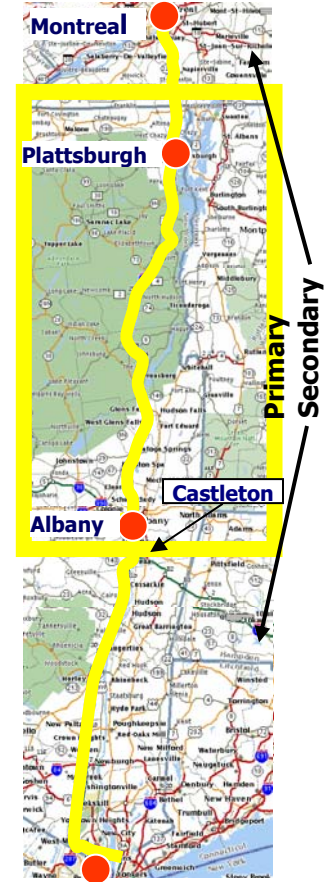




2.11. INTERMODAL FACILITIES AND OPERATIONS

2.11.1 Intermodal Facility Analysis Areas (Primary & Secondary)

The Primary Study Area for the Intermodal concepts is bounded by the CSX connection towards Boston in Castleton, to the Canadian border crossing just north of Rouses Point. Within this area, the Study focused primarily on CP Rail's Canadian Mainline as well as other principal north-south and east-west rail lines. (See section 2.4 of this report for further details on existing rail freight lines and operations in the corridor.) The Secondary Study Area represents the balance of the corridor extending from Castleton to the Tappan Zee Bridge and south, and from the Canadian/US border to Montreal along CP Rail's and CN's main rail lines. The principal focus in the Secondary areas was interchange logistics and intermodal connectivity, as well as rail access into the NYC/NJ markets. There are currently several other studies ongoing by various agencies in the Secondary Study Areas, both north and south, which were considered (to the extent possible) as part of this study effort. Because Secondary Study Area issues were being addressed as part of those studies, the principal focus of this study was on intermodal facilities and operations in the Primary Study Area.



2.11.2 Existing Intermodal Facilities in Corridor (Capacity, Utilization Levels & Projected Growth)

Within the I-87 Corridor, there are several intermodal facilities that are accessible by rail. The connecting services with railroads at each site vary depending on location and commodities handled. The current facilities in the Primary Study Area enable the transfer of goods from truck to rail, rail to truck, rail to ship, ship to rail, ship to truck and truck to ship.

- **Rail – Truck Facilities**

In the I-87 Corridor the primary intermodal activities are the transfer of goods between rail and truck. For intermodal goods, a typical trip begins by truck then is transferred to rail where it ends at a yard within a reasonable distance from its final destination where it is finally delivered by truck. The process of transferring goods from one mode to another to get from origin to destination is referred to as transloading.

In the corridor, the most popular type of transloading is a Flexi-Flo service. When goods are transferred from rail car to truck using the Flexi-Flo service, the contents of the car are discharged onto a truck with minimal handling of the product. The process can be done between other modes as well. Commodities that are typically transferred by this means are goods that can be carried in tank or hopper cars and transferred via a hose or pipe system.

Another important type of shipment to both trucking and railroad industries is the shipment of containers. Worldwide, container traffic continues to grow; however, in the I-87 Corridor the



only facility that handles any considerable amount of container traffic is at the Port of Albany. Containers are carried to varying extents by all of the freight railroads that operate in the corridor.

For container transfer to be profitable for railroads it is desirable to haul double stack containers. Along many of the rail lines in the corridor vertical clearances of less than 22'6" prohibit these trains. While single stacks can be moved through the corridor as currently configured, the efficiencies provided by double stacks which rail operators need to be competitive do not exist. Double stack trains do currently run east - west and south via Selkirk Yard. The infrastructure on CPR's Colonie Main has also been upgraded to provide double stack trains from the Port of Albany.

