

FINAL REPORT

CENTRAL NEW YORK INLAND PORT MARKET FEASIBILITY STUDY

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PREPARED FOR:
NEW YORK STATE DEPARTMENT OF TRANSPORTATION

SUBMITTED BY:
RSG



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1.0 EXECUTIVE SUMMARY

PURPOSE AND BACKGROUND

The New York State Department of Transportation (NYSDOT) asked RSG to assess the potential market demand for and viability of a new Central New York -region Inland Port facility, known as the Central New York Inland Port (CNYIP). “Inland Port” is a concept that involves moving containerized freight between a maritime port of entry and a secondary location by rail for end-point distribution by truck. Two organizations in the Central New York region have put forth proposals to develop the CNYIP in different locations and with different facility and operational characteristics.

We analyzed existing and available data sources and interviewed key stakeholders (Table 1 on page 9), including potential CNYIP customers, rail and logistics service providers, economic development and business advocacy groups, municipal officials, and port authorities. We also conducted several field visits to observe the proposed CNYIP sites and meet with some of these officials. While the information in this report is derived from interviews and available data, it should be noted that some proprietary information was unavailable to RSG.

PRINCIPAL FINDINGS

The CSX DeWitt Yard appears to be the only currently viable site for a CNYIP

CNYIP Market Summary:

- Minimum Requirements for Success: Based on interviews and discussions with potential Central New York region customers and logistics service providers, but lacking specific proprietary data on existing import and export moves, the potential for generating enough container volume to support an inland port will require, at a minimum:
 - **Daily train service**, at least five days/week and reliable train service that moves containers from the Port of New York/New Jersey (PONYNJ) terminal dock to the Central NY Inland Port within a reasonable period of time.
 - **A cost savings** between truck drayage to/from the Port of New York/New Jersey (PONYNJ) and combined truck drayage/rail service to/from/to the Central New York Inland Port. The cost of rail service of the CNYIP may provide a potential cost savings of up to \$500 over truck drayage from the PONYNJ.
- The CSX DeWitt Yard is the only proposed site that has a commitment for rail service. CSX officials have stated a willingness to provide service to an inland port at their DeWitt Yard location. However, CSX’s proposal for infrastructure and equipment needed to support the service should be reviewed. Further, to be viable, the State may want to consider options for ensuring CSX provides the level of service that shippers

indicate is critical for this service (i.e., daily train, Monday to Friday, reasonable period of service to/from PONYNJ.)

- Other market factors affecting the service:
 - Catchment Area: It was generally agreed the catchment area of the Central New York Inland Port (CNYIP) facility would be 75 – 100 miles, but that is directionally dependent.
 - Availability of empty containers: Some exporters have identified the availability of empty containers for export as a periodic problem as demurrage (daily container charge) creates an incentive to return containers to the Port empty.
 - Warehousing: Development of warehousing and distribution facilities within or adjacent to a CNYIP might contribute to the inland port's success, but is not essential to initial operation of the inland port.

Each of these factors is described in more detail below.

Daily (5 times a week) and reliable (within a reasonable period of time) train service was determined to be a minimum requirement for the potential success of the Central New York Inland Port (CNYIP).

The CNYIP's success will depend on whether shippers and receivers perceive that using the facility will achieve shipping cost savings as well as provide a level of service that meets their logistics needs. Most shippers need daily train service, at least 5 days a week. (Table 2 on page 19 shows the current CSX service from PONYNJ to Buffalo). The potential market includes:

- A large business that maintains a Syracuse warehouse and receives about 150 containers monthly, drayed from the PONYNJ said they would use a Central NY Inland Port if there were daily rail service that provided container delivery on a schedule that could be accommodated at their warehouse.
- A major business based in the Syracuse area is a potential import customer, but with significant service constraints due to its necessary timely delivery to customers. The firm imports up to 20 containers per day (approximately 6,000 containers per year). Firm officials said that the inland port would not likely align with their business model, even if there were cost savings, because the time required to move a container from PONYNJ to the Syracuse area would be longer than a day, thus affecting their ability to meet their timely delivery to customers. This business also be noted that its focus for future growth is the distribution centers in the New York City metropolitan region and Pennsylvania.

The cost of rail service of the CNYIP may provide a potential cost savings of up to \$500 over truck drayage from the PONYNJ.

Firms in Central New York that import and export goods through PONYNJ now rely on truck drayage to move the containers to or from the port to their destination. Based on information provided by stakeholders, it is estimated that the round-trip cost of truck drayage between the PONYNJ and the Central New York region is between \$1,000 and \$1,300. Many expect this to rise in 2017 and beyond due to several factors including:

- The national truck driver shortage;
- Federal government mandate of Electronic Log Devices; and
- The completion of the Bayonne Bridge project, which, by raising clearances is expected to result in larger container ships being accepted at the PONYNJ. Existing truck delays at Port terminal gates would be exacerbated by these higher cargo container ships calling at the PONYNJ.

