

# Logistics Park Calumet Business Development Study

November 2012

*Prepared for:*

**South Suburban Mayors and Managers Association**





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**Table of Contents**

**1 EXECUTIVE SUMMARY ..... 1**

1.1 LOGISTICS PARK CALUMET ..... 1

1.2 INTERVIEW SURVEY AND IMPLICATIONS FOR LOGISTICS PARK CALUMET ..... 4

1.3 FREIGHT MARKET ANALYSIS AND OPPORTUNITIES FOR LOGISTICS PARK CALUMET ..... 5

1.4 STRATEGIC ACTION PLAN..... 8

    1.4.1 *Marketing* ..... 8

    1.4.2 *Sites and Site Information*..... 8

    1.4.3 *Infrastructure Development*..... 10

    1.4.4 *Infrastructure for International Trade* ..... 11

    1.4.5 *Development Programs and Incentives* ..... 12

    1.4.6 *Funding Strategies* ..... 12

    1.4.7 *Workforce Development*..... 13

**2 REVIEW OF LOGISTICS PARK CALUMET ..... 14**

2.1 LOGISTICS PARK CALUMET AREA..... 14

    2.1.1 *Logistics Park Calumet North*..... 16

    2.1.2 *Logistics Park Calumet South*..... 18

2.2 REVIEW OF INDUSTRIAL LOCATION FACTORS ..... 18

2.3 LOGISTICS PARK CALUMET STRENGTHS..... 22

2.4 LOGISTICS PARK CALUMET WEAKNESSES ..... 23

**3 COMPETITIVE INDUSTRIAL DEVELOPMENT SITES IN NORTHERN ILLINOIS ..... 25**

3.1 CHICAGO INDUSTRIAL MARKET ..... 25

3.2 I-55 CORRIDOR ..... 27

3.3 O’HARE INDUSTRIAL SUBMARKET ..... 29

3.4 I-80/JOLIET SUBMARKET..... 29

3.5 I-88 CORRIDOR/AURORA ..... 29

3.6 SOUTH COOK SUBMARKET ..... 30

3.7 CHICAGO HEIGHTS ..... 30

3.8 THE SOUTH SUBURBS ..... 30

3.9 ALSIP..... 31

3.10 TINLEY PARK ..... 31

3.11 UNIVERSITY PARK..... 31

3.12 SAUK VILLAGE ..... 32

3.13 PARK 88 ..... 32

3.14 MINOOKA, ILLINOIS..... 32

3.15 INTERMODAL LOGISTICS PARKS AND TERMINALS ..... 33

**4 INDUSTRIAL USER INTERVIEWS ..... 35**

4.1 SUMMARY OF FINDINGS ..... 35

4.2 APPROACH ..... 35

4.3 CARGO NETWORKS AND PORT GATEWAYS..... 36

    4.3.1 *North American Gateways and Prince Rupert’s Share* ..... 36

    4.3.2 *Prince Rupert Ocean Carriers*..... 37

    4.3.3 *Prince Rupert Pricing*..... 37

    4.3.4 *Port Diversification* ..... 38

    4.3.5 *Halifax Gateway* ..... 38

4.4	INLAND TRANSPORTATION STRATEGY .....	39
4.5	RAIL .....	40
4.6	DISTRIBUTION CENTER LOCATION.....	40
4.7	EXPORT MANUFACTURING.....	41
4.8	OTHER FACTORS INFLUENCING LOGISTICS HUBS IN CHICAGO .....	41
4.8.1	<i>Labor</i> .....	41
4.8.2	<i>Land</i> .....	42
4.8.3	<i>Incentives</i> .....	42
4.8.4	<i>Green Initiatives</i> .....	42
4.9	IMPLICATIONS FOR LOGISTICS PARK CALUMET .....	43
<b>5</b>	<b>REGIONAL GOODS MOVEMENT ASSESSMENT .....</b>	<b>45</b>
5.1	MAJOR INDUSTRY TRENDS .....	45
5.1.1	<i>Recent Developments in the Trucking Industry and the Near-Term Outlook</i> .....	45
5.1.2	<i>Trends in U.S. Containerized Trade</i> .....	48
5.1.3	<i>Trends in Intermodal Rail</i> .....	53
5.2	CHICAGO BEA TOTAL CARGO .....	58
5.3	CHICAGO BEA TRUCK CARGO .....	61
5.3.1	<i>Total</i> .....	61
5.3.2	<i>Domestic Inbound</i> .....	63
5.3.3	<i>Domestic Outbound</i> .....	64
5.3.4	<i>Domestic Internal and Through Cargo</i> .....	65
5.3.5	<i>Imports (excl. NAFTA)</i> .....	65
5.3.6	<i>Export (excl. NAFTA)</i> .....	67
5.3.7	<i>NAFTA</i> .....	68
5.4	CHICAGO BEA RAIL CARGO .....	69
5.4.1	<i>Total</i> .....	69
5.4.2	<i>Domestic Inbound</i> .....	71
5.4.3	<i>Domestic Outbound</i> .....	72
5.4.4	<i>Domestic Internal and Through</i> .....	73
5.4.5	<i>Imports (excl. NAFTA)</i> .....	74
5.4.6	<i>Exports (excl. NAFTA)</i> .....	75
5.4.7	<i>NAFTA</i> .....	76
5.5	WATERBORNE FREIGHT AND PORT OF CHICAGO.....	77
5.6	FREIGHT OPPORTUNITY MATRIX .....	78
<b>6</b>	<b>RAIL INFRASTRUCTURE ANALYSIS .....</b>	<b>84</b>
6.1	RAIL INTERMODAL AND CARLOAD .....	84
6.1.1	<i>Canadian National</i> .....	84
6.1.2	<i>CSX Transportation</i> .....	91
6.1.3	<i>Union Pacific Railroad</i> .....	93
6.2	TRANSLOAD OPPORTUNITIES.....	94
6.3	RAIL INDUSTRY OVERVIEW .....	95
6.4	MOTOR CARRIERS.....	97
<b>7</b>	<b>STRATEGIC ACTION PLAN FOR LOGISTICS PARK CALUMET.....</b>	<b>99</b>
7.1	STRATEGIC ACTION PLAN.....	99
7.2	MARKETING.....	101
7.3	SITES AND SITE INFORMATION .....	101
7.4	INFRASTRUCTURE DEVELOPMENT .....	103

7.5	INFRASTRUCTURE FOR INTERNATIONAL TRADE .....	104
7.6	DEVELOPMENT PROGRAMS AND INCENTIVES .....	104
7.7	FUNDING STRATEGIES .....	105
7.8	WORKFORCE DEVELOPMENT.....	105
<b>8</b>	<b>ADDITIONAL INFORMATION FOR STRATEIC ACTION PLAN .....</b>	<b>106</b>
8.1	INTRODUCTION.....	106
8.2	EXPORT TRENDS AND OPPORTUNITIES.....	106
8.2.1	<i>The National Export Initiative</i> .....	106
8.2.2	<i>Export Market Impacts and Opportunities</i> .....	107
8.2.3	<i>The Korean Free Trade Agreement</i> .....	108
8.3	FOREIGN TRADE ZONES.....	108
8.4	U.S. CUSTOMS AND BORDER PROTECTION DIVISION CENTRALIZED EXAMINATION STATION .....	113
8.5	REVIEW OF FEDERAL AND STATE FUNDING PROGRAMS.....	113
8.6	INDIANA SHOVEL READY PROGRAM .....	114
8.7	REVIEW OF ROADWAY NETWORK.....	115
8.8	ILLINOIS HOUSE BILL 1606 FOR THE DEVELOPMENT OF LOGISTICS PARK CALUMET .....	117
8.8.1	<i>Illinois House Bill 1606</i> .....	117
8.8.2	<i>Current Redevelopment Mechanisms</i> .....	119
8.8.3	<i>The Precedent of CenterPoint Development Projects</i> .....	127
8.8.4	<i>Refinements of HB 1606</i> .....	128

**List of Tables**

Table 1-1:	Summary of Interviews and Implications for Logistics Park Calumet .....	4
Table 1-2:	Logistics Park Calumet Opportunity Matrix.....	6
Table 4-1:	Interview Respondents .....	36
Table 4-2:	Containerized Imports from China (incl. Hong Kong) by West Coast Gateway.....	37
Table 4-3:	Summary of Interviews and Implications for Logistics Park Calumet .....	44
Table 5-1:	Warehouse-able Commodities.....	59
Table 5-2:	Chicago BEA Inbound Truck Cargo, Top 25 Warehouse-able Commodities, 2009 (excl. Secondary Traffic).....	63
Table 5-3:	Chicago BEA Outbound Truck Cargo, Top 25 Warehouse-able Commodities, 2009 (excl. Secondary Traffic).....	64
Table 5-4:	Chicago BEA Domestic Inbound Rail Cargo, Top 25 Warehouse-able Commodities, 2009 (Million Tons) .....	71
Table 5-5:	Chicago BEA Domestic Outbound Rail Cargo, Top 25 Warehouse-able Commodities, 2009 (Million Tons) .....	72
Table 5-6:	Logistics Park Calumet Opportunity Matrix.....	80
Table 5-7:	Top Five Port and Mexico Origins of Truck Commodities Eligible for Rail Conversion, 2009 .....	82
Table 5-8:	Rail Cargo Canadian Origins to Chicago, 2010.....	83

**List of Figures**

Figure 1-1:	Logistics Park Calumet Area .....	1
Figure 1-2:	Logistics Park Calumet North Area (as defined for Illinois House Bill 1606).....	2
Figure 2-1:	Logistics Park Calumet Area .....	14
Figure 2-2:	Logistics Park Calumet North Area (as defined for Illinois House Bill 1606).....	15
Figure 3-1:	Chicago Submarket Map.....	26
Figure 5-1:	Indexes of Trucking Volume (TL and LTL), U.S. Industrial Production and Real GDP: 1995-2010 (1995 = 100) .....	45
Figure 5-2:	Indexes of Real Revenue per Load for Truckload Freight versus Real Diesel Fuel Prices: 1995-2010 (1995 = 100).....	46
Figure 5-3:	Indexes of Truckload Loads by Length-of-Haul Segment: 1996-2010 (1996 = 100).....	47
Figure 5-4:	Growth of U.S. Containerized Import and Export Loads, 1995-2010 .....	49
Figure 5-5:	Far East as a Share of U.S. Containerized Imports and Exports, 1995-2010.....	50
Figure 5-6:	Trends in the Composition of U.S. Containerized Imports and Exports, 1995-2010 .....	51
Figure 5-7:	Annual North America Intermodal Rail Volume, 2000 to 2010 .....	53
Figure 5-8:	Growth of North America Intermodal Service by Equipment Type, 2000 to 2010.....	53
Figure 5-9:	Quarterly Average Intermodal Train Speeds for North American Class I Railroads, 2000-2010.....	54

Figure 5-10: Midwest Inbound Intermodal Volume from West Coast and Share, 2000 to 2010 .....56

Figure 5-11: Chicago BEA Top-20 Intermodal Rail Lanes by Cargo Tons in 2009 .....57

Figure 5-12: Chicago BEA Cargo Tons and Value in 2009 .....58

Figure 5-13: Chicago BEA Cargo Tons, Total and Warehouse-able by Direction .....59

Figure 5-14: Chicago BEA Cargo Tons, Total and Warehouse-able by Mode .....60

Figure 5-15: Chicago BEA Truck Cargo, Tons .....61

Figure 5-16: Chicago BEA Truck Cargo, Value .....61

Figure 5-17: Chicago BEA Truck Cargo, Top Ten Commodity Groups .....62

Figure 5-18: Chicago BEA Truck Cargo, Top Ten Warehouse-able Commodity Groups .....62

Figure 5-19: Chicago BEA Inbound Truck Cargo, Top 10 Warehouse-able Commodity Groups .....63

Figure 5-20: Chicago BEA Outbound Truck Cargo, Top 10 Warehouse-able Commodity Groups .....64

Figure 5-21: Chicago BEA Import Truck Cargo, 2009 .....65

Figure 5-22: Chicago BEA Inbound Import Cargo by Truck, Top 10 Warehouse-able Commodity Groups .....66

Figure 5-23: Chicago BEA Export Truck Cargo, 2009 .....67

Figure 5-24: Chicago BEA Outbound Export Cargo by Truck, Top 10 Warehouse-able Commodity Groups .....67

Figure 5-25: Chicago BEA – NAFTA Import and Export Truck Cargo, 2009 .....68

Figure 5-26: Chicago BEA NAFTA Import Cargo by Truck, Top 10 Warehouse-able Commodity Groups, 2009 .....68

Figure 5-27: Chicago BEA NAFTA Export Cargo by Truck, Top 10 Warehouse-able Commodity Groups, 2009 .....68

Figure 5-28: Chicago BEA Rail Cargo, Tons .....69

Figure 5-29: Chicago BEA Rail Cargo, Value .....69

Figure 5-30: Chicago BEA Rail Cargo, Top Ten Commodity Groups .....70

Figure 5-31: Chicago BEA Rail Cargo, Top Ten Warehouse-able Commodity Groups .....70

Figure 5-32: Chicago BEA Domestic Inbound Rail Cargo, Top 10 Warehouse-able Commodity Groups .....71

Figure 5-33: Chicago BEA Domestic Outbound Rail Cargo, Top 10 Warehouse-able Commodity Groups .....72

Figure 5-34: Chicago BEA Import Rail Cargo, 2009 .....74

Figure 5-35: Chicago BEA Inbound Import Rail Cargo, Top 10 Warehouse-able Commodity Groups .....74

Figure 5-36: Chicago BEA Export Rail Cargo, 2009 .....75

Figure 5-37: Chicago BEA Outbound Export Rail Cargo, Top 10 Warehouse-able Commodity Groups .....75

Figure 5-38: Chicago BEA-NAFTA Import and Export Rail Cargo, 2009 .....76

Figure 5-39: Chicago BEA-NAFTA Import Cargo by Rail, Top 10 Warehouse-able Commodity Groups, 2009 .....76

Figure 5-40: Chicago BEA-NAFTA Export Cargo by Rail, Top 10 Warehouse-able Commodity Groups, 2009 .....76

Figure 5-41: Port of Chicago Cargo, 2009 .....77

Figure 5-42: Total Truckload Tons from Key U.S. Ports to Chicago in 2009 .....78

Figure 6-1: CN Railroad Network .....85

Figure 6-2: Container Terminal at Port of Prince Rupert .....86

Figure 6-3: CN Chicago Intermodal Terminal .....88

Figure 6-4: Chicago Regional Rail Map .....90

Figure 7-1 Logistics Park Calumet (House Bill I 606 Boundaries) ..... 100

Figure 8-1: Regional Highway Map ..... 116

Figure 8-2: Brownfields Redevelopment Process ..... 123

Figure 8-3: TIF Districts in LPC ..... 126

Figure 8-4: LPC Project Build Out & Operations ..... 133

# 1 EXECUTIVE SUMMARY

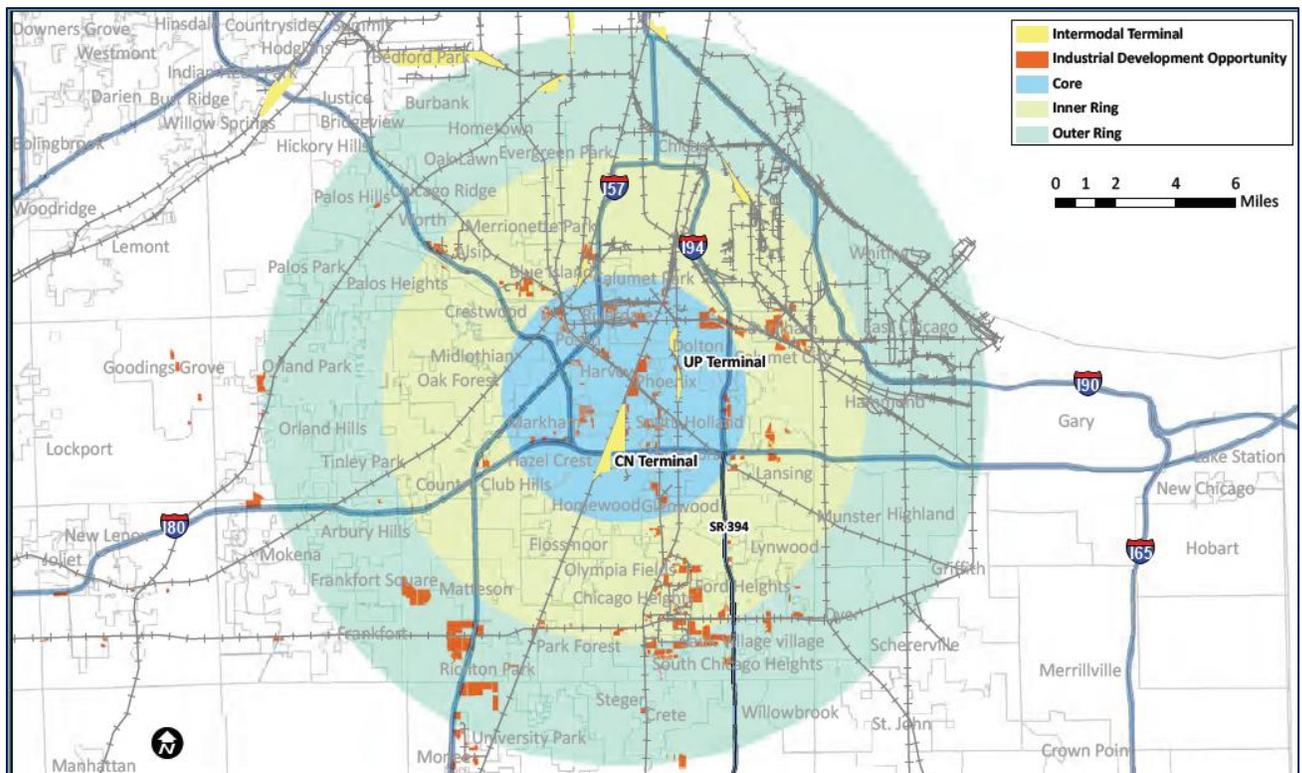
## 1.1 Logistics Park Calumet

This study evaluates the market environment and opportunities for Logistics Park Calumet, an intermodal logistics development located in Chicago's southern suburbs. Logistics Park Calumet's main sponsors are the South Suburban Mayors and Managers Association and its development arm, the Chicago Southland Economic Development Corporation. While these public agencies are currently fulfilling the role of master developer, this does not preclude a private development company from entering into this role at a later time. All of the communities involved in Logistics Park Calumet are current members of the South Suburban Mayors and Managers Association.

Logistics Park Calumet is located in the heart of Chicago's southern suburbs and offers a variety of opportunities for developing cargo-related activities that capitalize on this area's transportation infrastructure, land, labor, and other resources. As shown in Figure I-1, Logistics Park Calumet covers a broad area, but consists of Logistics Park Calumet North and Logistics Park Calumet South.

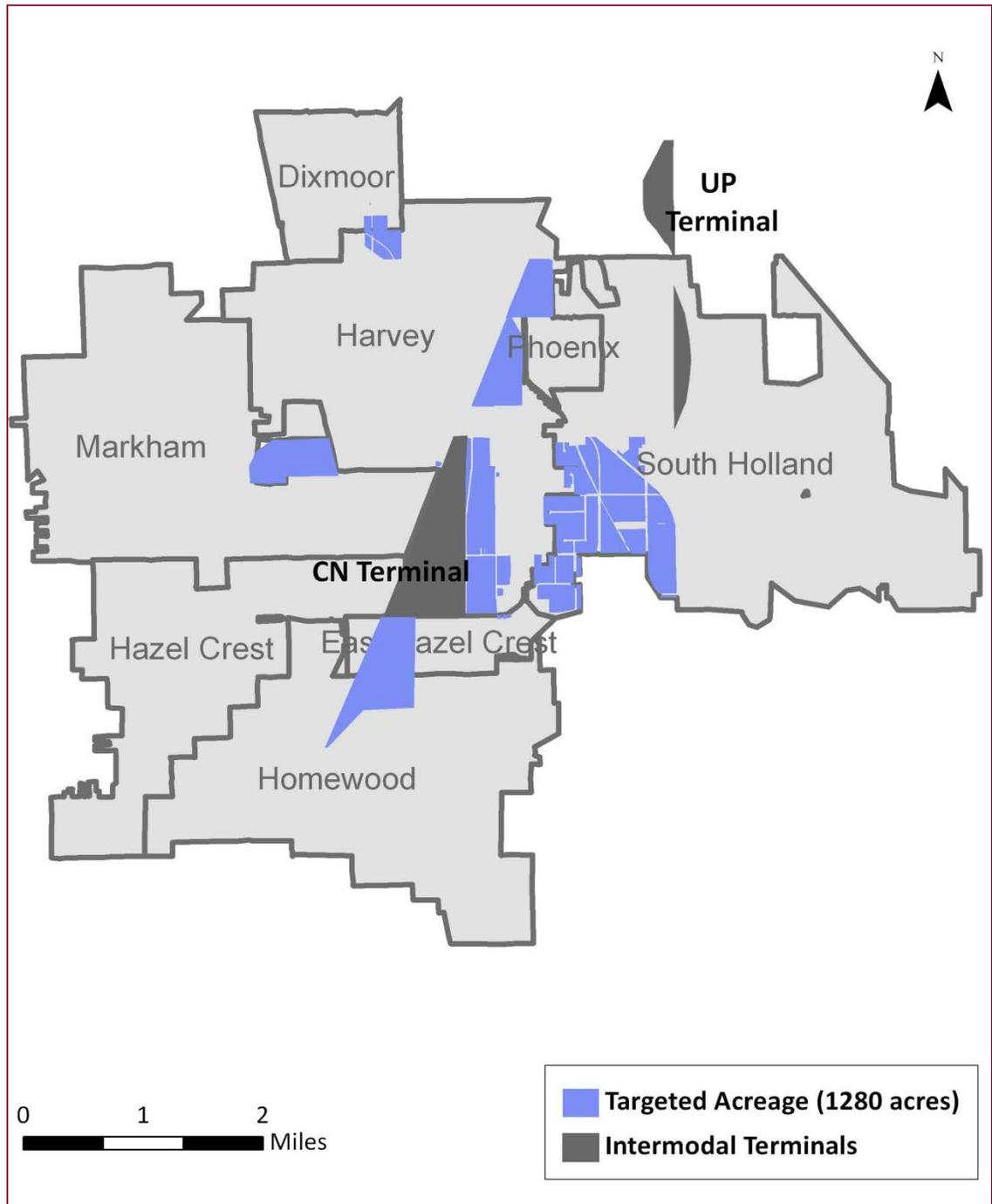
The core development area and focus of this study is Logistics Park Calumet North, which encompasses 1,280 acres for development (Figure I-2). The Canadian National and Union Pacific rail yards and an extensive network of highways (e.g. I-80, I-57, and I-294) and local road connectors serve this area.

**Figure I-1: Logistics Park Calumet Area**



Source: Chicago Southland Economic Development Corporation

**Figure I-2: Logistics Park Calumet North Area (as defined for Illinois House Bill 1606)**



Source: Chicago Southland Economic Development Corporation

Logistics Park Calumet North is located across portions of the following contiguous south suburban Cook County municipalities:

- Dixmoor
- East Hazel Crest
- Harvey
- Hazel Crest
- Homewood
- Markham
- Phoenix
- South Holland

Logistics Park Calumet has the following major strengths:

- Land for development with access to excellent transportation infrastructure and large populations.
- Rail
  - Strong intermodal rail infrastructure, including the Canadian National Railroad's Harvey Yard and access to other Class I railroads.
  - Direct rail access to the Port of Prince Rupert, British Columbia, Canada. It is the closest deep water port to Asia and to additional deep water ports on the East and West Coasts via the Canadian National Railroad.
  - Direct rail intermodal access to major markets in Canada and Mexico via the Canadian National and Union Pacific Railroads.
- Highways
  - Excellent interstate highway access via I-57, I-80, I-90, I-94, and I-294.
  - Very good local roadway access via U.S. Route 6 (159<sup>th</sup> Street) and Illinois Route 1 (Halsted Street).
- International Trade Facilities
  - Potential for a Free Trade Zone designation as a General Purpose Subzone of Free Trade Zone #22.
  - Potential for a Customs Service Central Examination Station at Fore Transportation.
- A range of potential funding support for development including TIF, enterprise zones, and local, state, and federal initiatives.
- Excellent public transit access via Pace and the Metra Electric District's University Park Line.
- Access to sufficient labor for warehousing and logistics services.

Logistics Park Calumet also faces the following challenges for development:

- Significant amounts of brownfield sites still needing remediation.
- Absence of shovel-ready development sites.
- Relatively limited raw land for development.
- Lack of Class A logistics buildings.
- Incomplete information on available development sites.
- Some local connector roads still needing improvement.
- Multiple municipal jurisdictions with inconsistent policies and procedures.
- Relatively high property taxes versus Kane and Will Counties.

## 1.2 Interview Survey and Implications for Logistics Park Calumet

The consultant team conducted interviews with freight transportation professionals to solicit input on logistics trends as well as on Logistics Park Calumet’s strengths, challenges, and opportunities. The following table summarizes key findings from these interviews.

