

V. DATA COLLECTION PROGRAM

As discussed in Section IV, an extensive data assembly and data collection program was undertaken to develop the data necessary to calibrate the existing Portway Extensions model and facilitate future operational and other performance measure analysis. This program consisted of three primary areas:

- Assembly of Existing Available Traffic Volume Data
- Collection of site-specific count data within and adjacent to the Port District
- Collection of external screenline count data

Study specific counts consisted of installation of Automatic Traffic Recorders (ATR's), manual intersection turning movement counts and link vehicle classification counts. This section summarizes the sources and locations of the data sets developed for incorporation into the study.

V.1 ASSEMBLY OF EXISTING AVAILABLE DATA

Traffic data were requested and received from the New York State Thruway Authority, New Jersey Department of Transportation (NJDOT), New Jersey Turnpike Authority (NJTA), MTA Bridges and Tunnels (MTA), and the Port Authority of New York & New Jersey and the CPIP consortium. The comprehensiveness and format of the data provided varied according to the availability from the various authorities. Data were compiled for the following locations:

- Tappan Zee Bridge (New York State Thruway Authority)
- Route 1 & 9 west of Jacobus Avenue, Kearny (NJDOT)
- Central Avenue south of Gypsum Street, Kearny (NJDOT)
- Route 7 between Newark TPK & I-95, Kearny (NJDOT)
- Route 1 between Charles & Foundry Street, Newark (NJDOT)
- Route 1 near Airport Service Road, Newark (NJDOT)
- I-280 from NJ 21 SB to I-280 EB, Newark (NJDOT)
- Route 21 between Market St & Raymond Blvd., Newark (NJDOT)
- Raymond Blvd. between Rte 21 & Raymond Plaza W., Newark (NJDOT)
- Route 21 between Mulberry & Chestnut St, Newark (NJDOT)
- Route 21 just South of Bridge Street, Newark (NJDOT)
- Route 21 just North of Clay Street, Newark (NJDOT)
- Route 21 between Lombardi & Bridge Street, Newark (NJDOT)
- I-280 between Passaic Ave. & Broad Street, Newark (NJDOT)
- Tonnelle Ave between New County & North Street, Jersey City (NJDOT)

- Route 21 between US 1&9 & Broad Street, Newark (NJDOT)
- New Jersey Turnpike between Interchange 14 & 14A (NJTA)
- New Jersey Turnpike between Interchange 14 & 15E (NJTA)
- New Jersey Turnpike between Interchange 15E & JE (NJTA)
- New Jersey Turnpike between Interchange JW & 15W (NJTA)
- Verrazano-Narrows Bridge (MTA)
- Goethals Bridge (The Port Authority of NY & NJ)
- George Washington Bridge (The Port Authority of NY & NJ)
- Holland Tunnel (The Port Authority of NY & NJ)
- Lincoln Tunnel (The Port Authority of NY & NJ)
- Outerbridge Crossing (The Port Authority of NY & NJ)
- Pulaski Street at Port Jersey Boulevard (Jersey City)

Extensive traffic volume data collected as part of the Portway Phase I Feasibility Assessment were obtained from the NJDOT. Locations for which ATR data for the years 1999 through 2001 included:

- Tonnelle Avenue Southbound south of Route 3
- Tonnelle Avenue Northbound south of Rte 3
- Tonnelle Avenue Southbound north of Jughandle To Secaucus Rd
- Tonnelle Avenue Northbound south of Secaucus
- Tonnelle Avenue Southbound north of Manhattan Avenue
- Tonnelle Avenue Northbound south of Manhattan Avenue
- Route 1&9 Westbound east of Summit Avenue
- Route 1&9 Eastbound east of Summit Avenue
- Pulaski Skyway Eastbound between Charlotte and Tonnelle Circles
- Pulaski Skyway Westbound between Charlotte and Tonnelle Circles
- Newark Avenue Westbound west of Charlotte Avenue
- Newark Avenue Eastbound west of Charlotte Avenue
- Route 1&9 Southbound/Northbound south of Broadway
- Fish House Rd Eastbound/Westbound Near Railroad Overpass
- Route 1&9/Rt 440 north of Clearmont Avenue
- Route 1&9/Rt 440 Southbound north of Claremont Avenue
- Route 1&9 Westbound/Eastbound east of Hackensack Avenue
- Central Avenue Southbound Below Pulaski Skyway
- Central Avenue Northbound Below Pulaski Skyway
- Route 1&9 Truck Eastbound West Of Central Avenue
- Central Avenue Northbound And On Ramp To Route 1&9 Truck
- Central Avenue Southbound On Ramp To Route 1&9 Eastbound
- Route 1&9 Eastbound Off Ramp To Central Avenue
- Doremus Avenue Northbound south of Route 1&9