These factors collectively hold the potential for making it increasingly difficult for a driver to complete a round-trip within the available Hours of Service (HOS) mandated by Federal regulations which stipulates how many hours a truck driver can operate.

Based on interview results, the cost of a rail move is estimated at about \$700 per container, plus \$100 for the *local* drayage move, and somewhat more across the Central New York region, depending on the distance from the CNYIP to the final destination.

CSX officials have previously and recently stated a willingness to provide service to an inland port at their DeWitt Yard location.

By being physically co-located with the existing Intermodal Container Transfer Facility (ICTF), there presumably would be operational benefits for the company. CSX runs daily intermodal trains from PONYNJ to Chicago (Monday – Sunday) and daily intermodal trains from PONYNJ to Buffalo (Monday -Thursday - four trains a week). CSX officials stated that they are addressing capacity constraints on the Hudson River Line and do not envision reliability or service issues.

The CSX DeWitt Yard appears to be the only viable site for a CNYIP because no other proposed site has a commitment for rail service. Norfolk Southern/NYS&W railroads do not have direct access to any of the locations included in this analysis. As discussed above, daily, reliable and cost effective train service is necessary to support a CNYIP. Norfolk Southern/NYS&W do not have direct access to the sites reviewed.

It was generally agreed the catchment area of the Central New York Inland Port (CNYIP) facility would be 75 – 100 miles, but that is directionally dependent. For example Binghamton is less than 100 miles to the south of Syracuse and closer to PONYNJ so businesses in the Binghamton area would not realize any advantage to draying containers to the Central New York Inland port versus draying containers directly to the Port of New York/New Jersey. Companies in close proximity to the Central New York terminal would experience the best cost savings and potential service advantages.

Some exporters have identified the availability of empty containers for export as a periodic problem as demurrage (daily container charge) creates an incentive to return containers to the Port empty.

The availability of containers is another important factor in gaining market interest. For example:

- Two major firms in the Central New York region, both export to China. Both firms expressed interest in using the inland port if the level of service and relative shipping cost savings warranted such use and containers were available.
- An official of another company that exports product from the Central New York area, stated that the inland port would likely provide a convenient option for shipping products out. With an overweight truck permit, and available containers for loading they would be able to move fully loaded containers to the CNYIP, whereas they now consolidate containers on-dock at the PONYNJ terminal.

Development of warehousing and distribution facilities within or adjacent to a CNYIP might contribute to the inland port's success, but is not essential to initial operation of the inland port.

The plan put forth by 3Gi to develop specialized warehousing for agricultural commodities may generate new agricultural export business, but this is not certain. Further, importers of retail goods will utilize existing or build new warehouse/distribution space in the region as their business needs warrant, not simply because a space adjacent to an inland port is available.

Development of a CNYIP is likely to facilitate the growth of business and employment related to existing import and export businesses as well as potential new import and export businesses in the region. This growth, however, may be offset to some degree by a loss of trucking jobs in the regional drayage sector, which may occur in parallel with the growing national truck driver shortage.



2.0 INTRODUCTION AND BACKGROUND

“Inland Port” is a concept that involves moving containerized freight between a maritime port of entry and a secondary location. Most inland ports connect to a maritime port by rail, although some are connected by water. An inland port is different than an Intermodal Container Transfer Facility (ICTF), often known simply as an intermodal yard. For example, the port may include a U.S. Customs office to clear imported freight.

The seaport finds benefit in a linkage to an inland port by shifting some of the off-dock movement of containers from truck to rail. This can address wait time at the port gate, air quality through reduced emissions, and improved customer service to more distant markets.

The community where the inland port is located may experience benefit in terms of a modest amount of employment at the port, development of warehouse/distribution facilities in the immediate vicinity, and the potential that businesses in the region may expand their import or export trade if the cost of rail transport is measurably less than truck drayage.¹ There may also be negative impacts in terms of increased truck traffic near the inland port.

One of the first inland ports in the United States was the Virginia Inland Port (VIP) at Front Royal, Virginia. Served by a direct rail connection from the Port of Virginia in Norfolk, the VIP is located near the junction of Interstates 66 and 81, providing excellent highway access for arriving and departing trucks.

2.1 | PHYSICAL REQUIREMENTS

There are minimum physical requirements for developing an inland port facility:

- Railroad access between the parent port and the inland port that is cleared for double-stack container trains
- Highway access that provides efficient reliable service to the potential business market area, ideally with a “first mile/last mile” connection to the National Highway System that minimizes community impact, for example by avoiding residential land use
- Three parallel tracks for loading/unloading operations, typically on the order of 3,000 linear feet
- Paved area for truck parking and container staging/storage; and possibly chassis storage
- Adjacent land, properly zoned, to accommodate a potential build-out of 1 – 2 million sq. ft. of warehouse space
 - For Central New York, this may include specialized facilities for agricultural commodities, including climate-controlled warehousing and grain storage

¹ Drayage is the retrieval of shipping containers from ports and hauling them by truck to inland locations such as rail heads, distribution centers, or stores.

