek Road<br>Middle Brook<br>Cuckels Brook<br>Raritan River<br>South Main St<br>Route 206<br>Waterway<br>CNJ Est RR<br>Mill Lane<br>Raritan River<br>Passaic River<br>CR Mnfctrs<br>Lincoln Highway<br>Foundry St   | 10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011 | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999<br>NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008  | 10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/25/2011<br>10/25/2011<br>10/25/2011  | TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE  |
| Lehigh Line       Lehigh Line         Lehigh Line       Passaic & Harsimus Branch         Passaic & Harsimus Branch       Passaic & Barsimus Branch         Passaic & Harsimus Branch       Passaic & Barsimus Branch      <  | 29.67<br>31.88<br>32.83<br>32.94<br>33.08<br>33.59<br>34.03<br>34.58<br>35.38<br>36.41<br>38.21<br>39.59<br>43.98<br>44.24<br>4.22<br>3.85<br>3.69<br>3.25<br>3.08<br>2.99<br>2.83<br>2.66<br>2.45<br>2.31  | Dismal Brook<br>Ambrose Brook<br>River Road<br>Ambrose Brook<br>Main St<br>Wollen Creek Road<br>Middle Brook<br>Cuckels Brook<br>Raritan River<br>South Main St<br>Route 206<br>Waterway<br>CNJ Est RR<br>Mill Lane<br>Raritan River<br>Passaic River<br>CR Mnfctrs<br>Lincoln Highway<br>Foundry St  | 10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011   | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999<br>NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008   | 10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/25/2011<br>10/25/2011<br>10/25/2011  | TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE  |
| Lehigh Line         Passaic & Harsimus Branch         P   | 31.88<br>32.83<br>32.94<br>33.08<br>33.59<br>34.03<br>34.58<br>35.38<br>36.41<br>38.21<br>39.59<br>43.85<br>43.98<br>44.24<br>4.22<br>3.85<br>3.69<br>3.25<br>3.08<br>2.99<br>2.83<br>2.66<br>2.45<br>2.31  | Ambrose Brook<br>River Road<br>Ambrose Brook<br>Main St<br>Wollen Creek Road<br>Middle Brook<br>Cuckels Brook<br>Raritan River<br>South Main St<br>Route 206<br>Waterway<br>CNJ Est RR<br>Mill Lane<br>Raritan River<br>Passaic River<br>CR Mnfctrs<br>Lincoln Highway<br>Foundry St  | 10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011   | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999<br>NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008  | 10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/25/2011<br>10/25/2011<br>10/25/2011<br>10/25/2011  | TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE  |
| Lehigh Line         Passaic & Harsimus Branch         Passaic & Secondary         National Docks Secondary         National Docks Secondary   | 32.83<br>32.94<br>33.08<br>33.59<br>34.03<br>34.58<br>35.38<br>36.41<br>38.21<br>39.59<br>43.85<br>43.98<br>44.24<br>4.22<br>3.85<br>3.69<br>3.25<br>3.08<br>2.99<br>2.83<br>2.66<br>2.45<br>2.31   | River Road<br>Ambrose Brook<br>Main St<br>Wollen Creek Road<br>Middle Brook<br>Cuckels Brook<br>Raritan River<br>South Main St<br>Route 206<br>Waterway<br>CNJ Est RR<br>Mill Lane<br>Raritan River<br>Passaic River<br>CR Mnfctrs<br>Lincoln Highway<br>Foundry St   | 10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011   | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999<br>NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008   | 10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/25/2011<br>10/25/2011<br>10/25/2011<br>10/25/2011  | TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE  |
| Lehigh Line         Passaic & Harsimus Branch   | 32.94<br>33.08<br>33.59<br>34.03<br>34.58<br>35.38<br>36.41<br>38.21<br>39.59<br>43.85<br>43.98<br>44.24<br>4.22<br>3.85<br>3.69<br>3.25<br>3.08<br>2.99<br>2.83<br>2.83<br>2.65<br>2.31  | Ambrose Brook<br>Main St<br>Wollen Creek Road<br>Middle Brook<br>Cuckels Brook<br>Raritan River<br>South Main St<br>Route 206<br>Waterway<br>CNJ Est RR<br>Mill Lane<br>Raritan River<br>Passaic River<br>CR Mnfctrs<br>Lincoln Highway<br>Foundry St   | 10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011   | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999<br>NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008  | 10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/21/2011<br>10/25/2011<br>10/25/2011<br>10/25/2011<br>10/25/2011  | TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE  |
| Lehigh Line       I         Passaic & Harsimus Branch       P         Passaic & Harsimus Branch       I         Passaic & Secondary       I <t< td=""><td>33.08<br/>33.59<br/>34.03<br/>34.58<br/>35.38<br/>36.41<br/>38.21<br/>39.59<br/>43.85<br/>43.98<br/>44.24<br/>4.22<br/>3.85<br/>3.69<br/>3.25<br/>3.08<br/>2.99<br/>2.83<br/>2.66<br/>2.45<br/>2.31</td><td>Main St<br/>Wollen Creek Road<br/>Middle Brook<br/>Cuckels Brook<br/>Raritan River<br/>South Main St<br/>Route 206<br/>Waterway<br/>CNJ Est RR<br/>Mill Lane<br/>Raritan River<br/>Passaic River<br/>CR Mnfctrs<br/>Lincoln Highway<br/>Foundry St</td><td>10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011</td><td>Conrail Philadelphia Division Track Chart 1999<br/>Conrail Philadelphia Division Track Chart 1999<br/>NS Harrisburg Division Track Chart 2008<br/>NS Harrisburg Division Track Chart 2008</td><td>10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011</td><td>TRUE<br/>TRUE<br/>TRUE<br/>TRUE<br/>TRUE<br/>TRUE<br/>TRUE<br/>TRUE</td></t<> | 33.08<br>33.59<br>34.03<br>34.58<br>35.38<br>36.41<br>38.21<br>39.59<br>43.85<br>43.98<br>44.24<br>4.22<br>3.85<br>3.69<br>3.25<br>3.08<br>2.99<br>2.83<br>2.66<br>2.45<br>2.31   | Main St<br>Wollen Creek Road<br>Middle Brook<br>Cuckels Brook<br>Raritan River<br>South Main St<br>Route 206<br>Waterway<br>CNJ Est RR<br>Mill Lane<br>Raritan River<br>Passaic River<br>CR Mnfctrs<br>Lincoln Highway<br>Foundry St  | 10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011  | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999<br>NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008   | 10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011  | TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE  |
| Lehigh Line       I         Passaic & Harsimus Branch       P         Passaic & Harsimus Branch       P         Passaic & Harsimus Branch       I         Passaic & Harsimus Branch       P         Passaic & Harsimus Branch       I         National Docks Secondary       I         National Docks Secondary       I         National Docks Secondary  | 33.59<br>34.03<br>34.58<br>35.38<br>36.41<br>39.59<br>43.85<br>43.98<br>44.24<br>4.22<br>3.85<br>3.69<br>3.25<br>3.08<br>2.99<br>2.83<br>2.66<br>2.45<br>2.31   | Wollen Creek Road<br>Middle Brook<br>Cuckels Brook<br>Raritan River<br>South Main St<br>Route 206<br>Waterway<br>CNJ Est RR<br>Mill Lane<br>Raritan River<br>Passaic River<br>CR Mnfctrs<br>Lincoln Highway<br>Foundry St   | 10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011   | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999<br>NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008   | 10/21/2011           10/21/2011           10/21/2011           10/21/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011  | TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE  |
| Lehigh Line       Lehigh Line         Lehigh Line       Passaic & Harsimus Branch         Passaic & Harsimus Branch       Passaic & Harsimus Branch         Passaic & Secondary       National Docks Secondary         National Docks Secondary <t< td=""><td>34.03<br/>34.58<br/>35.38<br/>36.41<br/>39.59<br/>43.85<br/>43.98<br/>44.24<br/>4.22<br/>3.85<br/>3.69<br/>3.25<br/>3.08<br/>2.99<br/>2.89<br/>2.89<br/>2.66<br/>2.45<br/>2.31</td><td>Middle Brook<br/>Cuckels Brook<br/>Raritan River<br/>South Main St<br/>Route 206<br/>Waterway<br/>CNJ Est RR<br/>Mill Lane<br/>Raritan River<br/>Passaic River<br/>CR Mnfctrs<br/>Lincoln Highway<br/>Foundry St</td><td>10/21/2011           10/21/2011           10/21/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011</td><td>Conrail Philadelphia Division Track Chart 1999<br/>Conrail Philadelphia Division Track Chart 1999<br/>Conrail Philadelphia Division Track Chart 1999<br/>NS Harrisburg Division Track Chart 2008<br/>NS Harrisburg Division Track Chart 2008</td><td>10/21/2011           10/21/2011           10/21/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011</td><td>TRUE<br/>TRUE<br/>TRUE<br/>TRUE<br/>TRUE<br/>TRUE<br/>TRUE<br/>TRUE</td></t<>      | 34.03<br>34.58<br>35.38<br>36.41<br>39.59<br>43.85<br>43.98<br>44.24<br>4.22<br>3.85<br>3.69<br>3.25<br>3.08<br>2.99<br>2.89<br>2.89<br>2.66<br>2.45<br>2.31  | Middle Brook<br>Cuckels Brook<br>Raritan River<br>South Main St<br>Route 206<br>Waterway<br>CNJ Est RR<br>Mill Lane<br>Raritan River<br>Passaic River<br>CR Mnfctrs<br>Lincoln Highway<br>Foundry St  | 10/21/2011           10/21/2011           10/21/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011  | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999<br>NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008  | 10/21/2011           10/21/2011           10/21/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011  | TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE  |
| Lehigh Line       I         Passaic & Harsimus Branch       I         Passaic & Secondary       I         National Docks Secondary       I         National Docks Secondary       I         National Docks Second   | 34.58<br>35.38<br>36.41<br>39.59<br>43.85<br>43.98<br>43.98<br>43.98<br>3.69<br>3.25<br>3.08<br>2.99<br>2.89<br>2.89<br>2.66<br>2.45<br>2.31  | Cuckels Brook<br>Raritan River<br>South Main St<br>Route 206<br>Waterway<br>CNJ Est RR<br>Mill Lane<br>Raritan River<br>Passaic River<br>CR Mnfctrs<br>Lincoln Highway<br>Foundry St  | 10/21/2011           10/21/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011   | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999<br>NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008  | 10/21/2011           10/21/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011   | TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE  |
| Lehigh Line         Dassaic & Harsimus Branch         Passaic & Barsimus Branch         Passaic & Barsimus Branch         Passaic & Barsimus Branch         National Docks Secondary         National Docks Secondary         National Docks Secondary  | 35.38<br>36.41<br>38.21<br>39.59<br>43.85<br>43.98<br>44.24<br>4.22<br>3.85<br>3.69<br>3.25<br>3.08<br>2.99<br>2.83<br>2.66<br>2.45<br>2.31   | Raritan River<br>South Main St<br>Route 206<br>Waterway<br>CNJ Est RR<br>Mill Lane<br>Raritan River<br>Passaic River<br>CR Mnfctrs<br>Lincoln Highway<br>Foundry St   | 10/21/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011  | Conrail Philadelphia Division Track Chart 1999<br>NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008  | 10/21/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011   | TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE  |
| Lehigh Line       Lehigh Line         Lehigh Line       Lehigh Line         Lehigh Line       Lehigh Line         Lehigh Line       Lehigh Line         Passaic & Harsimus Branch       Passaic & Harsimus Branch         National Docks Secondary       National Docks Secondary         National Docks S  | 36.41<br>38.21<br>39.59<br>43.85<br>43.98<br>44.24<br>4.22<br>3.85<br>3.69<br>3.25<br>3.29<br>2.83<br>2.69<br>2.83<br>2.6<br>2.45<br>2.31   | South Main St<br>Route 206<br>Waterway<br>CNJ Est RR<br>Mill Lane<br>Raritan River<br>Passaic River<br>CR Mnfctrs<br>Lincoln Highway<br>Foundry St  | 10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011  | NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008  | 10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011   | TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE  |
| Lehigh Line         Lehigh Line         Lehigh Line         Lehigh Line         Lehigh Line         Passaic & Harsimus Branch         National Docks Secondary   | 38.21<br>39.59<br>43.85<br>43.98<br>44.24<br>4.22<br>3.85<br>3.69<br>3.25<br>3.08<br>2.99<br>2.83<br>2.66<br>2.45<br>2.31   | Route 206<br>Waterway<br>CNJ Est RR<br>Mill Lane<br>Raritan River<br>Passaic River<br>CR Mnfctrs<br>Lincoln Highway<br>Foundry St   | 10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011  | NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008   | 10/25/2011<br>10/25/2011<br>10/25/2011<br>10/25/2011  | TRUE<br>TRUE<br>TRUE<br>TRUE  |
| Lehigh Line         Lehigh Line         Lehigh Line         Lehigh Line         Passaic & Harsimus Branch         National Docks Secondary   | 39.59<br>43.85<br>43.98<br>44.24<br>4.22<br>3.85<br>3.69<br>3.25<br>3.08<br>2.99<br>2.83<br>2.6<br>2.45<br>2.31   | Waterway<br>CNJ Est RR<br>Mill Lane<br>Raritan River<br>Passaic River<br>CR Mnfctrs<br>Lincoln Highway<br>Foundry St  | 10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/25/2011           10/21/2011   | NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008  | 10/25/2011<br>10/25/2011<br>10/25/2011  | TRUE<br>TRUE<br>TRUE  |
| Lehigh Line       Lehigh Line         Lehigh Line       Passaic & Harsimus Branch         Passaic & Harsimus Branch       Passaic & Harsimus Branch         National Docks Secondary       National Docks Secondary         National Docks Secondary       Nationa  | 43.85<br>43.98<br>44.24<br>4.22<br>3.85<br>3.69<br>3.25<br>3.08<br>2.99<br>2.83<br>2.6<br>2.45<br>2.31  | CNJ Est RR<br>Mill Lane<br>Raritan River<br>Passaic River<br>CR Mnfctrs<br>Lincoln Highway<br>Foundry St  | 10/25/2011<br>10/25/2011<br>10/25/2011<br>10/21/2011  | NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008   | 10/25/2011<br>10/25/2011  | TRUE<br>TRUE  |
| Lehigh Line         Lehigh Line         Passaic & Harsimus Branch         National Docks Secondary         National Docks   | 43.98<br>44.24<br>4.22<br>3.85<br>3.69<br>3.25<br>3.08<br>2.99<br>2.83<br>2.6<br>2.45<br>2.31   | Mill Lane<br>Raritan River<br>Passaic River<br>CR Mnfctrs<br>Lincoln Highway<br>Foundry St  | 10/25/2011<br>10/25/2011<br>10/21/2011  | NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008  | 10/25/2011  | TRUE  |
| Lehigh Line         Passaic & Harsimus Branch         National Docks Secondary  | 44.24<br>4.22<br>3.85<br>3.69<br>3.25<br>3.08<br>2.99<br>2.83<br>2.6<br>2.45<br>2.31  | Raritan River<br>Passaic River<br>CR Mnfctrs<br>Lincoln Highway<br>Foundry St   | 10/25/2011<br>10/21/2011  | NS Harrisburg Division Track Chart 2008   |   |   |
| Passaic & Harsimus Branch<br>Passaic & Harsimus Branch<br>National Docks Secondary<br>National Docks Secondary  | 4.22<br>3.85<br>3.69<br>3.25<br>3.08<br>2.99<br>2.83<br>2.6<br>2.45<br>2.31   | Passaic River<br>CR Mnfctrs<br>Lincoln Highway<br>Foundry St  | 10/21/2011  |   | 10/25/2011  | INUE  |
| Passaic & Harsimus Branch<br>Passaic & Barsimus  | 3.85<br>3.69<br>3.25<br>3.08<br>2.99<br>2.83<br>2.6<br>2.45<br>2.31   | CR Mnfctrs<br>Lincoln Highway<br>Foundry St   |   |   | 10/21/2011  |   |
| Passaic & Harsimus Branch         National Docks Secondary   | 3.69<br>3.25<br>3.08<br>2.99<br>2.83<br>2.6<br>2.45<br>2.31   | Lincoln Highway<br>Foundry St   | 10/21/2011  | · · · · · · · · · · · · · · · · · · ·   | 10/21/2011  | TRUE  |
| Passaic & Harsimus Branch         National Docks Secondary   | 3.25<br>3.08<br>2.99<br>2.83<br>2.6<br>2.45<br>2.31   | Foundry St  | 10/21/2011  | Conrail Philadelphia Division Track Chart 1999  | 10/21/2011  | TRUE  |
| Passaic & Harsimus Branch         National Docks Secondary  | 3.08<br>2.99<br>2.83<br>2.6<br>2.45<br>2.31   |   |   | Conrail Philadelphia Division Track Chart 1999  | 10/21/2011  | TRUE<br>TRUE  |
| Passaic & Harsimus Branch         National Docks Secondary         <   | 2.99<br>2.83<br>2.6<br>2.45<br>2.31   | ICP Mofetre   |   | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999  | 10/21/2011  | TRUE  |
| Passaic & Harsimus Branch         National Docks Secondary         <   | 2.83<br>2.6<br>2.45<br>2.31   | CR Mnfctrs<br>Boonke Ave  |   | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999  | 10/21/2011  | TRUE  |
| Passaic & Harsimus Branch         National Docks Secondary  | 2.6<br>2.45<br>2.31   | Roanke Ave  |   | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999  | 10/21/2011<br>10/21/2011  | TRUE  |
| Passaic & Harsimus Branch         National Docks Secondary         Na   | 2.45<br>2.31  | CR NWK/NY<br>South Charles St   | , ,   | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999  |   | TRUE  |
| Passaic & Harsimus Branch<br>Passaic & Harsimus Branch<br>Passaic & Harsimus Branch<br>Passaic & Harsimus Branch<br>Passaic & Harsimus Branch<br>National Docks Secondary<br>National Docks Secondary   | 2.31  | South Charles St  |   | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999  | 10/21/2011<br>10/21/2011  | TRUE  |
| Passaic & Harsimus Branch         Passaic & Harsimus Branch         Passaic & Harsimus Branch         Passaic & Harsimus Branch         National Docks Secondary         Natio   |   | Magazine St<br>Niagara St   |   | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999  | 10/21/2011  | TRUE  |
| Passaic & Harsimus Branch         Passaic & Harsimus Branch         Passaic & Harsimus Branch         National Docks Secondary         Nation   | Z. 1h   | Wilson Ave  |   | Conrail Philadelphia Division Track Chart 1999  | 10/21/2011  | TRUE  |
| Passaic & Harsimus Branch<br>Passaic & Harsimus Branch<br>National Docks Secondary<br>National Docks Secondary  |   | Avel  |   | Conrail Philadelphia Division Track Chart 1999  | 10/21/2011  | TRUE  |
| Passaic & Harsimus Branch<br>National Docks Secondary<br>National Docks Secondary   |   | Bay Ave   |   | Conrail Philadelphia Division Track Chart 1999  | 10/21/2011  | TRUE  |
| National Docks Secondary   |   |   |   | Conrail Philadelphia Division Track Chart 1999  |   |   |
| National Docks Secondary  |   | Dead Ditch<br>CR River Line   |   | Conrail Philadelphia Division Track Chart 1999  | 10/21/2011  | TRUE<br>TRUE  |
| National Docks Secondary  |   |   |   | Conrail Philadelphia Division Track Chart 1999  | 10/25/2011  |   |
| National Docks Secondary  |   | CR River Line<br>NJT Morristown Line  |   | Conrail Philadelphia Division Track Chart 1999  | 10/25/2011  | TRUE<br>TRUE  |
| National Docks Secondary  |   | Wayne St  |   | Conrail Philadelphia Division Track Chart 1999  | 10/25/2011<br>10/25/2011  | TRUE  |
| National Docks Secondary   |   | Bright St   |   | Conrail Philadelphia Division Track Chart 1999  | 10/25/2011  | TRUE  |
| National Docks Secondary  |   | Grand St  |   | Conrail Philadelphia Division Track Chart 1999  |   | TRUE  |
| National Docks Secondary   |   | Pacific Ave   |   | Conrail Philadelphia Division Track Chart 1999  | 10/25/2011<br>10/25/2011  | TRUE  |
| National Docks Secondary   |   |   |   | Conrail Philadelphia Division Track Chart 1999  |   | TRUE  |
| National Docks Secondary  |   | Johnson Ave<br>HBLR   |   | Conrail Philadelphia Division Track Chart 1999  | 10/25/2011<br>10/25/2011  | TRUE  |
| National Docks Secondary   |   | Linden Ave  |   | Conrail Philadelphia Division Track Chart 1999  | 10/25/2011  | TRUE  |
| National Docks Secondary<br>National Docks Secondary<br>National Docks Secondary<br>National Docks Secondary<br>National Docks Secondary<br>National Docks Secondary  | -   | Brown Place   |   | Conrail Philadelphia Division Track Chart 1999  | 10/25/2011  | TRUE  |
| National Docks Secondary<br>National Docks Secondary<br>National Docks Secondary<br>National Docks Secondary<br>National Docks Secondary  |   | CR Byne Ind   |   | Conrail Philadelphia Division Track Chart 1999  |   | TRUE  |
| National Docks Secondary<br>National Docks Secondary<br>National Docks Secondary<br>National Docks Secondary  |   | Garfield Ave  |   | Conrail Philadelphia Division Track Chart 1999  | 10/25/2011  | TRUE  |
| National Docks Secondary<br>National Docks Secondary<br>National Docks Secondary  |   | Avenue C  |   |   | 10/25/2011  | TRUE  |
| National Docks Secondary National Docks Secondary   |   | Avenue D  |   | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999  | 10/25/2011  | TRUE  |
| National Docks Secondary  |   | Kennedy Blvd  |   | Conrail Philadelphia Division Track Chart 1999  | 10/25/2011  | TRUE  |
|   |   | ,   | 10/05/0011  |   | 10/25/2011  |   |
| National DUCKS SECONDALY  |   | Route 440   |   | Conrail Philadelphia Division Track Chart 1999  | 10/25/2011  | TRUE  |
| Amboy Secondary   |   | Newark Bay<br>Stovons Rd  |   | Conrail Philadelphia Division Track Chart 1999  | 10/25/2011  |   |
|   |   | Stevens Rd<br>Ernsten Road  |   | Conrail Philadelphia Division Track Chart 1999  | 10/26/2011  |   |
| Amboy Secondary   |   | Ernston Road<br>Bordentown Road   |   | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999  | 10/26/2011  | TRUE<br>TRUE  |
| Amboy Secondary<br>Amboy Secondary  |   | Tenents Creek   |   | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999  | 10/26/2011  | TRUE  |
| Amboy Secondary<br>Amboy Secondary  |   |   |   | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999  | 10/26/2011  | TRUE  |
|   |   | Deep Run<br>South Rivor   |   |   | 10/26/2011  |   |
| Amboy Secondary   |   | South River   |   | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999  | 10/26/2011  |   |
| Amboy Secondary   |   | Gatzmer Ave   |   | · · · · · · · · · · · · · · · · · · ·   | 10/26/2011  |   |
| Amboy Secondary   |   | Poss Hol Rd<br>Poddiditab   |   | Conrail Philadelphia Division Track Chart 1999  | 10/26/2011  |   |
| Chemical Coast Secondary  |   | Peddiditch<br>Bound Crook   |   | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999  | 10/26/2011  | TRUE<br>TRUE  |
| Chemical Coast Secondary<br>Chemical Coast Secondary  |   | Bound Creek<br>Trunbull St  |   | Conrail Philadelphia Division Track Chart 1999  | 10/26/2011<br>10/26/2011  | TRUE  |
| Chemical Coast Secondary  |   | Port Ave Br   |   | Conrail Philadelphia Division Track Chart 1999  | 10/26/2011  | TRUE  |
| Chemical Coast Secondary<br>Chemical Coast Secondary  |   |   |   | · · · · · · · · · · · · · · · · · · ·   |   | TRUE  |
|   |   | Magolia Ave   |   | Conrail Philadelphia Division Track Chart 1999  | 10/26/2011  | TRUE  |
| Chemical Coast Secondary  |   | Livingston St   |   | Conrail Philadelphia Division Track Chart 1999  | 10/26/2011  |   |
| Chemical Coast Secondary  |   | Franklin St   |   | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999  | 10/26/2011  | TRUE<br>TRUE  |
| Chemical Coast Secondary  |   | First Ave   |   |   | 10/26/2011  |   |
| Chemical Coast Secondary  |   | Second Ave  |   | Conrail Philadelphia Division Track Chart 1999  | 10/26/2011  | TRUE  |
| Chemical Coast Secondary  |   | Third Ave   |   | Conrail Philadelphia Division Track Chart 1999  | 10/26/2011  | TRUE  |
| Chemical Coast Secondary  |   | Elizabeth River   |   | Conrail Philadelphia Division Track Chart 1999  | 10/26/2011  | TRUE  |
| Chemical Coast Secondary  |   | Storm Sewer   |   | Conrail Philadelphia Division Track Chart 1999  | 10/26/2011  | TRUE  |
| Chemical Coast Secondary  |   | Oil Pipes   |   | Conrail Philadelphia Division Track Chart 1999  | 10/26/2011  | TRUE  |
| Chemical Coast Secondary  |   | Morses Creek  |   | Conrail Philadelphia Division Track Chart 1999  | 10/26/2011  | TRUE  |
| Chemical Coast Secondary  |   | Pyles Creek   |   | Conrail Philadelphia Division Track Chart 1999  | 10/26/2011  | TRUE  |
| Chemical Coast Secondary<br>Chemical Coast Secondary  | 13.2  | Debra Place<br>Wood Bridge Creek  |   | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999  | 10/26/2011<br>10/26/2011  | TRUE<br>TRUE  |