- **Rail Intermodal Facilities (Primary)**

The intermodal facilities in the Primary Study Area that are accessible by rail offer several different types of services. The primary intermodal services provided by railroads include containers, automobile transfer and Flexi-Flo operations. Key facilities within the Primary Study Area include:

- Plattsburgh Yard (CP Rail)
- North Albany Yard (CP Rail)
- Selkirk Yard (CSX)
- West Albany Yard (CSX)
- Port of Albany/Rensselaer (APRR / CSX / CP Rail)

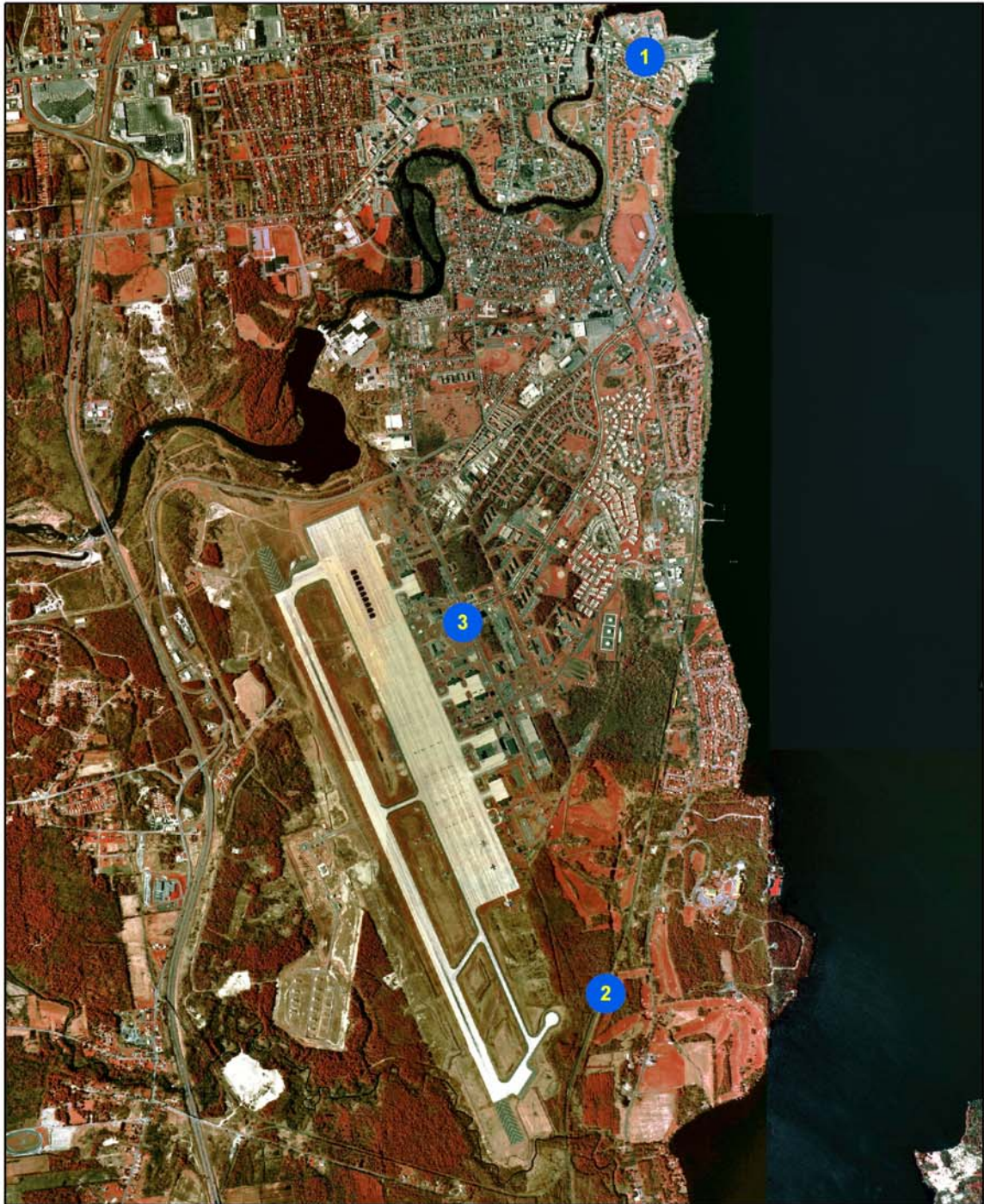
Each of these facilities offers varying degrees of interaction between modes. All of the facilities with the exception of Selkirk Yard offer Flexi-Flo service. The service provided varies depending on location, but goods are typically transferred between truck and rail with tank or hopper cars. The main service provided at Selkirk Yard is the distribution of new automobiles from rail to truck. The Port of Albany also provides container service between truck, rail and ship.