- Doremus Avenue Southbound south of Route 1&9
- Doremus Avenue Northbound north of Haynes Avenue
- Doremus Avenue Southbound north of Haynes Avenue
- Doremus Avenue Northbound Below The Newark Bay Extension
- Doremus Avenue Southbound Below The Newark Bay Extension
- Route 169 Southbound north of Prospect St
- Route 169 Northbound south of Prospect St

V.2 STUDY-SPECIFIC DATA COLLECTION

Manual Intersection Turning Movement Counts

Based upon a review of available information, it was found that only minimal traffic flow and vehicle classification count data were available proximate to the regional intermodal rail yards. Subsequently, locations selected for manual intersection turning movement counts focused on these areas. Manual intersection turning movement counts were conducted during the typical weekday a.m. and p.m. commuter peak periods (6:00 AM to 9:00 AM and from 3:30 PM to 6:30 PM). Observed volumes were recorded by movement and aggregated as passenger vehicles, light and medium trucks, container trucks, heavy non-container trucks.

Automatic Traffic Recorder Counts

Automatic Traffic Recorders (ATR's) were installed at various locations throughout the months of during January, February and March 2003. Each installation remained in place for a minimum of two weekdays. The ATR's were installed and programmed to record vehicle flows and classify according to the Federal Highway Administration Vehicle Classification definitions. Recorded vehicle classifications include:

- Motorcycles
- Passenger Cars
- Vans/pick-up trucks
- Buses
- Two axles and tire single units
- Three axles single units
- Four or more axle single units
- Four or less axle single trailers
- Five axle single trailers

- Six or more axle single trailers
- Five or less axle multi-trailers
- Six axle multi-trailers
- Seven or more axle multi-trailers

Any vehicles that did not match FHWA Classification Scheme categories were aggregated as Class 14. ATRs were installed in the following locations:

- West Side Avenue South of CSX entrance (North Bergen)
- County Road West of Tonnelle Avenue (Jersey City)
- Central Avenue south of APL driveway (Kearny)
- Pennsylvania Avenue East of CSX Kearny Entrance (Kearny)
- CSX Kearny entrance (Kearny)
- JFK Boulevard Between 42nd & 43rd (City of Bayonne)
- Avenue "B" Between 42nd & 43rd (City of Bayonne)
- Avenue "C" Between 42nd & 43rd (City of Bayonne)
- Broadway Between 42nd & 43rd (City of Bayonne)
- Avenue "E" Between 42nd & 43rd (City of Bayonne)
- JFK Boulevard East Between 48th & 49th (Weehawken)
- Park Avenue Between 47th & 48th (Union City)
- Broadway Between 47th & 48th (Union City)
- Hudson Avenue Between 47th & 48th (Union City)
- New York Avenue Between 47th & 48th (Union City)
- Bergenline Avenue Between 47th & 48th (Union City)
- JFK Boulevard Between 47th & 48th (Union City)
- Tonnelle Avenue Between 47th & 48th (North Bergen)
- Secaucus Road West of Tonnelle Avenue (Jersey City)

V.3 EXTERNAL SCREENLINE COUNTS

Subsequent to review of the initial existing condition model runs, it was determined that additional data were required to more fully calibrate the container flows extracted from the model. Towards this end, a series of external screenline locations were selected for monitoring. These locations included:

- Interstate 287 South of Route 17
- Route 17 East of Interstate 287
- Interstate 78 East of Interstate 287
- Route 24 West of JFK Pkwy

- NJ Turnpike Eastern Spur
- NJ Turnpike Western Spur
- NJ Turnpike South of Exit 7A
- Interstate 95 South of Fort Lee Rd
- Interstate 80 West of Exit 38
- Route 440 North of 40th St Overpass
- Newark Bay Bridge
- Route 440 South of Port Terminal Blvd
- Route 440 South of 22nd St
- ROUTE 440 North of Harbor St
- ROUTE 440 North of Interstate 78

At the above locations, manual vehicle classification counts were conducted during the a.m. and p.m. peak hours to identify not only the total volume of traffic, but also the proportion of trucks carrying shipping containers. These data were utilized to further calibrate the network model.

Due to the voluminous nature of the traffic count data, copies of the collected data are not provided in this report. However, copies of the complete traffic volume and vehicle classification count data are available on compact disk.