|   |         |                                       | Date        |  | Creation                 |              |
|---|---------|---------------------------------------|-------------|--|--------------------------|--------------|
| Line Name                                     | MP      | Structure_Name                        | Modified    | Source   | Date                     | Edited       |
| Chemical Coast Secondary                      | 19.76   | PA/W RR                               |             | Conrail Philadelphia Division Track Chart 1999   | 10/26/2011               | TRUE         |
| Port Reading Secondary                        |         | New Brunswick Road                    |             | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               | TRUE         |
| Port Reading Secondary                        | -       | Ambrose Brook                         |             | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               | TRUE         |
| Port Reading Secondary                        | -       | Stream                                |             | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               | TRUE         |
| Port Reading Secondary Port Reading Secondary | -       | Conrail Perth Amboy<br>Plainfield Av  |             | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               | TRUE         |
| Port Reading Secondary                        | 1       | Clive St                              |             | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999 | 10/27/2011               | TRUE<br>TRUE |
| Port Reading Secondary                        | 1       | Parsonac Rd                           |             | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               | TRUE         |
| Port Reading Secondary                        | 1       | Evergreen Ave                         |             | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               | TRUE         |
| Port Reading Secondary                        |         | Garden State Parkway                  |             | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               | TRUE         |
| Port Reading Secondary                        |         | Gill Lane                             | 10/27/2011  | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               | TRUE         |
| Port Reading Secondary                        | 15.68   | Route 9                               | 10/27/2011  | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               | TRUE         |
| Port Reading Secondary                        | 17.64   | Stream                                | 10/27/2011  | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               | TRUE         |
| Port Reading Secondary                        | 18.04   | Stream                                | 10/27/2011  | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               | TRUE         |
| Southern Secondary                            |         | Pine Brook                            |             | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               | TRUE         |
| Southern Secondary                            |         | Mill Pond Creek                       |             | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               | TRUE         |
| Southern Secondary                            | 1       | Manasquanni River                     |             | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               | TRUE         |
| Southern Secondary                            |         | Manasquanni River                     |             | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               | TRUE         |
| Southern Secondary                            | -       | Haystack Brook                        |             | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               | TRUE         |
| Southern Secondary                            |         | Metednkriver<br>Sbmetnkriver          |             | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999 | 10/27/2011               | TRUE<br>TRUE |
| Southern Secondary<br>Southern Secondary      |         | Lake Caroljo                          |             | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999 | 10/27/2011               | TRUE         |
| Southern Secondary                            | 1       | Toms River                            |             | Conrail Philadelphia Division Track Chart 1999   | 10/27/2011               | TRUE         |
| West Trenton Line                             |         | Royce Creek                           | - 1         | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               | TRUE         |
| West Trenton Line                             | -       | Royce Creek                           |             | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               | TRUE         |
| West Trenton Line                             |         | Royce Creek                           |             | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               | TRUE         |
| West Trenton Line                             | 50.87   | Cattle Pass                           | 11/10/2011  | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               | TRUE         |
| West Trenton Line                             | 50.74   | Pike Brook                            | 11/10/2011  | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               | TRUE         |
| West Trenton Line                             | 49.1    | Roaring Brook                         | 11/10/2011  | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               | TRUE         |
| West Trenton Line                             | -       | Stream                                |             | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               | TRUE         |
| West Trenton Line                             |         | Stream/Road                           |             | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               | TRUE         |
| West Trenton Line                             |         | Rock Brook                            |             | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               | TRUE         |
| West Trenton Line                             |         | Stream                                |             | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               | TRUE         |
| West Trenton Line<br>West Trenton Line        |         | Amwell Rd<br>Bedens Brook             |             | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999 | 11/10/2011<br>11/10/2011 | TRUE<br>TRUE |
| West Trenton Line                             |         | Grenwood Av                           |             | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               | TRUE         |
| West Trenton Line                             | -       | Stream                                |             | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               | TRUE         |
| West Trenton Line                             |         | Mine Road                             |             | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               | TRUE         |
| West Trenton Line                             |         | Route 518                             |             | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               | TRUE         |
| West Trenton Line                             | 39.97   | Stream                                | 11/10/2011  | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               | TRUE         |
| West Trenton Line                             | 39.42   | Hihohla Brook                         | 11/10/2011  | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               | TRUE         |
| West Trenton Line                             | 39.05   | Tits Mil Rd                           | 11/10/2011  | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               | TRUE         |
| West Trenton Line                             | -       | Baldwin Brook                         |             | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               | TRUE         |
| West Trenton Line                             |         | Broemel Ave                           |             | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               | TRUE         |
| West Trenton Line                             |         | Route 48                              |             | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               | TRUE         |
| West Trenton Line                             | 1       | Route 95                              |             | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               | TRUE         |
| West Trenton Line                             | -       | Scotch Rd                             |             | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               | TRUE         |
| West Trenton Line                             | +       | Parkway Ave<br>Asylum Rd              |             | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999 | 11/10/2011<br>11/10/2011 |              |
| West Trenton Line<br>West Trenton Line        |         | Abandoned RR                          |             | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               | TRUE<br>TRUE |
| West Trenton Line                             |         | Delaware River                        |             | Conrail Philadelphia Division Track Chart 1999   | 11/10/2011               | TRUE         |
| Waterfront Connection                         | 51.50   |                                       |             |  | , 10, 2011               |              |
| (Reverse Kearny)                              | 0.35    | Westbound PATH                        | 11/14/2011  | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Waterfront Connection                         | 1       |                                       | 11/14/2011  |  |                          |              |
| (Reverse Kearny)                              | 0.35    | Center Street Branch                  | 11/14/2011  | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Orange Branch                                 | 9       | Branch Brook Park                     | 11/14/2011  | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               | TRUE         |
| Orange Branch                                 |         | Franklin Av                           |             | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               | TRUE         |
| Sayreville Secondary                          |         | Main St                               |             | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               | TRUE         |
| Sayreville Secondary                          |         | Crossman Creek                        |             | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               | TRUE         |
| Sayreville Secondary                          |         | Minniska Av                           |             | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               | TRUE         |
| Sayreville Secondary                          | 1       | Claypit Spr                           |             | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               | TRUE         |
| Sayreville Secondary<br>Sayreville Secondary  |         | South River                           |             | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999 | 11/14/2011               | TRUE         |
| Sayreville Secondary<br>Sayreville Secondary  |         | New Jersey Turnpike<br>Lawrence Brook |             | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999 | 11/14/2011<br>11/14/2011 | TRUE<br>TRUE |
| River Line                                    |         | CR Northern Branch                    |             | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               | TRUE         |
| River Line                                    |         | Tidal Water                           |             | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               | TRUE         |
| River Line                                    |         | Bellmans Creek                        |             | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               | TRUE         |
| River Line                                    |         | Overpeck Creek                        |             | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               | TRUE         |
| River Line                                    |         | River Rd                              |             | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               | TRUE         |
| River Line                                    | 11.32   | Newbridge Creek                       |             | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               | TRUE         |
| River Line                                    | 11.47   | Newbridge Creek                       |             | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               | TRUE         |
| River Line                                    | 1       | Schrinbc Creek                        |             | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               | TRUE         |
| River Line                                    | +       | Psgway                                |             | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               | TRUE         |
| River Line                                    | 1       | Psgway                                |             | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               | TRUE         |
| River Line                                    | 1 10 01 | Ordell Res                            | 111/14/2011 | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               | TRUE         |