The following is a brief review of the services provided at each of these locations.

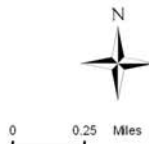
- **Plattsburgh Yard.** CP Rail's Plattsburgh Yard is located on their Canadian Mainline, adjacent to the Lake Champlain waterfront. The links to the highway that are in close proximity to the yard include I-87, US Route 9, and NYS Routes 3 and 22. Exhibit 2.11-1 provides an aerial view of the facility.

The current Flexi-Flo facility does not handle a large amount of traffic. The facility is capable of transferring materials from truck to rail and rail to truck. The main commodities handled at this location include plastics, paper pulp, paper products, chemicals, and liquid petroleum.

Construction work to move the current facility to Bluff Point Yard (south of the current facility) is scheduled to begin later in 2004. This move will allow the City of Plattsburgh's plans to redevelop the Lake Champlain waterfront to progress.



I-87 Multimodal Corridor Study
Exhibit 2.11-1
Plattsburgh Intermodal Facility



Legend

- 1 Plattsburgh Yard
- 2 Bluff Point Yard
- 3 PARC Transloading Facility Opportunities



- **North Albany Yard.** CPR's North Albany – Erie St Yard is located just north of their Kenwood Yard on the Colonie Mainline and in close proximity to I-90 and I-787. To access the location by truck, it is necessary to exit off of I-787 and gain access from Erie Street. An aerial view of the Kenwood Yard facility is presented in Exhibit 2.11-2.

This Flexi-Flo yard sees a large amount of rail traffic on a daily basis. Daily unit trains access this location. A unit train is a consist, made up of cars carrying the same commodity. For example, coal trains or tank cars transporting petroleum products.

In most instances, goods are transferred from rail to truck, but transfer from truck to rail is also possible. The main commodities handled at this location include liquid petroleum, molasses, and grain. The trucks typically transfer these goods to their destinations up to 200 miles from this yard.

- **West Albany Yard.** CSX's West Albany Yard is located on their Hudson Subdivision and adjacent to I-90 approximately half way between I-87 and I-787. To access this location by truck, it is necessary to access the local arterial system.