2.2 | CENTRAL NEW YORK INLAND PORT PROPOSALS: HISTORY

During the past 10 years, several economic development agencies and potential developers and operators have been exploring the potential for an inland port in the Central New York area. The goal has been to provide a facility that would serve the markets of Central New York and be linked to the PONYNJ by rail. A theme of these efforts is that by reducing the overall cost of transportation for import and export goods, businesses in Central New York would become more competitive in the global marketplace. This could in turn result in growth in employment for those businesses. In addition, the inland port could generate new warehouse/distribution centers with additional employment opportunities.

Key parties that have been involved to date include:

- **CenterState Corporation for Economic Opportunity.** CenterState CEO is a key economic development agency in Syracuse. It is staffed to conduct economic analysis and business strategy to support its members. Through collaboration with numerous other organizations in Central NY, it supports a wide range of programs that invest in the economic health of the region, from technology to workforce development. CenterState CEO has supported the Central New York Inland Port since its conceptual stages, and has worked with a series of potential developers. CenterState CEO has also performed an economic analysis of the project benefits.
- **Central New York Regional Economic Development Council.** Governor Cuomo created Regional Economic Development Councils (REDC) to be the mechanism for managing state economic development activities and initiatives. Each of the 10 REDCs develops strategic plans and lists of proposed priority projects that are the basis of a competition for funds. The Central New York REDC included the inland port as a priority project, which resulted in \$40 million being included in the 2014-15 NYS budget.
- **Port of Oswego Authority (POA).** The State of New York created the POA in 1960². POA's primary purpose is development and operation of port facilities and industrial projects in the Port District. Oswego is the first U.S. port of call on the Great Lakes from the St. Lawrence Seaway. It handles over 1 million tons of freight annually, including such commodities as aluminum, grain, and wind turbine components.
- **3Gi CNYIP Inc.** The partners comprising 3Gi CNYIP started the business in 2012 to develop the Central New York Inland Port on a 200-acre site adjacent to the existing CSX railyard and intermodal facility in DeWitt and Manlius. These partners include real estate developers, economists, and environmental scientists. Among the firm's investor partners is In-Transit Containers, Inc. (ICI), the operator of an intermodal terminal at the CSX Stackbridge yard in Worcester, Massachusetts that accommodates import/export containers from the Port of NY&NJ.

² NYS Public Authorities Law, Article 6, Title 2 (Port of Oswego Authority)

3.0 INFORMATION SOURCES

Objective data from public sources that are adequately detailed and geographically precise enough to form the foundation of the feasibility study are generally unavailable or unreliable. The data on existing or proposed rail services, trucking rates, individual business plans, and similar drivers of the proposed inland port facility's success or failure are generally considered proprietary and therefore either unavailable or not publishable. The team did use certain baseline data that allows one to gauge the overall magnitude of container volumes shipped to and from Central New York.

This report therefore relies mainly on the results of multiple interviews conducted with key stakeholders, including representatives of ports and railroads, economic development agencies, business associations, logistics firms, and potential import and export customers of an inland port. CenterState CEO, Mohawk Global Logistics, and others assisted in the identification of many of these interview subjects. Table 1 provides the complete list of entities interviewed.

TABLE 1: INTERVIEWS CONDUCTED FOR CENTRAL NEW YORK INLAND PORT MARKET ANALYSIS

	Municipality/Organization	Category	First Name	Last Name	Title
1	Syracuse Metropolitan Transportation Council	Regional Agency	James	D'Agostino	Executive Director
2	CenterState CEO	Economic development	Rob	Simpson	President
3	Raymour & Flanigan Furniture	Business - Import	Jeff	Lannier	Senior Vice President of Merchandising & Logistics
4	Mohawk Global Logistics	Business - Logistics	Rich	Roche	VP International Transportation
5	Gutchess Lumber	Business - Export	Steven	Servies	Vice President
6	Cayuga Milk Ingredients	Business - Export	Kevin	Ellis	COO
7	Perdue Agribusiness	Business - Export	Dennis	Lard	NY Regional Manager
8	Synapse / 3GI	Economic development	Chris	Beck	Founder/Director Emeritus
9	Pioneer Warehousing and Distribution	Business - Import	Thomas	Belge	President
10	Southern Wine and Spirits	Business - Import	Amos	Heaton	Director of Operations
11	Central NY Assoc of Manufacturers	Business Association	Randy	Wolken	President
12	C&S Companies	Consulting Engineers	Robert	Duclos	Senior Vice President
13	Town of Camillus	Municipality	Mary Ann	Coogan	Supervisor
14	Town of Dewitt	Municipality	Edward	Michalenko	Supervisor
15	Port Authority of NY/NJ	Port Entity	Steve	Brown	Manager, Regional Transportation Planning & Regional Development Department
16	Port Oswego Authority	Port Entity	Zelko	Kirincich	Executive Director & CEO
17	New York, Susquehanna and Western RR (NYSW)	Railroad	Nathan	Fenno	CEO
18	Norfolk Southern	Railroad	Michael	Fesen	Manager, Government Relations
19	CSX/CSX Transportation	Railroad	Maurice	O'Connell	Resident Vice President