|  |          |                                   | Date       | _  | Creation                 |              |
|--|----------|-----------------------------------|------------|--|--------------------------|--------------|
| Line Name  | MP 16.44 | Structure_Name                    | Modified   | Source   | Date                     | Edited       |
| River Line<br>River Line                             |          | Tappan Run<br>Tappan Run          |            | Conrail Philadelphia Division Track Chart 1999<br>Conrail Philadelphia Division Track Chart 1999 | 11/14/2011<br>11/14/2011 | TRUE<br>TRUE |
| River Line   |          | Tappan Run                        |            | Conrail Philadelphia Division Track Chart 1999   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                              |          | Northern Secondary                |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                              | 3.1      |                                   |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                              |          | Secaucus Rd                       |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                              | 4.18     | Division Creek                    | 11/14/2011 | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                              | 4.61     | County Rd                         | 11/14/2011 | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                              | 4.71     | NS Croxton Yard                   | 11/14/2011 | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                              | 4.76     | NJ Turnpike                       | 11/14/2011 | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                              | 4.95     | NJT Main Line                     | 11/14/2011 | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                              | 5.65     | NS Third Track                    | 11/14/2011 | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Bergen County Line                                   | 7.14     | Berrys Creek                      | 12/2/2011  | NJ Transit Physical Characteristics 2011   | 12/2/2011                | TRUE         |
| Main Line  |          | Pen Horn Creek                    |            | NJ Transit Physical Characteristics 2011   | 12/2/2011                | TRUE         |
| Main Line  |          | Pedestrian Tunnel                 |            | NJ Transit Physical Characteristics 2011   | 12/2/2011                | TRUE         |
| Main Line  |          | Pedestrian Tunnel                 |            | NJ Transit Physical Characteristics 2011   | 12/2/2011                | TRUE         |
| Main Line  |          | Stream                            |            | NJ Transit Physical Characteristics 2011   | 12/2/2011                | TRUE         |
| Main Line  |          | Stream                            |            | NJ Transit Physical Characteristics 2011   | 12/2/2011                | TRUE         |
| N. Jersey Coast Ln (No.)                             |          | New Brunswick Ave                 |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| N. Jersey Coast Ln (No.)                             |          | Suckerbrook                       |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| N. Jersey Coast Ln (No.)                             |          | Leesville Rd                      |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| N. Jersey Coast Ln (No.)                             |          | Avenel St                         |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| N. Jersey Coast Ln (No.)                             |          | Pedestrian Tunnel                 |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| N. Jersey Coast Ln (No.)<br>N. Jersey Coast Ln (No.) |          | Port Reading Sec CR<br>Freeman St |            | NJ Transit Physical Characteristics 2011<br>NJ Transit Physical Characteristics 2011             | 12/1/2011<br>12/1/2011   | TRUE<br>TRUE |
|  |          | Green St                          |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| N. Jersey Coast Ln (No.)<br>N. Jersey Coast Ln (No.) |          | Heards Brook                      |            | NJ Transit Physical Characteristics 2011<br>NJ Transit Physical Characteristics 2011             | 12/1/2011                | TRUE         |
| N. Jersey Coast Ln (No.)                             |          | Pedestrian Tunnel                 |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| N. Jersey Coast Ln (No.)                             |          | Main St                           |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| N. Jersey Coast Ln (No.)                             |          | Legion Place                      |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| N. Jersey Coast Ln (No.)                             |          | NJ Turnpike                       |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| N. Jersey Coast Ln (No.)                             |          | Springs Creek                     |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| N. Jersey Coast Ln (No.)                             |          | Maurer Rd                         |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| N. Jersey Coast Ln (No.)                             | 4.98     | Stream                            |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| N. Jersey Coast Ln (No.)                             | 5.32     | Pedestrian Tunnel                 |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| N. Jersey Coast Ln (So.)                             | 28.29    | Wesley Lack Brook                 | 12/1/2011  | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| Freehold Secondary                                   | 26.15    | Manalp Crk                        | 2/9/2012   | Conrail Philadelphia Division Track Chart 1999   | 2/9/2012                 | TRUE         |
| Freehold Secondary                                   | 25.69    | Manalp Crk                        | 2/9/2012   | Conrail Philadelphia Division Track Chart 1999   | 2/9/2012                 | TRUE         |
| Freehold Secondary                                   | 25.19    | Manalp Crk                        | 2/9/2012   | Conrail Philadelphia Division Track Chart 1999   | 2/9/2012                 | TRUE         |
| Freehold Secondary                                   | 24.88    | Manalp Crk                        | 2/9/2012   | Conrail Philadelphia Division Track Chart 1999   | 2/9/2012                 | TRUE         |
| Freehold Secondary                                   | 19.98    | Menrock Brk                       | 2/9/2012   | Conrail Philadelphia Division Track Chart 1999   | 2/9/2012                 | TRUE         |
| Freehold Secondary                                   |          | Farm Rd                           | 2/9/2012   | Conrail Philadelphia Division Track Chart 1999   | 2/9/2012                 | TRUE         |
| Freehold Secondary                                   | -        | Menrock Brk                       |            | Conrail Philadelphia Division Track Chart 1999   | 2/9/2012                 | TRUE         |
| Freehold Secondary                                   |          | Road/Stream                       |            | Conrail Philadelphia Division Track Chart 1999   | 2/9/2012                 | TRUE         |
| Freehold Secondary                                   |          | Yellow Brook                      |            | Conrail Philadelphia Division Track Chart 1999   | 2/9/2012                 | TRUE         |
| Freehold Secondary                                   |          | Stream                            |            | Conrail Philadelphia Division Track Chart 1999   | 2/9/2012                 | TRUE         |
| Hightstown Industrial                                |          | Cranbury Bk                       |            | Conrail Philadelphia Division Track Chart 1999   | 2/9/2012                 | TRUE         |
| Washington Secondary                                 |          | Grand Ave                         |            | NS Harrisburg Division Track Chart 2008  | 2/9/2012                 | TRUE         |
| Washington Secondary                                 |          | Waterway                          |            | NS Harrisburg Division Track Chart 2008  | 2/9/2012                 | TRUE         |
| Washington Secondary                                 |          | Cattle Pass                       |            | NS Harrisburg Division Track Chart 2008  | 2/9/2012                 | TRUE         |
| Washington Secondary                                 |          | Waterway<br>Cattle Bass           |            | NS Harrisburg Division Track Chart 2008  | 2/9/2012                 | TRUE         |
| Washington Secondary<br>Washington Secondary         |          | Cattle Pass<br>Farm Rd            |            | NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008               | 2/9/2012<br>2/9/2012     | TRUE<br>TRUE |
| Washington Secondary<br>Washington Secondary         |          | Farm Rd<br>Farm Rd                |            | NS Harrisburg Division Track Chart 2008  | 2/9/2012                 | TRUE         |
| Washington Secondary<br>Washington Secondary         |          | Farm Rd<br>Bright Rd              |            | NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008               | 2/9/2012                 | TRUE         |
| Washington Secondary                                 |          | Waterway                          |            | NS Harrisburg Division Track Chart 2008  | 2/9/2012                 | TRUE         |
| Washington Secondary                                 |          | Waterway                          |            | NS Harrisburg Division Track Chart 2008  | 2/9/2012                 | TRUE         |
| Washington Secondary                                 |          | Waterway                          |            | NS Harrisburg Division Track Chart 2008  | 2/9/2012                 | TRUE         |
| Washington Secondary                                 |          | Waterway                          |            | NS Harrisburg Division Track Chart 2008  | 2/9/2012                 | TRUE         |
| Washington Secondary                                 |          | Dirt Rd                           |            | NS Harrisburg Division Track Chart 2008  | 2/9/2012                 | TRUE         |
| Washington Secondary                                 |          | Dirt Rd                           |            | NS Harrisburg Division Track Chart 2008  | 2/9/2012                 | TRUE         |
| Washington Secondary                                 |          | St Route 31                       |            | NS Harrisburg Division Track Chart 2008  | 2/9/2012                 | TRUE         |
| Washington Secondary                                 |          | Waterway                          |            | NS Harrisburg Division Track Chart 2008  | 2/9/2012                 | TRUE         |
| Washington Secondary                                 |          | Cattle Pass                       |            | NS Harrisburg Division Track Chart 2008  | 2/9/2012                 | TRUE         |
| Washington Secondary                                 |          | Cattle Pass                       |            | NS Harrisburg Division Track Chart 2008  | 2/9/2012                 | TRUE         |
| Washington Secondary                                 |          | Waterway                          |            | NS Harrisburg Division Track Chart 2008  | 2/9/2012                 | TRUE         |
| Washington Secondary                                 |          | Waterway                          |            | NS Harrisburg Division Track Chart 2008  | 2/9/2012                 | TRUE         |
| Washington Secondary                                 | 72.06    | Waterway                          | 2/9/2012   | NS Harrisburg Division Track Chart 2008  | 2/9/2012                 | TRUE         |
| Washington Secondary                                 | 72.89    | Edison Rd                         |            | NS Harrisburg Division Track Chart 2008  | 2/9/2012                 | TRUE         |
| Washington Secondary                                 | 73.58    | Farm Rd                           |            | NS Harrisburg Division Track Chart 2008  | 2/9/2012                 | TRUE         |
| Washington Secondary                                 | 73.63    | Pohatcong Creek                   |            | NS Harrisburg Division Track Chart 2008  | 2/9/2012                 | TRUE         |
| Washington Secondary                                 | 74.01    | Stewville                         |            | NS Harrisburg Division Track Chart 2008  | 2/9/2012                 | TRUE         |
| Washington Secondary                                 | 74.61    | Farm Rd                           | 2/9/2012   | NS Harrisburg Division Track Chart 2008  | 2/9/2012                 | TRUE         |
| Washington Secondary                                 | 75.49    | Farm Rd                           |            | NS Harrisburg Division Track Chart 2008  | 2/9/2012                 | TRUE         |
| Washington Secondary                                 | 76.12    | Cattle Pass                       | 2/9/2012   | NS Harrisburg Division Track Chart 2008  | 2/9/2012                 | TRUE         |