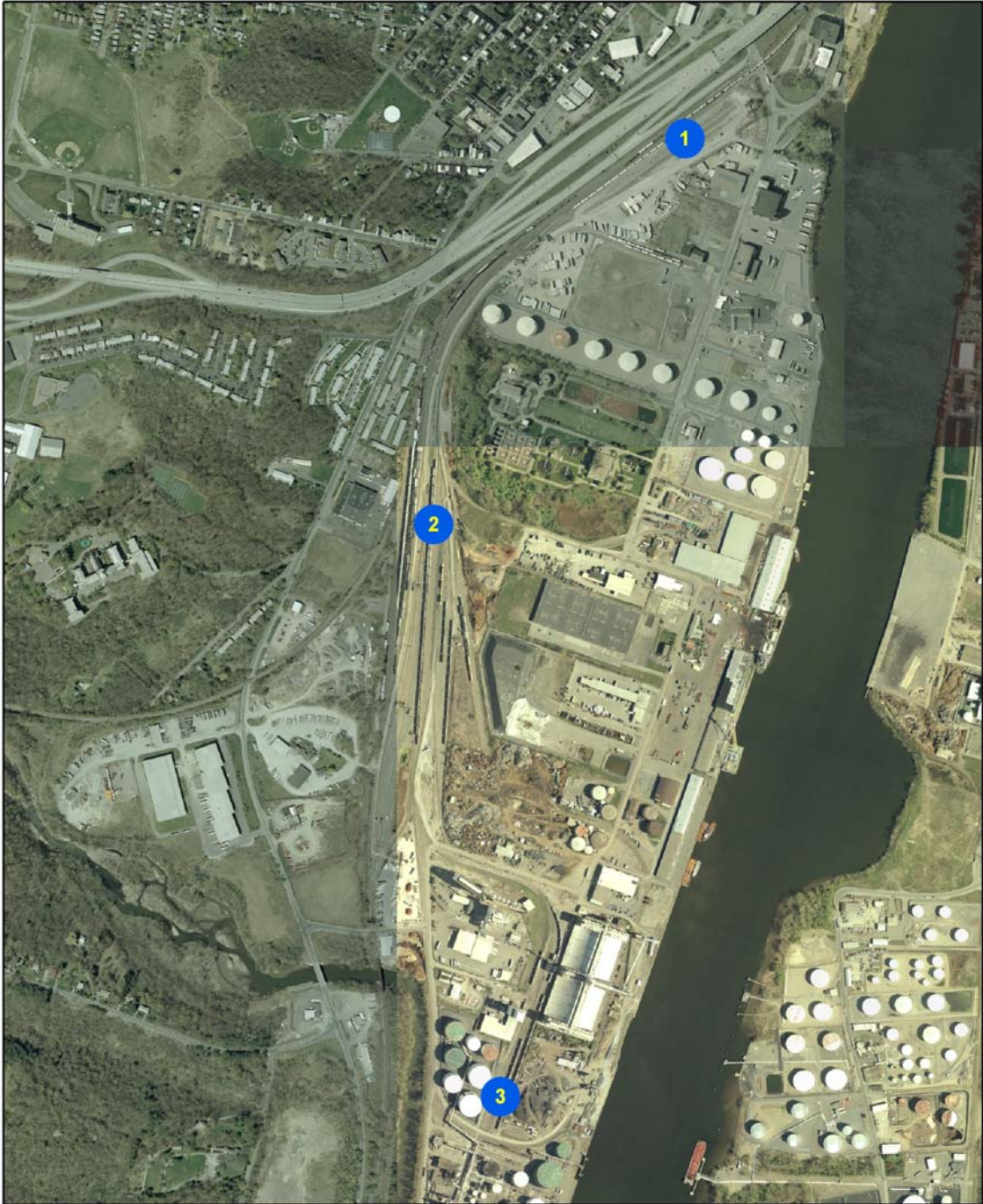
This Flexi-Flo yard sees a large amount of rail traffic on a daily basis. About 90% of the goods that enter this yard by rail are distributed to truck; unit trains take out the remaining 10%.

In most instances, goods are transferred from rail to truck, but transfer from truck to rail is also possible. The main commodities handled at this location include liquid petroleum, corn syrup, and chemical – acids. The trucks typically transfer these goods to their destinations up to 200 miles from this yard.

- **Selkirk Yard.** CSX's Selkirk Yard is located between the Selkirk and Castleton Subdivisions in close proximity to I-87, but main access to the yard is through the local arterial system. Exhibit 2.11-3 provides a topographical view of the site.

Besides servicing as one of CSX's main yards in the Northeast, this facility houses an 8 track automobile unloading / distribution facility with the capacity of 80 train cars. The lot for automobile storage is approximately 500 acres.

No truck to rail transfer takes place at this facility. The only commodity directly transferred from rail to truck at this location is new automobiles. These automobiles originate at factories in the western United States and eastbound rail traffic terminates in Selkirk where they are distributed to dealerships throughout the Northeastern United States. Once the automobiles are offloaded, the empty rail cars are then shipped back to the west.