**Table I-1: Summary of Interviews and Implications for LPC**

LPC Feature	Strength	Challenge
<b>Location</b>	<ul style="list-style-type: none"> <li>Logistics Park Calumet is well positioned for companies that use a rail-to-inland distribution center network strategy.</li> <li>Unlike many competing Midwest locations, a Chicago location takes advantage of ocean carriers’ inland services and can generate savings for shippers.</li> <li>Logistics Park Calumet is thirty-five miles south of downtown Chicago and thus is strong for distribution to locations south and east of Chicago (i.e. Chicago’s south suburbs, Indiana, Ohio and Lower Michigan).</li> <li>Trucks can spend less time on congested highways.</li> <li>The Canadian National’s Harvey Yard is convenient for shippers located south of Chicago who require access to empty equipment.</li> </ul>	<ul style="list-style-type: none"> <li>Logistics Park Calumet is not ideal for distribution areas that include Chicago as part of a northern distribution strategy, including northern Illinois, Wisconsin, or other northbound transits.</li> <li>Logistics Park Calumet is not suited for regional distribution centers that serve Midwestern and Eastern regional markets.</li> </ul>
<b>Rail Connectivity</b>	<ul style="list-style-type: none"> <li>Excellent rail access.</li> <li>The Canadian National Railroad’s Harvey Yard is located near the facilities of other major U.S. railroads, so shippers could combine multiple railroad shipments at Logistics Park Calumet.</li> <li>Logistics Park Calumet’s rail access can help mitigate the challenges shippers face from rising fuel prices, limitations on ocean carrier inland service offerings, and expected truck driver shortages.</li> <li>The Canadian National Railroad’s Halifax service can accommodate European cargo.</li> </ul>	<ul style="list-style-type: none"> <li>Rail access is not as important to shippers that use cross-dock strategies at ports.</li> <li>Shippers who have negotiated “door” service with ocean carriers are less concerned with rail terminal locations.</li> </ul>
<b>Connection via Prince Rupert on the Canadian National Railroad</b>	<ul style="list-style-type: none"> <li>The Port of Prince Rupert in British Columbia, Canada offers the fastest transit time from China to West Coast North America.</li> <li>Companies with high value and time sensitive goods from China can obtain faster and reliable service via the Port of Prince Rupert.</li> <li>The Canadian National Railroad’s Prince Rupert connection is perceived to be very reliable and offers a “green” gateway with on-dock rail and fuel efficient rail service.</li> </ul>	<ul style="list-style-type: none"> <li>A limited number of ocean carriers serve the Port of Prince Rupert.</li> <li>Ocean rate increases have caused some shippers to re-allocate imports to competing ports.</li> <li>A single railroad serves the Port of Prince Rupert.</li> <li>There is a lack of trucking to recover from rail blockages if they occur.</li> <li>The Port of Prince Rupert has a relatively poor location for import transload strategies.</li> </ul>
<b>Highway Access</b>	<ul style="list-style-type: none"> <li>Excellent highway connections, including I-57, I-80, I-90, I-94, and I-294.</li> <li>Recent improvements to highway interchanges.</li> <li>Many trucking companies located in the area.</li> </ul>	

LPC Feature	Strength	Challenge
<b>Labor, Land, Incentives</b>	<ul style="list-style-type: none"> <li>Logistics Park Calumet’s land prices and availability are perceived to be more favorable than other locations in the Chicago area.</li> <li>Sufficient labor availability.</li> <li>Good cooperation from local governments.</li> </ul>	<ul style="list-style-type: none"> <li>Companies may not understand the tax advantages that municipalities in the Logistics Park Calumet area offer.</li> </ul>

Source: TranSystems

### 1.3 Freight Market Analysis and Opportunities for Logistics Park Calumet

The consultant team examined which types of businesses could potentially benefit from a move to Logistics Park Calumet. These types of businesses would deal with commodities that are shipped to or manufactured in the Chicago metropolitan area and rely on rail or a combination of trucking and rail to go to areas south and east of Chicago. They appear in Table 1-2, Logistics Park Calumet Freight Opportunity Matrix.

**Table 1-2: Logistics Park Calumet Opportunity Matrix**

Logistics Park Calumet's Attribute	Major Attributes and Opportunities for Logistics Park Calumet			
	Logistics Park Calumet's Opportunity	Access to all U.S. class I railroads	Access to Midwest Markets	Fastest China-to-Midwest transit terminates at the Canadian National Railroad's Harvey Terminal.
	Given rising fuel costs and truck driver shortages, businesses can take advantage of rail cost savings compared to truck freight costs.	Midwest distribution strategies covering Illinois, Indiana, Ohio, Michigan, and possibly some other adjacent states.	COSCO's Hanjin service from China/Korea is 2-3 days faster than other ocean freight services.	Land, labor, business environment concerns are "tie breakers" after logistics needs are met.
Logistics Park Calumet's Opportunities by Market Sector (High, Medium, Low)				
International Inbound Truck to Rail Conversion	Target trucked commodities that can handle longer rail transit (i.e. wine and spirits and furniture from the West Coast; distribution center cargo from the West, East, and Gulf Coast ports; Mexican border states; and other parts of Mexico).	Favors distribution area that includes Chicago, and population centers to the south and east.	No truck conversion opportunity from Prince Rupert	Incentives can overcome any transportation cost advantages of other area locations.
Canadian Cargo	Advantage if cargo is coming in on the Canadian National Railroad. Manufactured goods from Alberta, or Forest Products from Ontario are prospects for Logistics Park Calumet, especially if the final destination is south of the Chicago area. Fertilizer may be viable given the proximity to southern agricultural states, but may require specialized facilities.	Because cargo is coming from Canada, better distribution center opportunities exist north of Logistics Park Calumet, UNLESS the major cargo distribution area is Chicago. However, these distribution center opportunities are heavily concentrated in Indiana, Ohio, and Michigan.	N/A – Prince Rupert cargo does not include Canadian sourced cargo.	
High-Value Cargo	Not all railroads will have sufficient transit times from the coasts.	Favors distribution area including Chicago, and population centers to the south.	High-value cargo requires the fastest transit to mitigate inventory carrying costs.	
Auto Parts	Generally high-value, time sensitive cargo that favors truck; however, looking for ways to use rail.	Central location to manufacturers in Chicago, Michigan, Indiana, and Ohio. Logistics Park Calumet has to compete with better locations in Ohio and Michigan.	Auto parts imported from China require fastest rail transit if used to reduce inventory carrying costs.	
Manufacturing (Exports)	Manufacturers often operate just-in-time inventory strategies that favor trucks.	Raw materials sourced from Midwest, finished products distributed across the U.S.	Just-in-time cargo from China requires the fastest transit to meet production schedules.	
Agriculture	The Canadian National is the key railroad because the other railroads do not have the same location advantage.	Agriculture shippers in Indiana and Ohio can avoid rail yards west and north of Chicago to save additional transit time and expense.	The Canadian National Harvey Yard's southernmost Chicago rail location enables shorter truck transit/costs for shippers in Ohio and Indiana who currently dray further towards Chicago. China is the main destination opportunity.	



<b>Major Attributes and Opportunities for Logistics Park Calumet</b>				
<b>Logistics Park Calumet's Attribute</b>	Access to all U.S. class I railroads	Access to Midwest Markets	Fastest China-to-Midwest transit terminates at the Canadian National Railroad's Harvey Terminal.	Labor, land availability, relatively low land prices, and a pro-business environment
<b>Logistics Park Calumet's Opportunity</b>	Given rising fuel costs and truck driver shortages, businesses can take advantage of rail cost savings compared to truck freight costs.	Midwest distribution strategies covering Illinois, Indiana, Ohio, Michigan, and possibly some other adjacent states.	COSCO's Hanjin service from China/Korea is 2-3 days faster than other ocean freight services.	Land, labor, business environment concerns are "tie breakers" after logistics needs are met.
Distribution Center	Cargo coming in on the Canadian National is the main advantage, but access to other Chicago area railroads is a plus.	Ideal for distribution areas including Chicago and states to the South. Logistics Park Calumet, however, has to compete with other Chicago locations, and established locations in Indiana and Ohio.	A distribution center close to the Canadian National's Harvey Yard would save on truck drays to the distribution center.	

Source: TranSystems

## **1.4 Strategic Action Plan**

The Strategic Action Plan builds on Logistics Park Calumet's strengths. It also addresses the challenges Logistics Park Calumet faces as it develops into a logistics hub. This Plan recommends several actions to enhance the marketing, infrastructure, and funding channels for Logistics Park Calumet's successful development. The proposed actions are derived from an analysis undertaken in this study and on initiatives that Logistics Park Calumet's leaders already have underway. Proposed actions are described below under Marketing, Site and Site Information, Infrastructure Development, Infrastructure for International Trade, Development Programs and Incentives, Funding Strategies, and Workforce Development.

### **1.4.1 Marketing**

#### ***Marketing Tools***

Logistics Park Calumet's representatives should create a website, PowerPoint presentation, and trade show brochure that shows and promotes Logistics Park Calumet's unique and competitive logistics assets. They should also continue to attend trade shows and other forums to raise awareness about Logistics Park Calumet within the logistics sector.

#### ***Marketing to Developers***

The South Suburban Mayors and Managers Association and the Chicago Southland Economic Development Corporation should continue to market Logistics Park Calumet's assets to developers and brokers. They should produce detailed information that developers can use to start their planning process. (Please see, Site Information Action below). They initially need to help potential developers identify suitable sites for acquisition and development, primarily for warehouses and distribution centers. The consultant team recommends property site sizes of 10 acres for warehouses and distribution centers.

The South Suburban Mayors and Managers Association and the Chicago Southland Economic Development Corporation should also build upon existing relationships with many of metropolitan Chicago's industrial real estate developers who are interested in the Logistics Park Calumet region.

#### ***Marketing to End-Users***

The South Suburban Mayors and Managers Association and the Chicago Southland Economic Development Corporation should also continue to develop relationships with importers and exporters through industry forums to raise Logistics Park Calumet's market awareness.

### **1.4.2 Sites and Site Information**

#### ***Develop Strategies for Specific Sites***

The South Suburban Mayors and Managers Association and the Chicago Southland Economic Development Corporation should include detailed site information for Logistics Park Calumet's prime development sites. These sites should include the following:

- Brownfields undergoing assessment and/or remediation,
- Trailer and container storage yards suitable for redevelopment,
- Surplus rail carload switching yards,
- Existing vacant land in useable condition,
- Abandoned former manufacturing buildings unsuitable for conversion, and
- Underused industrial assets suitable for redevelopment.

Since the mid-1990s, the City of Chicago's Departments of Environment and Planning/Development have had an extensive brownfields initiative. This program provides a number of relevant examples for redeveloping Cook County's southern suburbs. The consultant team recommends further analysis of this program in a future phase of this project.

The availability of shovel-ready/pre-certified sites is very important when marketing Logistics Park Calumet to prospective users. Developers and brokers tend to favor shovel-ready sites over other sites since most end users want to move into a new facility within six months from actual site selection. The South Suburban Mayors and Managers Association and the Chicago Southland Economic Development Corporation should prepare its own internal detailed plans about how to bring individual sites to shovel ready status, perhaps based on the State of Indiana's Shovel Ready Program. The Shovel Ready Program is designed to specifically enhance individual site's marketability. Funding for this work may be available through a U.S. Housing and Urban Development Challenge Grant. The South Suburban Mayors and Managers Association and the Chicago Southland Economic Development Corporation will ultimately share these plans with actual developers selected for specific sites. As part of this process, the consultant team strongly recommends that the South Suburban Mayors and Managers Association continue its aggressive program of environmental assessment and remediation.

### ***Develop Site Information***

The South Suburban Mayors and Managers Association and the Chicago Southland Economic Development Corporation should continue to generate site information on their GIS-based website that shows detailed site information and agreements with property owners on their plans for developing or selling property. This information should incorporate a cost analysis of property taxes and the operating costs compared to other regions. This information should include the following:

- Detailed property site descriptions, including total acreage;
- GIS data and maps identifying each property site;
- A list of current or known property owners for each parcel contained within each site;
- Complete transportation access data for each site including distance to the Canadian National and Union Pacific intermodal terminals and all relevant commercial truck access;
- Best estimates on each site's current environmental condition and the current status of any environmental inspection or remediation efforts currently underway;
- For property tax purposes, each site's current assessed valuation for all parcels; and
- A list of government financial incentives available for each site.

Based on the region's overall layout, especially relative to the Canadian National's Gateway Intermodal Terminal, these sites appear to offer the most promise generally for redevelopment into logistics warehouses or distribution centers. They offer a combined area of approximately 515 acres<sup>1</sup>.

- Fore Transportation Terminal, Harvey: 50 acres
- Harvey Northeast Intermodal Site A: 30 acres
- Harvey Northeast Intermodal Site B: 30 acres

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<sup>1</sup> It should be noted that the Canadian National has their own development plan (and schedule) for Logistics Park Chicago already underway, and their site is shown here for information purposes only. Additional sites identified by specific property owners are still in private hands and are shown for information purposes only. The property sizes shown are rough estimates only and may or may not reflect actual property sizes available for future development activities. None of these sites would be considered shovel ready today although some are closer to this goal than others.

- Clarke Logistics/Fuchs Lubricants Property: 30 acres
- Harvey Ready-Mix/Asphalt Property: 40 acres
- Harvey-Phoenix Logistics Site: 90 acres
- South Holland Indiana/State Street Corridor: 70 acres
- Canadian National Railroad's Logistics Park Chicago, East Hazel Crest/Homewood: 175 acres

The Wyman-Gordon site in northwest Harvey is too far from either the Canadian National or Union Pacific intermodal terminals for development as an intermodal logistics warehouse. However, it does appear to have serious potential as a rail-served transload center or rail-served industrial park. It is recommended that the Wyman-Gordon site be treated as a unique development project separate and apart from the larger Logistics Park Calumet development project. Since the municipal governments of Dixmoor and Harvey jointly own this site, the South Suburban Mayors and Managers Association/Chicago Southland Economic Development Corporation may want to lead the overall development effort. They may also seek the Cook County Bureau of Economic Development's help.

### ***Redevelopment of Existing Buildings***

The above analysis does not include any existing buildings in use now that might be converted, expanded, or demolished, such as those located on the north side of 171<sup>st</sup> Street east of Center Avenue in Harvey, or along Armory Drive in the Village of South Holland. Preliminary discussions with the Village of South Holland's municipal staff have already occurred regarding the redevelopment potential of existing in-use structures within the South Holland Industrial Park. It is recommended that the Village conduct a more in-depth land use analysis of their industrial park to identify specific individual sites with potential for warehouse conversion and redevelopment. They may want to model this analysis on the Village of Romeoville, which has produced an excellent industrial multi-use zoning map for their community.

### ***1.4.3 Infrastructure Development***

#### ***Sub-Regional Infrastructure***

The South Suburban Mayors and Managers Association, the Chicago Southland Economic Development Corporation and their members need to identify sub-regional infrastructure needs and develop infrastructure plans for key elements (e.g. roads and storm water management facilities). In particular, they need to use the South Suburban Mayors and Manager's new broadband grant to create the infrastructure necessary for providing broadband services to logistics industrial parks.

#### ***Local Road Network***

During the last five years, the Illinois Department of Transportation and the Illinois State Toll Highway Authority have successfully completed a series of programs to rebuild major highways and roadways in Chicago's southern suburbs. (Please see, Section 8.7 for specific projects and additional discussion of the local road network.) These regional roadway improvements have benefitted the overall Logistics Park Calumet project. However, they did not include any improvements to the local intermodal connectors at the Canadian National's Gateway Intermodal Terminal (e.g. 167<sup>th</sup> Street and Center Avenue).

To rectify this situation, the State of Illinois has begun addressing improvements to local intermodal connectors. It has, for example, committed \$4 million to completely rebuild 167<sup>th</sup> Street between Center Avenue and Armory Drive in South Holland, with scheduled completion in early 2013. This project will further enhance the local roadway network serving Logistics Park Calumet.

The Cook County Bureau of Economic Development, the Cook County Highway Department, and the City of Harvey, with the South Suburban Mayors and Managers Association's support, submitted an application for \$13.7 million under the federal TIGER Discretionary Grant program to fund intermodal connector improvements in Chicago's southern suburbs. Although the U.S. Department of Transportation did not select this project, it does not preclude the South Suburban Mayors and Managers Association and the Chicago Southland Economic Development Corporation from resubmitting this project. The consultant team, therefore, recommends that the South Suburban Mayors and Managers Association and the Chicago Southland Economic Development Corporation monitor the TIGER process and resubmit this project at a later date.

### **Site Specific Access**

Given this project's limited scope, the consultant team could not examine any roadway issues at either the Wyman-Gordon site or the Harvey-Phoenix site. Therefore, they recommend that commercial truck access at both locations be analyzed in more detail in this project's next phase.

### **Union Pacific Intermodal Terminal**

It is also recommended that further study be conducted on possible commercial truck routes between the Union Pacific Intermodal Terminal in Dolton and specific Logistics Park Calumet development sites in Harvey and South Holland.

## **1.4.4 Infrastructure for International Trade**

### **Foreign Trade Zone**

The Chicago Southland Economic Development Corporation should apply for foreign trade zone status.

In the short-term, the Chicago Southland Economic Development Corporation should qualify Logistics Park Calumet as a pre-designated General Purpose site within Foreign Trade Zone 22. This is a somewhat shorter process that still requires a specific "activation" process once an actual tenant or user is in place. But it will accomplish most economic development goals and will still get Logistics Park Calumet noticed in the developer community. In the long-term, the Chicago Southland Economic Development Corporation should seek to have Logistics Park Calumet become a fully-functioning specific General Purpose Site within Foreign Trade Zone 22's existing regional boundaries. This will require the full cooperation and active support of the Illinois International Port District, Foreign Trade Zone 22's grantee.

While not as complicated as a TIGER Grant Application, an application for Foreign Trade Zone status requires a certain level of professional expertise and a substantial amount of detailed information. Several professional consulting firms specialize in the preparation of Foreign Trade Zone applications. The South Suburban Mayors and Managers Association and the Chicago Southland Economic Development Corporation may want to consult with one or more of these firms before starting the application process. Many of these same firms offer professional Foreign Trade Zone management services once a Zone has been established.

### **Customs Inspection Station**

The Chicago Southland Economic Development Corporation should continue to pursue the location of a customs inspection station in the Logistics Park Calumet area. Currently, two U.S. Customs and Border Protection Centralized Examination Stations operate in the Chicago metropolitan area. Global CFS, Inc. in Bensenville, Illinois has License #1 and Channel Distribution Corporation in Itasca, Illinois has License #2.

A U.S. Customs and Border Protection Service representative visited Fore Transportation's offices in Harvey in May 2011 and indicated that a third central examination station license will be issued for the Chicago area in 2013. He indicated that the third station needed to be near the Canadian National's Gateway Intermodal Terminal, preferably on Fore's property. However, he indicated that the central examination station would be located there only if the local roadway infrastructure could handle the increased traffic. The combination of a central examination station, foreign trade zone designation, and rebuilt intermodal connectors would be a powerful force for regional economic development in the Logistics Park Calumet area.

#### **1.4.5 Development Programs and Incentives**

##### **Benchmarking of Development Programs**

Most of the recent warehouse and distribution center development in the region has occurred in Aurora, Bolingbrook, and Romeoville. All three communities share good reputations within the broker and developer community. The consultant team recommends that the South Suburban Mayors and Managers Association and Chicago Southland Economic Development Corporation help local south suburban communities develop a formal benchmarking process to see how they compare with the current primary regional development locations.

##### **Property Tax**

The South Suburban Mayors and Managers Association and the Chicago Southland Economic Development Corporation should continue to address property tax levels. By its nature, Logistics Park Calumet will be competing with other tax levels and existing developments located in the region. Tax levels may be a developer or end-user's deciding factor in site selection.

While numerous trucking companies have located large-scale terminals in the Logistics Park Calumet area, there is anecdotal evidence from both brokers and developers to suggest that the comparatively higher property taxes have been a barrier to large-scale warehouse development in Cook County. The South Suburban Mayors and Managers Association and the Chicago Southland Economic Development Corporation should undertake a detailed analysis and comparison of property tax assessment levels and property tax rates with neighboring locations, including Will and Kane Counties.

##### **Tax Increment Financing Program**

Tax increment financing is an economic development tool that helps local governments attract private development and new businesses. Tax increment financing districts are currently in Dixmoor, Harvey, Phoenix, and South Holland. The City of Harvey used some of its tax increment financing revenues to help jumpstart reconstruction of I 67<sup>th</sup> Street. The South Suburban Mayors and Managers Association and the Chicago Southland Economic Development Corporation should continue to work with their members to develop tax increment financing plans for properties available for development.

#### **1.4.6 Funding Strategies**

Within the last five years, the South Suburban Mayors and Managers Association and their public sector development partners have been extremely successful in securing federal and state funds for a variety of programs. (Please see, Section 9.5 for additional background information and examples.) The South Suburban Mayors and Managers Association and the Chicago Southland Economic Development Corporation should build on this success and continue to develop a range of funding sources for advancing the Logistics Park Calumet project. The sponsors should, for example, conduct a more detailed analysis of

existing federal financing programs, like Build America bonds, to determine their overall applicability to the Logistics Park Calumet project.

***House Bill 1606***

Logistics Park Calumet’s representatives will need to work to ensure HBI 606 is passed to create a funding source and development authority for investing in the area’s infrastructure.

***Southland Land Bank***

Logistics Park Calumet’s representatives should work with the Chicago Southland Development Fund and Cook County to create a funding source that will pay to acquire property for the Southland Land Bank. U.S. Environmental Protection Agency funds can therefore be used to more effectively remediate sites.

***1.4.7 Workforce Development***

The South Suburban Mayors and Managers Association and the Chicago Southland Economic Development Corporation should continue working with community colleges in the area to develop extensive logistics-related training programs.

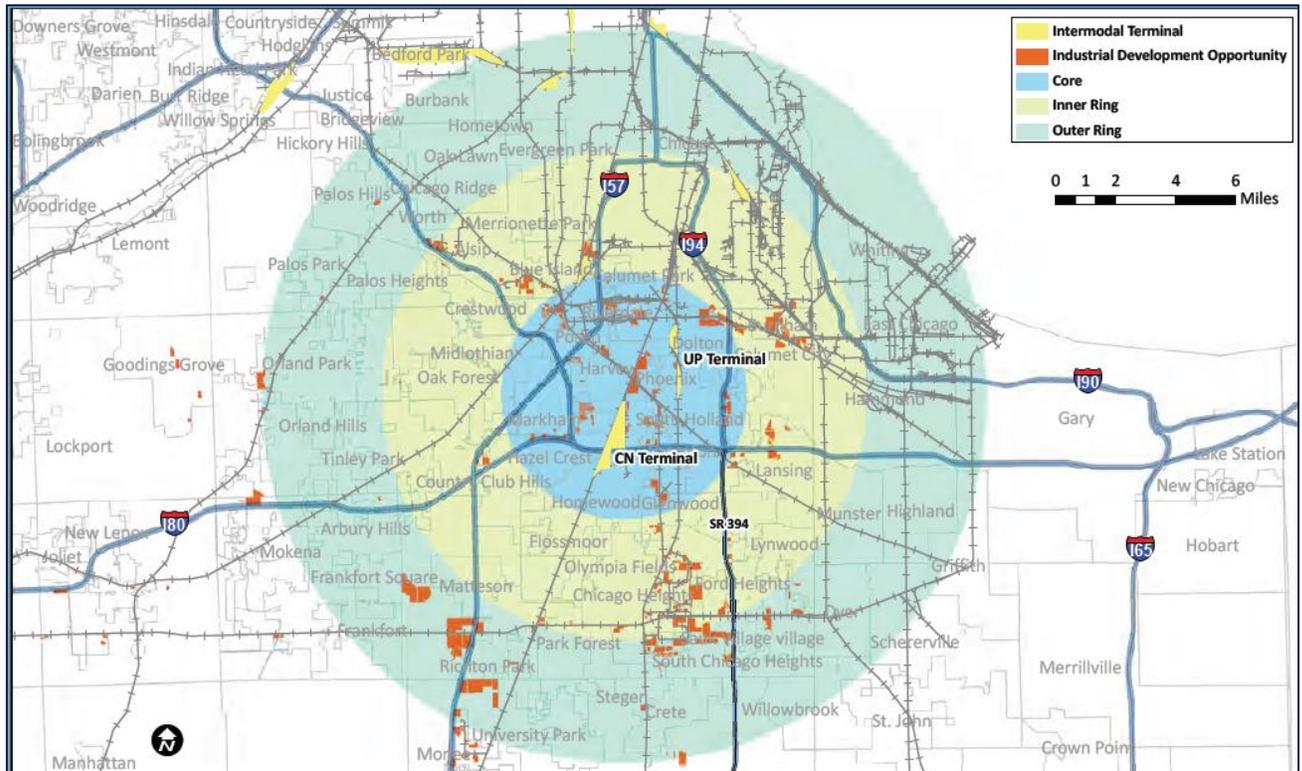
## 2 REVIEW OF LOGISTICS PARK CALUMET

### 2.1 Logistics Park Calumet Area

Logistics Park Calumet is located in the heart of Chicago's southern suburbs and offers a variety of opportunities for development of cargo-related activities that take advantage of the area's transportation infrastructure, land, labor, and other resources. Challenges include the need to remediate sites for development and the need to complete improvements to local road connectors. (Logistics Park Calumet's strengths and challenges are detailed in Section 2.3 and 2.4.)

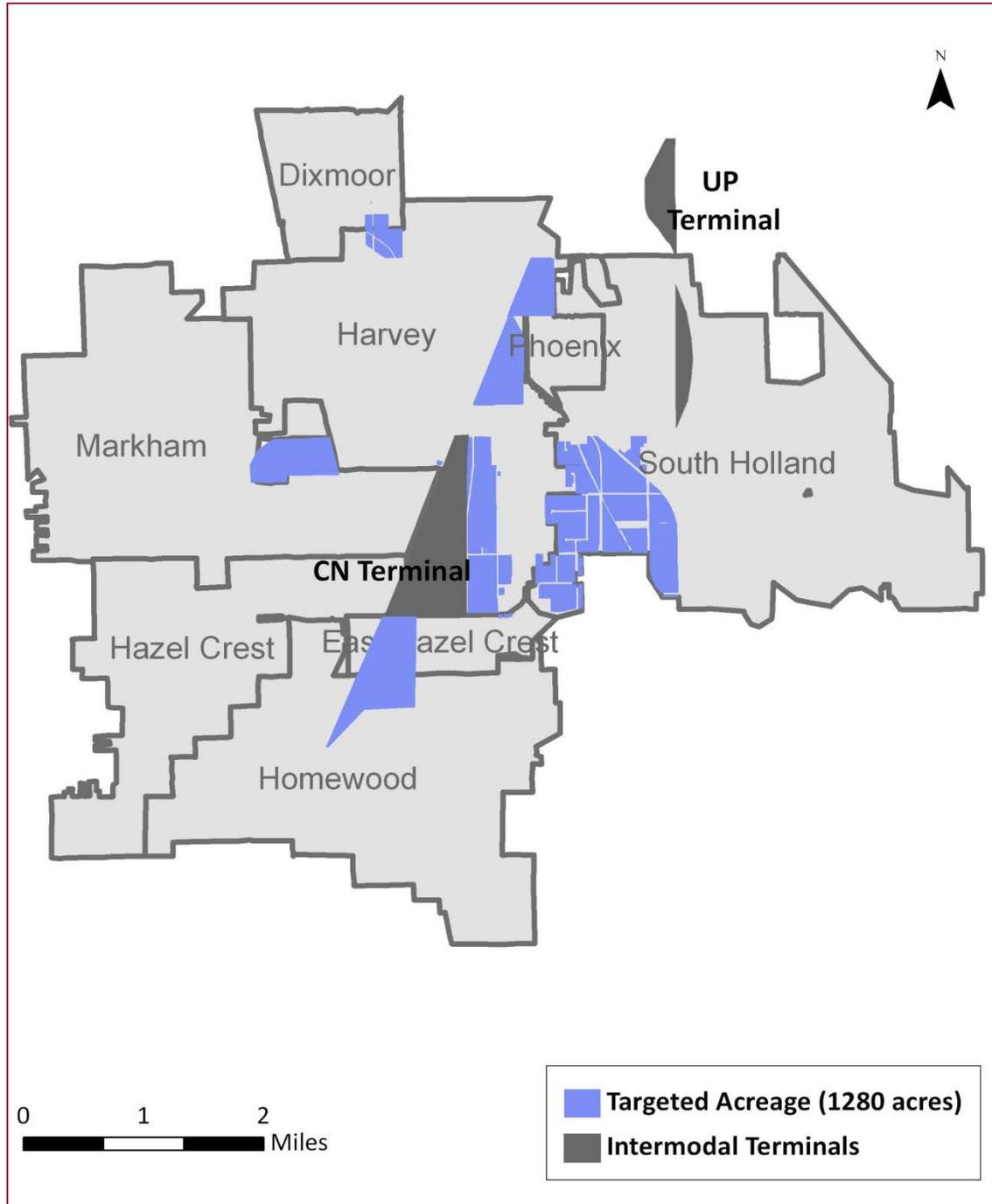
As shown in Figure 2-1, Logistics Park Calumet covers a broad area but can effectively be grouped into Logistics Park Calumet North and Logistics Park Calumet South. Figure 2-2 provides a more detailed map of Logistics Park Calumet North as defined in Illinois House Bill 1606 for the Development of Logistics Park Calumet. (Please see, the discussion of Bill 1606 in Section 8.8).