4.0 TRANSPORTATION INFRASTRUCTURE AND OPERATIONS

To assess the market for a Central New York Inland Port, it is important to understand the existing transportation infrastructure and operations that serve the demand between the Central New York region and the PONYNJ. The existing infrastructure includes the rail and highway systems between these two areas. Existing operations include not only the railroads but also the truck drayage services provided by many operators.

4.1 | RAIL SERVICE

As shown in Figure 1, through various arrangements, the major railroads serving the Central New York region have direct access to PONYNJ facilities. The Port has on-dock rail service through ExpressRail, which is a comprehensive rail program that has created dedicated rail facilities—and additional support track and rail yards—for each of the Port's major container terminals. Within the Conrail Shared Assets³ area, connections are provided to CSX, Norfolk

Southern (NS), and New York Susquehanna & Western (NYS&W) railroads.

Two alternate routes from the PONYNJ exist that can provide service to the Central New York region:

- CSX today provides direct service via its River Line on the west side of the Hudson River, turning west at Selkirk on its Water Level Route. CSX's DeWitt Yard, just east of Syracuse, currently functions as an ICTF for domestic traffic.
- NS and NYS&W can partner to move trains from the PONYNJ Little Ferry terminal on the NS Southern Tier line to Binghamton, and then on the NYS&W north to Syracuse. No such

FIGURE 1: RAIL FACILITIES SERVING THE PORT



³ Conrail Shared Assets Operations is the unofficial commonly used name for modern-day Conrail. It operates three networks—the North Jersey, South Jersey/Philadelphia, and Detroit Shared Assets Areas, where it serves as a contract local carrier and switching company for its owners, CSX and the Norfolk Southern Railway. When most of the former Conrail's track was split between these two railroads in the 1990s, the three shared assets areas (a total of about 1,200 miles of track) were kept separate to avoid giving one railroad an advantage in those areas. Conrail operates using its own employees and infrastructure, but owns no equipment outside of maintenance equipment.

service exists today, although NS has documented its willingness to partner with NYS&W to provide service of this nature (see Attachment 1).⁴

Both the CSX and NS/NYS&W routes are fully cleared for double-stack operations.

While a physical connection between the PONYNJ and Central New York is necessary for an inland port to operate, there must also be a rail company commitment to serving the inland port. Railroads, as privately owned businesses, will make service decisions that fit their business and operating plans, creating a return on investment for their owners and shareholders. The service plan must include a schedule of how often trains will move to/from the inland port and how long the move will take. For example, once or twice weekly service may make it difficult for local companies to accommodate schedules of the ocean carriers in their overall supply chain. As of the date of this report, CSX has stated it is committed to daily service, Monday through Friday, with two-day service to/from the Port. NS/NYS&W have also committed to operating a service, but have suggested that frequency will depend on market demand.

4.2 | HIGHWAY

An inland port's highway access must also be adequate to efficiently, reliably and safely accommodate truck movements to and from the facility. Distance, travel time, and reliability are important indicators. Syracuse is at the junction of I-81, which provides north-south access from the Canadian border through Central NY and beyond; and I-90, the NYS Thruway, which provides east-west access across the state. I-481 is a half-beltway around the urban area on the east side, connecting to I-81 north and south of the City, and interchanging with I-90. Finally, I-690 is a supplementary east-west route from I-481 through the City to I-90 west of the City. None of these routes experience significant recurring congestion; as such, they can accommodate additional truck volume.

Shippers and receivers in the broader Central New York region will typically have to rely on the state highway system and possibly local roads to access the Interstate highways. While there may be specific locations that are not suitable for truck travel, these companies for the most part are already moving their inbound or outbound freight by truck.

Another issue related to truck movement is weight. In general, trucks are limited to 80,000 pounds gross vehicle weight. Those that exceed that weight require an overweight permit, which will specify the route they must use. This ensures that the infrastructure can accommodate the weight. There are some export commodities, including some agricultural products, hardwood logs, and hardwood lumber, that exceed the weight limit with a full container. NYSDOT is creating the Highway Oversize/Overweight Credentialing System (HOOCs). This web-based application will make it easier to obtain overweight permits.