| Line NameMIWashington SecondaryWashington SecondaryWashington SecondaryWashington SecondaryWashington SecondaryWashington SecondaryPortland SecondaryNortheast Corridor LineNortheast Corridor LineNort  | 76.57<br>57.7<br>77.98<br>79.3<br>79.75<br>0.35<br>1.19<br>2.96<br>4.18<br>4.21<br>5.65<br>6.28<br>6.28<br>6.28<br>6.28<br>6.28<br>6.28<br>6.28<br>6.28   | Structure_Name         CO Route 519         Cattle Pass         Dirt Rd         Warren St         Stockton St         Delaware River         Drinage Rd         Private Rd         Hackensack River         Former NJT Boonton Line         Hackensack River - Portal Draw         Private Rd         Belleville Tpke         Former Seaboard Lead         Harrison Tpke         Creek         NJT Morristown Line         Center Street / PATH         Sth St         4th St         Passaic River Draw         Raymond Blvd | 2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>10/21/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011 | Source NS Harrisburg Division Track Chart 2008 Conrail Philadelphia Division Track Chart 2008 Conrail Philadelphia Division Track Chart 1999 NJ Transit Physical Characteristics 2005 NJ Transit Physical Characteri | Date           2/9/2012           2/9/2012           2/9/2012           2/9/2012           2/9/2012           2/9/2012           2/9/2012           2/9/2012           2/9/2012           2/9/2012           10/21/2011           11/14/2011           11/14/2011           11/14/2011           11/14/2011           11/14/2011           11/14/2011           11/14/2011           11/14/2011           11/14/2011           11/14/2011           11/14/2011           11/14/2011           11/14/2011           11/14/2011           11/14/2011 | Edited           TRUE           TRUE |
|---|---|---|--|--|--|--|
| Washington Secondary<br>Washington Secondary<br>Washington Secondary<br>Portland Secondary<br>Passaic & Harsimus Branch<br>Northeast Corridor Line<br>Northeast Corridor Line   | 57.7<br>77.98<br>79.3<br>79.75<br>0.35<br>1.19<br>2.96<br>4.18<br>4.21<br>5.65<br>6.28<br>6.28<br>6.28<br>6.59<br>6.86<br>7.03<br>7.06<br>7.8<br>7.96<br>7.98<br>8.11<br>8.55<br>8.59<br>8.66<br>8.71<br>8.77<br>8.77<br>8.77<br>8.79 | Cattle Pass<br>Dirt Rd<br>Warren St<br>Stockton St<br>Delaware River<br>Drainage Rd<br>Private Rd<br>Hackensack River<br>Former NJT Boonton Line<br>Hackensack River - Portal Draw<br>Private Rd<br>Belleville Tpke<br>Former Seaboard Lead<br>Harrison Tpke<br>Creek<br>NJT Morristown Line<br>Center Street / PATH<br>Sth St<br>4th St  | 2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>10/21/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011 | NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008<br>NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005   | 2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>10/21/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011   | TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE   |
| Washington Secondary         Washington Secondary         Washington Secondary         Portland Secondary         Passaic & Harsimus Branch         Northeast Corridor Line         Northeast Corridor Line <td>77.98<br/>79.3<br/>79.75<br/>0.35<br/>1.19<br/>2.96<br/>4.18<br/>4.21<br/>5.65<br/>6.28<br/>6.28<br/>6.28<br/>6.28<br/>6.59<br/>6.86<br/>7.03<br/>7.06<br/>7.98<br/>8.11<br/>8.55<br/>8.59<br/>8.866<br/>8.71<br/>8.77<br/>8.77<br/>8.77<br/>8.902</td> <td>Dirt Rd<br/>Warren St<br/>Stockton St<br/>Delaware River<br/>Drainage Rd<br/>Private Rd<br/>Hackensack River<br/>Former NJT Boonton Line<br/>Hackensack River - Portal Draw<br/>Private Rd<br/>Belleville Tpke<br/>Former Seaboard Lead<br/>Harrison Tpke<br/>Creek<br/>NJT Morristown Line<br/>Center Street / PATH<br/>Sth St<br/>4th St</td> <td>2/9/2012<br/>2/9/2012<br/>2/9/2012<br/>2/9/2012<br/>2/9/2012<br/>2/9/2012<br/>2/9/2012<br/>10/21/2011<br/>11/14/2011<br/>11/14/2011<br/>11/14/2011<br/>11/14/2011<br/>11/14/2011<br/>11/14/2011</td> <td>NS Harrisburg Division Track Chart 2008<br/>NS Harrisburg Division Track Chart 2008<br/>Conrail Philadelphia Division Track Chart 1999<br/>NJ Transit Physical Characteristics 2005<br/>NJ Transit Physical Characteristics 2005</td> <td>2/9/2012<br/>2/9/2012<br/>2/9/2012<br/>2/9/2012<br/>2/9/2012<br/>2/9/2012<br/>2/9/2012<br/>2/9/2012<br/>10/21/2011<br/>11/14/2011<br/>11/14/2011<br/>11/14/2011<br/>11/14/2011<br/>11/14/2011</td> <td>TRUE<br/>TRUE<br/>TRUE<br/>TRUE<br/>TRUE<br/>TRUE<br/>TRUE<br/>TRUE</td> | 77.98<br>79.3<br>79.75<br>0.35<br>1.19<br>2.96<br>4.18<br>4.21<br>5.65<br>6.28<br>6.28<br>6.28<br>6.28<br>6.59<br>6.86<br>7.03<br>7.06<br>7.98<br>8.11<br>8.55<br>8.59<br>8.866<br>8.71<br>8.77<br>8.77<br>8.77<br>8.902              | Dirt Rd<br>Warren St<br>Stockton St<br>Delaware River<br>Drainage Rd<br>Private Rd<br>Hackensack River<br>Former NJT Boonton Line<br>Hackensack River - Portal Draw<br>Private Rd<br>Belleville Tpke<br>Former Seaboard Lead<br>Harrison Tpke<br>Creek<br>NJT Morristown Line<br>Center Street / PATH<br>Sth St<br>4th St   | 2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>10/21/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011                         | NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008<br>Conrail Philadelphia Division Track Chart 1999<br>NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005  | 2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>10/21/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011   | TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE   |
| Washington Secondary         Washington Secondary         Portland Secondary         Portland Secondary         Portland Secondary         Portland Secondary         Portland Secondary         Portland Secondary         Possaic & Harsimus Branch         Northeast Corridor Line         Northeast Corridor  | 79.3<br>79.75<br>0.35<br>1.19<br>2.96<br>4.18<br>4.21<br>5.65<br>6.28<br>6.28<br>6.28<br>6.59<br>6.59<br>6.86<br>7.03<br>7.06<br>7.93<br>7.06<br>7.98<br>8.1<br>8.59<br>8.66<br>8.71<br>8.77<br>8.79<br>8.77<br>8.79<br>9.02<br>9.02  | Warren St<br>Stockton St<br>Delaware River<br>Drainage Rd<br>Private Rd<br>Hackensack River<br>Former NJT Boonton Line<br>Hackensack River - Portal Draw<br>Private Rd<br>Belleville Tpke<br>Former Seaboard Lead<br>Harrison Tpke<br>Creek<br>NJT Morristown Line<br>Ccenter Street / PATH<br>Sth St<br>4th St   | 2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>10/21/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011                       | NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008<br>Sorrail Philadelphia Division Track Chart 2008<br>Conrail Philadelphia Division Track Chart 1999<br>NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005  | 2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>10/21/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011   | TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE   |
| Washington Secondary         Portland Secondary         Possaic & Harsimus Branch         Northeast Corridor Line   | 79.75<br>0.35<br>1.19<br>2.96<br>4.18<br>4.21<br>5.65<br>6.28<br>6.28<br>6.28<br>6.28<br>6.28<br>6.28<br>6.28<br>7.03<br>7.06<br>7.98<br>7.96<br>7.98<br>8.1<br>8.59<br>8.66<br>8.71<br>8.77<br>8.75<br>9.02<br>9.02<br>9.1           | Stockton St<br>Delaware River<br>Drainage Rd<br>Private Rd<br>Hackensack River<br>Former NJT Boonton Line<br>Hackensack River - Portal Draw<br>Private Rd<br>Belleville Tpke<br>Former Seaboard Lead<br>Harrison Tpke<br>Creek<br>NJT Morristown Line<br>Center Street / PATH<br>Sth St<br>4th St   | 2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>10/21/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011                                   | NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008<br>S Harrisburg Division Track Chart 2008<br>Conrail Philadelphia Division Track Chart 1999<br>NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005   | 2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>10/21/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011   | TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE   |
| Portland Secondary<br>Portland Secondary<br>Portland Secondary<br>Portland Secondary<br>Passaic & Harsimus Branch<br>Northeast Corridor Line<br>Northeast Corridor Line  | 0.35<br>1.19<br>2.96<br>4.18<br>4.21<br>5.65<br>6.28<br>6.28<br>6.59<br>6.86<br>7.03<br>7.06<br>7.96<br>7.96<br>7.96<br>8.51<br>8.59<br>8.66<br>8.71<br>8.77<br>8.75<br>9.02<br>9.1   | Delaware River<br>Drainage Rd<br>Private Rd<br>Private Rd<br>Hackensack River<br>Former NJT Boonton Line<br>Hackensack River - Portal Draw<br>Private Rd<br>Belleville Tpke<br>Former Seaboard Lead<br>Harrison Tpke<br>Creek<br>NJT Morristown Line<br>Center Street / PATH<br>Sth St<br>4th St  | 2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>10/21/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011   | NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008<br>Conrail Philadelphia Division Track Chart 1999<br>NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005   | 2/9/2012<br>2/9/2012<br>2/9/2012<br>2/9/2012<br>10/21/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011   | TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE   |
| Portland Secondary<br>Portland Secondary<br>Portland Secondary<br>Portland Secondary<br>Passaic & Harsimus Branch<br>Northeast Corridor Line<br>Northeast Corridor Line  | 1.19<br>2.96<br>4.18<br>4.21<br>5.65<br>6.28<br>6.28<br>6.59<br>6.86<br>7.03<br>7.06<br>7.96<br>7.96<br>7.96<br>8.81<br>8.59<br>8.66<br>8.71<br>8.77<br>8.95<br>8.66<br>8.71<br>8.77<br>8.95  | Drainage Rd<br>Private Rd<br>Private Rd<br>Hackensack River<br>Former NJT Boonton Line<br>Hackensack River - Portal Draw<br>Private Rd<br>Belleville Tpke<br>Former Seaboard Lead<br>Harrison Tpke<br>Creek<br>NJT Morristown Line<br>Center Street / PATH<br>Sth St<br>4th St  | 2/9/2012<br>2/9/2012<br>2/9/2012<br>10/21/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011   | NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008<br>Conrail Philadelphia Division Track Chart 1999<br>NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005  | 2/9/2012<br>2/9/2012<br>2/9/2012<br>10/21/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011   | TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE   |
| Portland Secondary<br>Portland Secondary<br>Passaic & Harsimus Branch<br>Northeast Corridor Line<br>Northeast Corridor Line   | 2.96<br>4.18<br>4.21<br>5.65<br>6.28<br>6.28<br>6.28<br>7.03<br>7.06<br>7.96<br>7.96<br>7.96<br>8.81<br>8.59<br>8.66<br>8.71<br>8.77<br>8.79<br>8.79<br>8.66  | Private Rd<br>Private Rd<br>Hackensack River<br>Former NJT Boonton Line<br>Hackensack River - Portal Draw<br>Private Rd<br>Belleville Tpke<br>Former Seaboard Lead<br>Harrison Tpke<br>Creek<br>NJT Morristown Line<br>Center Street / PATH<br>Sth St<br>4th St<br>Passaic River Draw   | 2/9/2012<br>2/9/2012<br>10/21/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011   | NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008<br>Conrail Philadelphia Division Track Chart 1999<br>NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005   | 2/9/2012<br>2/9/2012<br>10/21/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011   | TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE   |
| Portland Secondary<br>Passaic & Harsimus Branch<br>Northeast Corridor Line<br>Northeast Corridor Line   | 4.18<br>4.21<br>5.65<br>6.28<br>6.59<br>6.86<br>7.03<br>7.06<br>7.8<br>7.96<br>7.98<br>8.11<br>8.55<br>8.59<br>8.66<br>8.71<br>8.77<br>8.77<br>8.92<br>9.02<br>9.1  | Private Rd<br>Hackensack River<br>Former NJT Boonton Line<br>Hackensack River - Portal Draw<br>Private Rd<br>Belleville Tpke<br>Former Seaboard Lead<br>Harrison Tpke<br>Creek<br>NJT Morristown Line<br>Center Street / PATH<br>Sth St<br>4th St<br>Passaic River Draw   | 2/9/2012<br>10/21/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011   | NS Harrisburg Division Track Chart 2008<br>Conrail Philadelphia Division Track Chart 1999<br>NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005  | 2/9/2012<br>10/21/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011   | TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE   |
| Passaic & Harsimus Branch<br>Northeast Corridor Line<br>Northeast Corridor Line   | 4.21<br>5.65<br>6.28<br>6.59<br>6.86<br>7.03<br>7.06<br>7.8<br>7.96<br>7.98<br>8.59<br>8.66<br>8.71<br>8.59<br>8.66<br>8.71<br>8.77<br>8.92<br>9.02<br>9.1  | Hackensack River<br>Former NJT Boonton Line<br>Hackensack River - Portal Draw<br>Private Rd<br>Belleville Tpke<br>Former Seaboard Lead<br>Harrison Tpke<br>Creek<br>NJT Morristown Line<br>Center Street / PATH<br>Sth St<br>4th St<br>Passaic River Draw   | 10/21/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011   | Conrail Philadelphia Division Track Chart 1999<br>NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005   | 10/21/2011           11/14/2011           11/14/2011           11/14/2011           11/14/2011           11/14/2011           11/14/2011           11/14/2011           11/14/2011           11/14/2011           11/14/2011           11/14/2011           11/14/2011   | TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line   | 5.65<br>6.28<br>6.28<br>6.59<br>6.86<br>7.03<br>7.06<br>7.98<br>8.1<br>8.5<br>8.59<br>8.66<br>8.71<br>8.71<br>8.75<br>8.95<br>9.02<br>9.1   | Former NJT Boonton Line<br>Hackensack River - Portal Draw<br>Private Rd<br>Belleville Tpke<br>Former Seaboard Lead<br>Harrison Tpke<br>Creek<br>NJT Morristown Line<br>Center Street / PATH<br>Sth St<br>4th St<br>Passaic River Draw   | 11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011   | NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005   | 11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011   | TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line   | 6.28<br>6.28<br>6.59<br>6.86<br>7.03<br>7.06<br>7.98<br>8.1<br>8.5<br>8.59<br>8.66<br>8.71<br>8.71<br>8.75<br>9.02<br>9.1   | Hackensack River - Portal Draw<br>Private Rd<br>Belleville Tpke<br>Former Seaboard Lead<br>Harrison Tpke<br>Creek<br>NJT Morristown Line<br>Center Street / PATH<br>Sth St<br>4th St<br>Passaic River Draw  | 11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011   | NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005   | 11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011   | TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line  | 6.28<br>6.59<br>6.86<br>7.03<br>7.96<br>7.96<br>7.98<br>8.1<br>8.5<br>8.59<br>8.66<br>8.71<br>8.77<br>8.75<br>9.02<br>9.1   | Private Rd<br>Belleville Tpke<br>Former Seaboard Lead<br>Harrison Tpke<br>Creek<br>NJT Morristown Line<br>Center Street / PATH<br>Sth St<br>4th St<br>Passaic River Draw  | 11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011   | NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005   | 11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011   | TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE   |
| Northeast Corridor Line Northe  | 6.59<br>6.86<br>7.03<br>7.96<br>7.98<br>8.1<br>8.59<br>8.66<br>8.71<br>8.77<br>8.95<br>9.02<br>9.1  | Belleville Tpke<br>Former Seaboard Lead<br>Harrison Tpke<br>Creek<br>NJT Morristown Line<br>Center Street / PATH<br>Sth St<br>4th St<br>Passaic River Draw  | 11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011   | NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005   | 11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011   | TRUE<br>TRUE<br>TRUE<br>TRUE<br>TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line  | 6.86<br>7.03<br>7.06<br>7.8<br>7.96<br>7.98<br>8.1<br>8.5<br>8.59<br>8.66<br>8.77<br>8.95<br>9.02<br>9.1  | Former Seaboard Lead<br>Harrison Tpke<br>Creek<br>NJT Morristown Line<br>Center Street / PATH<br>Sth St<br>4th St<br>Passaic River Draw   | 11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011   | NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005   | 11/14/2011           11/14/2011           11/14/2011           11/14/2011           11/14/2011   | TRUE<br>TRUE<br>TRUE<br>TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line  | 7.03<br>7.06<br>7.8<br>7.96<br>7.98<br>8.1<br>8.5<br>8.59<br>8.66<br>8.71<br>8.77<br>8.95<br>9.02<br>9.1  | Harrison Tpke<br>Creek<br>NJT Morristown Line<br>Center Street / PATH<br>Sth St<br>4th St<br>Passaic River Draw   | 11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011   | NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005   | 11/14/2011<br>11/14/2011<br>11/14/2011   | TRUE<br>TRUE<br>TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line   | 7.06<br>7.8<br>7.96<br>7.98<br>8.1<br>8.5<br>8.59<br>8.66<br>8.71<br>8.77<br>8.95<br>9.02<br>9.1  | Creek<br>NJT Morristown Line<br>Center Street / PATH<br>5th St<br>4th St<br>Passaic River Draw  | 11/14/2011<br>11/14/2011<br>11/14/2011<br>11/14/2011   | NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005   | 11/14/2011<br>11/14/2011   | TRUE<br>TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line   | 7.8<br>7.96<br>7.98<br>8.1<br>8.5<br>8.59<br>8.66<br>8.71<br>8.77<br>8.95<br>9.02<br>9.1  | NJT Morristown Line<br>Center Street / PATH<br>5th St<br>4th St<br>Passaic River Draw   | 11/14/2011<br>11/14/2011<br>11/14/2011   | NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line  | 7.96<br>7.98<br>8.1<br>8.5<br>8.59<br>8.66<br>8.71<br>8.77<br>8.95<br>9.02<br>9.1   | Center Street / PATH<br>5th St<br>4th St<br>Passaic River Draw  | 11/14/2011<br>11/14/2011   | NJ Transit Physical Characteristics 2005   |  |  |
| Northeast Corridor Line<br>Northeast Corridor Line   | 7.98<br>8.1<br>8.5<br>8.59<br>8.66<br>8.71<br>8.77<br>8.95<br>9.02<br>9.1   | Sth St<br>4th St<br>Passaic River Draw  | 11/14/2011   | · · · · · · · · · · · · · · · · · · ·  | 11/14/2011   |  |
| Northeast Corridor Line<br>Northeast Corridor Line   | 8.1<br>8.5<br>8.59<br>8.66<br>8.71<br>8.77<br>8.95<br>9.02<br>9.1   | 4th St<br>Passaic River Draw  | 1  | The transit Revision ( paractoristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line   | 8.5<br>8.59<br>8.66<br>8.71<br>8.77<br>8.95<br>9.02<br>9.1  | Passaic River Draw  | 1 × × / × ¬ / ∠ U × ⊥  | NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line   | 8.59<br>8.66<br>8.71<br>8.77<br>8.95<br>9.02<br>9.1   |   |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line  | 8.66<br>8.71<br>8.77<br>8.95<br>9.02<br>9.1   | nay nonu pivu   |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line   | 8.71<br>8.77<br>8.95<br>9.02<br>9.1   | NJT Bus Lanes   | 1  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line   | 8.77<br>8.95<br>9.02<br>9.1   | Market St   |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line  | 8.95<br>9.02<br>9.1   | Edison Place  |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line  | 9.02<br>9.1   | Lafayette St  |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line   | 9.1   | Green St  |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line  |   | Elm St  |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line  | 2.1.2   | Walnut St   | 1  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line  |   | Cottage St  |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line   |   | E Kinney St   | 1  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line   |   | Oliver St   |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line   |   | Chestnut St   |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line  |   | Pennington St   |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line  |   | Tichnor St  | 1  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line   |   | South St  |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line  |   | Thomas St   | 1  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line<br>Northeast Corridor Line<br>Northeast Corridor Line<br>Northeast Corridor Line<br>Northeast Corridor Line<br>Northeast Corridor Line   |   | Murray St   |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line<br>Northeast Corridor Line<br>Northeast Corridor Line<br>Northeast Corridor Line<br>Northeast Corridor Line  | 9.89  |   |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line<br>Northeast Corridor Line<br>Northeast Corridor Line<br>Northeast Corridor Line   |   | Ernest St   | 1  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line<br>Northeast Corridor Line<br>Northeast Corridor Line  |   | Wright St   |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line<br>Northeast Corridor Line   |   | Miller St   |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line Northeast Corridor Line   |   | Vanderpool St   |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line   |   | Lane Running track  |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
|   |   | McCellan St   |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Connor Line   |   | North Ave   | 1  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line   |   | Fairmount St  |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line   |   |   | 1  | NJ Transit Physical Characteristics 2005   |  |  |
| Northeast Corridor Line   |   | Mary St<br>Magnolia St  |  | NJ Transit Physical Characteristics 2005   | 11/14/2011<br>11/14/2011   | TRUE   |
| Northeast Corridor Line   |   | Chestnut St   |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line   |   | Morris Ave  |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line   |   | E'Port Secondary  |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line   |   | Private Rd  |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line   |   | Pedestrian Tunnel   |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line   |   | W. Grand St   |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line   |   | W. Jersey St  |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line   |   | Elizabeth River   | 1  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line   |   | Rahway Ave  |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line   |   | South St  | 1  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line   |   | Elmora Ave  |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line   |   | Tannery Creek   | <u> </u>   | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line   |   | Wood Ave  | 1  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line   |   | Pearl St  |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line   |   | West Creek  | 1  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line   |   | Stiles St   | 1  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line   |   | Scott Ave   | -  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line   |   | Grand Ave   |  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line   |   | Rahway River  | 1  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
|   |   | Main St   | 1  |  |  | TRUE   |
| Northeast Corridor Line   |   | Poplar St   | 1  | NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005   | 11/14/2011   |  |
| Northeast Corridor Line   |   |   | 1  |  | 11/14/2011   | TRUE   |
| Northeast Corridor Line   | 10 21   | Irving & Cherry Sts   | 1  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line   |   | Milton Ave  | 1  | NJ Transit Physical Characteristics 2005   | 11/14/2011   | TRUE   |
| Northeast Corridor Line<br>Northeast Corridor Line  | 19.41   | Commerce Ave<br>Hazelwood Ave   | 1  | NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005   | 11/14/2011<br>11/14/2011   | TRUE<br>TRUE   |