**Figure 2-1: Logistics Park Calumet Area**



Source: Chicago Southland Economic Development Commission

**Figure 2-2: Logistics Park Calumet North Area (as defined for Illinois House Bill 1606)**



Source: Chicago Southland Economic Development Corporation

### **2.1.1 Logistics Park Calumet North**

Logistics Park Calumet North is located south of the Calumet River, north of Lincoln Highway (Route 30), west of the Illinois-Indiana state line, and east of the Will-Cook county line. The Canadian National's Intermodal Terminal in Harvey, the Union Pacific's Intermodal Terminal in Dolton, the Indiana Harbor Belt and CSX Intermodal Terminals in Riverdale, and the Iowa Interstate Railroad's Intermodal Terminal in Blue Island serve Logistics Park Calumet North.

Metra's Electric District University Park Line, Rock Island District Joliet Main Line, and Southwest Service provide commuter rail service to communities in this area. Metra's proposed Southeast Service would serve communities on the east side of Logistics Park Calumet North.

Logistics Park Calumet North has excellent interstate highway access via I-57, I-80, I-90, I-94, and I-294 and very good local roadway access via U.S. Route 6 (159<sup>th</sup> Street) and Illinois Route 1 (Halsted Street).

There are five principal areas for development in Logistics Park Calumet North, which are the Dixmoor-Harvey Industrial Park (the former Wyman-Gordon site), the Harvey Northeast Industrial District, the Harvey South Industrial District, the Harvey-Phoenix Logistics Site, and the South Holland Industrial Park. The Dixmoor, Harvey, and Phoenix locations are classic brownfields, most with derelict buildings.

The primary challenge in developing these four areas will be environmental cleanup and remediation, as well as other steps necessary to make these sites shovel ready and attractive for developers and end users. Dixmoor and Harvey own outright the Dixmoor-Harvey Industrial Park. A variety of individuals and corporations own the other sites with no dominant owner or developer. An additional development in the area is the Canadian National Railroad's Logistics Park on approximately 175 acres.

#### **Dixmoor-Harvey Industrial Park**

The Dixmoor-Harvey Industrial Park is located on the 47-acre site of the former Wyman-Gordon plant. It has direct access to the CSX and Canadian National intermodal terminals and is a mile from an entrance ramp onto I-57.

Remediation of this site began in 2010 and was completed earlier this year.

#### **Harvey South and Northeast Industrial Districts**

Harvey's South and Northeast Industrial Districts are easily accessible from I-80 and I-294 via Illinois Route 1 (Halsted Street) and U.S. Route 6 (159<sup>th</sup> Street). The Harvey South Industrial District (also known as the Center Avenue Industrial Corridor) is directly across the street from the Canadian National's Gateway Intermodal Terminal. Fore Transportation has its terminal and general offices here on part of its 50 acre site. The Harvey South District has two additional prime warehouse development sites totaling approximately 70 acres located along Center Avenue south of 167<sup>th</sup> Street.

The condition of this area's local roads has been a problem in the past. However, 167<sup>th</sup> Street and Center Avenue will be rebuilt soon.

The Harvey Northeast Industrial District has approximately 80 acres contained within two smaller sites; one located on each side of the Canadian National's Elsdon Subdivision mainline and west of Halsted Street. The site south of the mainline is adjacent to the northeast end of the Canadian National Gateway Intermodal

Terminal. One could directly access the Canadian National terminal from this site if certain roadway improvements were made. This was once a small industrial district that had rail service.

The site north of the mainline contains a derelict grain silo. The biggest problem facing the Northeast District is the underlying environmental conditions.

Both sites within this District are classic brownfields, that contain derelict buildings and will require extensive remediation before returning to productive reuse.

### ***Harvey-Phoenix Logistics Site***

The Harvey-Phoenix Logistics Site is located about 1.5 miles north of the Canadian National intermodal terminal via Halsted Street (Route 1). It covers approximately 90 acres and was formerly the site of manufacturing facilities for Allied Tube, Arco, and Chalmers.

The primary challenge here is what to do with the existing empty structures on the site. While this site is located too far from the Canadian National and Union Pacific's intermodal terminals for use as an intermodal warehouse, it does have some potential as a rail-served transload facility.

### ***The South Holland Industrial Park***

The South Holland Industrial Park sits on approximately 900 acres in the village's southwest side. Its far southern part is located in the village of Thornton. Businesses in this vibrant, well-developed industrial park provide more than 1,000 full-time jobs and significantly contribute to the Village of South Holland's tax base.

Virtually all of the property within this park is zoned Light Industrial. Buildings in the South Holland Industrial Park are generally older and consist of both manufacturing and warehouse users. Most of the logistics buildings would be classified as Class B with some Class C. Its only Class A structure is probably the new Liberty Furniture distribution center.

CSXT serves this industrial park. It is easily accessible from I-80, Illinois Route 1 (Halsted Street), and U.S. Route 6 (159<sup>th</sup> Street). It does not have any apparent environmental issues, but does have several buildings and properties currently on the market.

UPS Freight operates a large, less-than-load terminal on West 172nd Street just east of Halsted Street. It employs more than 200 people, making it one of South Holland's larger employers. Its parent company, UPS, Inc. is a global provider of a full range of logistics and transportation services and could theoretically expand its logistics services and facilities at or near this site. This potential could be enhanced by including the South Holland Industrial Park within the proposed General Purpose Subzone of Foreign Trade Zone #22.

Kiswani Trucking opened a new terminal last year at this industrial park's west side. Illinois Transport moved from a smaller facility to a larger terminal on this industrial park's east side.

The challenge in South Holland is how to reevaluate, redevelop, and perhaps repurpose an existing active regional industrial park given larger global economic forces at work. The Liberty Furniture Industries distribution center, located at 555 West 167<sup>th</sup> Street is a good example of this industrial park's development potential. This distribution center receives import containers loaded with furniture that its employees transload into domestic trailers for final delivery to customers. It is a new building with 26 dock

doors that is located on approximately seven acres of land. This company would make an excellent case study for future research to determine what attracted them to South Holland.

A substantial amount of “underdeveloped” property is located along the east side of South Indiana Avenue (State Street) between 166<sup>th</sup> Street and Armory Drive. Covering about 70 acres, this area consists of a collection of “odds and ends” including several truck terminals, a school bus company, a local construction company, and a forklift dealer. This site has a few existing structures on it. The CSX/Union Pacific mainline borders this site on the east, separating it from South Holland’s residential neighborhoods.

Moving west, Armory Drive becomes 167<sup>th</sup> Street as it crosses into Harvey. The City of Harvey, with the State of Illinois’ financial assistance, will begin rebuilding 167<sup>th</sup> Street in 2012. Once this project is completed, Armory Drive/167<sup>th</sup> Street will become a major truck route providing direct access between the South Holland Industrial Park and the Canadian National Railroad’s Gateway Intermodal Terminal in Harvey. Industrial properties located along and adjacent to this rebuilt roadway could become prime sites for redevelopment into warehouses and distribution centers.

One of the challenges for the Village of South Holland is to decide which buildings can be reused and which ones should probably be demolished to make way for new construction. The Village of South Holland may want to consider the preparation of a more robust comprehensive land use plan to reflect these changes and new development opportunities.

### **Canadian National Logistics Park**

In August 2010, the Canadian National Railroad announced development plans for Logistics Park Chicago on approximately 175 acres of their own property, located south of the I-80 viaduct and west of Ashland Avenue. Almost half of this property is in the Village of East Hazel Crest with the remainder in the Village of Homewood.

This logistics park will likely be completed around 2015 when the first warehouse buildings are expected to be available. Some of this site may be used for the Harvey Intermodal Yard expansion.

#### **2.1.2 Logistics Park Calumet South**

Logistics Park Calumet South spans from Lincoln Highway (Route 30) to the north, Wilmington-Peotone Road to the South, the Indiana-Illinois state line to the east, and Schoolhouse Road extended to the west. This region has rich assets for the intermodal industry.

The proposed Centerpoint Intermodal Terminal will be located in far south suburban Crete, north of the proposed South Suburban Airport, and near the Centerpoint Elwood Intermodal Terminal. The proposed Illiana Expressway will connect all three sites. It will extend from I-55 near Elwood, Illinois to I-65 just south of Crown Point, Indiana.

## **2.2 Review of Industrial Location Factors**

Factors influencing site selections of North American logistics hubs largely focus on on-time delivery requirements and a region’s ability to reduce transportation costs. These factors include fuel price volatility, rail reliability and speed improvements, North America import/export gateway diversification strategies, and inventory stock on-hand strategies.

Logistics managers select regions based on their proximity to high density customer/supplier locations, and available transportation modes (including low cost rail and lowest overall network transportation costs).

These factors help logistics managers determine which regions will increase on-time performance and meet lowest cost thresholds.

After selecting a region or regions, these logistics managers examine labor supply, government incentives, and environmental factors to differentiate between competing sites within the selected region or regions. The remainder of Section 2 will provide an overview on site selection criteria once regional requirements are met.

The following macro market trends have been driving industrial development and location within North America for approximately the last decade<sup>2</sup>:

1. Consolidation of major manufacturing and distribution operations, requiring larger facilities at fewer locations;
2. Speed-to-market demands and the logistics of “just-in-time” shipping;
3. Strategic importance of proximity to intermodal transportation and suppliers;
4. Flexibility to accommodate growth and change;
5. Sophisticated materials handling systems that support increasing market demands for efficiency, customization, and “high touch”;
6. Individualized requirements that demand an “inside out” approach to infrastructure;
7. Access to a competitive labor markets;
8. A return to the urban core and adaptive reuse; and
9. An increased awareness of energy and environmental issues.

Several of these trends are evident in the Chicago metropolitan area and provide competitive advantages for Logistics Park Calumet. Trend #3 identifies the importance of “proximity to intermodal transportation,” which is evident in the increased use of intermodal rail transportation in recent years. Higher costs for over-the-road truck service and the development of logistics parks adjacent to intermodal rail yards have precipitated these increases.

Logistics Park Calumet has direct connections to the Canadian National Railroad’s intermodal terminal in Harvey and the Union Pacific’s intermodal terminal in Dolton, Illinois. It also is near other railroads serving the Chicago metropolitan area. Multiple rail carriers provide rail carload service across Chicago’s southern suburbs.

Trend #7 identifies the importance of having “access to a competitive labor market.” Logistics Park Calumet has a long manufacturing and freight transportation business history. The southern suburbs have a pool of people who would like to work in manufacturing and/or transportation. The South Suburban College in South Holland and Prairie State College in Chicago Heights even offer classes that train people to work in logistics.

Trend #8 identifies “a return to the urban core and adaptive reuse”. According to the National Association of Industrial and Office Properties, the advantages driving the adaptive reuse market are ready access to labor pools, proximity to transportation and suppliers, impediments to greenfield development, and appealing tax incentives. One of the underlying attributes of Logistics Park Calumet’s development calls for “adaptive reuse” of several hundred acres of brownfield sites in Chicago’s southern suburbs.

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<sup>2</sup> Based on interview and a review of industry literature, including the National Association of Industrial and Office Properties (NAIOP) released “Exceptional Industrial Projects – Beyond the Box”.

The top ranked corporate site selection factors for 2010 according to *Area Development Magazine's* 25th Annual Survey were the following:

1. Highway accessibility,
2. Labor costs,
3. Tax exemptions,
4. Occupancy or construction costs,
5. State and local incentives,
6. Corporate tax rate,
7. Availability of skilled labor,
8. Inbound/outbound shipping costs,
9. Energy availability and costs, and
10. Availability of buildings.

The Labor Costs and Highway Accessibility categories traded places between first and second from the prior year. This priority was reiterated in their 2010 Corporate Survey, which showed that 97.3% of respondents considered highway accessibility very important or important. *"Companies are not only targeting locations that are in close proximity to prime transportation arteries, but they also are making sure they have easy access both on and off of those major interstates and highways."*

Respondents also identified the following as other incentives they considered most important when making a site selection decision:

- Tax incentives (tax credits, exemptions, etc.) – 58%
- Financial incentives (grants, bonds, loans, etc.) – 28%
- Worker training incentives – 20%
- Other incentives (land, utility-rate subsidies, infrastructure support, etc.) – 38%

In early October 2011, the Transportation Research Board released *NCFRP Report 13 Freight Facility Location Selection: A Guide for Public Officials*, which describes key criteria that the private sector considers when making decisions about where to build new logistics facilities. This guide is a companion to, and results from, research contained in the final report for *NCFRP Project 23 Economic and Transportation Drivers for Siting Freight Intermodal and Warehouse Distribution Facilities*. It seeks "...to provide insight on... location decisions for freight facilities and suggest best practices for transportation, land use, economic development, and regional partnerships to public sector agencies and officials considering and responding to freight facility development and location decisions."

The Guide is especially relevant to Logistics Park Calumet's development and identifies the following very specific components for "laying the groundwork":

- Prior development of community vision, goals, and comprehensive plans;
- Education and inclusion of community stakeholders;
- Initial third-party feasibility study on the community's appropriateness for a freight facility;
- Amenable transportation network;
- Clearly defined economic development strategy;
- Clear and consistent zoning regulations and permitting requirements;
- Public utility capacity;
- Identification of private sector developers with interest and capability to construct freight facilities and infrastructure;
- An amenable tax environment; and
- Public sector incentives.

It also describes how the location selection process actually works, as follows:

- Proximity and/or access to key markets are the most important driving factor that determines the region or community in which a freight facility will locate.
- Freight facilities will only consider locations that fulfill the primary objective of moving goods in the most efficient manner from the originating point to the destination point. This trumps most other considerations.
- Local officials can provide a hospitable climate in their communities through appropriate zoning, compatible land use, transportation infrastructure, and community support to better attract freight facilities.
- When companies evaluate sites, some criteria are far more important than others. Their ability to access key markets, efficient transportation, and sufficient qualified labor, while lowering total costs are key criteria.

The Guide also presents a case study that involved one of the largest and most successful public warehouse companies in the Midwest. This company shared their key requirements for locating new facilities that are important for the Logistics Park Calumet development project. These key requirements are as follows;

- The facility must have access to an Interstate or major highway interchanges (within 3 miles);
- The facility must have on-site access to rail carload;
- The facility must be between 150,000 and 200,000 square feet;
- The facility must be in good structural condition including docks, roof, and floors;
- The facility must handle storm water on-site;
- The community's real estate taxes must be reasonable; and
- The company prefers energy-efficient facilities.

Other considerations include:

- The new site should be located within the metropolitan area and have access to the markets served;
- Land prices and development costs to refurbish the existing facility would also factor into location decisions; and
- Any facilities considered would have to be sound real estate investments and sellable in the future.

When evaluating candidate sites, the top five most critical evaluation criteria are:

- The ability to access key markets,
- Interaction with the transportation network,
- Modal choice,
- Labor and workforce, and
- Total cost environment.

An important conclusion of The Guide is that:

*“...besides proximity and access to customer and market, a freight facility needs to efficiently connect to the transportation network.”*

### 2.3 Logistics Park Calumet's Strengths

At a presentation before the Chicago Southland Chamber of Commerce several years ago, CenterPoint's CEO Michael Mullen was asked what makes a successful logistics park development. He identified the following three primary characteristics that sites must have:

1. A location near or adjacent to a high volume rail intermodal route,
2. A location that has very good to excellent interstate highway access, and
3. A location near or adjacent to a major population center.

He went on to describe some conversations his company had with local officials from Albuquerque, New Mexico, who wanted CenterPoint to develop an intermodal logistics park in their community. Mr. Mullen (correctly) noted that while Albuquerque is located along side the Burlington Northern Santa Fe's primary intermodal mainline and at the junction of two interstate highways, its closest major metropolitan market is more than 500 miles away.

Successful intermodal logistics parks, like Centerpoint in Elwood, Illinois and Hillwood in Alliance, Texas, have the following characteristics:

- Access to a major container seaport,
- An intermodal facility served by a Class I railroad,
- A minimum of 1,000 acres of generally contiguous land,
- U.S. Customs clearance services,
- Foreign Trade Zone (FTZ) status,
- Strong local market access (e.g. major metro area),
- Nearby access to north/south and/or east/west interstate highways, and
- Access to a strong local labor pool.

All of these characteristics exist today or are being actively developed within the Logistics Park Calumet design concept.

Logistics Park Calumet shares the following beneficial traits with the intermodal center located in Elwood, Illinois:

- Designated Foreign Trade Zone (under development);
- Designated Enterprise Zone;
- Direct Access to a Class I railroad (Canadian National Railroad) intermodal facility (vs. the Burlington Northern Santa Fe);
- Low dray costs given its proximity to the Canadian National intermodal facility (vs. the Burlington Northern Santa Fe);
- Links to multiple railroads, including the Canadian National, CSX, and Union Pacific (vs. the Burlington Northern Santa Fe and Union Pacific);
- Flexible zoning for manufacturing or distribution;
- Full interchange at I-80 and Halsted Street (vs. I-55 and the Arsenal Road interchange);
- Minutes from the intersections of I-80, I-294, and I-57 (vs. the I-55 and I-80 intersection).
- Substantial truck docks and trailer parking (under development);
- Interior park roads designed for freight traffic (under development); and

- Approximately 20 miles due south of Chicago (vs. 40 miles for Elwood).

The principle of co-location is fundamental to an inland port's operational efficiency. Several recent logistics zone projects in North America are capitalizing on this advantage where the planning and setting of a new or expanded intermodal terminal is done concomitantly with a logistics zone project. Co-located logistics zone projects tend to be significantly larger than conventional logistics zones solely serviced by road.

Hillwood's Alliance Global Logistics Hub, located just north of Fort Worth, Texas, is arguably the largest and most successful intermodal logistics park in North America. Logistics Park Calumet shares several important characteristics with Alliance including the following:

- Access to a major rail intermodal terminal,
- Direct access to major interstate highways,
- Location in a Foreign Trade Zone,
- An on-site central examination station (CES),
- Rail-served facilities, and
- Rail transload terminals.

CenterPoint Intermodal Center in Elwood and Logistics Park Calumet share several other important factors. The primary situational factor that distinguishes these projects was the impetus for development of their respective sites. Both projects have called for brownfield redevelopment to replace jobs lost through global macroeconomic events. In Elwood's case, it was the closure of the Joliet Army Arsenal towards the end of the Cold War. In Logistics Park Calumet's case, it was the loss of a major portion of the region's manufacturing base due to increasing global competition. Both projects' ability to swiftly reintegrate themselves (and their communities) into the larger global economy is a key success factor.

Another important situational factor is their proximity to potentially incompatible land uses. In the Arsenal's case, the site was relatively isolated from residential areas and other potentially conflicting land uses. In Logistics Park Calumet's case, the south suburbs have historically been home to a heavy concentration of freight and manufacturing facilities. Ninety years ago, the Calumet region was one of the world's leading industrial districts. Today, the same region has been described as blighted; "a premier example of the Rust Belt". Yet much of the region's legacy transportation infrastructure remains in place. Thus, the issue of incompatible land use will tend to be minimized in Logistics Park Calumet's development.

## 2.4 Logistics Park Calumet's Weaknesses

Logistics Park Calumet overall ranks favorably when compared against both general location selection criteria and specific logistics and transportation site selection criteria. There are, however, several areas of concern.

First, while general highway access for Logistics Park Calumet ranks high, the following local roads are cause for serious concern: 167<sup>th</sup> Street between Center Avenue and Halsted Street and Center Avenue between 159<sup>th</sup> and 171<sup>st</sup> Streets. The condition of these roadways are absolutely deplorable. The City of Harvey is currently leading a project to rebuild 167<sup>th</sup> Street between Center Avenue and Armory Drive, which includes the Halsted Street intersection. This project is scheduled to be completed in early 2013 and is absolutely critical to Logistics Park Calumet's overall success. An application for a TIGER 3 grant was submitted in October 2011, but was not selected for funding. Thus, a funding source for the rebuilding of Center Avenue is unknown at this time.

Most site selection surveys indicate that having an available trained or qualified workforce is a major factor in the site selection process. However, actual workforce numbers and overall workforce quality in Chicago's southern suburbs is unknown at this time. However, substantial documentation indicates very high unemployment levels in the southern suburbs overall compared to the rest of the Chicago metropolitan region, so the consultant team has assumed that this translates into a high level of workforce availability. Survey responses in Section 5 of this report suggest that the workforce in Chicago's southern suburbs is well suited to transportation work.

The South Suburban College in South Holland and Prairie State College in Chicago Heights have come together to develop and offer a fairly comprehensive curriculum in transportation and logistics. This includes co-sponsoring a truck driving school. However, this curriculum does not currently offer coursework in warehouse management and operations. This deficiency has been noted in discussions with various members and organizations within the Chicago Southland Economic Development Corporation.

Finally, it should be noted that most recent logistics park and warehouse developments have occurred in Will and Kane Counties, where property taxes overall are considerably lower than that of Cook County. The lack of property tax equity among these three counties could be a significant barrier to Logistics Park Calumet's future success.

## 3 COMPETITIVE INDUSTRIAL DEVELOPMENT SITES IN NORTHERN ILLINOIS

### 3.1 Chicago Industrial Market

Chicago remains the second largest industrial market in the U.S. with over 1.5 billion square feet in total inventory, ranked just behind Southern California and ahead of the combined Ohio markets of Cincinnati, Columbus, and Cleveland. Approximately one-quarter of the total U.S. population lives within one day's drive of Chicago.

The closest geographic competitor to Chicago is Columbus, Ohio, which has direct intermodal rail service to all major East Coast ports via CSX and Norfolk Southern. Another regional competitor, Memphis, has about one-quarter the total warehouse space Chicago does. The Canadian National serves both the Chicago and Memphis markets, with direct intermodal service from major Canadian ports and metropolitan areas. Both the Burlington Northern Santa Fe and the Norfolk Southern are expanding their intermodal terminals in Memphis.

The following unique classifications based on physical characteristics identify industrial buildings:

- General Industrial,
- Research & Development/Flex, and
- Warehouse/Distribution.

According to Grubb & Ellis, 55% of all square footage in the Chicago metropolitan area consists of warehouse and distribution space. This reflects the Chicago metropolitan area's historic role as a transportation hub and distribution center. About one-third of all industrial space falls into the general industrial category which includes manufacturing.

Jones Lang LaSalle similarly defines the Chicago metropolitan area's industrial market, with 53% of all space consisting of warehouse and distribution and only 26% classified as pure manufacturing. While signs indicate that manufacturing might be making something of a comeback, the dominant industrial space user in the Chicago regional market is warehousing and distribution, by about a two to one margin.

Each industrial submarket in the Chicago metropolitan area tends to have its own unique characteristics and customer base over the years. It would be difficult to describe their unique characteristics as strengths or weaknesses.

All of these submarkets tend to share certain traits, however. Each industrial submarket appears to have very good to excellent highway access. Development tends to occur in either unincorporated areas or areas already zoned for industrial or manufacturing development. End use tends to dictate building size and there continues to be a full range of buildings from 100,000 square feet up to 1,000,000 square feet. Some submarkets specialize in smaller buildings while others favor the so-called big box warehouses. There are strong indications that more recent developments have occurred in counties with the lowest regional tax rates, but these counties also have many greenfield sites that can be made shovel-ready with relatively little effort or expense.

While exact definitions (and boundaries) tend to vary slightly from broker to broker, it appears that most brokers agree that the Chicago metropolitan area has approximately 17 industrial real estate subzones or submarkets. These can be classified broadly as:

- Chicago;
- Suburban Cook, DuPage, Kane, Lake, McHenry, and Will Counties in Illinois; and
- Lake and Porter Counties in Indiana.

Chicago has two submarkets, which are City North and City South. Suburban Cook, Du Page, Kane, and Will Counties contain approximately a dozen individual submarkets and these contain most of the industrial square footage and development activity in the suburbs. Will County alone has two submarkets, I-55 and I-80/Joliet that are not shown in Figure 3-1. The I-80/Joliet submarket includes the intermodal logistics parks at Joliet and Elwood, as well as developments along I-80 in Will and Grundy Counties.

**Figure 3-1: Chicago Submarket Map**



Source: CBRE MarketView Chicago Industrial Report, Third Quarter 2011

Some brokers include southeastern Wisconsin (Kenosha and Racine Counties) as a separate submarket, and others have chosen to combine Kenosha County with Lake County, Illinois. Most brokers now include the I-39 Corridor as a separate submarket within the Chicago region. Some also include DeKalb County, Illinois as a separate submarket.

According to research from Oak Brook-based real estate brokerage firm NAI Hiffman, the top three Chicago region submarkets for overall net absorption of industrial property in the first three quarters of 2011 were the:

- I-55 Corridor,
- O’Hare Industrial Corridor, and
- I-80/Joliet Corridor.

These are also three of the region’s leading warehouse markets in terms of size and commercial activity. Only the I-80/Joliet Corridor is tied directly to a rail intermodal terminal or a large-scale structured logistics park development, but there are several rail intermodal terminals located within the O’Hare Industrial submarket. According to Hiffman’s Metropolitan Chicago Industrial Report, Third Quarter 2011:

*“Active submarkets catering to brand name companies who lease large distribution and warehouse spaces have led the recovery, specifically the I-55 Corridor, I-80/Joliet Corridor and I-88 Corridor. These companies have witnessed retail sales increase through the economic recovery, and with demand for goods likely to escalate into 2012, have begun to address expansion plans in these accessible submarkets.”*

All three submarkets have excellent interstate highway access and contain rail-served warehouses. Foreign Trade Zone 22 general purpose sites are scattered across all three markets. Both the I-55 and I-80/Joliet Corridor markets were originally greenfield developments, but had some early issues centered around the lack of local roads and the need for municipal infrastructure. They continue to have these issues now that the area has increasing local and regional roadway congestion. However, they benefit from relatively low taxes.