I-87 Multimodal Corridor Study
Exhibit 2.11-2
Expansion of Kenwood Yard
Commercial Vehicle Trailer Lot

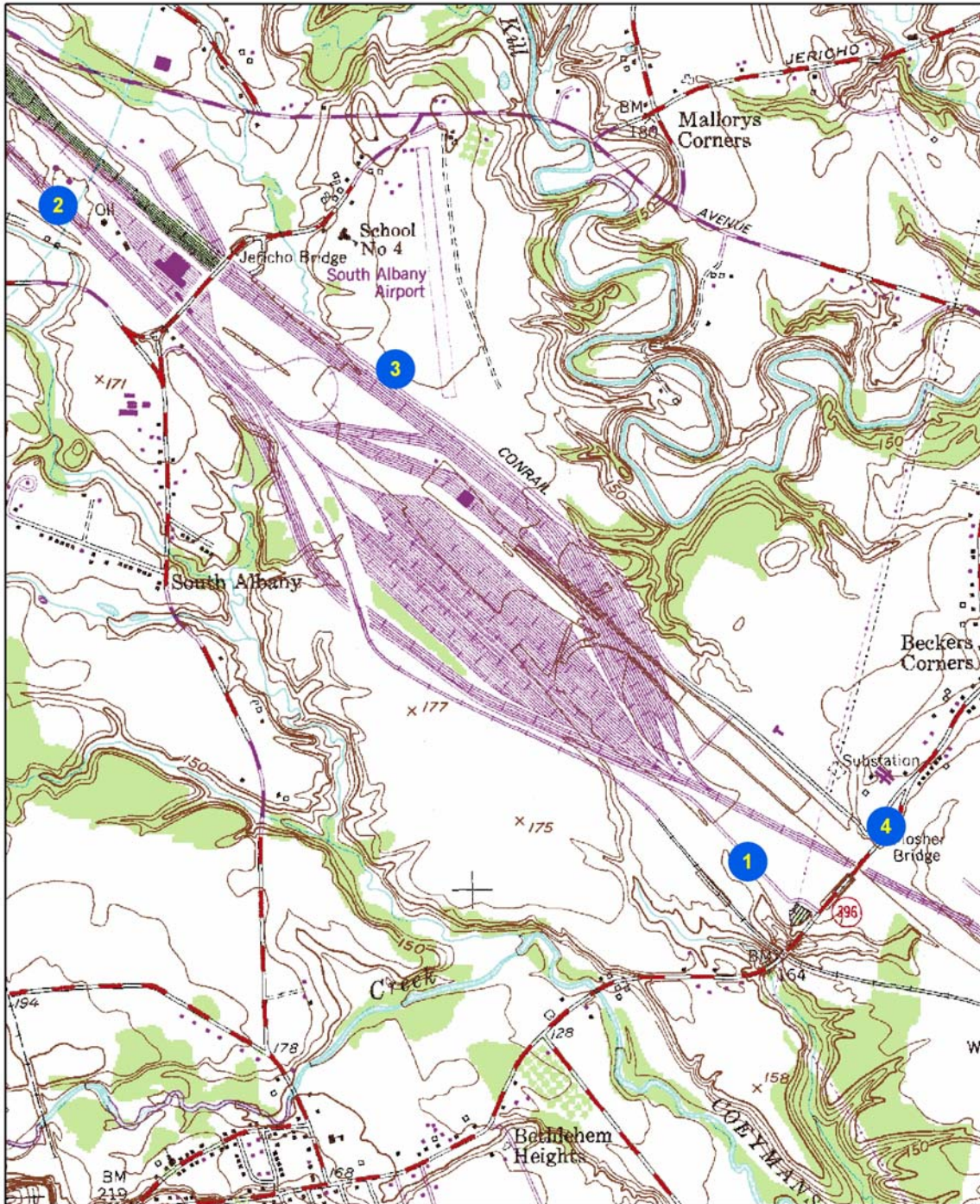


0 0.1 Miles

Legend

Transloading Improvement Opportunities

- 1** Kenwood Yard
- 2** Albany Port Yard
- 3** Cabbage Island Branch



I-87 Multimodal Corridor Study
Exhibit 2.11-3
Selkirk Intermodal Yard

Legend

- ① Intermodal Transloading Opportunities
- ② Intermodal Transloading Opportunities
- ③ Auto Loading / Unloading
- ④ I-87 Access Opportunities



0 0.25 Miles



- **Port of Albany/Rensselaer.** The Port of Albany is located on the Hudson River adjacent to I-787 and in close proximity to I-87 and I-90. Rail service is provided by the Albany Port Railroad (APRR), which is owned 50% by CPR and 50% by CSX Transportation, making it possible to move goods in any direction in the Northeast. The rail lines that tie into the APRR include CSX's Port Subdivision and CPR's Colonie Mainline. The APRR serves the Port of Albany with 18 miles of track, including dockside access. Highway and rail access are also available to the Port of Rensselaer.