|  |       |                                 | Date       |  | Creation                 | L            |
|--|-------|---------------------------------|------------|--|--------------------------|--------------|
| Line Name  | MP    | Structure_Name                  | Modified   | Source   | Date                     | Edited       |
| Northeast Corridor Line  |       | Withers Ave                     |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line  | _     | NJT North Jersey Coast Line     |            | NJ Transit Physical Characteristics 2005   | 11/14/2011<br>11/14/2011 | TRUE<br>TRUE |
| Northeast Corridor Line<br>Northeast Corridor Line             |       | Stream                          |            | NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005 | 11/14/2011               | TRUE         |
| Northeast Corridor Line  |       | St George Ave                   |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line  |       | Sucker Brook                    |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line  | _     | Stream                          |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line  | _     | Oak Tree Rd                     |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line  | 22.97 | Stream                          |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line  | 23.07 | Garden State Parkway            | 11/14/2011 | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line  | 23.42 | South Wood Ave                  | 11/14/2011 | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line  | 23.44 | Stream                          |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line  |       | Evergreen Ave                   |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line  |       | Parsonage Rd                    |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line  |       | Port Reading Secondary          |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line  |       | Stream                          |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line  |       | Grove Ave<br>Main St            |            | NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005 | 11/14/2011<br>11/14/2011 | TRUE<br>TRUE |
| Northeast Corridor Line<br>Northeast Corridor Line             |       | Lake St                         |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line  |       | Perth Amboy Running Track       |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line  | - 1   | Memorial Parkway                |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line  |       | Talmadge Rd                     |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line  |       | Stream                          |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line  |       | Plainfield Ave                  |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line  |       | Sutton Ave                      | 11/14/2011 | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line  |       | Stream                          |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line  |       | River Rd                        |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line  |       | Raritan River                   |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line  | _     | Route 18                        |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line  |       | Johnson Drive                   |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line<br>Northeast Corridor Line             | _     | Nelson St<br>George St          |            | NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005 | 11/14/2011<br>11/14/2011 | TRUE<br>TRUE |
| Northeast Corridor Line  |       | Easton Ave                      |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line  |       | French St                       |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line  |       | Joyce Kilmer Ave                |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line  |       | Patterson St                    |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line  | 31.63 | Bayard St                       | 11/14/2011 | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Gladstone Line   | 23.66 | Waterway                        | 12/1/2011  | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| Gladstone Line   | 24.03 | Waterway                        | 12/1/2011  | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| Gladstone Line   |       | Waterway                        |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| Gladstone Line   |       | Waterway                        |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| Gladstone Line   | _     | Waterway                        |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| Gladstone Line   |       | Waterway                        |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| Gladstone Line   | _     | Waterway                        |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| Gladstone Line<br>Gladstone Line                               |       | Waterway<br>Waterway            |            | NJ Transit Physical Characteristics 2011<br>NJ Transit Physical Characteristics 2011 | 12/1/2011<br>12/1/2011   | TRUE<br>TRUE |
| Gladstone Line   | _     | Waterway                        |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| Gladstone Line   | -     | Penns Brook                     |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| Gladstone Line   |       | Waterway                        |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| Gladstone Line   | - 1   | Cattlepass                      |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| Gladstone Line   |       | Waterway                        |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| Gladstone Line   |       | Waterway                        |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| Gladstone Line   | 38.78 | Waterway                        |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| Gladstone Line   |       | Waterway                        |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| Gladstone Line   |       | Waterway                        |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| Gladstone Line   |       | Waterway                        |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| Gladstone Line   | - 1   | Peapack Brook                   |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| Gladstone Line   |       | Peapack Brook                   |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| Montclair Line<br>Montclair Line                               |       | Park Ave                        |            | NJ Transit Physical Characteristics 2011<br>NJ Transit Physical Characteristics 2011 | 12/1/2011                |              |
| Montclair Line   |       | Washington Ave<br>Toney's Brook |            | NJ Transit Physical Characteristics 2011<br>NJ Transit Physical Characteristics 2011 | 12/1/2011<br>12/1/2011   | TRUE<br>TRUE |
| Montclair-Boonton Line   |       | Stream                          |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| Montclair-Boonton Line   |       | Stream                          |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| Montclair-Boonton Line   |       | Waterway                        |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| Montclair-Boonton Line   | - 1   | Route 287                       |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| Montclair-Boonton Line   |       | Waterway                        |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| Montclair-Boonton Line   | 27.89 | Waterway                        | 12/1/2011  | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| Montclair-Boonton Line   |       | Pedestrian Tunnel               |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| Montclair-Boonton Line   | _     | Rockaway River                  |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| Montclair-Boonton Line   | - 1   | Waterway                        |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| Montclair-Boonton Line   |       | Waterway                        |            | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
|  |       | Private Rd                      | 2/9/2012   | NS Harrisburg Division Track Chart 2008  | 2/9/2012                 | TRUE         |
| Portland Secondary   |       |                                 |            |  |                          |              |
| Portland Secondary<br>Portland Secondary<br>Portland Secondary | 4.65  | Private Rd<br>Stouts Ln         | 2/9/2012   | NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008   | 2/9/2012                 | TRUE         |