### **3.2 I-55 Corridor**

If there is such a thing as a truly dominant modern industrial submarket in the Chicago region, the I-55 Corridor is probably it. At the 2011 Will County Center for Economic Development’s Global Logistics Summit, J.B. Hunt’s Vice President of Intermodal Operations, indicated that 60% of Hunt’s intermodal deliveries in the Chicago area were made to warehouses located along I-55. It is basically a 15-mile linear industrial park along both sides of I-55 between Burr Ridge and Plainfield.

The Will County Center for Economic Development’s industrial park map shows more than two dozen individual branded parks straddling I-55 between I-355 and the Plainfield Main Street exit. However, no brand or developer dominates there. The market consists of approximately 80 million square feet of space, making it the third largest suburban market by size and one of the newest. While the I-55 and I-80/Joliet submarkets contain approximately the same number of buildings, the I-55 submarket is concentrated in a much smaller overall geographic area. About three-quarters of the space is located in Bolingbrook and Romeoville. The top three I-55 developments, which collectively contain about 20% of the total space in this submarket, are:

- Internationale Center in Woodridge,
- Crossroads Business Park in Bolingbrook, and
- Pinnacle Business Center in Romeoville.

This is a market that clearly caters to larger users with over half the available square footage at the end of 2010 in the 200,000 sq. ft. plus range. As a single market, almost every developer and broker is involved in the I-55 Corridor. In their Chicago Market Overview, published at the end of 2010, NAI Hiffman described the I-55 Corridor this way:

*“Of all the Chicago area industrial submarkets, the I-55 Corridor has seen the most activity and development interest over the past few years. As a result, the majority of available land is either already developed or is controlled by developers, rendering the I-55 Corridor an “infill market” with little additional land available for significant new development.”*

Several hundred companies of all shapes and sizes occupy warehouse space in this market. Significant users in the I-55 Corridor include,

- Consumer entertainment companies (e.g. Samsung Electronics and Sony Music Entertainment);
- Consumer product companies (e.g. Kimberley Clark Corporation);
- Third-party logistics providers (e.g. Ozburn Hessey Logistics; APL Logistics; Exel, Inc.; and Sanyo Logistics);
- Major national retailers (e.g. Sears, Ace Hardware, and Home Depot);
- Automotive suppliers (e.g. Bridgestone Firestone);
- Food and beverage distributors (e.g. Diageo North America and Home Run Inn);
- Public warehouse companies (e.g. Central American Warehouse and Midwest Warehouse & Distribution); and
- Specialty warehouse providers (e.g. LaGrou Distribution and R.R. Donnelley Logistics Services).

This area is located just about equidistant from all the major existing Chicago area intermodal terminals, and is relatively convenient to both O’Hare International Airport and Chicago. I-294 brackets it at one end and I-80 at the other. The combination of warehouse-related truck traffic and substantial residential growth in Will County, especially in the Plainfield area, in recent years, has made I-55 one of the most congested interstate highway segments in the region. Thus, the I-55 Corridor may ultimately become a victim of its own success.

The I-55 Corridor appears to be the strongest and most successful industrial submarket in the region, and possibly the best one to benchmark against overall. Its characteristics include the following:

- Excellent interstate and local highway access;
- Good overall regional location to population base and intermodal terminals;
- Formerly a greenfield area with ample undeveloped acreage;
- Large number of consumer goods companies as tenants;
- Large number of third party logistics providers as tenants; and
- Low Will County property taxes.

### 3.3 O’Hare Industrial Submarket

The O’Hare industrial submarket is the largest and one of the oldest suburban markets with approximately 100 million square feet of space. Proximity to O’Hare International Airport drives demand in this submarket. Approximately 40% of this market is located in Elk Grove Village and many of the buildings in this submarket are older and could be described as functionally obsolete. It is anchored around one of the region’s most important transportation assets, which also sits at the intersection of multiple interstate highways. Undeveloped land around O’Hare International Airport is becoming increasingly scarce, and there are signs this market has reached capacity in terms of new development.

According to Chicago Metropolis 2020, the proposed O’Hare Freight Center is a region that employs an estimated one-third of all city and suburban freight center workers. It includes the O’Hare and West Cook industrial submarkets for an estimated 160 million square feet of combined industrial space. Forty percent of this space is concentrated within the communities of Elk Grove Village and Franklin Park. The proposed O’Hare Freight Center includes the Canadian Pacific intermodal terminals in Bensenville and Schiller Park and the Union Pacific Global II terminal in Northlake. The Canadian Pacific and Union Pacific provide rail carload service to sites within the O’Hare market communities of Elk Grove Village, Bensenville, and Franklin Park.

### 3.4 I-80/Joliet Submarket

CenterPoint logistics park developments in Elwood (BNSF) and Joliet (UP) anchor the I-80/Joliet submarket, sometimes referred to as Central Will. It is a large geographic area and includes portions of Will and Grundy Counties, including the Minooka area. I-55 and I-80 serve this submarket. It is a classic greenfield market, although CenterPoint’s logistics park in Elwood is situated on part of the former Joliet Army Arsenal.

A controversy is growing over how to deal with increasing truck congestion in and around the mega-warehouse sites that characterize this market. It might have become a victim of its own success. This is clearly the market for “multistate big box users”. As a real estate market, it tends to have a few users who occupy some of the largest structures in the Chicago region. For instance, Wal-Mart occupies two buildings at Elwood, each containing 1.35 million square feet. In the third quarter of 2011, there were only two leasing deals in this market. However, they totaled 900,000 square feet.

### 3.5 I-88 Corridor/Aurora

An equally valid model for Logistics Park Calumet might be the I-88 Corridor and specifically what is occurring in and around Aurora. The I-88 Corridor submarket contains approximately 60 million square feet of space ranking it approximately 7<sup>th</sup> among suburban submarkets. It is something of a niche market, providing overflow regional distribution space for the West Cook and Central Du Page submarkets. Aurora is a traditional blue collar manufacturing community that has become one of the hottest industrial development submarkets in the last decade. Like Chicago’s southern suburbs, it is located near the edge of the Chicago region. The Illinois Tollway provides excellent highway access to both sites. Kane County tax rates have provided an important incentive that is lacking in Chicago’s southern suburbs.

Rather than recycling brownfields, Aurora has chosen to annex large portions of surrounding greenfield areas on its east and north sides to jumpstart its industrial development growth. Meridian Business Park is its largest industrial development, and is located on Aurora’s east side. Liberty Business Park is the second largest in terms of space and is located on Aurora’s far north side.

### 3.6 South Cook Submarket

The South Cook submarket is the second largest market in the region by square footage at 85.5 million square feet, behind the O'Hare submarket and just ahead of the I-55 Corridor submarket. It extends in a long arc from Bedford Park and Bridgeview on the north, along I-294, and then to the Indiana state line. Half the square footage in this market is located within the communities of Bedford Park, Alsip, and Chicago Heights. It is a market consisting largely of smaller buildings. According to NAI Hiffman's "Metropolitan Chicago Market Report 2010 Year End Review":

*"The area benefits from a solid mix of manufacturing and distribution facilities due to an abundance of skilled, educated labor, and excellent access to several major expressways, train lines and public transportation. The submarket consists of primarily older product with scattered modern infill developments of around 2 million SF in Bedford Park and additional projects in Alsip and Sauk Village. Ownership is mixed, including institutional, owner/user and both national and local private owners. While its location close to Chicago is key, Cook County taxes can be a financial burden."*

Based on NAI Hiffman's description of the South Cook submarket, the only new construction in this market within the last five years consists of the following:

- The Bedford Park Corporate Center I-5 in Bedford Park,
- ProLogis Park 294 in Alsip, and
- DP Partners LogistiCenter in Sauk Village.

CBRE breaks this market down further into two submarkets, South and Southwest Cook. CBRE's definition of South Cook excludes Bedford Park and Bridgeview, but includes the Will County communities of Crete, Monee, and University Park. With approximately 55 million square feet in this submarket (according to CBRE), the top five communities are the following:

- Chicago Heights – 9.6 million square feet;
- University Park – 7 million square feet;
- South Holland – 4.4 million square feet;
- Tinley Park – 4.3 million square feet; and
- Harvey – 4.1 million square feet.

### 3.7 Chicago Heights

Chicago Heights is one of the oldest industrial communities in the Chicago region, originally formed in the 1890's as an outer ring industrial suburb. It still contains a strong industrial base.

### 3.8 The South Suburbs

Significant amounts of industrial real estate development has occurred in the south suburbs in recent years, primarily in the communities of Sauk Village, Tinley Park, and University Park. The main development in Sauk Village has been LogistiCenter, that Dermody Properties (DP Partners) of Reno, Nevada originally developed six years ago. Developments in Tinley Park straddle I-80, while those in University Park are located along the village's western border, generally between the Canadian National mainline tracks and I-57. The primary developers in University Park have been Venture One Real Estate, LLC based in Lincolnshire and USAA Real Estate Company based in San Antonio, Texas.

Recent branded developments in Tinley Park include the following:

- Tinley Crossings, and
- Tinley Park Corporate Center.

Recent branded developments in University Park include the following:

- Governors Gateway Industrial Park,
- Gateway 57 Corporate Park,
- Commerce Center at University Park, and
- University Crossings Corporate Center.

Branded industrial parks in nearby south suburban communities should be seen as partners rather than competitors. One of the inherent strategic weaknesses in the Logistics Park Calumet development concept is the lack of large land parcels capable of supporting buildings in excess of 400,000 square feet. Branded industrial parks located in nearby communities contain an impressive inventory of modern warehouse buildings up to one million square feet. There is an opportunity here to create a south suburban network of industrial parks, connected by limited access highways that would be capable of meeting the need for any size or shape building within a 10-mile radius of the core Logistics Park Calumet development area.

The model here should be the network of industrial parks surrounding the Burlington Northern Santa Fe intermodal terminal in Alliance, Texas. Developer Hillwood Properties based their overall marketing strategy on a variant of the original General Motors Corporation marketing plan, which made sure that General Motors had a unique product for every customer's need. Hillwood has divided Alliance into multiple districts catering to specific business needs. Their warehouse districts include the following:

- Alliance Gateway, a 2,400-acre industrial district designed to provide sites for warehouse facilities serving large-scale distributors and manufacturers;
- Westport at Alliance, a 1,500-acre district designed to offer tenants access to rail and other transportation modes; and
- Alliance Center, a 2,600-acre business complex encircling Fort Worth Alliance Airport, which offers its tenants direct runway access.

### **3.9 Alsip**

Alsip has a number of rail-served buildings located in an older industrial park that the Indiana Harbor Belt serves with some other older industrial properties. It also has some new construction in ProLogis Park 294.

### **3.10 Tinley Park**

Tinley Park has some new construction just off I-80 at Harlem Avenue.

### **3.11 University Park**

The south suburbs' most active industrial market is likely University Park, which is approximately 10 miles south of I-80. University Park was originally founded in 1967 as Park Forest South and contains several modern, large-scale industrial parks on its west side, adjacent to I-57.

A significant amount of new construction is occurring just east of I-57 in the Commerce Center and University Crossings Industrial Parks. According to Coldwell Banker Richard Ellis, Commerce Center is the

tenth largest branded industrial park in the region by square footage. In 2010, the Clorox Company announced they were leaving their Minooka, Illinois warehouse and relocating to a larger 1.35 million square foot building at University Park.

### 3.12 Sauk Village

Development in Sauk Village remains focused on the LogistiCenter Industrial Park on Sauk Trail Road. At 325 acres, it is one of suburban Cook County's largest industrial parks. LogstiCenter already has three completed and leased buildings and has rail service via the Canadian National. This Park is easily accessible from Logistics Park Calumet via I-80 to Illinois 394, then five miles south to Sauk Trail.

In July 2011, DP Partners announced they had reached agreement with Winpak Portion Packaging, Inc. to develop a 267,000-square-foot manufacturing facility in the DP LogistiCenter. The new facility is an expansion of the manufacturer's local operations in nearby Chicago Heights. Winpak plans to expand to 600,000 square feet on their 28-acre site.

### 3.13 Park 88

Park 88 in DeKalb has attracted some activity in recent years. This development contains 465 acres located just north of the Peace Road interchange on I-88. Target located their 1.5 million-square-foot Midwest regional distribution center at Park 88 in 2006. The State of Illinois provided approximately \$9.6 million in tax incentives and grants to secure this project.

In August 2010, 3M broke ground on a new 650,000 sq. ft. regional distribution center at this location. This area could now be considered the I-88 Corridor's far west side. DeKalb County by itself contains approximately 6.9 million square feet or approximately 10% of the size of the I-88 Corridor submarket. It remains to be seen what impact increased tolls, increased fuel, and reduced driver service hours have on this location. Park 88's developer is Venture One Real Estate LLC, based in Lincolnshire, Illinois. It is the same developer for Gateway 57 and Governor's Gateway Industrial Park both located in University Park.

### 3.14 Minooka

Minooka may be another one of those locations that is too far from the Chicago metropolitan area to be competitive. Minooka is about four miles west of the I-55 interchange along I-80 at the Ridge Road exit. The town is unique because parts of it are located in three separate counties, Grundy, Kendall, and Will. However, most of the development sites are located in Grundy County. The closest rail intermodal terminals are Union Pacific in Joliet and the Burlington Northern Santa Fe in Elwood. The CSXT's New Rock Subdivision mainline provides local rail service in this community.

Previously announced warehouse developments in Minooka include the following:

- Minooka Ridge I & II (Opus),
- TCB Development,
- Minooka Distribution Center (AMB/ProLogis),
- Liberty Business Center (Liberty Property Trust), and
- Internationale Centre South (ProLogis/AMB).

In 2010, the Clorox Company announced that they were leaving an 817,000 square foot building in the ProLogis Internationale Centre South industrial park and moving to move to a new 1.35 million square foot

building in University Park just off I-57. The Clorox warehouse was Building #3 in this development. Kellogg's occupied Building #1, consisting of 1.3 million square feet, and Alberto-Culver occupied the smaller Building #2 .

Minooka Ridge I consists of an 861,438 square foot transload facility that Macy's, Inc. owns and operates. In September 2011, it was announced that Electrolux had signed a lease to occupy half the Minooka Ridge II building that stood empty for almost two years.

### 3.15 Intermodal Logistics Parks and Terminals

The phenomenon of the intermodal logistics park, i.e. a planned logistics park development immediately adjacent to a rail intermodal terminal, is a recent one. Strong, well-financed developers have driven these developments in the Chicago region and around the U.S. The Chicago metropolitan area has only two truly active intermodal logistics park developments, which are the Burlington Northern Santa Fe Logistics Park Chicago, a 770-acre facility in Elwood, and the Union Pacific's Joliet Intermodal Terminal, an 835-acre facility located nearby in Joliet. They are Logistics Park Calumet's primary regional competitors.

The Burlington Northern Santa Fe and the Union Pacific Railroads provide service from these sites to the Southern California ports of Long Beach and Los Angeles. Both of these ports directly compete with the Canadian west coast ports of Prince Rupert and Metro Vancouver for Trans-Pacific container traffic.

Combined with adjacent industrial parks, these logistics parks cover 6,100 acres and can support up to 32 million square feet of commercial real estate space. Wal-Mart occupies two 1.34 million square foot buildings in Elwood and CenterPoint recently signed a 657,000-square-foot lease with Home Depot.

The Burlington Northern Santa Fe, Union Pacific, and other railroads operate intermodal rail terminals in the Chicago area that are not integrated with logistics parks, although various industrial and logistics facilities surround most of them.

The Burlington Northern Santa Fe operates intermodal service between Chicago and the Pacific Northwest ports of Seattle and Tacoma. This service uses the Burlington Northern Santa Fe intermodal terminal in west suburban Cicero, which has approximately half of the Elwood facility's lift capacity. Like the Canadian National's Gateway Terminal, the Cicero intermodal terminal was converted from a former carload hump yard. While this terminal is adjacent to Illinois Route 50 (Cicero Avenue), and in some respects resembles Logistics Park Calumet's neighborhoods, no attempts have been made to redevelop the immediate area's industries.

The Union Pacific has indicated that they plan to use their new Joliet terminal, now called Global IV, for international steamship traffic. In addition to serving southern California ports, the Union Pacific also serves the Ports of Oakland and Seattle. It appears that the Union Pacific will keep Global I and II open for now. Global II is located in a traditional industrial area in west suburban Northlake, adjacent to the Union Pacific's Proviso Classification Yard. Global I is located on Western Avenue in Chicago, just west of an increasingly up-scale residential neighborhood.

The Canadian Pacific is one of the Canadian National's serious rail competitors for international traffic between Chicago and the Ports of Montreal and Metro Vancouver. The Canadian Pacific's main Chicago intermodal terminal straddles Bensenville and Franklin Park. It also has a smaller terminal located nearby in Schiller Park. These two terminals together handle less than half of the Canadian National's volume in the Chicago metropolitan area.

While no specific warehouse developments are associated with these intermodal terminals, a number of legacy industrial developments surround them. Franklin Park is one of Illinois' largest industrial areas and the place where the Milwaukee Road developed one of its first industrial parks in the 1950's. It is relatively close to the large Centex Industrial Park in Elk Grove Village. This was the region's first planned industrial park, constructed in the 1950's and currently is the largest contiguous industrial park in North America. The Canadian Pacific terminal is adjacent to the southern border of O'Hare International Airport and is near several industrial parks that the Airport anchors, including some on Airport property.

CSX Intermodal's main Chicago area terminal is located in Bedford Park, just east of Harlem Avenue. This facility ranks second only to the Burlington Northern Santa Fe's Elwood facility in terms of annual lifts. It is an excellent example of brownfield redevelopment since it is located on part of the former Belt Railroad of Chicago's Clearing Yard. This terminal is connected to most East Coast ports and would be considered something of an indirect competitor based on global trade flows. However, the CSX appears to be more interested in investing in terminal expansion in Ohio to serve the Midwest rather than Chicago. They recently opened a new intermodal terminal in northwest Ohio at North Baltimore and are expanding terminals in Columbus, Ohio and Louisville, Kentucky. As a distribution center in the Midwest for imported goods, Columbus has historically been a geographic competitor for Chicago in much the same way as Memphis.

CSX's Bedford Park terminal is located in the middle of the Bedford Park industrial district which includes a substantial amount of public warehouse space and truck terminals. This area was originally part of the planned industrial community known as the Clearing Industrial District. The primary roadway access to this industrial area is off of I-55 via Illinois Route 43 (Harlem Avenue) or via Illinois Route 50 (Cicero Avenue). Both roadways are heavily congested. Expansion of Central Avenue south under the Belt Railway of Chicago's Clearing Yard will improve access to the CSX terminal.

A number of planned intermodal developments across northern Illinois remain on the drawing board. The Seneca I-80 Railport in Grundy County, located along U.S. Route 6 (Seneca Road) south of I-80, remains largely in the planning stage. Original specifications called for a 465-acre "Railport" facility, adjacent to a 550-acre industrial park capable of supporting over 10 million square feet in warehouse development. CSXT's New Rock Subdivision mainline and the Illinois River run along this site's south side. Keating Resources is the primary developer and NAI Hiffman is their exclusive marketing agent.

CenterPoint's proposed 1,000-acre intermodal logistics park in Crete, Illinois has not attracted an anchor rail intermodal terminal. This development may ultimately prosper, not because of rail connections but because of its proximity to the proposed Illiana Expressway.

Further west, planned industrial parks located around Union Pacific's Global III intermodal terminal in Rochelle, such as CenterPoint's Intermodal Center and Logisticenter at Rochelle, remain largely undeveloped. Global III is currently operating at approximately 30% of its original design capacity. The Union Pacific uses the terminal primarily for block-swapping between intermodal trains. Its investment in Global IV in Joliet is widely regarded as acknowledgement that the Rochelle terminal was an idea whose time has not yet arrived. The so-called I-39 Logistics Corridor is more marketing concept than viable competitor. The conventional wisdom is that Rochelle is simply too far away from the Chicago metropolitan area to be operationally viable as a general warehouse and distribution center.

## 4 INDUSTRIAL USER INTERVIEWS

### 4.1 Summary of Findings

The consultant team interviewed freight transportation professionals about logistics trends and Logistics Park Calumet’s market opportunities, strengths, and challenges. These freight transportation professionals stated that Logistics Park Calumet’s most attractive features are its proximity to the population densities around Chicago and its access to four major North American railroads (i.e. the Canadian National, the Burlington Northern Santa Fe, the Union Pacific, and the CSX). This railroad presence allows shippers rail access to any West Coast, Gulf Coast, and East Coast port gateway to take advantage of low cost rail transportation and build redundancies into supply chains.

Some shippers are attracted to the connection from the Port of Prince Rupert to the Canadian National’s Harvey rail facility. The Port of Prince Rupert’s limited number of ocean carriers, however, makes it less important than Logistics Park Calumet’s overall rail and road access. Logistics Park Calumet provides fast access to the interstate highway system, including I-55, I-57, I-80, I-90, I-94, and I-294. Its proximity to many trucking companies and designated local, over-weight truck corridors are attractive features for rail-focused shippers.

Logistics Park Calumet’s optimal target area for cargo distribution includes Chicago and regions to the south and east, such as Indiana, Ohio, and Lower Michigan. Its area-wide labor supply is suitable for logistics activities and Harvey, South Holland, and Dolton’s ability to collectively accommodate truck transportation proves that this area provides a “logistics friendly” environment.

The interviewed freight transportation professionals asked that local governments clarify their available tax incentives. No one understood these incentives.

### 4.2 Approach

The consultant team interviewed several freight transportation professionals about their North American cargo distribution networks and whether they could benefit from use of the Canadian National’s Port of Prince Rupert rail service to Harvey and Logistics Park Calumet’s future warehousing and other services. These interviewees included personnel from shippers, ocean carriers, an ocean port authority, and a third-party logistics provider. Their diversity provided the consultant team with different perspectives on Logistics Park Calumet’s potential services. The consultant team promised these interviewees anonymity in exchange for their views.

The consultant team used these responses to help develop profiles about companies that could benefit from moving or expanding to Logistics Park Calumet. They also used information previously collected from other interviews with ocean port, inland port, and industrial real estate development personnel.

**Table 4-1: Interview Respondents**

Company	Distribution Area
3 <sup>rd</sup> Party Logistics Provider	International
3 <sup>rd</sup> Party Logistics Provider	International
3 <sup>rd</sup> Party Logistics Provider	International
3 <sup>rd</sup> Party Logistics Provider	National
Footwear and Apparel Shipper	National
Grocery Retailer	National
Ocean Carrier	Calls Prince Rupert
Ocean Carrier	Calls Prince Rupert
Ocean Port Authority	Prince Rupert to Chicago
Retailer	National
Retailer	National
Sporting Goods	National
Trucker	Chicago
Trucker	Chicago

Source: TranSystems

### 4.3 Cargo Networks and Port Gateways

The interviewed shippers took a global view about how to optimally distribute cargo within the U.S. To meet supply chain service performance needs at the lowest delivered cost, they will consider gateways, transportation modes, and inventory strategies when evaluating and selecting a logistics hub. The following discussion illustrates the freight network and routing choices that would help shippers determine whether to use Logistics Park Calumet.

#### 4.3.1 North American Gateways and Prince Rupert’s Share

According to its website, the Port of Prince Rupert received 193,507 twenty foot equivalent container units of imports in 2010. Assuming that most of these imports originated in China, the Port of Prince Rupert accounted for approximately 3% of all imported goods from China that transited U.S. West Coast ports (as displayed in Table 4-2). Other competing West Coast ports imported over 6 million twenty foot equivalent container units from China in 2010.

The Port of Prince Rupert maintained its growth in 2011 when imports expanded 21% to 234,700 twenty foot equivalent container units. The addition of new ship calls by ocean carriers, China Ocean Shipping Company (COSCO) and Hanjin, facilitated this growth in 2010 and 2011.

**Table 4-2: Containerized Imports from China (incl. Hong Kong) by West Coast Gateway**

<b>West Coast Gateway</b>	<b>2010 TEU (000)</b>	<b>% of Total</b>
Pacific Southwest (Los Angeles / Long Beach)	4,621	74.1%
Pacific Northwest (Seattle / Tacoma / Portland)	1,014	16.3%
Northern California (Oakland)	411	6.5%
Prince Rupert *	194	3.1%
<b>Total</b>	<b>6,240</b>	<b>100.0%</b>

\* For purposes of comparison, all of Prince Rupert imports are assumed to originate from China.

Source: TranSystems, JOC Piers, and Prince Rupert Port Authority

Shippers importing containers through Prince Rupert primarily have inland destinations in Montreal, Toronto, Chicago, and Memphis. Chicago is the destination for approximately 33,000 containers or one-third of these inland moves. According to one respondent, Detroit and other Eastern U.S. destinations have emerged over the last eighteen months for high value or time sensitive imports, such as auto parts and garments. Logistics Park Calumet cannot share in these “beyond” Chicago moves because shippers directly send them to their final destinations without stopping.

The shippers’ preferred ocean port gateway for imports is one that meets their transit time and rate requirements. Based on the consultant team’s interviews, shippers requiring the fastest transit times from China to Chicago will likely prefer the Port of Prince Rupert because it offers a one-to three-day ocean transit advantage over other North American West Coast ports. Shippers with supply chains that can accommodate slower transit times will not likely have a gateway preference as long as their cargo arrives on-time at their final destination. Transport routes with slower transit times frequently have lower freight rates, which may persuade some shippers to use them.

#### **4.3.2 Prince Rupert Ocean Carriers**

COSCO; Hanjin Shipping; Kawasaki Kisen Kaisha, Ltd. (“K” Line); and Yang Ming Lines are the only ocean carriers that call on the Port of Prince Rupert. “K” Lines and Yang Ming Lines each reportedly import only twenty or so containers per week using chartered space on COSCO and Hanjin vessels. More ocean carriers, however, may schedule calls at this port in the future.

#### **4.3.3 Prince Rupert Pricing**

Interviews with shippers who used the Port of Prince Rupert reported that they were initially attracted to this port’s lower costs relative to the other West Coast gateways. However, subsequent ocean rate increases caused one respondent to reallocate future shipments to alternate port gateways, noting:

*“Prince Rupert has the fastest transit to Chicago, at about 19 days for us. The competition has a 22 day service, which is good enough. Reliable 22 day service at a competitive price is more important than the fastest service at a premium.”*

- Major U.S. Retailer

The survey comments suggested that ocean carriers may be charging a premium for a perceived service reliability edge and faster ocean transits. One respondent suggested that shippers who require premium services will be willing to pay more. Another respondent commented that this corridor's customs clearance was "flawless."

Expensive cargo with high inventory carrying costs benefit from shorter transit times. Just-in-time cargo, where late-arriving goods cause lost revenue from interrupted manufacturing processes or inventory stock-outs during sales promotions require highly reliable transportation. The Port of Prince Rupert in either case may be the preferred gateway, according to the interviewees.

Survey comments also suggested that ocean carriers are aware that the Port of Prince Rupert must be competitive with other West Coast gateways to continue attracting cargo. More ocean carriers serving this port in the future may keep ocean carrier rates at market levels. The actual future pricing strategy for cargo passing through the Port of Prince Rupert, however, is unknown.