⁴ It should be noted that NS and CSX each own 40% of NYS&W and have various operating agreements with NYS&W.

4.3 | MOVING CONTAINERS TO THE PORT: TRUCK DRAYAGE VS. RAIL

Firms in Central New York that import and export goods through PONYNJ now rely on truck drayage to move the containers to or from the port. These firms will contract with a hauler, often through a freight broker or third party logistics firm that is arranging the entire move. The hauler picks up the imported container at the port terminal, clears the gate, and drives to the receiving business. The business must ensure the container is unloaded and returned to the port, empty or full, within a specified time period, typically four or five days. Because the ocean shipping companies, which own the containers, want to keep them in circulation, they impose demurrage⁵ charges that must be paid for each day beyond the contracted due date. An export business is often faced with finding an empty container that can be delivered to its facility, loaded, and then drayed to the Port in time to avoid demurrage.

All of this makes total travel time important. Truck travel on relatively uncongested roads from Central New York to one of the terminals at the Port is about four hours. There will be some wait period at the port gate, depending on how many trucks are arriving at the given time of day. Once on the port, the driver must deliver the container, pick up another, and exit the terminal.

Based on information provided by stakeholders, it is estimated that the round-trip cost of truck drayage between the PONYNJ and the Central New York region, exclusive of demurrage, is between \$1,000 and \$1,300. Many expect this to rise in 2017 and beyond due to several factors:

- The federal government, which regulates driver hours-of-service (HOS), will require every truck to be equipped with an electronic logging device (ELD) by the end of 2017. ELDs will make strict enforcement of driver HOS easier.
- The opening of the expanded Panama Canal, which allows larger container ships that carry up to 18,000 twenty-foot equivalent units (TEU).⁶ Upon completion of the Bayonne Bridge Navigational Clearance Project, the largest ships will be able to access and unload at PONYNJ terminals. While the precise impact of these larger ships calling at the Port is difficult to project, it is reasonable to assume that existing truck delays at Port terminal gates will be exacerbated by these higher cargo volumes.
- The well-documented problem of a growing national truck driver shortage. While this most directly affects long-haul trucking, it is conceivable that drayage companies may have to pay more to attract and retain drivers.

⁵ Demurrage is the charge levied by the shipping line on the consignee if the container is not cleared and returned to the contracted empty depot within the specified free days offered by the line.

⁶ The twenty-foot equivalent unit (TEU) is an inexact unit of cargo capacity often used to describe the capacity of container ships and container terminals. It is based on the volume of a 20-foot-long (6.1 meters) intermodal container, a standard-sized metal box which can be easily transferred between different modes of transportation, such as ships, trains and trucks.

These factors collectively hold the potential for making it increasingly difficult for a driver to complete a round-trip within the available HOS. Adding an overnight stay to the trip will obviously increase the cost. Some estimates suggest that a round-trip truck dray could cost as much as \$1,700 by 2018. Beyond the cost consideration, truck retains an advantage of offering service directly to/from the loading dock.

Different considerations will drive a firm's decision to move cargo by rail from PONYNJ. ExpressRail is responsible for moving an inbound container from the dock to a designated freight rail terminal. The receiving railroad assembles its trains at the terminal (e.g. Croxton or Little Ferry). Railroads typically operate their container trains as a scheduled service, so the container must arrive at the terminal by a specified time to be placed on the outbound train. For example, on CSX, there may be a cutoff time of 4:30 pm for a train that is scheduled to depart at 11:00 pm and arrive in Syracuse at 11:20 am the next day. The conceptual NS/NYS&W service may have a longer transit time resulting from the additional inter-line transfer of the container railcar in the Binghamton railyard. Once the train reaches the inland port, the container may be unloaded onto a waiting truck to be drayed a relatively short distance to the receiving company (reverse operation for exports).

Based on interview results, the cost of a rail move is estimated at about \$700 per container, plus \$100 for the local drayage move, and somewhat more across the Central New York region, depending on the distance. The trucking issues affecting long-distance port drayage do not exist for this operation. Short-haul drivers may be able to make multiple turns without exceeding HOS limits, and it is easier to attract drivers to jobs where they are home every night.

In general, certain importers and exporters will find the operating characteristics and costs associated with an inland port to be attractive. However, much of the benefit to such firms will be realized only with regularly-scheduled and frequent rail service. Some of the potential inland port developers have proposed that service would begin with only one train per week, until demand increased enough to justify additional trains. Both import and export businesses that were interviewed suggest that this level of service would make it difficult to use the inland port, despite the cost savings. Even with commodities like lumber, which are not in themselves typically time-sensitive, the rail move would have to match the schedule of the ocean carrier.