|  |       |                                | Date       |  | Creation                 |              |
|--|-------|--------------------------------|------------|--|--------------------------|--------------|
| Line Name  | MP    | Structure Name                 | Modified   | Source   | Date                     | Edited       |
| Portland Secondary                                 | 7.19  | Delaware River                 | 2/9/2012   | NS Harrisburg Division Track Chart 2008  | 2/9/2012                 | TRUE         |
| Raritan Valley Line                                | 55.73 | Creek                          | 11/12/2011 | NJ Transit Physical Characteristics 2005   | 11/12/2011               | TRUE         |
| Raritan Valley Line                                | 55.2  | Creek                          | 11/12/2011 | NJ Transit Physical Characteristics 2005   | 11/12/2011               | TRUE         |
| Raritan Valley Line                                | 53.18 | Willough Creek                 | 11/12/2011 | NJ Transit Physical Characteristics 2005   | 11/12/2011               | TRUE         |
| Raritan Valley Line                                | 44.47 | Creek                          | 11/12/2011 | NJ Transit Physical Characteristics 2005   | 11/12/2011               | TRUE         |
| Gladstone Line                                     | 21.57 | Passaic Ave                    | 12/1/2011  | NJ Transit Physical Characteristics 2011   | 12/1/2011                | TRUE         |
| Northeast Corridor Line                            | 31.75 | Townsend St                    | 11/14/2011 | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                            | 31.8  | Suydam St                      | 11/14/2011 | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                            |       | Handy St                       |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                            |       | Stream                         |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                            |       | Stream                         |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                            | -     | Oakley's Brook                 |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                            |       | Oakley's Brook                 |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                            |       | Deans Lane                     |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                            |       | Stream                         |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                            |       | Dean Pond Rd<br>Lawrence Brook |            | NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005 | 11/14/2011<br>11/14/2011 | TRUE<br>TRUE |
| Northeast Corridor Line                            | -     | Lawrence Brook                 |            |  |                          | TRUE         |
| Northeast Corridor Line                            |       |                                |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line<br>Northeast Corridor Line | -     | Lawrence Brook<br>Devils Run   |            | NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005 | 11/14/2011               | TRUE         |
| Northeast Corridor Line                            |       | Deviis Run<br>Millstone River  |            | NJ Transit Physical Characteristics 2005<br>NJ Transit Physical Characteristics 2005 | 11/14/2011               | TRUE         |
| Northeast Corridor Line                            | 1     | Swingers Race                  |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                            |       | Stream                         |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                            |       | Stream                         |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                            |       | Stream                         |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                            |       | Assampink Creek                |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                            |       | Stream                         |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                            | -     | Colemans Creek                 |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                            |       | Stream                         | , ,        | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                            |       | Nottingham Way                 |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                            |       | Assampink Creek                |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                            |       | Bridge St                      |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                            |       | South Warren St                |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                            | 1     | Route 29 North                 |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                            |       | Route 29 South                 |            | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Northeast Corridor Line                            |       | Delaware River                 | 11/14/2011 | NJ Transit Physical Characteristics 2005   | 11/14/2011               | TRUE         |
| Raritan Valley Line                                | 59.06 | Creek                          | 11/12/2011 | NJ Transit Physical Characteristics 2005   | 11/12/2011               | TRUE         |
| Lehigh Line  | 44.56 | Pleasant Rum Road              | 10/25/2011 | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  | 46.14 | Waterway                       | 10/25/2011 | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  | 48.19 | Creek                          | 10/25/2011 | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  | 49.28 | Creek                          | 10/25/2011 | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  | 49.31 | River Road                     | 10/25/2011 | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  | 50.07 | Creek                          | 10/25/2011 | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  | 50.69 | Raritan River                  | 10/25/2011 | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  | 51.52 | Creek                          | 10/25/2011 | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  | 52.01 | Waterway                       | 10/25/2011 | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  | 52.53 | Creek                          | 10/25/2011 | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  |       | Creek                          |            | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  |       | Raritan River                  |            | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  |       | Creek                          |            | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  |       | Creek                          |            | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  |       | Raritan River                  |            | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  |       | Creek                          |            | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  |       | Creek                          |            | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  |       | Creek                          |            | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  |       | Creek                          |            | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  |       | Baptist Church Rd              |            | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  |       | Creek                          |            | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  |       | Mulchwy Creek                  |            | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  |       | Pattenburg Rd                  |            | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  |       | Creek                          |            | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  |       | Turkey Hill Rd                 |            | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  |       | Muscntg Creek                  |            | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  |       | Route 639<br>Grook Bood        |            | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  |       | Creek Road                     |            | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  |       | Route 519                      |            | NS Harrisburg Division Track Chart 2008  | 10/25/2011               |              |
| Lehigh Line  |       | Pursell St                     |            | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  |       | Center St                      |            | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  |       | Stockton St                    |            | NS Harrisburg Division Track Chart 2008  | 10/25/2011               | TRUE         |
| Lehigh Line  |       | Delaware River<br>Creek        |            | NS Harrisburg Division Track Chart 2008<br>NS Harrisburg Division Track Chart 2008   | 10/25/2011<br>10/25/2011 | TRUE<br>TRUE |
| Lehigh Line  |       |                                |            |  |                          |              |

## APPENDIX E: RAIL DEMAND – DETAILED MODELING APPROACH

### **Detailed Modeling Approach**

The mode choice model is specified using a binomial logit functional form. The dependent variable can be described as the "log-odds" of choosing rail over truck. Mathematically, the log-odds can be calculated for a particular transportation market (domestic carload, international carload, intermodal) as:

$$\ln \frac{P_{ij}}{(1-P_{ij})}$$

where P is the market share of rail; *i* indexes the commodity at the two-digit STCC code level and *j* the origin-destination pair.

These data are calculated using Transearch. An advantage of using this specification is that it binds the rail share between 0 and 1 and in addition, produces a smooth S-Curve that is a reasonable approximation of the path of mode shares. The log-odds are regressed on cost estimates for each market based on cost estimates developed by the U.S. Department of Transportation Federal Railroad Administration for their Intermodal and Inventory Cost Model, used to predict the extent to which changes in generalized costs impact the shipper choice of model shares. This model was used to generate per mile shipping cost estimates across the categories of transportation operations, inventories, warehousing and ordering for specific two-digit STCC commodity classifications. The estimates were subsequently assigned to matching Transearch data for cargoes relevant to the NJTPA market.