#### **4.3.4 Port Diversification**

Although shippers choose ports and transportation modes that are the least expensive overall, they are reluctant to rely on a single gateway. Severe port and rail service interruptions in the late 1990s/early 2000s affected U.S. West Coast ports and highlighted the need for alternate gateways. Shippers therefore developed redundancies in their supply chains and selected additional ports for their import cargo.

The Canadian National Railroad is the exclusive rail service provider at Prince Rupert and shippers are concerned about the absence of an alternate rail service; a single track incident could completely block the rail corridor. Shippers are also aware that premium rates are often the norm in lanes where a single carrier controls the route. However, it is also recognized that the Canadian National has made a significant commitment to the Prince Rupert Corridor. The Canadian National was involved in the design of the Prince Rupert marine terminal and has made substantial rail system upgrades:

*"The CN grade is the slightest of all the gateways, the valley is wide, and a highway generally follows the rail, so incidents are cleared quickly. The service is very reliable in general. CN has spent \$350 mil to install siding to allow for long trains, and passing trains in each direction. The result is a very reliable service. The current track utilization is 25-30 percent, so right now there is room to grow... The CN is committed to making this service competitive, because they share in the success of the port."*

- Transportation Provider

#### **4.3.5 Halifax Gateway**

According to interviews, Logistics Park Calumet could also benefit from the small amount of European and other cargo that enters North America through the Port of Halifax and is then railed to the Canadian National Railroad's Harvey Yard. Ocean carriers that currently move cargo through the Halifax gateway to the Harvey Yard are Maersk Lines, NYK, Zim Lines, Hapag Lloyd Lines, Atlantic Container Lines, CMA-CGM and Mediterranean Shipping Lines.

According to one interview, shippers could have a more efficient logistics operation, including saving on trucking expenses, if they received cargo from different port gateways (Prince Rupert and Halifax) at a single facility located near the Canadian National Railroad's Harvey Yard. The consultant team's other project work indicates that cargo from Asia via the Suez Canal to East Coast ports is on the rise, and could move through Halifax into the Canadian National Railroad's Harvey Yard.

#### 4.4 Inland Transportation Strategy

Shippers also evaluate different inland transportation strategies for the effective delivery of imported goods. Rail deliveries are usually considered to be the lowest cost transportation mode, but shippers also look at a mixture of cost, transit time, and inventory stock requirements. The following import inland strategies were mentioned during the interviews:

- **Direct Rail to Inland Distribution Center.** Rising fuel prices, and potential future driver shortages, have encouraged shippers to look more closely at use of lower cost rail services rather than higher cost truck services. Containers are railed directly from the port to inland distribution centers, which are sited near inland intermodal rail terminals. This strategy requires longer lead times because rail services are slower than truck transportation services.
- **Transload Operations.** Shippers consolidate international 40-foot containers into domestic 53-foot containers or trailers to lower their inland transportation costs and introduce more flexibility into their supply chains (e.g. shippers can accommodate the contents of three 40-foot containers into two 53-foot containers). This transfer is undertaken at a transload facility near the port. Large retailers are major users of the transload strategy.
- **Inventory Holding/Cross-Docking.** This strategy is designed for shippers who import goods and then distribute to their retail customers, who commonly place just-in-time orders. Imports are unloaded at a cross-dock facility near the port and held until the customer (e.g. a footwear or apparel retailer) places an order. Retailers who take advantage of this strategy avoid significant inventory carrying costs. Trucking is preferred for the U.S. inland move because it provides fast and reliable transit.

Of all the strategies listed above, those that include rail are the most likely to appeal to shippers considering to locate at Logistics Park Calumet. Interviewees who positively viewed Logistics Park Calumet considered its rail connection as a strong selling point, especially if they had regional distribution centers in the area and had arranged trucking from the rail terminal to their distribution centers.

Shippers with inland strategies that depended on trucking did not see any particular advantage in Logistics Park Calumet versus other locations near Chicago, unless their distribution centers were located near the Logistics Park Calumet area. Shippers who directly contracted with ocean carriers to deliver their imports to their distribution centers did not care which gateway or rail yard was used, so long as their transit time and rate requirements were met.

A port's local economy and population must be large enough to attract sufficient 53-foot equipment to generate empty boxes for transload activity. Los Angeles is a popular transload location, because its large population attracts many inbound 53-foot containers for supplying transload operations. Given its smaller population, the Seattle/Tacoma area experiences shortages of 53-foot equipment. Prince Rupert would experience a more severe domestic equipment shortage than Seattle/Tacoma, given its small, local population. One respondent familiar with North America equipment availability suggests that a reliable transloading option in Prince Rupert would require repositioning of empty equipment at considerable expense.

## 4.5 Rail

Rail access is a very attractive feature of Logistics Park Calumet because it is the cheapest over-land transportation mode. Chicago is the largest North American rail hub and has the following major railroads within ten miles of each other – the Burlington Northern Santa Fe, the Union Pacific, the Norfolk Southern, the CSX, Iowa Interstate, and the Canadian National Railroad. Nearly all respondents agreed that the Canadian National Railroad’s connection to Prince Rupert is Logistics Park Calumet’s strongest advantage. According to one respondent, a distribution center built next to the Canadian National’s yard “would eliminate trucking costs since the Canadian National could deliver containers directly to the distribution center”. Respondents mentioned WalMart’s decision to locate close to the Burlington Northern Santa Fe’s Elwood intermodal rail facility as an example of how many shippers are migrating towards distribution centers that are adjacent to rail terminals as part of their supply chain strategies.

Shippers may have goods arriving from the West Coast on different railroads, so they consider access between their Chicago distribution centers and the various railroads. Interviews suggest that the Canadian National Railroad’s Harvey Yard has good connectivity to other railroads in the area, especially to the Burlington Northern Santa Fe’s Elwood Logistics Park, “which is only 34 miles away”. Two respondents stated it is very important for Logistics Park Calumet to include infrastructure improvements that will enhance local road’s connectivity to the key highways, and, by extension, to other rail terminals. Logistics Park Calumet may attract shippers who use more than one railroad if the connectivity is well established between Logistics Park Calumet and the different rail terminals.

Various trends indicate future increased rail use to Chicago. Rising fuel prices have caused shippers to increasingly select rail service whenever possible since trucking costs are more sensitive to fuel prices. Ocean carriers are also reluctant to provide service beyond the ports, unless the inland points have enough backhaul cargo to mitigate the costs of returning ocean containers back to the coast. Chicago is one area where ocean carriers are willing to provide this service. Other inland points that do not offer the same backhaul opportunities as Chicago (e.g. places in Indiana and Ohio, which often carry as much as a \$600 rate premium over Chicago), according to one respondent. Projected truck driver shortages are also likely to cause shippers to switch more freight to rail transportation.

## 4.6 Distribution Center Location

Potential distribution center sites are primarily evaluated on transportation costs and ability to meet on-time delivery service performance requirements. After these requirements are met, available land and local incentives are considered.

Truck freight costs for the last leg or “last mile” typically are incurred for the distance from the distribution center to the customer’s door. They usually are the entire move’s highest cost, which includes ocean and rail transportation. Distribution centers are therefore placed in central locations to reduce this cost. According to respondents, a distribution center located in Logistics Park Calumet benefits distribution south of Chicago. It does not compete well with distribution centers at other locations that serve areas north or west of Chicago. Two respondents illustrated the impact of distribution center placement. A larger retailer commented,

*“We have retail outlets in Wisconsin and in Michigan, so if we were to re-locate near Harvey, our costs would be more for some of our deliveries, and less for others. All and all, it would be a wash.”*

- Retailer

A trucking firm, on the other hand, relocated from Chicago to the Logistics Park Calumet area and saved approximately \$300,000 in fuel during the first year because of reduced distances traveled to and from the rail terminals.

A strong feature of Logistics Park Calumet is highway access. Survey respondents noted that Logistics Park Calumet provides easy access to the regional highway network, including I-55, I-57, I-80, I-90, I-94, and I-294.

Several respondents also noted that a Harvey location benefits shippers moving southbound and eastbound goods, specifically to Indiana, Michigan, and Ohio.

*“You don’t have to deal with the congestion, and you avoid an overnight stay for loads to Ohio. If you leave from Elk Grove – that adds 110 miles to the round trip as compared to Harvey – that is enough for an over-nighter.”*

- Trucker

Export grain shippers who pick up empty containers in Chicago, dray them to facilities south of Chicago, and return them to rail terminals in Chicago might also benefit from grain facilities located in Harvey, especially if they currently pick up and drop off containers north of Harvey. Respondents suggested that the most likely candidates for locating a distribution center at Logistics Park Calumet would be those focusing on distribution to Chicago and/or Midwestern states, such as Indiana, Ohio, and Michigan.

Regional distribution centers serving a combined Midwest and Eastern U.S. market may not consider a Chicago location, because these distribution center strategies tend to locate in areas that cover high percentages of the U.S. population within a one to 1.5 day truck delivery timeframe. Respondents mentioned locations further south and east of Chicago, like Columbus, Memphis, and parts of Pennsylvania.

## **4.7 Export Manufacturing**

Similar to advantages gained by distribution centers that are near end customers, manufacturers can also reduce their raw material freight costs if their suppliers are located nearby. Rail access to key North American ports also enhances Logistics Park Calumet as a favorable export site for manufacturers.

## **4.8 Other Factors Influencing Logistics Hubs in Chicago**

Labor availability, labor costs, and land prices also influence distribution center site selection. Local incentives, such as tax incentives, tend to “break a tie” between sites, assuming that key selection (e.g. lower transportation costs) criteria are met.

### **4.8.1 Labor**

The skill level required for a typical distribution center worker is not high, yet other studies have shown that access to a “trainable” workforce is difficult to find. Many people are not prepared to work in a warehouse environment.

Survey respondents, however, indicated that the workforce around Harvey is sufficient and suited for warehouse and distribution work. A trucking firm stated that all of his employees live within seven miles of his Harvey facility, which he saw as a positive indicator of the Harvey area’s labor availability.

Another respondent who operates distribution centers in Wisconsin and Illinois suggested that his company was looking into warehouse and distribution center automation, because he believed that “no one wants to work in a warehouse anymore”. Process automation could be used to address any future labor shortage and skill issues. The overall perception of the Chicago area, however, was that labor availability is favorable.

Shippers evaluate labor costs in the overall cost equation. However, they did not raise it as an issue for Logistics Park Calumet.

#### **4.8.2 Land**

Two respondents mentioned that land prices in the Logistics Park Calumet area must be cheaper than what the Burlington Northern Santa Fe Railroad paid further north in Elk Grove Village. Limited available space makes it hard to expand in Elk Grove Village.

These respondents saw that the Logistics Park Calumet area has ample space, which is important for attracting different-sized distribution centers. One of these respondents has a large retail distribution center with over one million feet of warehouse space plus additional land for parking. His facility covers approximately 400 acres. A facility this large could serve smaller distribution centers and stores throughout the Midwest if it were located in Logistics Park Calumet.

One interviewee who is knowledgeable about land costs in competing regions cited a recent example of a Chicago site winning out over a location with lower land costs. A shipper selected a Chicago site over an Indianapolis site with less expensive land because his deliveries were concentrated closer to Chicago. The Chicago site generated lower transportation costs that more than offset the higher land prices. This example demonstrates how Logistics Park Calumet can overcome lower land prices in competing regions if transportation costs are critical for a shipper.

#### **4.8.3 Incentives**

Government incentives tend to break a tie between two competing locations. They help developers and businesses perceive a municipality’s willingness to support a land development project.

Logistics Park Calumet is willing and able to work with logistics developers and transportation companies. Only one respondent was familiar with the opening of a new facility in Harvey, but his comment was that, “Municipalities will stand on their ear to get everything done that needs to be done. You don’t have the constraints... that Will County put on [the Burlington Northern Santa Fe Railroad]”. An example of this type of cooperation involved the establishment of “intermodal connectors,” in which the municipalities of Harvey, South Holland, and Dolton removed weight restrictions on 167<sup>th</sup> and Indiana Avenue to facilitate local movement of overweight containers that railroads permit.

Shippers also look at each prospective site’s tax advantages. In Harvey’s case, one respondent indicated that he received a “class 8 certification” for locating in a blighted area, which made his facility eligible for a substantial tax assessment reduction. His Cook County property value assessment is 16%, compared to 48% percent in Will or DuPage Counties. Another facility operator in Harvey offered a contrasting view; he suggested that the City of Harvey’s property taxes are much higher than surrounding cities. Harvey and other municipalities should therefore address any confusion over tax advantages.

#### **4.8.4 Green Initiatives**

Interest in green transportation and warehousing has been growing in recent years, although the consultant team received only a few survey comments on this subject. The consultant team’s other studies have shown

that environmental concerns and the desire to reduce distribution costs have increased shippers' interest in energy efficiency, including initiatives to reduce transportation's carbon footprint. Warehouses that efficiently use energy or that use alternative energy sources, such as solar panels are growing in favor.

An interviewee noted that the Canadian National Railroad's Port of Prince Rupert to Harvey route has one of the lowest gradients of all rail corridors off North America's West Coast. Trains on this route have very efficient fuel consumption and lower diesel particulate emissions. The Port of Prince Rupert to Harvey gateway can therefore be positioned as a "green" corridor for imports transported into the Chicago region.

#### **4.9 Implications for Logistics Park Calumet**

Respondents viewed rail connectivity as Logistics Park Calumet's biggest advantage as a logistics hub. The Prince Rupert gateway via the Canadian National rail line was considered a strong advantage. However, the limited number of ocean carriers currently calling at Prince Rupert and the absence of a second railroad at Prince Rupert were viewed as weaknesses for the Prince Rupert-Chicago corridor. The Logistics Park Calumet location would most benefit companies that have distribution areas concentrated south of Chicago. Table 4-3 summarizes the interview results and their implications for Logistics Park Calumet.

**Table 4-3: Summary of Interviews and Implications for Logistics Park Calumet**

Logistics Park Calumet's Feature	Strength	Challenge
<b>Location</b>	<ul style="list-style-type: none"> <li>Logistics Park Calumet is well positioned for companies that use a Rail-to-Inland Distribution Center network strategy.</li> <li>Unlike many competing Midwest locations, a Chicago location takes advantage of ocean carriers' inland services and can generate savings for shippers.</li> <li>Logistics Park Calumet is thirty-five miles south of downtown Chicago and so is strong for distribution to sites south and east of Chicago (i.e. Chicago's southern suburbs, Indiana, Ohio and Lower Michigan).</li> <li>Trucks can spend less time on congested highways.</li> <li>The Canadian National's Harvey Yard is convenient for shippers located south of Chicago who require access to empty equipment.</li> </ul>	<ul style="list-style-type: none"> <li>Logistics Park Calumet is not ideal for distribution areas that include Chicago as part of a northern distribution strategy, including northern Illinois, Wisconsin, or other northbound transits.</li> <li>Logistics Park Calumet is not suited for regional distribution centers that serve Midwestern and Eastern regional markets.</li> </ul>
<b>Rail Connectivity</b>	<ul style="list-style-type: none"> <li>Excellent rail access.</li> <li>The Canadian National's Harvey Yard is located near the facilities of other major U.S. railroads, so a shipper could combine shipments by multiple railroads at Logistics Park Calumet.</li> <li>Logistics Park Calumet's rail access can help mitigate the challenges shippers face from rising fuel prices, limitations on ocean carrier inland service offerings, and expected truck driver shortages.</li> <li>The Canadian National's Halifax service can accommodate European cargo.</li> </ul>	<ul style="list-style-type: none"> <li>Rail access is not as important to shippers that use cross-dock strategies at ports.</li> <li>Shippers who have negotiated "door" service with ocean carriers are less concerned with rail terminal locations.</li> </ul>
<b>Connection via Prince Rupert on the Canadian National</b>	<ul style="list-style-type: none"> <li>Fastest transit time from China to North America's West Coast.</li> <li>Companies with high value and time sensitive goods from China can obtain faster and reliable service via Prince Rupert.</li> <li>The Canadian National's Prince Rupert connection is seen as very reliable.</li> <li>Offers a "Green" gateway with on-dock rail and fuel efficient rail service.</li> </ul>	<ul style="list-style-type: none"> <li>Limited selection of ocean carriers.</li> <li>Ocean rate increases have caused some shippers to re-allocate imports to competing ports.</li> <li>Dependence on a single railroad.</li> <li>Lack of trucking to recover from rail blockages if they occur.</li> <li>Relatively poor location for import transload strategies.</li> </ul>
<b>Highway Access</b>	<ul style="list-style-type: none"> <li>Excellent highway connections, including I-55, I-57, I-80, I-90, I-94, and I-294.</li> <li>Recent improvements to highway interchanges.</li> <li>Many trucking companies located in the area.</li> </ul>	
<b>Labor, Land, and Incentives</b>	<ul style="list-style-type: none"> <li>Logistics Park Calumet's land prices and availability are viewed more favorably than other Chicago area locations.</li> <li>Sufficient labor availability.</li> <li>Good cooperation from local government.</li> </ul>	<ul style="list-style-type: none"> <li>Companies may not understand the tax advantages municipalities in the Logistics Park Calumet area offer.</li> </ul>

Source: TranSystems

## 5 REGIONAL GOODS MOVEMENT ASSESSMENT

### 5.1 Major Industry Trends

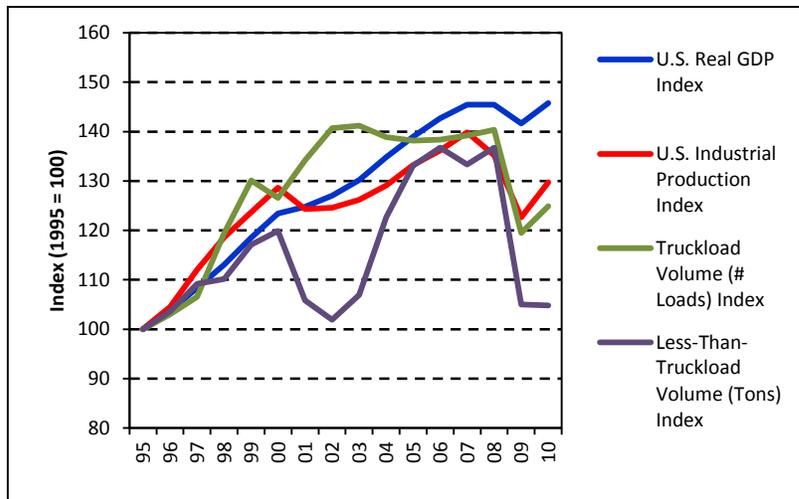
#### 5.1.1 The Trucking Industry's Recent Developments and Near-Term Outlook

Shippers in 2012 have faced 9% - 18% increases in trucking rates, which given rising truck fuel and labor costs. This will likely continue shippers' movement away from over-the-road freight transportation to intermodal rail.

#### Trends in the Trucking Industry: 1995 to 2010

- The volume of for-hire and private trucking activity in the United States is approximately 8.5 billion freight tons, accounting for approximately 70% of U.S. freight tons and 40% of ton-miles (U.S. Bureau of Transportation Statistics, Commodity Flow Survey).
- Truck shipments as measured in truckload and less-than-truckload tons have tended to move in tandem with the growth of the U.S. economy and U.S. industrial production, represented by real gross domestic product and the industrial production index, respectively. Figure 5-1 shows these relationships on an annual basis from 1995 to 2010, highlighting the most recent years of recession and recovery, 2008-2010.

**Figure 5-1: Indexes of Trucking Volume (Truckload and Less Than Truckload), U.S. Industrial Production and Real GDP: 1995-2010 (1995 = 100)**



Source: American Trucking Associations; TranSystems' estimates

Truckload volume tended to grow at a somewhat faster rate relative to the economy (gross domestic product and industrial production) from 1995 to 2002, and then at a slower rate from 2002 to 2010. The slower growth relative to gross domestic product reflects the growing importance of services relative to goods in the U.S. economy. However, there is even a clear decline in truck volume relative to industrial production, which indicates both modal substitution (e.g., rail for truck) and changing logistics networks.

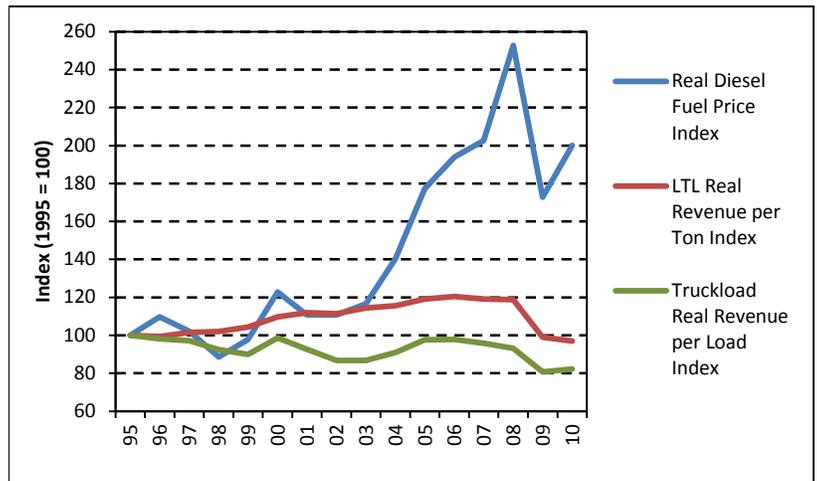
- The falloff in truckload volume relative to the economy was particularly severe in the 2009 recession year and lagged the recovery in 2010. By contrast, the growth of less than load tonnage tended to lag the overall economy for the entire period. Finally, Exhibit I shows that truckload and less than truckload volume growth was far more variable over time than the overall economy.

- Trucking pricing and revenue also tended to lag the overall economy. Figure 5-2 shows annual indices of truckload revenue per load and less than truckload revenue per ton, adjusted for inflation, from 1995 through 2010. The truckload index fell significantly from 1995 to 2003, recovered strongly from 2003 to 2006, then fell again from 2006 to 2009, particularly in the recession year of 2009, and recovered slightly during 2010. By contrast, the less than load index increased through 2006, and then flattened in 2007-2008 before sharply declining in 2009. Even in the 2010 recovery period, real less than load revenue per ton continued to decline.

- Figure 5-2 also shows that this overall fall in real revenue per load occurred during a period of rapidly rising real fuel prices. By 2008, inflation-adjusted diesel fuel prices were, on average, 2.5 times the level in 1995. Although fuel prices fell sharply after mid-2008, they were still more than double the 1995 level by 2010 and continued to rise into 2011.

Truckers' inability to raise rates in the face of rising fuel prices is largely due to competitive forces. In the case of truckload freight, rail intermodal shipments have increased their share of longer-haul segments, and competition from small package operators have displaced less than load shipments. This severe cost-price squeeze has led to sharp financial deterioration for many trucking companies and owner-operators.

**Figure 5-2: Indexes of Real Revenue per Load for Truckload Freight versus Real Diesel Fuel Prices: 1995-2010 (1995 = 100)**



Source: American Trucking Associations; U.S. Dept. of Energy, EIA; TranSystems' estimates

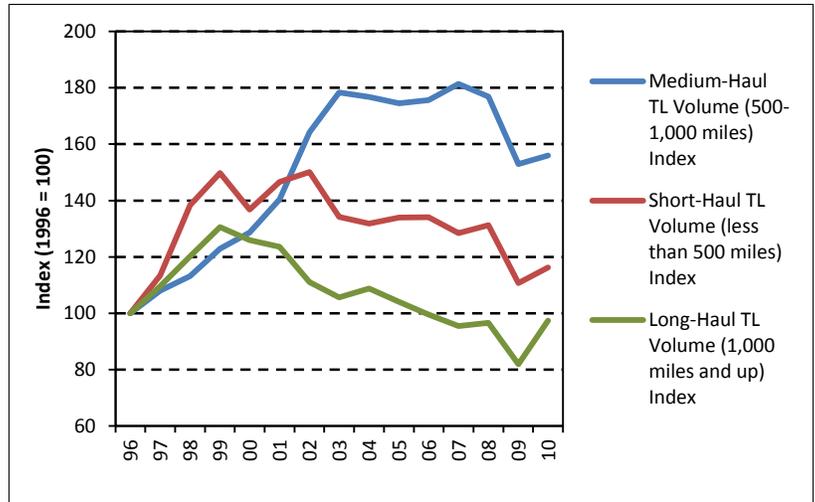
- Many trucking companies and owner-operators have also had trouble getting financing and recruiting drivers. This has particularly affected the industry's relatively long-haul segment (having haul lengths over 1,000 miles), as shown in Figure 5-3, which presents annual truckload volumes for 1996-2010 in three broad categories of length-of-haul. Truckload volumes in the long-haul segment fell 25% in 2010 from their peak in 1999. The long-haul segment is where the difficulties of recruiting drivers have been most acute.

- Meanwhile, Figure 5-3 also shows that both the medium-haul (500-1,000 miles) and short-haul (less than 500 miles) segments grew significantly over the period. The medium-haul segment grew the fastest, especially through 2007, but has since declined sharply. Indeed, the medium-haul segment most rapidly declined in the recent recession and made the slowest recovery. In both of these cases, there has been major competition from rail intermodal service.

- Rapid growth has occurred in international container volumes, particularly for very long length-of-haul lanes (1,500-3,000 miles) between the West Coast and Midwest, Gulf, and Eastern Seaboard. It has enabled intermodal services to make inroads on long-haul traffic lanes.

More recently, with heavy investment in rail infrastructure and with steadily improving rail service performance and operating costs relative to highway shipments, rail intermodal has gained share in the medium-haul traffic lanes as well, particularly in rail-eligible lanes east of the Mississippi River.

**Figure 5-3: Indexes of Truckload Loads by Length-of-Haul Segment: 1996-2010 (1996 = 100)**



Source: American Trucking Associations and TranSystems' estimates

### Trucking Industry Outlook for 2011-2012

- Looking forward, as the U.S. economy continues to recover from the recession; the trucking industry will be faced with continued and even more intense constraints on growth and upward cost pressures. The following major regulatory developments will exacerbate the limited supply of truck drivers:
  - Compliance, Safety and Accountability Initiative – The U.S. Department of Transportation (USDOT) has been increasingly emphasizing tracking of large over-the-road vehicles—buses and trucks—to identify and address safety issues. Truck drivers with less-than-perfect safety performance will be more quickly removed from the eligible driver pool.
  - Hours-of-Service Regulations – Further limits on driving hours per week or per day and stricter enforcement of those limits will increase the number of drivers required for a given amount of freight movement. The USDOT will implement further restrictions beginning in late 2011 or early 2012.
  - Increased Scrutiny of Illegal Aliens – as truck drivers' licenses come up for renewal, those unable to provide documentation of U.S. citizenship will be denied a license. Ultimately, this might affect up to 10% of drivers.