Besides offering service between rail and truck, there is service to and from ship for each mode. The ships serve both domestic and international markets.

Due to the growing congestion problems at the Port of New York and New Jersey container traffic is growing at the Port of Albany. The Port has purchased the largest harbor crane in New York State. The crane has the capability to lift 123 short tons 65 feet and 38 short tons 158 feet. The containers can then be either loaded onto truck or rail depending on their final destination. Ships at the Port of Albany also export containers that arrive at the Port by either truck or rail.

The main commodities transferred between modes include:

- Inbound by Rail, Outbound by Ship
 - Corn
 - Molasses
 - Steel
 - Generators
- Inbound by Rail, Outbound by Truck
 - Grain
 - Corn
 - Molasses
 - Animal Feed
 - Wood Pulp
 - Steel
- Inbound by Ship, Outbound by Rail and/or Truck
 - Oil Products
 - Salt
 - Cocoa Beans

As the Port facilities continue to grow, larger shipments are received to be transferred. General Electric has been shipping new and reconditioned generators to New York City where they are loaded onto ships for points worldwide. In addition, old generators come in to the Port by ship from around the world and are then shipped back to GE by rail for repair. Clearance improvements have taken place on the rail infrastructure between GE Schenectady and the Port of Albany.



Due to the age of the APRR's facility and changes in the railroad industry with respect to size and weight of shipments vs. geometry and layout of facilities, there are some limitations as to what facility, capacity and operational improvements can be made. The APRR has also recently made shed track improvements. These improvements allowed the APRR to expand their trackage in order to increase capacity and promote reliability of shipments. Another recent improvement of the APRR is the installation of an air distribution system. With these recent upgrades there are still opportunities for the Port's rail business to expand and attract new customers.

- **Port Facilities (Rail – Ship – Truck)**

Within the I-87 Corridor, the only port facility which serves as an intermodal site is the Port of Albany. At the Port facility transfer between Rail – Ship – Truck is possible. A more detailed overview of the port facilities was provided in the discussion of the Port of Albany/Rensselaer above.

- **Air-Freight-Truck Facilities**

- **Clinton County Airport.** Air Cargo Activity at Clinton County Airport consists of daily flights by both FedEx and UPS. These cargo operators fly turboprop aircraft to/from Clinton County Airport. The aircraft utilize existing public use apron space available at the airport, and minor services as necessary from the local Fixed Based Operator. The air cargo operators do not lease, own, or operate any designated facilities at the airport, as the current public facilities can accommodate their business activities. As cargo growth rates are generally consistent with the economic growth rate of a community, there is not an anticipated need for a designated air cargo-truck intermodal facility under current conditions. However, Clinton County and Plattsburgh International intend to market the facility as a U.S. alternative to Montreal for scheduled and specialty cargo carriers. With U.S. Customs service available, the Airport could accommodate international cargo traffic if demand is generated.

Once all airport services and activity are moved from Clinton County Airport to Plattsburgh International, it is anticipated that the air cargo operations will follow suit. Plattsburgh International has ample existing space to accommodate existing air cargo activity, as well as any type or size of future air cargo-truck intermodal facility that may be necessary.

- **Other Airports.** Air cargo operators do not use the other non-commercial airports in the corridor regularly. Air deliveries do occur at Saratoga County, Floyd Bennett Memorial, and other airports, but this activity is sporadic and should not require any special facilities in the future.