5.0 MARKET POTENTIAL

Although estimates of job creation associated with a new Central New York Inland Port range from a few hundred to 2,000, no single source of data can reveal the market potential such a facility would generate. It was generally agreed that the catchment area of the facility would be 75-100 miles, but that is directionally dependent. For example, Binghamton is less than 100 miles to the south of Syracuse, but much closer to PONYNJ, so businesses located there would not find any advantage to draying containers to Syracuse rather than directly to the Port. CSX also serves an existing inland port operation in Buffalo, where many of the containers are destined for Canada. Thus, the catchment area of a Central New York Inland Port may extend southwest into the Finger Lakes and east into the Mohawk Valley.

5.1 | EXISTING MARKET ANALYSES/FORECASTS

While CenterState CEO commissioned an export plan,⁷ that document is similarly based on interviews and surveys of potential business partners and focuses on strategies to improve export markets for existing large exporters and small-medium sized businesses. It does not document expected business growth.

The internal analysis prepared by the POA includes an economic impact analysis.⁸ In this case the estimated benefits are based on the estimated cost (\$100 million) and job production (2.3 million person-hours) of constructing the inland port facility at the Honeywell site. Additional analysis is based not on market data, but on three scenarios of distribution center construction ranging from 1.25 million to 2.5 million square feet of space.

5.2 | CURRENT PONYNJ-SYRACUSE CONTAINER VOLUMES

In 2012, the latest year for which data was available, it was reported that 23,337 TEUs⁹ destined for the Central New York region were imported through the Port of New York/New Jersey facilities. This data can be misleading on actual origins/destinations of the containers due to a central business location ordering for multiple warehouses. In these cases, the data shows all containers going to the central location instead of the actual destinations. In order to gauge actual market volume, RSG interviewed actual importers and exporters in the Central New York region. One other item to note is that CSX handled virtually no Syracuse import or export (i.e., Syracuse region as origin or destination) ExpressRail cargo during 2012.

⁷ Brookings Institution, "CenterState NY Export Plan", Brookings-Rockefeller Project on State and Metropolitan Innovation, 2012

⁸ Martin Associates, "CenterState NY Inland Port and Rail Connector, Benefit Cost Analysis" 09/17/2015

⁹ It should be noted that because the TEU is an inexact unit, it cannot be converted precisely into other units. The related unit forty-foot equivalent unit (FEU), however, is defined as two TEUs, and is the most frequently used container today. Therefore, it is probable that the actual number of containerized freight movements to and from the Syracuse region is less than the number of TEUs.

5.3 | EXPORT BUSINESSES

Major exports from Central New York include agricultural commodities and wood products as well as scrap paper and metals. Soybeans are a growing export commodity, with most being shipped to Asia. Soybean farmers will work with a company like Perdue Agribusiness, which will consolidate and potentially store the product until the best price leads to an export contract. Soybeans are currently moved by rail hopper car to the Port of Virginia, where they are containerized and shipped. An official of Perdue stated that soybeans could move through the Central New York Inland Port if on-site storage facilities were constructed and the resulting rates and schedules were more favorable than those the firm has today.

Two major firms in the Central New York region, , both export a significant amount of product to China.. Both firms expressed interest is using the inland port if the level of service and relative shipping cost savings warranted such use.

An official of another company that exports from the Central New York area, stated that the inland port would likely provide a convenient option for shipping products out. With an overweight truck permit, they would be able to move fully loaded containers to the CNYIP, whereas they now consolidate containers on-dock at the PONYNJ terminal.

5.4 | IMPORT BUSINESSES

It is important that the Central New York region have an import market that draws containers that could then be made available for export businesses. However, because most of upstate New York, including the Syracuse region, has been experiencing modest population declines for at least two decades, the region's consumer market is not growing in a manner that supports steady demand for imported goods.

Offsetting this to an extent is that some companies that import retail goods are moving their distribution centers away from the I-95 corridor. These moves are driven by increasing real estate costs associated with new distribution facilities as well as traffic congestion that undermines travel time reliability for scheduled deliveries. Several examples of such relocated or new distribution centers in New York State include:

- CVS: On I-86 at Willawana, east of Elmira
- Best Buy: On I-86 at Nichols, west of Binghamton
- Walmart: On Route 20 at Sharon Springs
- Ace Hardware: On I-87 at Wilton, north of Albany

A large distributor that maintains a Syracuse warehouse and receives about 150 containers monthly, drayed from the PONYNJ at a cost ranging from \$1,200 to \$1,300 per container.

stated they would use a Central NY Inland Port if there were daily rail service that provided container delivery on a schedule they could accommodate at their warehouse.

A major business based in the Syracuse area, is another potential import customer, but with significant constraints. The firm imports up to 20 containers per day (about 6,000 containers per year) to the Syracuse area. Currently, truck drayage from the PONYNJ averages about 12 hours, which supports the firm's timely delivery to customers. Firm officials said that the inland port would likely not align with their business model, even if there were cost savings, because the time required to move a container from PONYNJ to Liverpool would be longer than a day, thus affecting their ability to meet their timely delivery to customers. It should also be noted that the New York City metropolitan region and Pennsylvania are its stated focus areas for future growth. Therefore, there may be little to no potential for growth in containers flowing to the Central New York area.