- An offsetting effect on the supply of drivers is the potential for allowing Mexican truck drivers to enter the U.S. However, this is not a certainty, and, in any case, only applies to cross-border shipments, since the Federal government would not allow Mexican drivers to move freight on traffic lanes within the U.S.
- The trucking industry will encounter equipment shortages due to increasingly stringent financial requirements placed on borrowers, which will particularly constrain poorly-financed firms and owner-operators in the market's long-haul segments. There is a strong possibility (although it is far from certain), meanwhile, that diesel fuel prices will continue to climb toward previous peak levels (2008).
- These regulatory and economic factors will likely reduce supply and raise prices for over-the-road trucking. These effects on shippers will vary by traffic lane and will depend on the lengths-of-haul and presence of viable competition from rail in a particular lane. In cases where rail intermodal competition exists, over-the-road service will continue to rapidly lose share to rail, especially as railroads continue to invest heavily in intermodal infrastructure, particularly terminals and rights-of-way. As fuel prices increase, rail and truck prices will increase, but overall, truck prices will rise relative to rail.

Driver and over-the-road equipment shortages will put highway trucking at an increased disadvantage, particularly for longer length-of-haul traffic lanes and during periods of peak seasonal demand. Rail competition meanwhile will limit price increases in these lanes.

Where rail does not serve the traffic lanes well, truckers will have significant pricing power and rates will rise sharply. On average, labor and equipment supply constraints in 2012 will increase truckload rates 5-10% over 2010 levels, with larger increases occurring in lanes that face no intermodal competition. Increased diesel fuel prices could increase truckload rates up to 10% in 2012.

- Given these factors, the outlook for the next two years, 2011-2012, is for a continued steady decline of the highway share of medium-to-long-haul shipments. With increased constraints on driver supply, the amount of longer-haul over-the-road truckload shipments may even decline, notwithstanding a continued U.S. economic recovery.
- Shippers are therefore advised to be alert to impending truck shortages and rate hikes, particularly during periods of peak seasonal freight movement. Longer term, shippers should consider orienting their distribution networks to maximize their rail intermodal use, where no comparable supply constraints exist.

### **5.1.2 Trends in U.S. Containerized Trade**

The international container trade, particularly imports, is by far the fastest-growing driver of freight transportation activity in the U.S. In terms of tonnage, the international container trade (there is a moderate-size domestic container trade, mainly between the mainland U.S. and Alaska, Hawaii and U.S. territories) accounts for approximately 3% of the U.S. freight market. However, when measured in ton-miles, it is nearly 12%.

A substantial portion of the freight traffic moving in the U.S. that is classified as “domestic” is actually imports moving from import distribution centers near the inbound ocean ports to second-tier warehouses or final destinations. A significant portion of export freight likewise moves as “domestic” from interior U.S. origins to ports for loading into containers to be shipped to overseas destinations.

The international container trades to and from the U.S. averaged 5.3% annual growth over the past 15 years, with imports growing 6.4% annually and exports growing 3.8% annually. The total international container trade grew six to seven times the annual growth rate of approximately 0.8% for domestic freight over the same period. Although container trade growth is likely to considerably slow over the next several decades, it will still be significantly faster than domestic trade growth. Developments in international trade will also continue to play an increasing role in shaping the pattern of freight flows and logistics networks in the U.S.

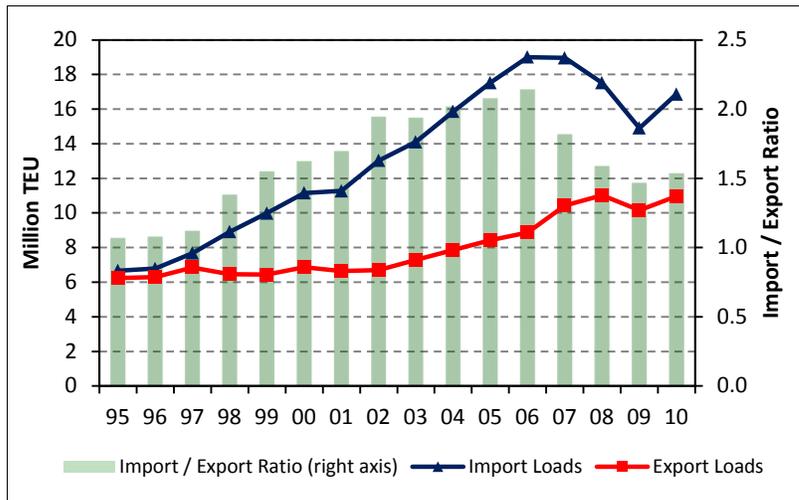
The following sections describe the container trade, its size, geographic distribution, commodity composition and growth; the major trends in the trade and their effects on transportation and distribution patterns in the U.S.; and the impact on the Midwest and Chicago area.

**Growth of Containerized Imports and Exports**

In 2010, the most recent full year that data is available, containerized imports into the U.S. from foreign overseas ports totaled 16.9 million twenty-foot equivalent units. Exports from the U.S. to foreign destinations totaled 11.0 million twenty-foot equivalent units.

Domestic shipments between the U.S. Mainland and Alaska, Hawaii, and U.S. territories totaled 0.6 million twenty-foot equivalent units.

**Figure 5-4: Growth of U.S. Containerized Import and Export Loads, 1995-2010**



Source: JOC Piers and TranSystems' estimates

Figure 5-4 shows the fifteen-year trend from 1995 to 2010 in containerized imports and exports. Imports grew 6.4% annually during this period, far outpacing export's 3.8% annual growth.

Given this growth disparity, the ratio of import to export twenty-foot equivalent units increased sharply from 1.07 in 1995 to a high of 2.14 in 2006. In 2010, this ratio was 1.54. This import/export imbalance has had major implications for routing domestic and international loads in the U.S.

The relatively rapid growth of imports over this period is mainly due to unprecedented growth in goods consumption in the U.S. and an acceleration of the trend toward off-shoring production of both consumer goods and related capital goods. After falling almost continuously from the end of World War II, the share of goods in total U.S. consumption began to rise in the early 1990s and continued to gradually increase up to 2007. The housing market boom of 2002-2007 produced a "wealth effect" on consumption from rising home values, particularly for such goods as Building Materials and Furniture, which were increasingly outsourced and produced overseas.

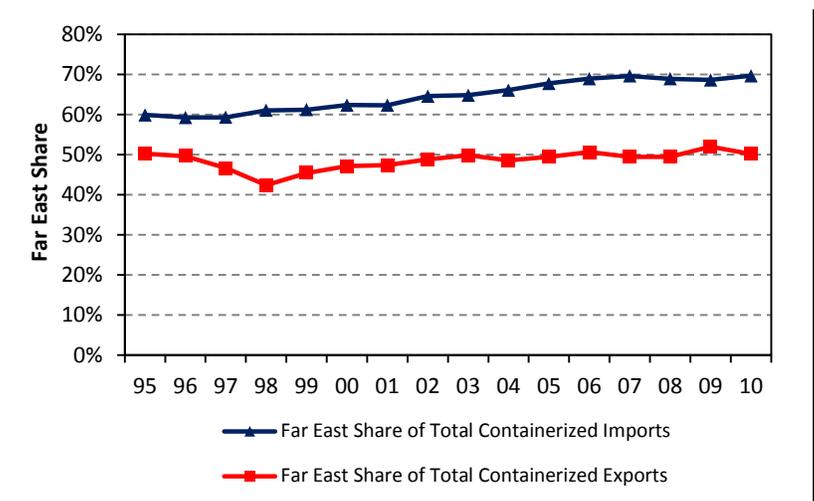
When the housing boom burst, containerized imports reversed course. They slightly declined in 2007 and then rapidly declined 7.9% in 2008 and 14.9% in 2009. Even with a 13.1% increase in 2010, imports were still 11.3% below their peak annual volume in 2006.

Exports grew at a substantially lower rate than imports over the last 15 years, but performed more robustly than imports since 2006, as shown in Figure 5-4. A sharp decline in the U.S. dollar relative to most major overseas currencies and continued strong growth in overseas production and incomes have recently led to their recent surge.

Far Eastern countries, particularly China have increasingly dominated the sourcing of U.S. imported merchandise. Figure 5-5 shows that the share of Far Eastern imports increased from 59.9% in 1995 to 69.7% in 2010.

The Far Eastern share of U.S. exports was essentially the same, at 50.1% in 1995 and 2010. Since imports are still the “heavy leg” in U.S. container trades, the steady shift to sourcing from the Far East tended to increase the role of West Coast port gateways.

**Figure 5-5: Far East as a Share of U.S. Containerized Imports and Exports, 1995-2010**



Source: JOC Piers and TranSystems’ estimates

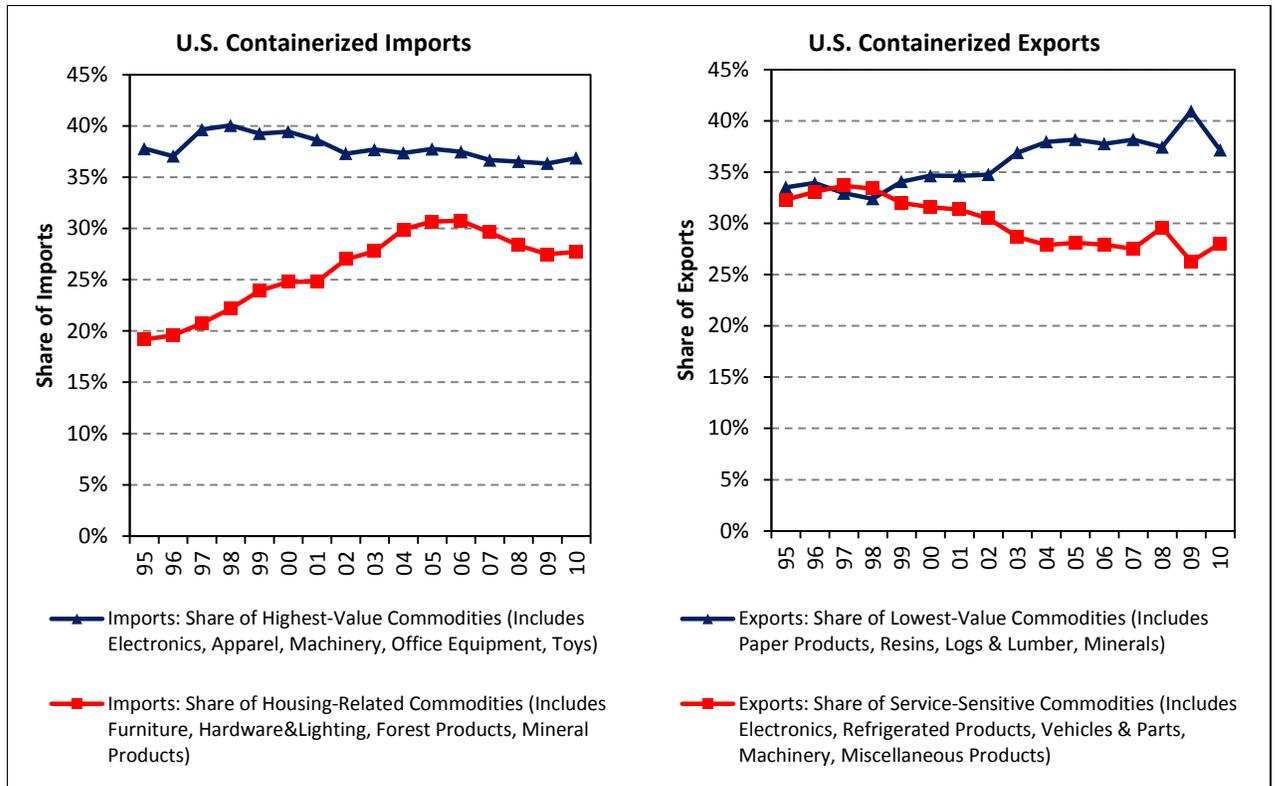
### **The Container Trade’s Impact on the U.S. Supply Chain**

The container trade’s effects on transportation and logistics in the continental U.S. depends on the particular commodities moved. Imports are primarily higher-value, light-density consumer goods and related capital or semi-finished goods, which are mainly sensitive to trends in U.S. real disposable income, industrial production, and wealth. By contrast, exports tend to be lower-value raw or semi-finished products, sensitive to the value of the U.S. dollar relative to other currencies and overseas economic growth. Trends in commodity composition are shown for containerized imports and exports in Figure 5-6.

From 1995 to 2006, commodities most closely related to housing increased their share of total imports from 14.8% to 24.1%. In the 2007-2009 downturn, their share of total imports fell rapidly and stayed well below their peak share during the 2010 recovery. The highest-value imports, such as electronics, apparel, and industrial machinery remained remarkably constant over the entire 1995-2010 period, falling only slightly from 37.8% in 1995 to 36.9% in 2010.

Lowest-value commodities, such as forest products and recycled material, increased their market share from 33.5% in 1995 to 41.0% in 2010, although certain higher-value commodities like vehicles and parts have grown significantly. This was largely due to increased demand from China.

**Figure 5-6: Trends in the Composition of U.S. Containerized Imports and Exports, 1995-2010**



Source: JOC PIERS and TranSystems estimates

Since containerized imports are oriented toward consumer goods, their geographic distribution ultimately resembles the U.S. population distribution. Exports, meanwhile, tend to originate in the coastal areas near container ports. This mismatch between export origin and import destination leads shippers to use domestic freight to reposition containers carrying imported merchandise to inland destinations back to the port of entry.

Intermodal rail service primarily serves interior destinations like the Midwest from the port of discharge. Shippers are increasingly unloading 20-foot and 40-foot international containers at sites close to the discharge ports and reloading their merchandise typically into 53-foot high-cube domestic containers. This transfer is done at special-purpose transloading facilities or, more frequently, at import distribution centers near the discharge ports. Two 53-foot domestic containers can typically absorb the contents of three 40-foot international containers to generate significant savings on inland line haul costs.

The 53-footer can also improve the inland shipment’s “round-trip” economics, which shippers can more easily reposition back to the port area loaded with domestic freight. By 2010, the major California ports handling containerized imports—Los Angeles, Long Beach and Oakland—were shipping approximately 55% of imported merchandise to inland destinations via high-cube domestic containers. This trend increases the importance of import distribution centers near major containership ports.

It is also important to note that the transfer of imported merchandise from an international container to a domestic unit, whether in a straight transload or via an import distribution center, changes the designation

of the shipment from “international” to “domestic,” although the merchandise often has not significantly changed. This is seen in a high percentage of so-called domestic freight coming in from a coastal origin to an inland metro area such as Chicago that is labeled “Warehouse and Distribution” freight. Most of this is essentially imported merchandise.

### ***All-Water versus Intermodal Service for Far East Imports***

The West Coast ports have lost their share of the Far Eastern trade over the last 10-15 years, despite their proximity to Far Eastern markets and the widespread availability of intermodal rail service to interior destinations as well as the Gulf and East Coasts. Their share of Far Eastern containerized imports went from a high of 85.1% in 1997 down to 71.4% in 2009.

Geographically, this shift has mainly affected points along the U.S. Eastern Seaboard. Starting around 1997, the rapid growth of Far Eastern imports produced a series of intermodal service failures on the West Coast, particularly at the largest port complex, L.A./Long Beach. These failures accelerated the shift, already underway, of major retailers such as Walmart, Target, and Home Depot to diversify their import distribution away from too much reliance on West Coast port gateways. Ocean carriers expanded capacity and improved their services to East Coast and Gulf Coast ports to accommodate these shifts. The share of Far Eastern imports moving in “all-water” service through the Panama and Suez Canals to East Coast ports (and, beginning in 2004, Gulf Coast ports) mirrored the declining West Coast share.

The trend toward increased share of “all-water” service halted in 2010, when the West Coast share of Far Eastern imports increased slightly to 72.1% versus a low of 71.4% in 2009. It is highly likely that the “all-water” share of Far Eastern imports may stop increasing and even decline going forward. There are several reasons for this, and international distribution to the Midwest and other interior locations is a key determinant.

- First, shippers have already achieved major gains in the “all-water” share of Far Eastern imports. In 2000, for example, approximately 60% of Far Eastern imports going to destinations in the Northeastern U.S. were shipped via intermodal service over the West Coast. However, this share fell to approximately 7% in 2010, meaning that 93% of these shipments were entering the U.S. via East Coast ports. Similar conditions prevailed in the Southeast.
- Secondly, the Eastern Seaboard region, which has the highest potential for “all-water” service, is growing relatively slowly as U.S. population and industry gradually move in a southwesterly direction.
- Finally, the railroads have sharply improved their intermodal service performance off the West Coast. At the same time, “all-water” service ocean carriers have shifted to so-called “slow steaming” to reduce fuel costs and mitigate air pollution.
- Even if “all-water” service maintains its very high share of Eastern Seaboard destinations, it is unlikely that “all-water” service could be substituted for intermodal service from the Far East to the U.S. interior, particularly the Midwest. The routings via the Panama Canal to the interior are too circuitous to make sense. The transit time differential between “all-water” service intermodal services off the West Coast would be even greater than for shipments to the Eastern Seaboard.

### 5.1.3 Intermodal Rail Trends

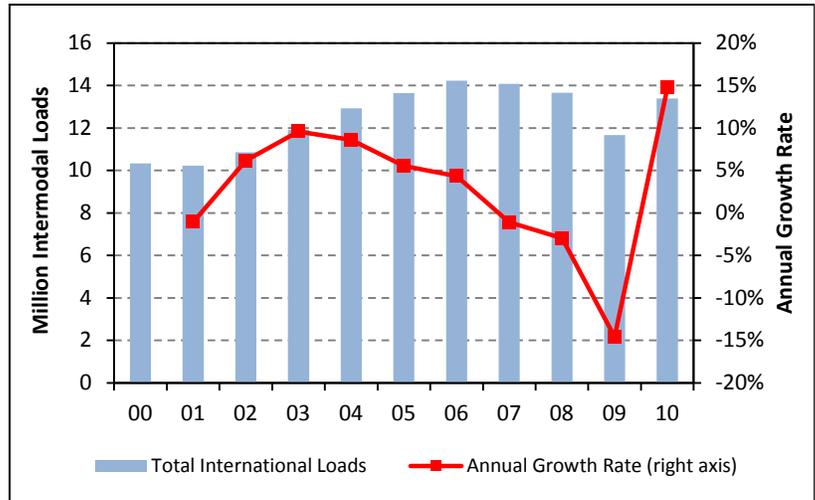
Intermodal rail volumes in the U.S. and Canada have annually grown 2.6% over the last decade, as shown in Figure 5-7. Like most segments of the U.S. freight market, intermodal rail volume in the most recent full year, 2010, is still well below its peak. The intermodal 2010 volume, at 13.4 million loads, is still 5.9% below the peak volume of 14.2 million loads in 2006. Exhibit I also shows that intermodal growth has been volatile over this period, particularly from 2007 to 2010.

Intermodal growth has also varied by equipment type. As shown in Figure 5-8, use of standard truck trailers in intermodal service declined sharply from 2000-2010 at a -5.0% annual rate, while the share of international and domestic container loads increased at a 5.0% annual rate.

Exhibit II also shows that the fastest-growing containers are the 48- and 53-foot high-cube units, growing at a 7.4% annual rate. With the percentage of high-cube domestic containers rapidly growing (with 53-footers rapidly replacing 48-footers), containerized merchandise is growing at an even faster rate.

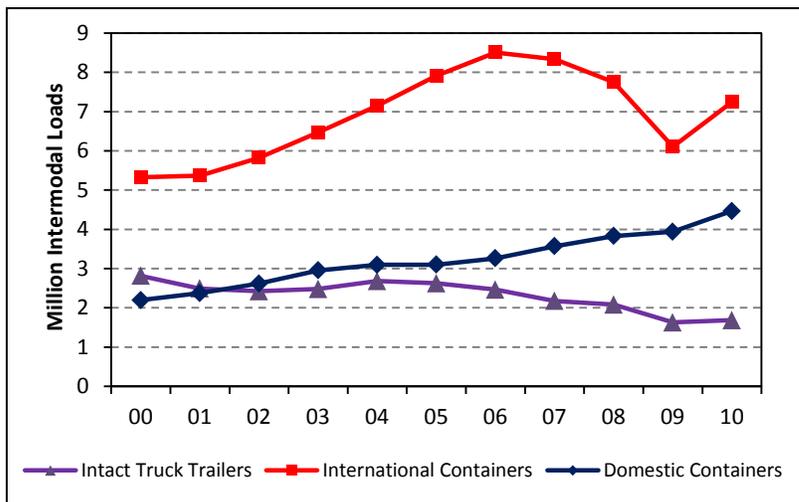
When adjusted for container size, the study team estimates that the growth of containerized merchandise moving via intermodal service grew at a 5.6% annual rate from 2000-2010, which is about twice the growth rate of the U.S. and Canadian economies (real gross domestic product) during this period.

**Figure 5-7: Annual North America Intermodal Rail Volume, 2000 to 2010**



Source: IANA

**Figure 5-8: Growth of North America Intermodal Service by Equipment Type, 2000 to 2010**



Source: IANA

The fastest-growing intermodal markets are long length-of-haul (1500+ miles) east-west traffic lanes, particularly those associated with containerized imports moving through ports on the West Coast to points east of the Rockies. Container volumes on these lanes have been growing two to three times as fast as the real growth of the U.S./Canadian economies, particularly with a growing dominant share of the Far East as a

source of merchandise imports. Since 2008, domestic intermodal volumes have also gained an increased share of medium-haul (500-1,500 mile) traffic lanes at the expense of over-the-road truck service.

The growth of international container volume is the principal driver of rail intermodal growth. Loads arising from international imports or exports (mostly imports) account for approximately 60% of total intermodal loads. The share of international container volume (in total intermodal volume) is even greater when expressed in container-miles or ton-miles, because international loads are typically moving in the long length-of-haul traffic lanes. International container volume accounts for approximately 75% of total intermodal volume in container (or trailer)-miles. However, intermodal container volume has recently made significant gains in the domestic freight market for the following reasons:

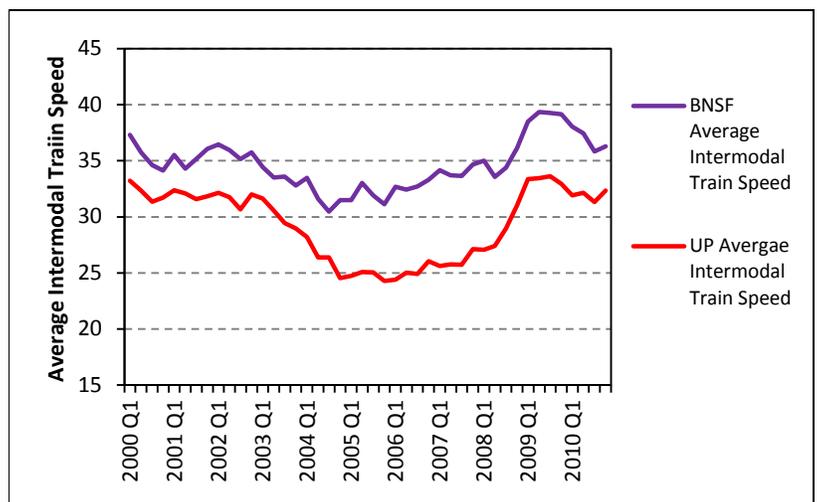
- Operating costs of over-the-road truck services rapidly rose relative to rail and are expected to increase further, given substantial increases in diesel fuel prices and intensifying truck driver shortages. These labor shortages are particularly prevalent in medium- and long-haul traffic lanes and could create spot shortages of truck service, particularly in peak months.
- Rail service (e.g., transit speed and reliability, terminal dwell times, service frequency, and coverage of origin-destination pairs) continues to improve due to major rail infrastructure investments (e.g. expanded terminal facilities and improved rights-of-way).

As an example of improved rail service, Figure 5-9 presents quarterly data on average intermodal linehaul speeds, in miles-per-hour (mph), from the first quarter of 2000 to the fourth quarter of 2010 for the Burlington Northern Santa Fe and the Union Pacific. The Burlington Northern Santa Fe's average intermodal train speed increased from a low of 30.5 mph in third quarter 2004 to a high of 39.3 mph in the second quarter of 2009. Light traffic volume positively affected the latter quarter, which was near the trough of the recent recession. However, after a substantial recovery in traffic by the fourth quarter of 2010, the Burlington Northern Santa Fe's average speed was 36.3 mph or 19% faster than the low point.

Similarly, the Union Pacific's average speed increased from a low of 24.3 mph in fourth quarter 2005 to a high of 33.6 mph in third quarter 2009 and most recently at 32.4 mph in fourth quarter 2010, or a 33% improvement over the worst quarter. The Burlington Northern Santa Fe and the Union Pacific's transit speed

improvements by the fourth quarter of 2010 were achieved with substantially greater traffic volumes than in their periods of slowest intermodal train speeds.

**Figure 5-9: Quarterly Average Intermodal Train Speeds for North American Class I Railroads, 2000-2010**



Source: IANA

### **Containers and Transloading**

As shown in Figure 5-8, the container is rapidly becoming the dominant unit for intermodal transportation in the U.S. and Canada. Higher-capacity containers are increasing their share of both international and domestic intermodal shipments. In the first year with available data, 2000, intact highway trailers accounted for 27.2% of total intermodal moves. Detached international (20-, 40- and 45-foot) and domestic (48- and 53-foot) containers accounted for the other 72.8%. By 2010, the share of intact highway trailers had fallen more than half to 12.6% of total intermodal moves.

Since 2000, container use has dramatically grown with the relatively rapid growth of international intermodal shipments and the increasing dominance of double-stack service. The use of higher-cube domestic containers, particularly 53-foot units, has rapidly grown. Transloading has the following advantages:

- It saves on rail line haul and destination drayage costs;
- It enables more efficient repositioning of units with loads back to container port areas; and
- It allows importers to re-allocate merchandise by destination at a point in time only five to ten days before scheduled delivery, thus providing a better match between supply and consumer demand.

By 2010, containers accounted for 87.4% of intermodal loads (and an even higher share of intermodal ton-miles). The share of 53-foot containers was about 31% in 2010, up from 8% in 2000.

### **West Coast Intermodal versus All-Water and East Coast Intermodal**

- As noted in an earlier section on the international container trade, the change in share of West Coast discharge versus East Coast or Gulf Coast discharge of containerized import cargo has affected the growth in international intermodal volume.
- The West Coast share of imports has tended to increase, due to the growing dominance of Asia, particularly China, as the source of containerized merchandise. Approximately 60% of Asia-origin cargo discharged at West Coast ports makes its way (either as intact international containers or trans-loaded domestic containers) to destinations east of the Rocky Mountains. Nearly all of this traffic moves via intermodal.
- However, the extraordinarily rapid year-in/year-out growth of the Asia trade beginning in the late 1990s led to a deterioration of intermodal service off the West Coast, and a steady shift to alternative routes from Asia via the Panama and Suez Canals to East and Gulf Coast locations. The share of such all-water service from Asia increased from a low of 14.8% in 1997 to a high of 26.7% in 2009. Destinations on the Eastern Seaboard within 200 miles from the East Coast shifted almost entirely to all-water service.
- At the same time, import cargo via East Coast ports from Europe or via the Suez Canal to destinations in the Midwest shifted from highway truck to intermodal. Eastern railroads like CSX's National Gateway and Norfolk Southern's Heartland Corridor instituted major initiatives to enhance this service.
- Beginning in mid-2009, the share of Asia-origin import cargo discharging on the West Coast began to rise again. The West Coast share increased from 71.8% in 2009 to 73.1% in 2010. The main reasons for this shift appear to be (1) the exhaustion of opportunities for expansion of all-water

service to destinations on the Eastern Seaboard, and (2) improvements in intermodal service relative to all-water service. These improvements include increases in intermodal transit speeds and the advent of “slow steaming” in all-water service vessel deployments.