- **Aviation Intermodal Facilities (Primary and Secondary)**

The two intermodal air freight-truck facilities in the corridor are located at Albany International Airport and Stewart International Airport. These airports are served by "all-cargo" airlines, including Federal Express (FedEx), United Parcel Service (UPS), Emery Worldwide, Airborne Express, and United States Postal Service (USPS).



- **Albany International Airport.** A new air cargo facility is located in the northeast quadrant of the Airport. The intermodal facility includes a 400,000 SF aircraft parking apron east of Runway 19. Presently, three cargo companies lease space in the adjacent 50,000 SF cargo building, which is equipped with loading bays for both aircraft and trucks. An older air cargo facility is located on the west side of the Airport near the passenger terminal.

The following air cargo companies operate out of Albany International:

- FedEx, UPS, and Airborne Express currently operate Boeing 727, Boeing 757, and DC-9 aircraft, respectively. Each of these cargo companies lease space out of the new air cargo facility.
- USPS currently operates Boeing 727 aircraft into Albany International, and leases space out of the older air cargo facility.
- The major airlines, which include US Airways, Northwest Airlines, and Southwest Airlines, have regular air cargo (i.e., belly freight) operations at Albany. Mobil Air Transport handles cargo for the major airlines out of the older air cargo facility.

Truck traffic that uses the new air cargo facility accesses I-87 via Route 7 at Interchange 6 to Wade Road. The driving distance from the Interchange 6 to the intermodal facilities is less than two miles. Access to the older cargo facility is provided from I-87 Interchange 4 via Albany-Shaker Road (adjacent to the passenger terminal). The driving distance from Interchange 4 to this cargo facility is approximately one mile.

- **Stewart International Airport.** Air cargo facilities at Stewart International Airport are located in the northwest and southwest quadrants of the Airport. In the northwest quadrant, air cargo activity is centered on the air cargo building and a former hangar. Airborne Freight and Emery Worldwide operate out of the main air cargo building, while FedEx operates out of the former hangar. The main air cargo apron contains 580,000 SF, and was recently expanded to accommodate future cargo operators.

Across the airfield, cargo activity occurs in the southwest quadrant at Hangar B, which is used by CAS Handling and UPS. The following air cargo companies operate out of Stewart International:

- Airborne Freight Corporation currently operates DC-9 aircraft into Stewart International. Airborne also uses Stewart as an overflow location for DC-8 aircraft not able to fly into Newark or JFK. The cargo sort process and preparation of the cargo containers is performed at their City Distribution Center on Route 17K. Air cargo containers are trucked between the aircraft apron and the distribution center.
- Emery Worldwide currently operates both widebody A300 aircraft and Boeing 727 aircraft into Stewart International. Emery's northeast hub operation is located at Stewart as a distribution center that transports local packages bound to and from New York City.



- FedEx currently operates Boeing 727 aircraft into Stewart International. The facilities at the Airport leased by FedEx support the airside component of FedEx's air cargo operation. The cargo sort process and preparation of the cargo containers is performed at the City Station distribution center, located in the Stewart Industrial Park. Air cargo containers are trucked between the aircraft apron and the distribution center.
- UPS currently operates Boeing 757 aircraft into Stewart International. UPS leases space from CAS Handling in Hangar B. CAS performs aircraft and cargo handling for UPS.

The air cargo facility located in the northwest quadrant is located off Route 17K, which has an Interchange with I-87 (Interchange 17). The driving distance from Interchange 17 to the intermodal cargo facilities is less than two miles.

Hangar B (UPS cargo), located adjacent to the passenger terminal, is accessed via Bruenig Road. From I-87 Interchange 17, trucks travel west on Route 17K to Route 100, then travel south on Route 300 to Route 207. Bruenig Road is located off Route 207. The distance between I-87 and Hangar B is less than four miles.