The generalized cost approach was chosen as the optimal means of gauging modal share changes that may arise from capital improvements in transportation infrastructure. For example, improvements to the rail system, holding constant over-the-road service levels and all other cost categories, would be expected to widen the cost differential between truck and rail and therefore compel some shippers to change their model of transport from truck to rail. Thus the magnitude of the truck to rail diversion rests on the potential cost-savings to shippers impacted by the improvement.

The logit model was used as the primary tool in defining the quantitative relationship between the share of rail tonnage and the generalized cost differentials. We define our market as freight carried either by rail or by truck. We therefore eliminate from the econometric model all freight that is carried by air, water or pipeline under the assumption that these transportation markets are separate from rail and truck and therefore offer no opportunity for substitution. Similarly, we eliminate all NAFTA-related cargoes because there are no precise origin destination data for traffic moving to and from Canada and Mexico. This precludes the application of appropriate cost data to the individual commodity movements. Nevertheless, when the rail forecasts are complete, these tonnages are included in the market share to provide an estimate for rail share in the aggregated transportation market. Canada and Mexico are important regional trade partners with Mexico being an important growth market.

The model was developed to forecast only relative changes in mode share due to expected changes in generalized cost of transportation. Assuming no changes in cost the model assumes base year (2007 Transearch) mode share remains unchanged and increases / decreases in volume

are accounted through increases in total truck and rail tonnage forecasts developed as part of the 2040 Freight Industry Level Forecasts. In addition the analysis is "unconstrained" and does not take into account anticipated changes in capacity. These are taken into account separately as part of the anticipated impacts of major economic trends. The model takes into account the varying cost of rail per mile by different origin and destination.

## **Detailed Model Results**

The following Tables contain the results of the model using a cross-section of shipments relevant to the NJTPA freight transportation market for 2007.

Table 1 displays the results for domestic carloads. The coefficients of particular interest are the cost ratio (rail/truck) and the stand-alone rail transportation operating cost per mile. The adjusted R-Squared is 0.28, which indicates that 28 percent of the variance in the log-odds is explained by the variables in the model. Cross-sectional models generally have lower R-square statistics compared to time series models, which tend to have extremely high r-squares.

| Table I: Domestic Rail Carloads Econometri                      |                |            |             |       |
|---|----------------|------------|-------------|-------|
| Variable  | Coefficient    | Std. Error | t-Statistic | Prob. |
| la deve e d   |                |            |             |       |
| independe   | ent Variables  |            |             |       |
| Constant  | 4.541          | 3.037      | 1.50        | 0.136 |
|   |                |            |             |       |
| LOG(Inventory + Warehousing + Ordering Cost Ratio) <sup>2</sup> | -5.758         | 1.914      | -3.01       | 0.003 |
|   | 5 500          | 4.400      | 5.05        |       |
| LOG(Rail Transport Operating Cost)                              | -5.569         | 1.103      | -5.05       | 0.000 |
| Commodity Cod   | o Dummy Varial |            |             |       |
| commonly cou  |                | 5163       |             |       |
| STCC2=Farm Products   | 3.384          | 1.849      | 1.83        | 0.068 |
|   |                |            |             |       |
| STCC2=Food and Kindred Products                                 | 0.081          | 1.610      | 0.05        | 0.960 |
|   |                | 4.070      | 0.01        |       |
| STCC2=Lumber or Wood Products                                   | 0.505          | 1.653      | 0.31        | 0.760 |
| STCC2=Pulp, Paper and Allied Products                           | 2.777          | 1.648      | 1.69        | 0.093 |
|   | 2.111          | 1.040      | 1.00        | 0.000 |
| STCC2=Chemicals or Allied Products                              | 1.352          | 1.679      | 0.80        | 0.422 |
|   |                |            |             |       |
| STCC2=Petroleum or Coal Products                                | 3.144          | 1.811      | 1.74        | 0.084 |
| STCC2=Rubber or Misc. Plastic Products                          | 0.000          | 0.400      | 1.05        | 0.400 |
| STCC2=Rubber or MISC. Plastic Products                          | -3.608         | 2.188      | -1.65       | 0.100 |
| STCC2=Clay, Concrete Glass or Stone Products                    | 0.206          | 1.681      | 0.12        | 0.903 |
|   | 0.200          |            | 0.12        | 0.000 |
| STCC2=Primary Metal Products                                    | 2.659          | 1.654      | 1.61        | 0.109 |
|   |                |            |             |       |
| STCC2=Fabricated Metal Products                                 | 3.696          | 2.617      | 1.41        | 0.159 |
|   |                |            |             |       |

## Table 1: Domestic Rail Carloads Econometric Results<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> There were 302 observations for this regression. Dummy variables by State were included for freight originating in different regions (38 dummy variables) and have not been shown in the interest of space.

<sup>&</sup>lt;sup>2</sup> This the ratio of inventory, warehousing and ordering cost of rail to truck

| Variable  | Coefficient | Std. Error | t-Statistic | Prob. |  |  |
|---|-------------|------------|-------------|-------|--|--|
| STCC2=Electrical Machinery, Equipment or Supplies | 5.414       | 2.229      | 2.43        | 0.016 |  |  |
| STCC2=Transportation Equipment                    | 6.535       | 1.806      | 3.62        | 0.000 |  |  |
| Adjusted R-squared = 0.282                        |             |            |             |       |  |  |
| F-statistic = 3.269                               |             |            |             |       |  |  |
| Probability F-Stat= 0.000                         |             |            |             |       |  |  |

Source: HDR Analysis

For both cost variables, the signs of the coefficients were negative as expected and statistically different from zero. The broad interpretation is that as the rail/truck ratio of aggregated inventory, warehousing and ordering costs rise, as these costs for rail rise relative to costs for trucks, the log-odds of choosing rail diminish. Similarly, as the stand-alone transportation costs of rail increases, the log-odds of choosing rail over truck diminish. The remaining variables in the model are "dummy" variables or variables that indicate with a value of 1, whether the shipment is of a particular origin (at the FIPS level / State level) or a particular commodity (at the two-digit STCC level). These variables were included because some cargo origins will offer more opportunity for shippers to switch to rail because they will have adequate infrastructure. Similarly some STCC codes will be more likely to switch to rail owing to their physical dimensions, value, or other unobserved (in the Transearch data) characteristics. The coefficients estimated for the dummy variables should be interpreted as relative to the overall constant term. A positive coefficient implies a higher likelihood of switching and a negative coefficient implies a lower likelihood of switching.

In the international carload market, results reported in Table below, only the inventory cost variables displayed both the correct signs and were statistically different from zero. These results indicate that the higher is the value of the cargo and therefore the higher is the inventory costs of the cargo, the more likely shippers are to choose truck over rail.

| Variable                           | Coefficient                    | Std. Error | t-Statistic | Prob. |  |  |  |
|------------------------------------|--------------------------------|------------|-------------|-------|--|--|--|
| Independent Variables              |                                |            |             |       |  |  |  |
| Constant                           | -3.845                         | 3.476      | -1.11       | 0.271 |  |  |  |
| LOG(Rail Inventory Cost Per Mile)  | -6.118                         | 2.478      | -2.47       | 0.015 |  |  |  |
| LOG(Truck Inventory Cost Per Mile) | 1.879                          | 1.017      | 1.85        | 0.067 |  |  |  |
| Commo                              | Commodity Code Dummy Variables |            |             |       |  |  |  |
| STCC2=Food and Kindred Products    | 0.717                          | 1.984      | 0.36        | 0.719 |  |  |  |
| STCC2=Lumber or Wood Products      | -1.497                         | 2.599      | -0.58       | 0.566 |  |  |  |

### Table 20: International Carloads Econometric Results<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> There were 167 observations for this regression. Dummies were included for commodity codes and origin regions by State (33 dummy variables).

| 1.294                 | 2.057                             | 0.63  | 0.530  |
|-----------------------|-----------------------------------|---|--|
| 1.021                 | 1.967                             | 0.52  | 0.605  |
| -2.972                | 2.692                             | -1.10   | 0.272  |
| 0.982                 | 1.998                             | 0.49  | 0.624  |
| 8.367                 | 3.342                             | 2.50  | 0.014  |
| -0.694                | 3.412                             | -0.20   | 0.839  |
| ted R-squared = 0.231 |                                   |   |  |
| -Statistic = 2.160    |                                   |   |  |
| rob. F-Stat=0.001     |                                   |   |  |
|                       | 1.021<br>-2.972<br>0.982<br>8.367 | 1.021       1.967         -2.972       2.692         0.982       1.998         8.367       3.342         -0.694       3.412         ted R-squared = 0.231 | 1.021       1.967       0.52         -2.972       2.692       -1.10         0.982       1.998       0.49         8.367       3.342       2.50         -0.694       3.412       -0.20         ted R-squared = 0.231 |

Source: HDR Analysis

The intermodal market was modeled using the ratio of total rail costs per mile to trucking costs per mile. Again, the coefficient exhibits the expected sign and is statistically significant (different from zero) at the 10 percent level. Different models for international intermodal and domestic intermodal. The dataset for international intermodal had fewer observations and models resulted in suspiciously high r-squared. Dummy variable approaches were also investigated but resulted in counter-intuitive coefficient signs further confirming suspicions regarding high r-squares for the smaller sample.

### Table 21: Intermodal Econometric Results<sup>4</sup>

| Variable                            | Coefficient | Std. Error | t-Statistic | Prob. |  |
|-------------------------------------|-------------|------------|-------------|-------|--|
| LOG(Rail Intermodal cost Per Mile / |             |            |             |       |  |
| Trucking Cost Per Mile)             | -5.657      | 3.124      | -1.81       | 0.072 |  |
| Adjusted R-squared=0.172            |             |            |             |       |  |
| F-Statistic: 3.09                   |             |            |             |       |  |
| Prob. F-Stat=0.000                  |             |            |             |       |  |

Source: HDR Analysis

### Forecasting Future Cost Estimates

The above models define the quantitative relationship between the log-odds of choosing rail over truck and the differential costs associated with each mode. In the next phase, we project

<sup>&</sup>lt;sup>4</sup> A total of 213 observations were included in this regression. No commodity codes dummies were included however origin region dummy variables were included (21 dummy variables).

relevant costs by mode for the key forecast years. The estimated coefficients derived from the above econometric models are then applied to these costs across origin-destination pairs and relevant commodities. The estimated shares from this exercise are subsequently applied to the tonnage forecasts developed as part of the NJTPA 2040 Freight Industry Level Forecasts Study.

Cost assumptions included transportation cost increases, inventory costs, warehousing cost increases and ordering cost increases. Base case assumptions along with low and high case assumptions were developed. Base case assumptions are presented and discussed below.

The Producer Price Index (PPI) published by the US Bureau of Labor Statistics includes indices for each relevant cost component except for "Ordering". However, the Ordering component does not vary between rail and truck and is therefore irrelevant in calculating the cost differential.

Both trucking and rail costs are heavily dependent upon diesel fuel prices and therefore diesel fuel price forecasts will serve as a proxy for operating costs in both modes. The diesel price forecast is taken directly from the US Energy Information Agency (EIA) for the years through 2035. After 2035, we apply the 2035 growth rate. Assumed growth rates are shown in Table 2: below along with yearly projections displayed in Figure 1 below. For the impacts of cost increases on mode share only growth rates of fuel prices are relevant.

|      | Diesel Price Forecast<br>(\$ 2009 per gallon) | Average Annual<br>Increase | Transportation Cost Avg. Annual<br>Increase |
|------|---|----------------------------|---|
| 2010 | 2.9   |                            |   |
| 2020 | 3.5   | 2.00%                      | 2.00%                                       |
| 2030 | 3.83  | 0.86%                      | 0.86%                                       |
| 2040 | 4.3   | 1.05%                      | 1.05%                                       |

Table 2: Increases in Transportation Cost (Base Case Assumption)

Source: 2011 Reference Case Scenario, Energy Information Agency

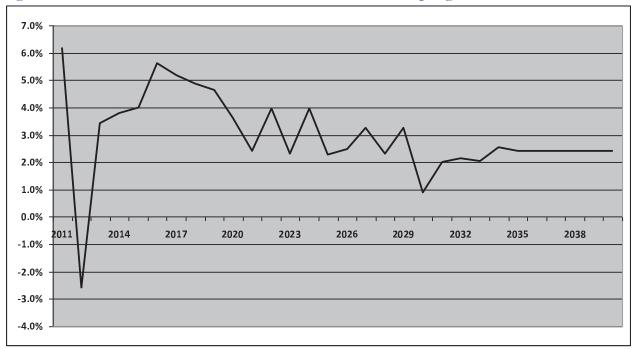


Figure 1: US EIA Diesel Real Price Growth Forecast, 2009 \$'s per gallon.