- The re-emergence of the West Coast advantage appears to have significant staying power. The all-water service share is not likely to exceed its 2009 peak, even after the Panama Canal’s expansion in 2014-15 increases capacity and potentially lowers all-water service unit costs.

### Implications for the Midwest

The Midwest share of total North American intermodal traffic has generally increased over the last decade. Inbound loads with imported merchandise has primarily driven this increased share of inbound intermodal volume from the West Coast.

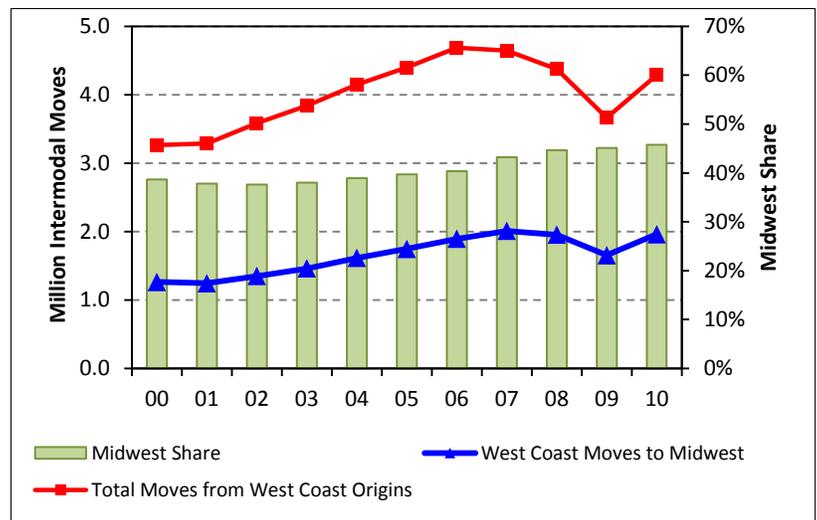
As shown in Figure 5-10, Midwest inbound volume increased from 2.55 million loads in 2000 to 3.53 million loads in 2010. This is a compound annual growth rate of 3.3%, well above the 2.6% overall North America intermodal growth rate for 2000-2010.

For shipments originating on the West Coast, most of which are imported merchandise, Midwest destination volume increased at a still faster 4.5% annual rate, and the Midwest share of intermodal shipments originating on the West Coast increased from 38.7% in 2000 to 45.8% in 2010.

The composition of intermodal loads into the Midwest has been shifting more towards high-cube 53-foot domestic containers and a lower percentage of 20-, 40- and 45-foot international containers. In the West Coast-to-Midwest intermodal market, for example, the share of 48- and 53-foot container loads increased from a low of 18.6% in 2005 to 30.0% in 2010. The increased share of the high-cube domestic container suggests that import containers moving through West Coast ports with merchandise ultimately bound for the Midwest are increasingly being unloaded on the West Coast with their contents transferred to high-cube domestic containers. Therefore, an increasing percentage of this import merchandise has already been through one “tier” of import distribution by the time it reaches a Midwest destination. Accounting for the higher cube of the domestic container, approximately 40% of the import merchandise coming through the West Coast to the Midwest has already been through one tier of distribution.

The remainder of inbound intermodal volume into the Midwest is domestic loads plus a relatively small amount of import loads via East Coast and Gulf Coast ports. These loads grew at a 1.9% average annual rate from 2000 to 2010, well below the 2.6% overall average North America intermodal growth rate.

**Figure 5-10: Midwest Inbound Intermodal Volume from West Coast and Share, 2000 to 2010**

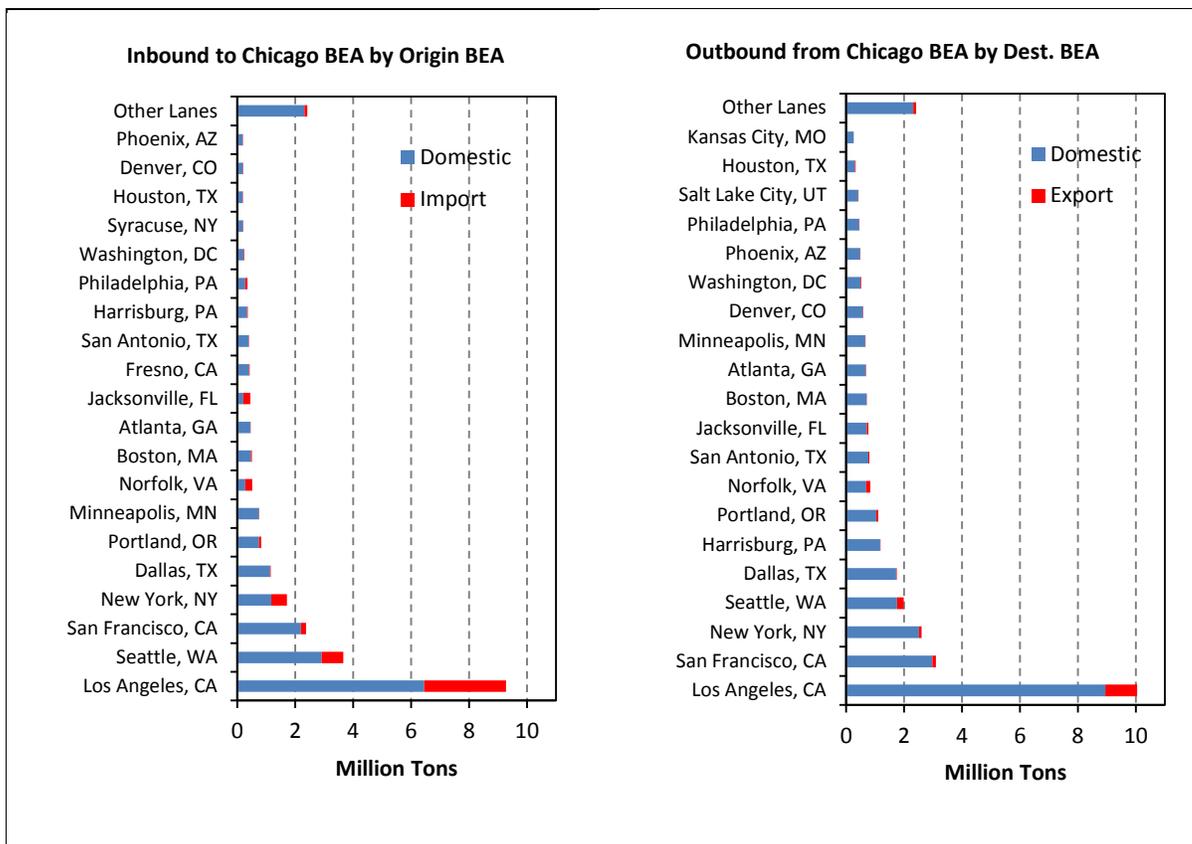


Source: IANA

Among the import loads via the East and Gulf Coast ports, an increasing percentage of the first-tier import distribution is handled near the ports.

The intermodal freight flow to and from the Chicago BEA is similar to that of the total Midwest area. Chicago currently accounts for an estimated 50-55% of total Midwest intermodal loads, although that percentage has probably declined slightly in recent years. Figure 5-11 presents estimates for 2009 of total intermodal tonnage inbound to and outbound from the Chicago BEA for 2009, how that inbound and outbound tonnage is distributed by origin and destination BEA, respectively, and the proportion of overseas (import or export) tonnage for each origin-destination pair. As shown, by far the largest intermodal lanes are inbound from and outbound to the Los Angeles BEA.

**Figure 5-11: Chicago BEA Top-20 Intermodal Rail Lanes by Cargo Tons in 2009**



Source: TranSystems derived from IHS Global Insight Transearch Data

Although only approximately 25% of inbound freight from Los Angeles is designated as “import,” this represents only those imports that are moving via Southern California ports in “thru-service” in international containers destined for plants or first-tier distribution warehouses in Chicago. As noted previously, a substantial portion of what is labeled “domestic” actually represents so-called “Warehousing and Distribution” freight that is essentially still import merchandise that has moved through an intermodal distribution center or a transload facility and will be part of second-tier distribution in Chicago. This also applies to the tonnage moving from the other West Coast BEAs, Seattle, Portland, and San Francisco.

A significant portion of “domestic” freight moving from Chicago to other BEAs, particularly on the West Coast, is actually export cargo. It will be transferred to export containers at West Coast ports and other outbound ports.

## 5.2 Chicago BEA Total Cargo

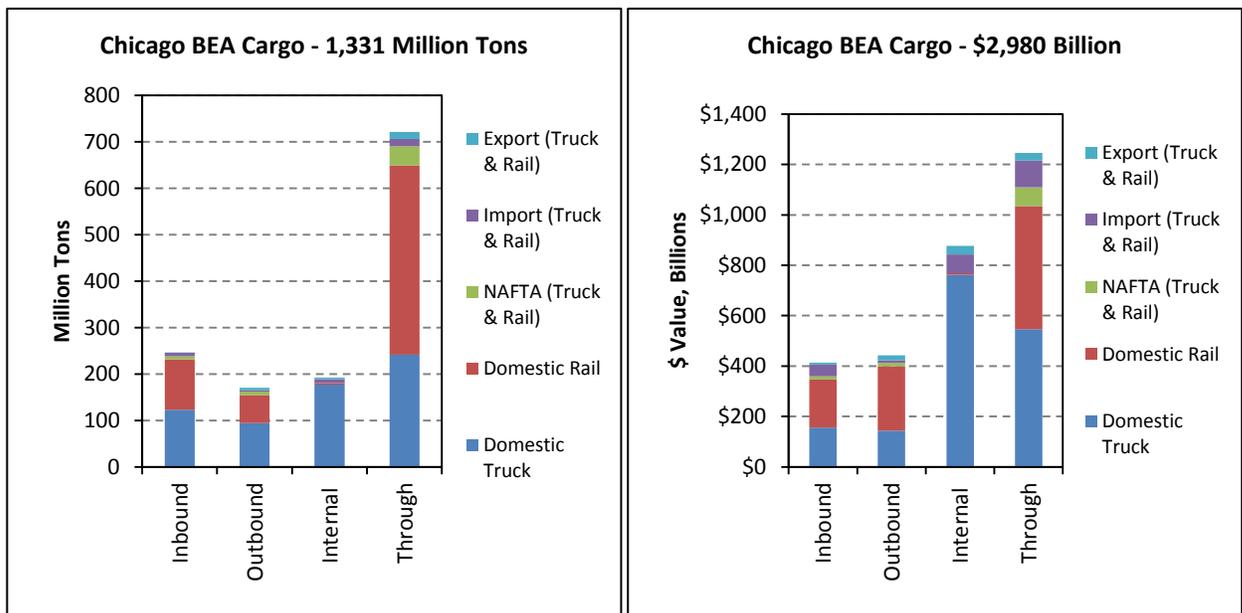
The Chicago BEA<sup>3</sup> had truck and rail cargo flows amounting to 1.3 billion tons in 2009 with an estimated value of \$2,980 billion. The total volume comprises several different directional flows (Figure 5-12) – inbound, outbound, internal (within the BEA) and through (cargo moving through but not stopping in the Chicago BEA). These flows are spread across different trades and modes – domestic truck and rail, NAFTA imports and exports by truck and rail, and non-NAFTA imports and exports by truck and rail.

The main cargo flows of interest in this report are inbound and outbound, which together amounted to 417 million tons in 2009 with an estimated value of \$856 billion, 31% of total tons, and 29% of total cargo value. These flows generate the principal demand for warehousing and logistics facilities within the Chicago BEA.

As the country’s leading inland transportation hub, significant freight volumes move through Chicago without stopping in the region – 722 million tons in 2009. Through traffic accounted for 54% of this region’s cargo but only 42% of total value, which reflects the greater share of lower value commodities in through traffic. The region also has a large volume of internal cargo movement. Nearly all this traffic is drayage of containers to and from intermodal rail yards, and truck shipments to and from warehouses within the region (e.g. deliveries from warehouses to stores).

International cargo flows (import, export, and NAFTA) amounted to 115 million tons in 2009 and are significantly smaller than total domestic flows (1,217 million tons). However, international cargo volume is understated because some of the domestic cargo is in fact international cargo that was converted to a domestic move (e.g. international containerized cargo discharged at West Coast ports and transferred into domestic containers and trailers for shipment to inland markets.)

**Figure 5-12: Chicago BEA Cargo Tons and Value in 2009**



Source: TranSystems derived from IHS Global Insight Transearch Data

When evaluating the region’s cargo, it is helpful to focus on commodities that are more suited to added-value logistics services or that undergo some form of manufacturing process. These commodities are of primary interest to Logistics Park Calumet’s development. The broadly defined “warehouse-able” commodities are those that are processed and/or have a relatively high value per metric ton. These commodities are more likely to require added-value logistics services including warehousing and distribution services. Commodity groups are identified as warehouse-able (Table 5-1) based on value per ton data, commodity characteristics, and judgments using the consultant team’s prior experience. Given the broad commodity groups in the source data, a commodity group may contain a mixture of higher value and lower value components.

**Table 5-1: Warehouse-able Commodities**

Warehouse-able Commodity Groups (Higher Value / Distribution Potential)		Other Commodity Groups (Lower Value / Distribution Potential)	
Alcoholic Beverages	Pharmaceutical Products	Agricultural Products	Petroleum Products
All Other Machinery	Plastics And Rubber	Base Metal	Rocks Stone And Sand
Base Metal Articles	Printed Materials	Cereals	Wood Products
Food Products	Textiles And Articles	Chemical Products	Waste And Scrap
Electronics	Tobacco Products	Coal	
Furniture	Transportation Equipment	Fertilizer	
Live Animals And Fish	Vehicles And Parts	Logs And Rough Lumber	
Misc Manufactured Prod		Mineral Products	

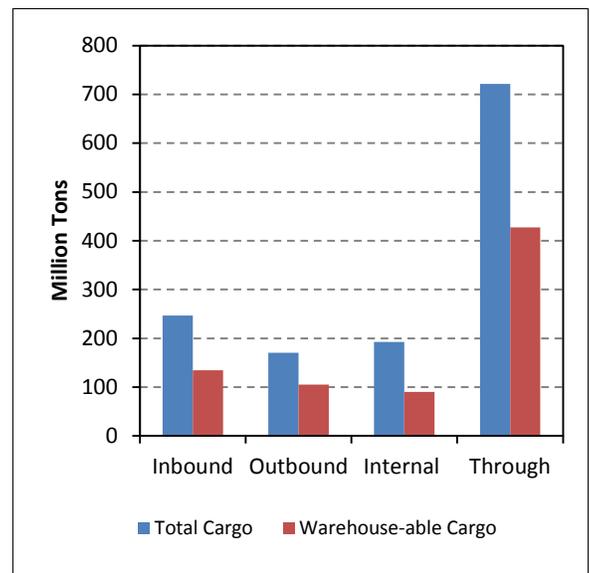
Source: TranSystems

Warehouse-able cargo was an estimated 757 million tons or 57% of total regional cargo in 2009. It accounted for approximately 95% of total cargo value, which reflects the higher value nature of warehouse-able commodities (e.g. consumer products).

The distribution of warehouse-able commodities by direction is shown in Figure 5-13. Looking at the important inbound and outbound flows, warehouse-able commodities had shares of 55% and 62% respectively.

Warehouse-able commodities are especially prominent international cargo. They accounted for 66% of NAFTA cargo, 74% of export cargo, and 87% of import cargo (Figure 5-14). The high share of imports reflects the profile of the non-NAFTA import trade; which includes containerized finished and semi-finished products imported from Asia over West Coast ports, including Prince Rupert, and shipped to the Chicago region for local consumption and regional distribution.

**Figure 5-13: Chicago BEA Cargo Tons, Total and Warehouse-able by Direction**

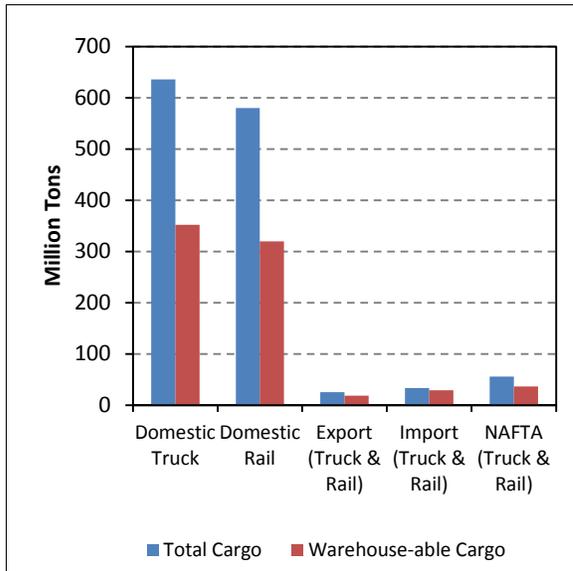


Source: IHS Global Insight Transearch Data

By contrast to international cargo, warehouse-able commodities accounted for 55% of domestic truck and rail cargo. Domestic cargo flows include large volumes of bulk commodities, such as coal, which are not suited to Logistics Park Calumet.

**Figure 5-14: Chicago BEA Cargo Tons, Total and Warehouse-able by Mode**

Further discussion of cargo flows is provided in Section 5 for truck cargo and Section 6 for rail cargo, which emphasize inbound and outbound flows.



Source: IHS Global Insight Transearch Data

### 5.3 Chicago BEA Truck Cargo

#### 5.3.1 Total

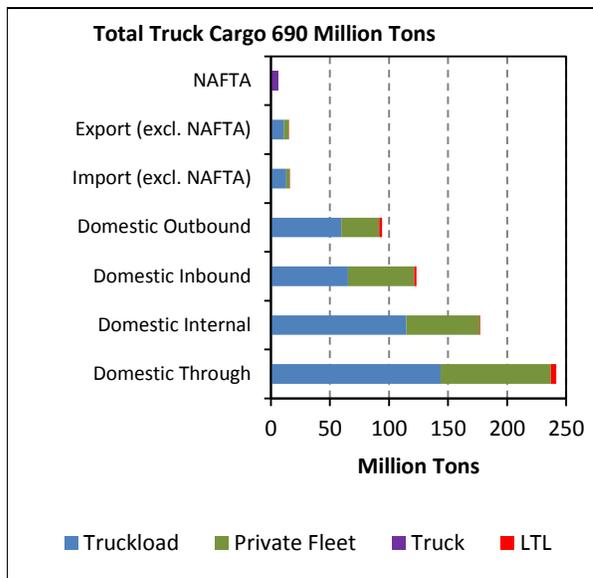
Local consumption, local industry, local and regional freight distribution, and freight movements through the Chicago BEA have generated substantial truck freight volumes. In 2009, total truck freight volumes amounted to 690 million tons with an estimated value of \$1,846 billion. They fell into the following flows:

- Domestic
  - Inbound to and outbound from the region,
  - Internal (between locations within the region), and
  - Through the region.
- Imports and exports (NAFTA and non-NAFTA).

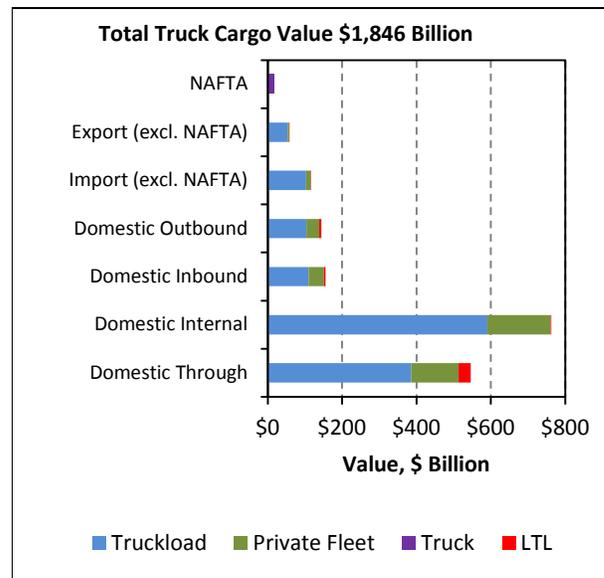
The primary cargo flows of interest are those that begin or end in the Chicago BEA because they generate demand for warehousing and logistics services in the region’s industrial parks. Figure 5-15 Figure 5-16 respectively show tonnage and value by truck cargo distribution flows. The largest segment by tonnage is domestic through freight with 35% of total tons and 30% of total value. This is followed by internal (26% and 41%), domestic inbound (18% and 8%), and domestic outbound (14% and 8%) freight.

International trade (overseas imports and exports, and NAFTA) accounts for 8% of tons and 13% of value; its larger value share is due to higher-value commodities present in the import trade. The international component of regional truck freight is understated because a substantial amount of import cargo and some export cargo are captured within the domestic flows.

**Figure 5-15: Chicago BEA Truck Cargo, Tons**



**Figure 5-16: Chicago BEA Truck Cargo, Value**



Source: TranSystems derived from IHS Global Insight Transearch Data Source: TranSystems derived from IHS Global Insight Transearch Data

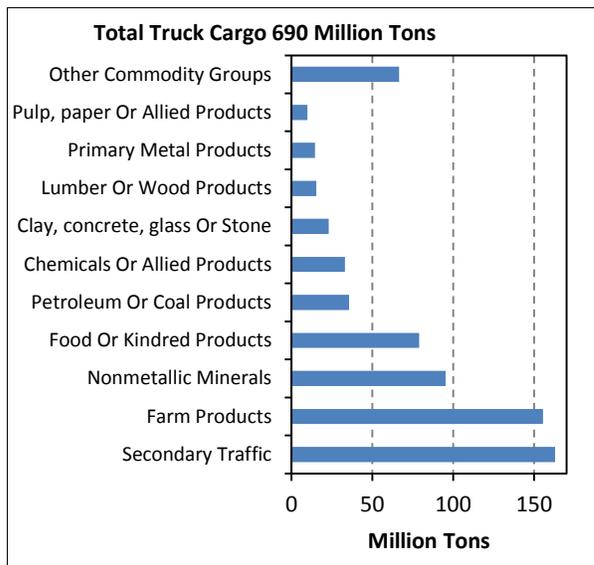
Truck cargo falls into several broad truck transportation sectors (Figure 5-15 above) – truckload, private fleet, truck, and less-than-truckload. Private fleet involves freight that private in-house truck fleets (e.g. those retailers operate) handle. Less-than truckload is a relatively specialist sector involving high value, time sensitive, and/or small freight volume.

In the case of international trade, NAFTA cargo is classified under a general “Truck” category; commercial truckload service largely moves this cargo. Truckload and private fleets move most truck cargo, with respective shares of 59% and 36% of total truck cargo in 2009. The truckload share is highest in the international truck cargo sector – up to 86% of total cargo (assuming all the NAFTA cargo moving by “Truck” is classified as Truckload).

The consultant team has provided a regional truck cargo profile by commodity group for domestic and international cargo in all directions. (Please see, Figure 5-17.) The largest commodity group is Secondary Traffic, which amounted to 163 million tons or 24% of the region’s truck cargo in 2009. This commodity group comprises Secondary Traffic related to warehouse and distribution centers (e.g. deliveries of consumer products from warehouses to stores), rail intermodal drayage to and from rail intermodal yards in the Chicago area, and a small volume of cargo drayage to and from the airports. Farm Products (23%) include grains, livestock, fruits and vegetables, and other agricultural products. Nonmetallic Minerals (14%) is large broken stone, gravel and sand. Food or Kindred Products (11%) include a blend of intermediary products for further processing and final products. Examples are animal by-products, pet food, fresh/chilled/frozen meat, soft drinks and mineral water, and canned fruits and vegetables.

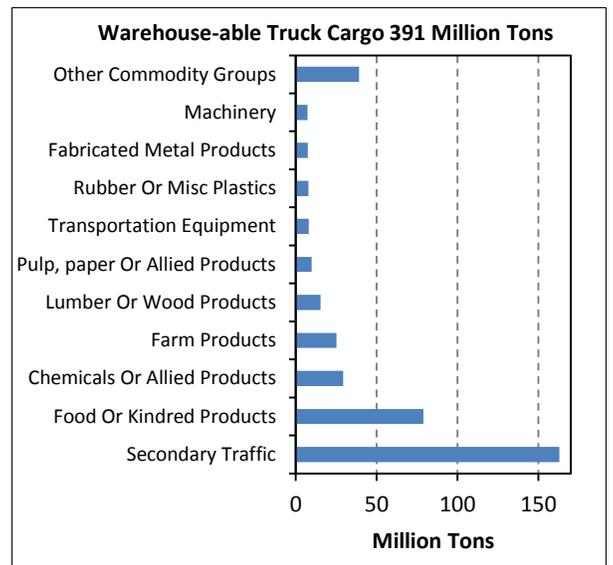
This commodity ranking shifts when a filter is applied to identify the warehouse-able commodities (i.e., those suited to warehousing and logistics services) (Please see, background discussion in Section 2.4.) Secondary Traffic remains the top commodity group (Figure 5-18) but Farm Products falls from second to fourth, and several other bulk-focused commodity groups drop out of the top ten (e.g. Nonmetallic Minerals, Petroleum or Coal Products, and Clay, concrete, glass or Stone). The second and third ranked commodity groups are Food or Kindred Products and Chemicals or Allied Products. Further analysis of commodities is provided in the discussion of domestic and international flows by direction (inbound, outbound, etc.) presented below.

**Figure 5-17: Chicago BEA Truck Cargo, Top Ten Commodity Groups**



Source: TranSystems derived from IHS Global Insight Transearch Data

**Figure 5-18: Chicago BEA Truck Cargo, Top Ten Warehouse-able Commodity Groups**



Source: TranSystems derived from IHS Global Insight Transearch Data

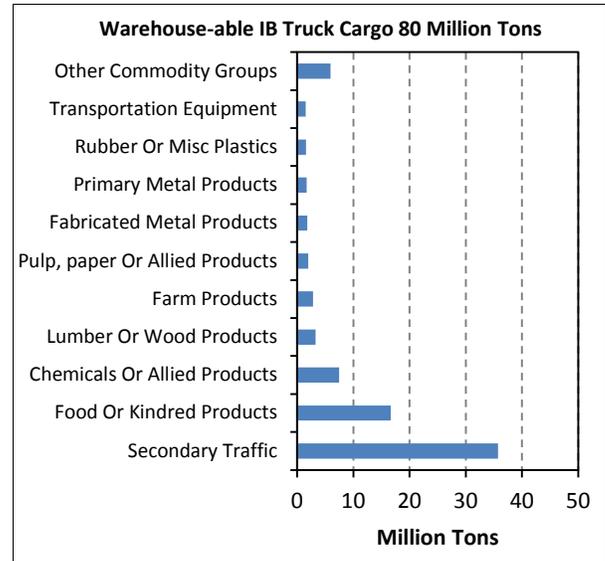
### 5.3.2 Domestic Inbound

The Chicago BEA had inbound truck cargo of 123 million tons in 2009 with an estimated value of \$156 billion. Approximately 80 million tons (65%) with a value of \$146 billion (93%) was classified as warehouse-able cargo.