2.11.3 Planning/Construction for Intermodal Facilities in Corridor

• **NYSDOT Rail Program and Related Intermodal Facility Plans**

NYSDOT currently has ongoing planning initiatives to develop potential intermodal projects on the following railroads:

- CP Rail Systems (Former D&H)
- CSX Transportation (Former Conrail)
- Albany Port Railroad
- Vermont Railway (CLP & Hoosick Section)

These projects include both improvements to the existing infrastructure (track and yards) and construction of new facilities where necessary. Plans include creating a new truck/rail intermodal facility at the new Plattsburgh International Airport, and an on-going project by NYSTA and the Greene County IDA to develop a new facility at the New Baltimore rest area along I-87 in Greene County. Further details on these projects are presented below in the Section 2.11-5.

• **Planned Intermodal Aviation Facilities**

No new intermodal facilities are currently planned in the corridor. However, both existing facilities (at Albany and Stewart International Airports) are planned for expansion to accommodate market driven growth. At Stewart International Airport, the Airport Sponsor recently extended the main cargo apron for aircraft parking, nearly doubling its size to 580,000 SF – over 13 acres. The apron can handle any aircraft size, including Boeing 747 aircraft. US Customs is located at the airport, enabling international cargo (currently provided at Stewart by charter companies). The area adjacent to the expanded apron has been graded and prepared



for additional cargo handling buildings and truck bays. The Airport may build such facilities directly for lease-back to cargo operators, or would consider a land lease for development by private cargo companies. Additional development of this intermodal facility is anticipated during the next five years.

At Albany International Airport the new intermodal air cargo facility was designed for a linear apron, building and truck bay expansion on its north side. Over the next tens years it is anticipated that all cargo handling at Albany International will occur at this facility requiring the expansion. The older cargo facility adjacent to the airport terminal will ultimately be removed to enable terminal expansion. This plan will physically separate the passenger and air cargo processing functions at Albany International Airport, and will increase operational efficiency.

2.11.4 Summary of Existing Intermodal Facilities in Corridor

Regardless of the commodities being transferred at the intermodal facilities in the corridor it is necessary to ensure that the rail yards, highway infrastructure and port facilities meet the needs of each mode. If inadequate facilities are available then it will not be feasible to utilize such facilities. Currently, each of the sites in the corridor offer transfer of goods that are important to that particular region.

2.11.5 Intermodal Improvement Concepts

The initial phase of the Study's development and assessment process involved a comprehensive data collection and review process in order to determine existing intermodal traffic volumes, logistics, and the current condition of the intermodal infrastructure. These baseline data were then evaluated against four basic screening criteria for intermodal facilities and operations to identify critical analysis areas in the corridor:

- Reliability and safety (condition of infrastructure);
- Capacity and congestion;
- Clearances (especially in connection with double stack container traffic); and
- Intermodal connectivity (highway-rail, rail-to-rail and water-to-rail connections, along with links to key economic activity nodes, such as existing or planned warehouse centers).

The screening criteria listed above were supported by extensive input from the primary railroad operators, port operators, transportation agencies and other key stakeholders in the corridor, gathered through a variety of workshops and one-on-one meetings. Based on the data screening and stakeholders' input, a number of key improvement concepts were identified. Some of them would depend on, or certainly operate more efficiently, if various components of the rail capital improvement programs for the major freight (CP Rail and CSX) and passenger operators (Amtrak) were completed (e.g., double tracking in various areas to minimize passenger-freight conflicts). These programs are called out in Section 2.2. of this report and are not repeated here.

Intermodal facilities also connect directly into long-range plans for highway capacity in the corridor. For example, if an intermodal terminal for rail to truck transfer/distribution were available in the central Saratoga County region, then goods offloaded in the Port of New York



and New Jersey could be shipped to the Capital District by rail and then trucked the last leg of the trip.

Regardless if located in Saratoga County, or elsewhere in the Capital District, this type of facility, if properly located and supported, could take a considerable amount of truck traffic off the I-87 corridor as well as the congested bridges around the metropolitan New York City area. Similarly, the Port of Albany could support several intermodal project opportunities between modes that could create significant growth if implemented in the correct manner. Further details on these improvement concepts are discussed below.

Exhibit 2.11-4 lists the candidate concepts within the Intermodal category, and indicates the approximate location of each within the Primary and Secondary Study Areas. Brief write-ups of each concept are also provided.