The above-referenced information suggests that growth in import business through a Central New York Inland Port will require a high level of service by the railroad to support the way retail suppliers operate. Projected cost savings will increase the level of attraction. Economic development agencies would need to aggressively market the location and service to generate demand for new distribution facilities. While these could be built at the inland port, that is not a requirement, as a short truck move would not add significantly to time or cost.

5.5 | MARKET POTENTIAL SUMMARY

Based on interviews and discussions with potential Central New York region customers and logistics service providers, but lacking specific data on existing import and export moves, the potential for generating enough container volume to support an inland port will depend on:

- Daily train service, at least five day/week
- Reliable train service that moves containers from the PONYNJ terminal dock to the Central NY Inland Port within a reasonable period of time
- Availability of empty containers for export; some exporters have identified this as a periodic problem, as demurrage charges create an incentive to return containers to the Port empty
- Cost differential between truck drayage to/from the Port and combined truck drayage/rail service to/from the inland port

6.0 PROSPECTIVE INLAND PORT SITES

While this feasibility study is intended to be independent of a selected site, the candidate sites have important implications for the inland port's operational feasibility.

6.1 | SITE ALTERNATIVES IDENTIFIED BY SPONSORS

Over the last few years, there have been at least three primary sites in discussion, as shown in Figure 2 and discussed below.

FIGURE 2: CENTRAL NY INLAND PORT



infrastructure and adjacent warehousing.

- **Jamesville/Hansen Quarry.** This site is an abandoned quarry that is adjacent to the NYS&W Syracuse branch track. It would be served by the NS/NYS&W partnership. There is access to I-481 via Jamesville Rd. While the topography of the site may present some challenges, it has been determined that there is sufficient land for developing the inland port infrastructure and adjacent warehousing.
- **Camillus/Honeywell Site.** This site in the Town of Camillus comprises several waste beds that were initially used by the Honeywell Corporation for storing Solvay process waste, and later used for waste from the Onondaga Lake clean up. The site is located on both sides of the CSX mainline; which is the only railroad that could directly serve it. There is a nearby rail junction where NYS&W can interchange with CSX, but a service agreement is not likely. The site has access via Route 695 to I-690 and then to I-90. The capped waste beds provide a large amount of land that can be developed for the inland port and a large amount of warehousing.
- **CSX DeWitt Yard.** The CSX DeWitt Yard is just east of I-481 in the Town of DeWitt. It currently operates as an ICTF for domestic freight. As an active freight yard, the inland port would not have to start from a blank slate. Additional tracks would have to be constructed to the east for the container trains to be loaded/unloaded; additional area would be paved for truck parking and container storage. There is a modest amount of land available for warehouse development, but it is primarily wetland that would require off-site mitigation. Access to I-481 uses Kirkville Road and either Fremont Rd, which has some neighborhood impacts, or perhaps an improved Girden Rd.

6.2 | LAND USE AND LOCAL GOVERNMENT PERSPECTIVES

Local government has an important role to play in any development project. They are responsible for reviewing the zoning and for site plan approval. It is in that process that the Town Planning Board would consider the impacts on the natural and human environment of the proposed facility and operation. They could reasonably expect to see negative impacts mitigated to the greatest extent possible.

Two of the proposed sites are in the Town of DeWitt, the other in the Town of Camillus. The Supervisor of each Town was interviewed and provided the following insights:

- **Town of Camillus.** The Town of Camillus is on record as supporting the development of an inland port at the Honeywell site. They point out that it is unused industrial land that has been subject to environmental mitigation; it would require no zoning change. By virtue of its location, there is little impact on the human environment. There are no residential neighborhoods nearby. While it is relatively close to the New York State Fairgrounds, analysis has shown that the distance is too great for either visual or auditory impact. Their expectation is that there is sufficient capacity on Route 695 and its junction with I-690 to handle the expected truck volume. The Town foresees that site development of the adjacent warehousing location could generate significant tax base and employment for area residents.
- **Town of DeWitt.** The Supervisor of the Town of DeWitt did not speak for the Town Board, only offering his own opinion. While the Hansen Quarry site meets the physical criteria for the inland port, it generated substantial community opposition when the idea was made public in the media. Because of the perceived negative impact on these residents, it is not likely that the Town would support this site for development of the inland port.

The Supervisor is a much stronger supporter of the CSX DeWitt Yard site. It is already a railroad facility. There are numerous industrial sites nearby, some of which are either vacant or underused. While there is only a modest amount of land available for development immediately adjacent to the site, the Town believes the facility could act as a catalyst for redevelopment of the other industrial sites. While truck traffic could pose a measurable impact on the Fremont Road neighborhood, the Town believes there are options to construct new truck access to Kirkville Road and I-481.