Source: 2011 Reference Case Scenario, Energy Information Agency

Inventory costs have been relatively flat compared to other generalized costs of transport. The US PPI fore Department Store Inventory costs shows a 5-year average annual increase of 0.35 percent. Projecting this forward yields the trajectory in Figure 2.

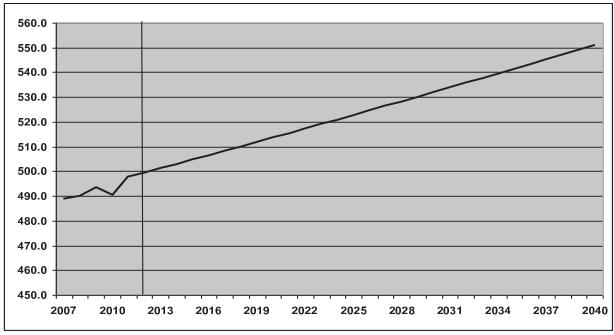
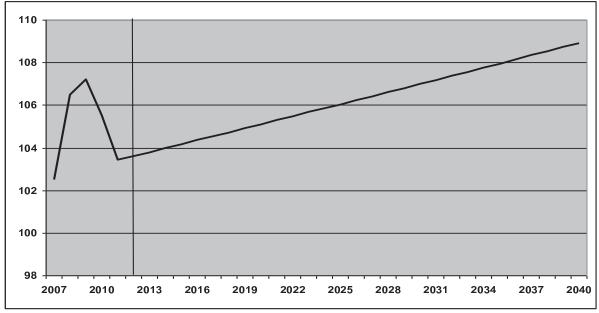


Figure 2: Department Store Inventory Cost Index History and Forecast (Base Case Assumption)

Source: Bureau of Labor Statistics

Warehousing costs are dependent to a large extent on capacity. Warehousing costs have thus been relatively flat, rising just 0.18 percent per year since 2007 on a compound average annual basis and falling sharply from 2009 to 2011. This low-growth trend is expected to continue over the long-term as the logistics industry continues to expand.





Source: Bureau of Labor Statistics

# APPENDIX F: PASSENGER DEMAND AND RIDERSHIP FORECASTS

**Regional Service Summaries** 

The numbers of current average weekday trains are shown in 14 for both Amtrak and New Jersey Transit. Amtrak operates on the average weekday almost 50 round trip trains between Trenton and New York as noted below New Jersey Transit operates a higher number of round trip trains per day on key segments and slightly lower at Trenton.

### Table 1: Current Average Weekday Trains (by Interlocking Segment)

|                               | Inter City Rail / Amtrak | Commuter Rail / NJT |
|-------------------------------|--------------------------|---------------------|
| New York to Trenton           |                          |                     |
| PSNY – Secaucus               | 100                      | 359                 |
| Secaucus – Swift              | 100                      | 359                 |
| Swift – Hudson                | 100                      | 239                 |
| Hudson – Newark               | 100                      | 313                 |
| Newark – Hunter               | 100                      | 313                 |
| Hunter – Union                | 100                      | 251                 |
| Union – County Interlocking   | 100                      | 155                 |
| County Interlocking - Trenton | 100                      | 114                 |

Source: NEC Infrastructure Master Plan

### Summary of Current Ridership on Rail Lines

### NJ Transit

Rail Transit ridership in the NJTPA Region is summarized in the table below that shows the average daily ridership by geographical station of boarding. On an average weekday nearly 259,900 riders used the New Jersey transit system. The highest trips are experienced by the Northeast Corridor (NEC) with over 100,000 riders per day.

The ridership data are based on the geographical location of each boarding station not the particular train service being utilized by the rider. For example a rider that boards the train at Secaucus (part of the Northeast Corridor) is considered a NEC rider even though trains such as the Coastline trains, Montclair-Boonton trains all provide connections between Secaucus and New York City. The ridership data does not consider which of those trains the rider may potentially use, rather treats all those riders as NEC riders geographically.

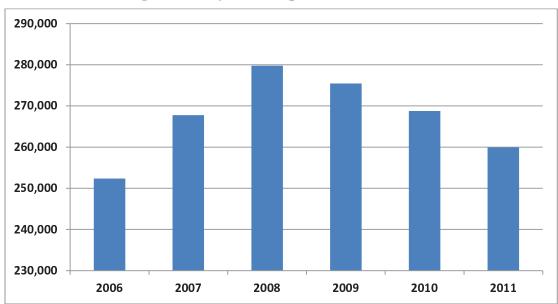
The transfers do not actually represent additional riders, but rather rail-to-rail transfers some of the daily 260,000 riders must make to complete their journey. For example a Ridgewood-NY Penn trip requires a transfer at Secaucus; that trip would be shown as a Ridgewood boarding and a transfer.

| Line                    | FY 2011 |
|-------------------------|---------|
| Raritan Valley Line     | 21,250  |
| Morris & Essex          | 52,300  |
| Coastline               | 25,000  |
| Northeast Corridor      | 110,800 |
| Montclair Boonton Line  | 15,050  |
| Main Line Bergen County | 25,750  |
| Pascack Valley          | 6,750   |
| Atlantic City           | 2,950   |
| Meadowlands             | 50      |
| Rail Subtotal           | 259,900 |
| Transfers               | 22,900  |
| Rail Total              | 282,800 |

## Table 2: Summary of Current NJ Transit Rail Ridership in the NJTPA Region

Source: New Jersey Transit

Figure 1 shows the rail system wide average weekday ridership growth for New Jersey Transit for fiscal years 2006 to 2011. Average weekday ridership reached a peak in 2008 and has since declined slightly to around 260,000 riders on the average weekday.

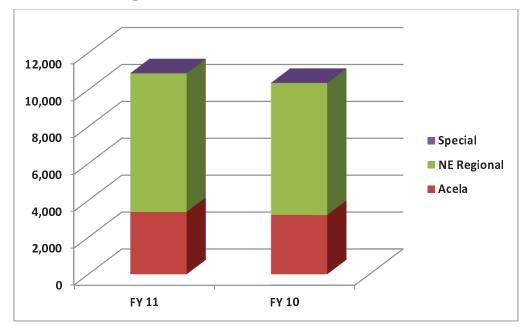


## Figure 1: Historical Average Weekday Ridership

Source: New Jersey Transit

## Amtrak

Amtrak's ridership on the Northeast corridor continues to grow. As shown in Figure 2 ridership in the Northeast corridor grew from 10.4 million riders in fiscal year 2010 (October 2009 – September 2010) to 10.9 million riders in fiscal year 2011. During 2010 – 11, Northeast regional service ridership and Acela ridership both increased approximately five percent over the previous year. In Fiscal year 2009 total ridership was 10 million. The ridership estimates show riders who travel through New Jersey as well as those riders who do not travel through New Jersey and are travelling for example from New York to Boston.





Total Amtrak ridership (boardings and alightings) in New Jersey increased from 1.6 million riders during fiscal year 2010 to 1.67 million riders in fiscal year 2011. These ridership estimates include only to or from destinations within New Jersey and not passengers who are passing through New Jersey on their way to New York for example.

Source: Amtrak Monthly Performance Reports

## Table 3: Amtrak Ridership in New Jersey

| City               | FY 10 Boards +<br>Alightings | FY 11 Boards +<br>Alightings |
|--------------------|------------------------------|------------------------------|
| Metropark          | 388,371                      | 396,902                      |
| New Brunswick      | 6,609                        | 6,678                        |
| Newark             | 658,089                      | 683,626                      |
| Newark Airport     | 116,526                      | 120,428                      |
| Princeton Junction | 40,692                       | 39,573                       |
| Trenton            | 420,533                      | 424,068                      |
| Total              | 1,630,820                    | 1,671,275                    |

Source: Amtrak State Fact Sheet

Summary of Ridership Forecasts on Rail lines

## NJ Transit

Given recent developments with cancellation of the Access to the Regions Core (ARC) trans-Hudson tunnel, regional forecasts for ridership that included the ARC as planned development were likely to over predict ridership as well as train service assumptions. As a result the most relevant forecasts for ridership in the area were those that exclude the construction of the tunnel from forecast scenarios.

The table below shows peak period passenger rail trips by line and major terminal. The forecasts assume that the ARC tunnel is not constructed. Rail trips are expected to increase at about two percent per annum to 2030. The Northeast Corridor and the North Jersey Coast Line, despite accounting for almost 50 percent of the ridership currently, are expected to grow around two percent per annum. Faster growth is forecast for the Bergen Line, Monclair- Boonton Line and Port Jervis Line at about 2.5 percent per annum.

|                           | 2005 Existing |                |         | 2030        |                | 2005    | 2030   | 2005-30 |      |
|---------------------------|---------------|----------------|---------|-------------|----------------|---------|--------|---------|------|
| NJ Transit Lines          | New<br>York   | Newark<br>Penn | Hoboken | New<br>York | Newark<br>Penn | Hoboken | Total  | Total   | CAGR |
| Main / Bergen             | 1,150         | -              | 5,500   | 4,775       | -              | 7,618   | 6,650  | 12,393  | 2.5% |
| Montclair -<br>Boonton    | 1,200         | -              | 1,950   | 3,653       | -              | 1,995   | 3,150  | 5,648   | 2.4% |
| Morris and Essex          | 9,600         | -              | 3,600   | 13,012      | -              | 4,744   | 13,200 | 17,756  | 1.2% |
| NEC and NJCL <sup>1</sup> | 23,400        | 8,700          | 650     | 32,718      | 20,642         | 455     | 32,750 | 53,815  | 2.0% |
| Raritan Valley            | 3,000         | 3,650          | -       | 4,661       | 5,944          |         | 6,650  | 10,605  | 1.9% |
| Pascack Valley            | 500           | -              | 2,500   | 2,040       | -              | 3,747   | 3,000  | 5,787   | 2.7% |
| Port Jervis               | 370           | -              | 1,700   | 937         | -              | 2,899   | 2,070  | 3,836   | 2.5% |
| Total                     | 39,220        | 12,350         | 15,900  | 61,796      | 26,586         | 21,458  | 67,470 | 109,840 | 2.0% |

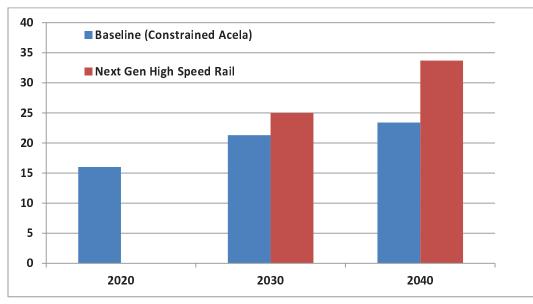
Table 4: New Jersey Transit Peak Period (6am - 10am) Rail Trips by Line & Terminal

Source: NJ Transit, Access to the Regions Core Final Environmental Impact Statement

## Amtrak

Amtrak ridership is forecast to grow from 16 million riders in 2020 to 23.4 million riders in 2040. If improvements are made to the Northeast Corridor to provide high speed rail, ridership is expected to increase to 25 million by 2030 and nearly 33.7 million by 2040.

Figure 3: Amtrak Ridership Forecasts



Source: Amtrak Northeast Corridor Master plan

<sup>&</sup>lt;sup>1</sup> Northeast Corridor (NEC) and New Jersey Coast Line (NJCL)

The above ridership presents overall ridership growth in the Northeast corridor. Ridership passing through New Jersey is expected to be lower. Ridership for 2040 is shown in the table below. The Keystone Corridor links New York City with Philadelphia and Harrisburg.

|   | NE    | C Master P | lan   | Next- Gen High Speed Rail<br>Plan     |         |       |
|---|-------|------------|-------|---------------------------------------|---------|-------|
| Annual NEC Ridership 2040<br>(Millions) | Acela | Regular    | Total | Next-<br>Gen<br>High<br>Speed<br>Rail | Regular | Total |
| South of New York City                  | 3.7   | 9.4        | 13.1  | 7.1                                   | 9       | 16.1  |
| Through New York City                   | 0.6   | 1.5        | 2.1   | 3.4                                   | 1.5     | 4.9   |
| Keystone Corridor                       | 0     | 2.1        | 2.1   | 0.5                                   | 2       | 2.5   |
| Total Riders                            | 4.3   | 13         | 17.3  | 11                                    | 12.5    | 23.5  |

Table 5: Ridership Forecasts for 2040 in the Northeast Corridor

Source: Amtrak NEC Masterplan

Ridership south of New York City passing through New Jersey is expected to reach 13.1 million, along with through trips from New York City which are expected to be 2.1 million in 2040. Over all according to the NEC Masterplan ridership is expected to be 17.3 million for passengers in New Jersey compared to 23.4 million for the Northeast Corridor as a whole. If High speed rail improvements are made to the NEC then total ridership through New Jersey is expected to 23.5 million compared to 33.7 million for the NEC corridor as a whole.



Egan Consulting Group