6.3 | OPERATOR AND DEVELOPER PERSPECTIVES

Each of the three primary sites poses different opportunities and challenges to meeting the basic requirements for both the potential operators and developers. As noted, each site is aligned with different railroads and development teams.

- **CSX.** CSX officials have previously and recently stated a willingness to provide service to an inland port at their DeWitt Yard location. By being physically co-located with the existing ICTF, there would presumably be operational benefits for the company. As shown in Table 2, CSX runs daily intermodal trains to Chicago; the “local” train drops/picks up a block of cars at the Buffalo/Seneca ICTF to serve demand.

TABLE 2: CSX INTERMODAL CONTAINER

Route	Service Days	Trains/Day	Trains/Week
<i>Elizabeth - Chicago (No Syracuse Stop)</i>			
Elizabeth Marine Term --> Chicago	Mon-Sun	1	7
Chicago --> Elizabeth Marine Term	Tues-Fri, Sun	1	5
<i>Elizabeth - Buffalo (No Syracuse Stop)</i>			
Elizabeth Marine Term --> Buffalo	Mon-Thur	1	4
Buffalo --> Elizabeth Marine Term	Mon-Sat	1	6

CSX officials stated that they are addressing capacity constraints on the Hudson River Line, and do not envision reliability of service issues. CSX proposes to operate the inland port facility themselves, unlike CSX/Stackbridge, which is operated by an independent contractor.

CSX has expressed no interest in serving the Honeywell site. Although the site is immediately adjacent to CSX’s mainline track, CSX officials stated that they do not believe there is a business case for them to support an entirely new facility only a few miles from their existing yard and ICTF. These officials also noted that they do not believe the expense of constructing a new facility from the ground up is warranted. They also said the Honeywell site lacked any “operational synergies” for CSX.

- **NYS&W.** This short line railroad is in the difficult position of offering service, but not having access to a location to directly do so. The interviews suggested that it is unlikely that local opposition to the Hansen Quarry site will be overcome, nor will CSX grant NYS&W rights to operate into the Honeywell site.
- **Port of Oswego Authority.** Internal analysis prepared by POA identifies the Honeywell site as the preferred location for the inland port. However, without a willing railroad partner, the site becomes operationally infeasible.
- **3Gi CNYIP Inc.** This company may still play a role in developing warehousing adjacent to the DeWitt Yard site. They own about 200 acres of land at that site and could follow through on their proposal to construct and operate climate-controlled and other specialized warehousing facilities for agricultural clients.

7.0 CONCLUSIONS

There is little objective and reliable data with which to validate proponents' forecasts and estimates of the potential market demand and economic benefits associated with a new Central New York Inland Port. Therefore, the followings conclusions are based mainly on a distillation and analysis of the information obtained through interviews with key stakeholders.

A. Development of a CNYIP is likely to facilitate the growth of business and employment related to existing import and export businesses as well as potential new import and export businesses in the region.

The growth of business and employment, however, may be offset to some degree by a loss of trucking jobs in the regional drayage sector, which may occur in parallel with the growing national truck driver shortage. In addition, the CNYIP's success will depend on whether shippers and receivers perceive using the facility will achieve shipping cost savings as well as provide a level of service that meets their logistics needs; most shippers need daily service. Shippers that use intermodal rail service to the PONYNJ through a CNYIP may save up to \$500 per container in shipping costs over truck drayage from the Syracuse region.

B. The CSX DeWitt Yard appears to be the only viable site for a CNYIP because no other proposed site has a commitment for rail service.

While the CSX DeWitt Yard is the only one of the various sites under consideration for the CNYIP with committed rail service, its viability is tempered by at least two key considerations. First, the cost estimate provided by CSX for construction and equipment requires a thorough review by experts in land development and intermodal equipment and operations to ensure its accuracy and cost-effectiveness. Second, because the nature and frequency of intermodal rail service serving a CNYIP is fundamental to this economic feasibility and regional benefits, the State of New York should consider options for ensuring CSX provides the level of service they have proposed (i.e., daily train, Monday-Friday, second day service to/from the PONYNJ).

C. Development of warehousing and distribution facilities within or adjacent to a CNYIP might contribute to the inland port's success, but is not essential to initial operation of the inland port.

An inland port, whose primary role is to enable more efficient and reliable transshipment of containers between an inland community and a distant marine port, does not necessarily need on-site or adjacent manufacturing or logistics facilities for its operations to be successful. Further, it is very difficult to determine whether the plan put forth by 3Gi to develop specialized warehousing for agricultural commodities will generate new agricultural export business. In addition, importers of retail goods will utilize existing or build new warehouse/distribution space in the region as their business needs warrant, not simply because a space adjacent to an inland port is available.