The consultant team has provided a breakdown of warehouse-able cargo by commodity group (STCC2 code<sup>4</sup>) in Figure 5-19. The largest inbound commodity group handled by truck is Secondary Traffic; 93% of which is Warehouse and Distribution Center related traffic; the remainder is mostly drayage to intermodal rail ramps.

Further refinement of inbound truck commodities is provided in Table 5-2, which shows more specific commodity types (STCC4) and excludes the large Secondary Traffic commodity group. These top 25 inbound warehouse-able commodities amounted to 23 million tons in 2009. Commodities within the Food or Kindred Products and Farm Products sectors accounted for almost 50% of this tonnage.

**Figure 5-19: Chicago BEA Inbound Truck Cargo, Top 10 Warehouse-able Commodity Groups**



Source: TranSystems derived from IHS Global Insight Transearch Data

**Table 5-2: Chicago BEA Inbound Truck Cargo, Top 25 Warehouse-able Commodities, 2009 (excl. Secondary Traffic)**

Commodity (STCC4)	Inbound 2009 Million Tons	Commodity (STCC4)	Inbound 2009 Million Tons
Misc Industrial Organic Chemicals	3.85	Canned Fruits, Vegetables, Etc.	0.63
Soft Drinks or Mineral Water	2.24	Wet Corn Milling or Milo	0.63
Misc Food Preparations, Nec	1.66	Newspapers	0.59
Dairy Farm Products	1.34	Malt Liquors	0.58
Misc Plastic Products	1.33	Misc Indus Inorganic Chemicals	0.53
Processed Milk	1.06	Misc Metal Work	0.51
Primary Forest Materials	0.88	Mail and Express Traffic	0.49
Bread or Other Bakery Prod	0.86	Deciduous Fruits	0.48
Lumber or Dimension Stock	0.86	Frozen Fruit, Veg or Juice	0.48
Fiber, Paper or Pulpboard	0.79	Misc Printed Matter	0.45
Flour or Other Grain Mill Products	0.73	Motor Vehicles	0.43
Prepared or Canned Feed	0.69	Misc Sawmill or Planing Mill	0.43
Fertilizers	0.65	<b>Total Top 25</b>	<b>23.16</b>

Source: TranSystems derived from IHS Global Insight Transearch Data

<sup>4</sup> STCC – Standard Transportation Commodity Code

### 5.3.3 Domestic Outbound

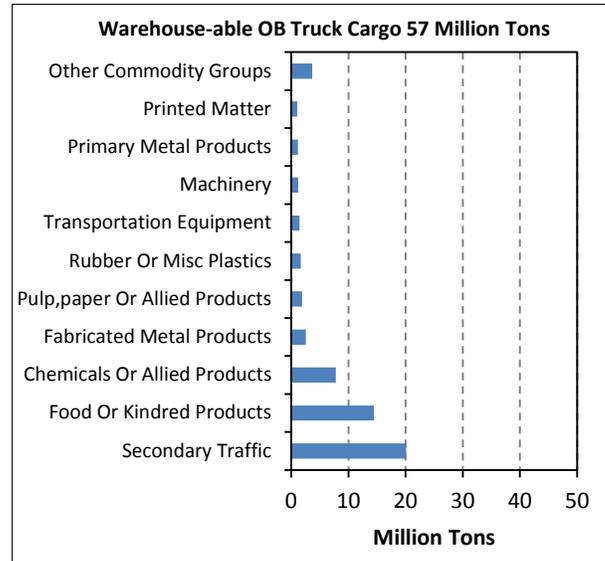
The Chicago BEA had outbound truck cargo of 94 million tons in 2009 with an estimated value of \$144 billion. Approximately 57 million tons (61%) was classified as warehouse-able cargo. It had a value of \$133 billion (92%).

A breakdown of warehouse-able cargo by commodity group (STCC2) is provided in Figure 5-20. Secondary Traffic is the largest inbound commodity group handled by truck; 94% of which is Warehouse and Distribution Center related traffic. The remainder is mostly drayage to and from intermodal rail ramps.

Further refinement of the inbound truck commodities is provided in Table 5-3, which shows more specific commodity types (STCC4) and excludes the large Secondary Traffic commodity group. These top 25 outbound warehouse-able commodities amounted to 22 million tons in 2009.

Commodities within the Food or Kindred Products and Farm Products sectors accounted for 54% of this tonnage.

**Figure 5-20: Chicago BEA Outbound Truck Cargo, Top 10 Warehouse-able Commodity Groups**



Source: TranSystems derived from IHS Global Insight Transearch Data

**Table 5-3: Chicago BEA Outbound Truck Cargo, Top 25 Warehouse-able Commodities, 2009 (excl. Secondary Traffic)**

Commodity (STCC4)	Outbound 2009 Million Tons	Commodity (STCC4)	Outbound 2009 Million Tons
Misc Food Preparations, Nec	2.67	Misc Metal Work	0.61
Misc Industrial Organic Chemicals	2.62	Motor Vehicles	0.58
Misc Plastic Products	1.46	Frozen Specialties	0.57
Soft Drinks or Mineral Water	1.18	Bread or Other Bakery Prod	0.57
Processed Milk	1.15	Cosmetics, perfumes, Etc.	0.54
Flour or Other Grain Mill Products	0.99	Drugs	0.53
Wet Corn Milling or Milo	0.96	Containers or Boxes, paper	0.51
Candy or Other Confectionery	0.78	Prepared or Canned Feed	0.50
Soap or Other Detergents	0.77	Paints, Lacquers, Etc.	0.50
Canned Fruits, vegetables, Etc.	0.67	Misc Indus Inorganic Chemicals	0.49
Cereal Preparations	0.62	Soybean Oil or By-products	0.49
Plastic Material or Synth Fibers	0.62	Dairy Farm Products	0.48
Fertilizers	0.62	<b>Total Top 25</b>	<b>21.49</b>

Source: TranSystems derived from IHS Global Insight Transearch Data

### 5.3.4 Domestic Internal and Through Cargo

The Chicago BEA had internal truck cargo of 177 million tons in 2009 with an estimated value of \$763 billion. Approximately 78 million tons (44%), valued at \$750 billion (98%) was classified as warehouse-able cargo.

Secondary Traffic amounted to 73 million tons in 2009. Ninety-three percent of this was warehouse-able cargo. Most of this traffic (68%) was intermodal drayage to and from ramps; the remainder was warehouse and distribution center traffic.

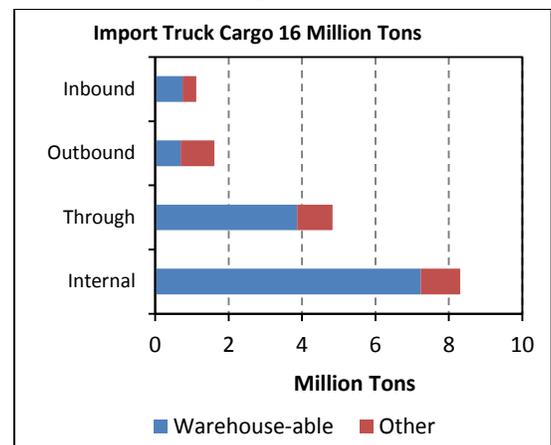
Domestic truck cargo moving through the Chicago BEA amounted to 242 million tons in 2009 with an estimated value of \$546 billion. An estimated 137 million tons (57%), valued at \$522 billion (96% of worth), was classified as warehouse-able cargo. Four commodity groups accounted for nearly 70% of this cargo – Food or Kindred Products (31%), Secondary Traffic (17%), Farm Products (14%) and Lumber or Wood Products (8%).

### 5.3.5 Non-NAFTA Imports

The Chicago BEA had 16 million tons of import cargo in 2009, excluding cross-border NAFTA trade with Canada and Mexico. As shown in Figure 5-21, this import cargo is broken down into several flows. The inbound flow is of primary interest because it is imports moving by truck directly from international cargo gateways (for example, the Port of Seattle) to the Chicago BEA. The outbound flow captures imports discharged at facilities in the Chicago BEA and trucked to destinations outside the Chicago BEA. The through flow captures import cargo passing through the Chicago BEA. Internal cargo is primarily import cargo drayage to and from rail intermodal ramps (87%).

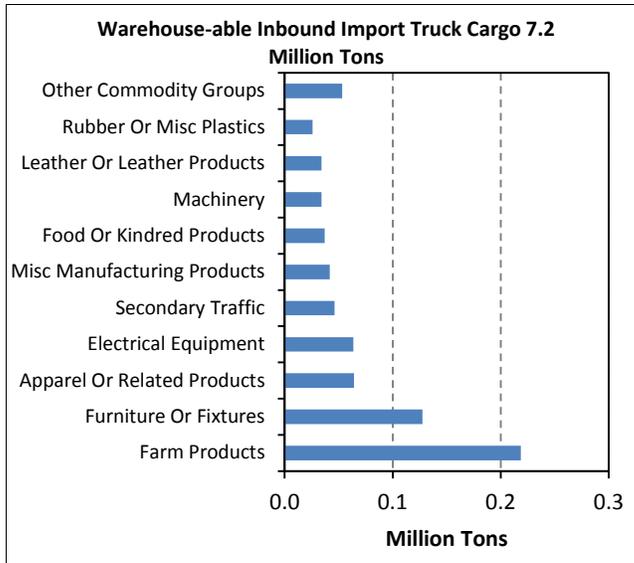
The database understates the import cargo volume that the Chicago BEA handled. A significant amount of import cargo is captured as domestic freight. The use of transloading, the transfer of cargo from marine containers to domestic equipment, has increased over the past decade because it provides shippers with greater supply chain flexibility and mitigates line haul transportation and repositioning costs. Trends in transloading activity were discussed earlier in Section 3.3.

**Figure 5-21: Chicago BEA Import Truck Cargo, 2009**



Source: TranSystems derived from IHS Global Insight Transearch Data

**Figure 5-22: Chicago BEA Inbound Import Cargo by Truck, Top 10 Warehouse-able Commodity Groups**



Source: TranSystems derived from IHS Global Insight Transearch Data

Inbound imports amounted to 1.1 million tons with an estimated value of \$5.2 billion. Warehouse-able cargo accounted for 67% of the tons and 95% of the value. A breakdown of warehouse-able cargo by commodity group (STCC2) is provided in Figure 5-22. The largest commodity groups are Farm Products, Furniture or Fixtures, Apparel or Related Products, and Electrical Equipment. Approximately 95% of the Farm Products group was Tropical Fruit imports.

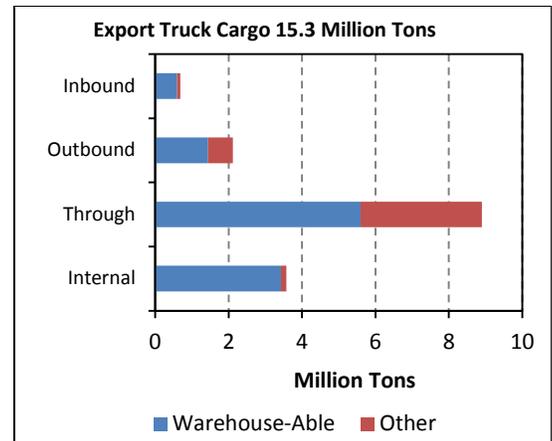
The prominence of these commodity groups reflects the composition of U.S. containerized import trade, which consumer-oriented commodities and components for final assembly manufacturing dominate.

### 5.3.6 Non-NAFTA Exports

The Chicago BEA had non-NAFTA export cargo totaling 15.3 million tons in 2009. As shown in Figure 5-23, this cargo broke down into several flows. The outbound flow is of primary interest because it is exports moving by truck directly from the Chicago BEA to international cargo gateways. The inbound flow captures export cargo trucked in from other BEAs to export facilities inside the Chicago BEA. The through flow captures export cargo passing through the Chicago BEA. Internal cargo is primarily drayage of export cargo to rail intermodal ramps (89%).

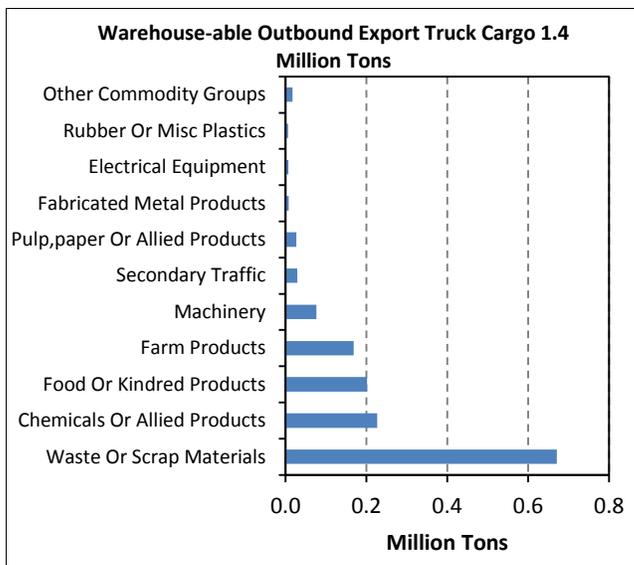
As stated earlier, the database understates the export cargo volume that the Chicago BEA handled. Export cargo is also captured as domestic freight. The use of export transloading allows shippers to use higher capacity domestic equipment for the overland move to the port of export and also overcome shortages of marine containers at inland points.

**Figure 5-23: Chicago BEA Export Truck Cargo, 2009**



Source: TranSystems derived from IHS Global Insight Transearch Data

**Figure 5-24: Chicago BEA Outbound Export Cargo by Truck, Top 10 Warehouse-able Commodity Groups**



Source: TranSystems derived from IHS Global Insight Transearch Data

Outbound exports amounted to 2.1 million tons with an estimated value of \$5.4 billion. Warehouse-able cargo accounted for 68% of the tons and 94% of the value. A breakdown of the warehouse-able cargo by commodity group (STCC2) is provided in Figure 5-24.

The largest commodity groups are Waste or Scrap Materials, Chemicals or Allied Products, Food or Kindred Products and Farm Products. The prominence of these commodity groups reflects the composition of U.S. containerized export trade, which is dominated by lower-value products. This profile is the reverse of the commodity profile for imports discussed earlier, which has predominance of higher value products.

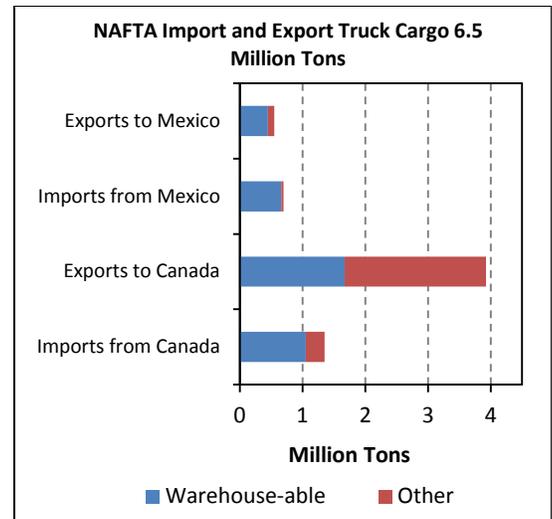
### 5.3.7 NAFTA

The Chicago BEA had total NAFTA import and export truck cargo of 6.5 million tons in 2009, with a total estimated value of \$18 billion. As shown in Figure 5-25, the largest cargo flows were with Canada – 3.9 million tons of exports and 1.4 million tons of imports. Trade with Mexico is smaller and more balanced with 0.7 million tons of imports and 0.5 million tons of exports.

The Mexican trade also has a higher percentage of warehouse-able commodities compared to trade with Canada. Warehouse-able commodities account for 95% of Mexican imports and 81% of Mexican exports. By contrast, only 78% of Canadian imports and 43% of Canadian exports are classified as warehouse-able.

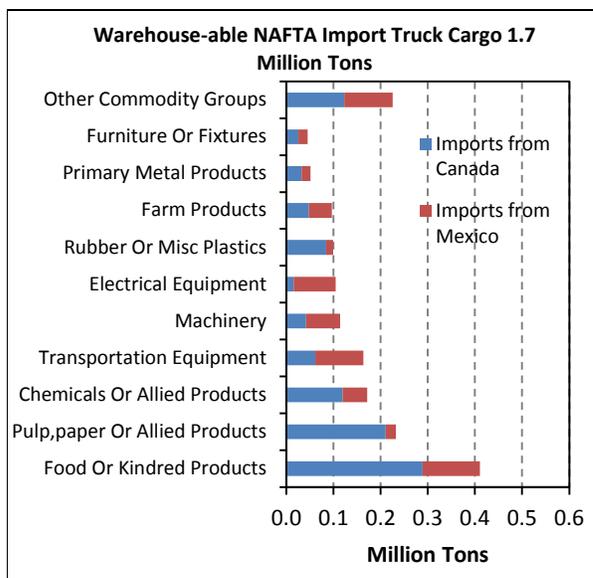
A breakdown of the warehouse-able cargo by commodity group (STCC2) is provided in Figure 5-26 for imports and Figure 5-27 for exports. Food or Kindred Products is the largest import and export commodity group. In the case of imports, Mexico has a greater presence in higher value commodities – for example, electrical equipment, machinery and transport equipment.

**Figure 5-25: Chicago BEA – NAFTA Import and Export Truck Cargo, 2009**



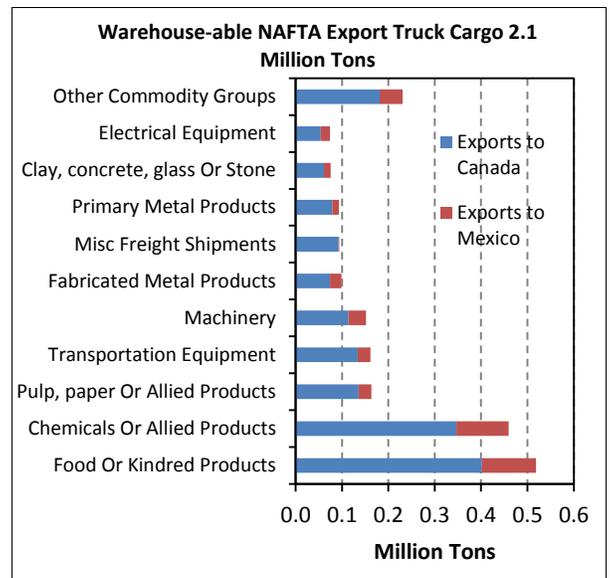
Source: TranSystems derived from IHS Global Insight Transearch Data

**Figure 5-26: Chicago BEA NAFTA Import Cargo by Truck, Top 10 Warehouse-able Commodity Groups, 2009**



Source: TranSystems derived from IHS Global Insight Transearch Data

**Figure 5-27: Chicago BEA NAFTA Export Cargo by Truck, Top 10 Warehouse-able Commodity Groups, 2009**



Source: TranSystems derived from IHS Global Insight Transearch Data

## 5.4 Chicago BEA Rail Cargo

### 5.4.1 Total

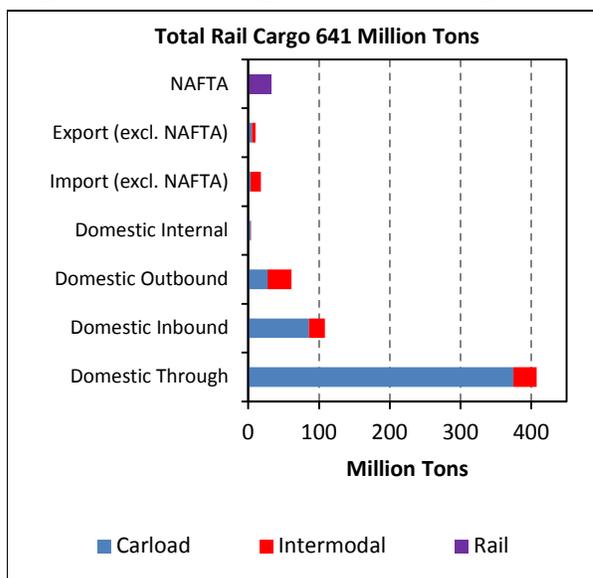
Chicago is the nation’s leading rail hub and handles substantial volumes of rail freight generated by local consumption, local industry, local and regional distribution, and movements through the Chicago area between other parts of the country. In 2009, total rail cargo amounted to 641 million tons with an estimated value of \$1,134 billion. Rail cargo falls into the following flows:

- Domestic
  - Inbound to and outbound from the region,
  - Internal (between locations within the region), and
  - Through the region.
- NAFTA and Non-NAFTA Imports and Exports
  - Inbound and outbound, and
  - Through.

The primary cargo flows of interest are those that originate or terminate in the Chicago BEA. These flows generate the demand for warehousing and logistics services in the region’s industrial parks. The rail cargo distribution by flow type is shown in Figure 5-28 and 5-29. The largest segment by tonnage is domestic through freight with 64% of total tons and 43% of total value. This is followed by domestic inbound (17% and 17%) and domestic outbound (9% and 22%) rail cargo.

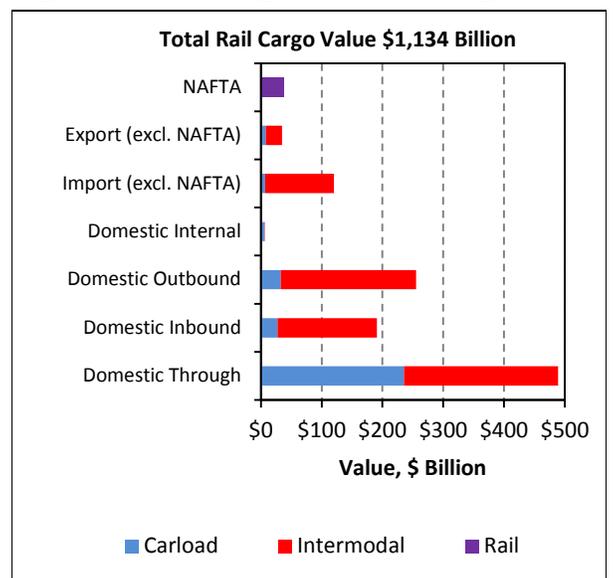
International trade (overseas imports and exports, and NAFTA) accounts for 9% of tons and 13% of value, its larger share of value is due to the higher-value commodities present in the import trade. The international rail freight component is understated because a substantial amount of import cargo and some export cargo are captured within the domestic freight flows. For example, an international import arrives at the port of discharge (for example, Los Angeles), enters an import distribution center near the port, and

**Figure 5-28: Chicago BEA Rail Cargo, Tons**



Source: TranSystems derived from IHS Global Insight Transearch Data

**Figure 5-29: Chicago BEA Rail Cargo, Value**



Source: TranSystems derived from IHS Global Insight Transearch Data

departs the distribution center as a domestic rail shipment to Chicago.

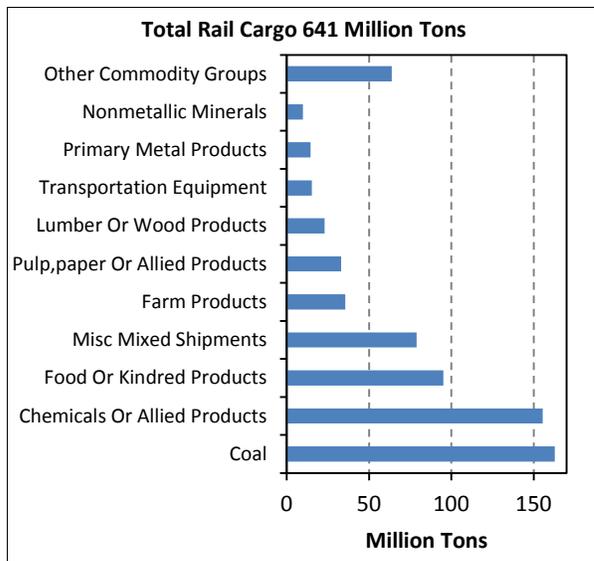
Rail cargo falls into two broad rail modes (Figure 5-28 above) – carload and intermodal. Carload is predominantly used for lower value and less-time-sensitive commodities, including bulk commodities, such as grain. Intermodal rail moves higher-value and more time-sensitive commodities, for example imports of consumer products.

Intermodal rail accounted for 81% of import cargo tons and 47% of export cargo tons. The final rail mode category is “Rail”, which captures both carload and intermodal shipments in the NAFTA trade. A review of commodities handled by rail in the NAFTA trade (presented later in Section 6.4.7) shows that many of the largest commodities are lower-value bulk products more suited to carload service), which suggests that the majority of the “Rail” category involves carload shipments.

A profile of regional rail cargo (domestic and international, all directions) by commodity group is provided in Figure 5-30. The largest commodity group is Coal, which amounted to 151 million tons in 2009 and 23% of the region’s rail cargo. Other major rail commodities are Chemicals or Allied Products (23%), Food or Kindred Products (11%), Miscellaneous Mixed Shipments (11%) and Farm Products (9%). Miscellaneous Mixed Shipments captures cargo moving by intermodal rail service, including the higher-value imports.

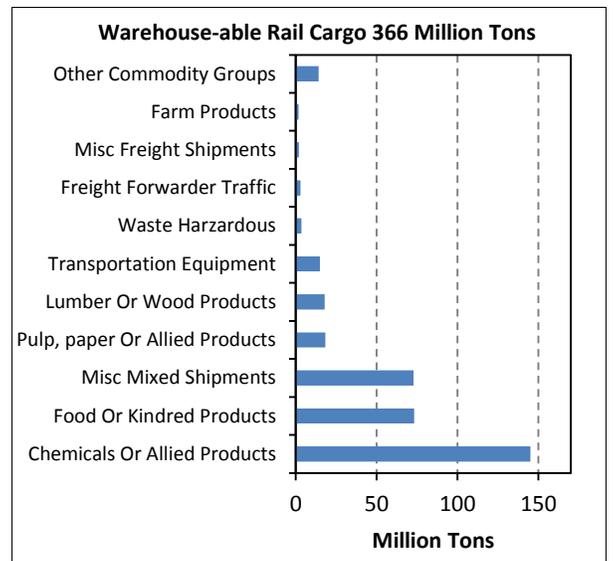
The commodity ranking shifts when a filter is applied to identify the warehouse-able commodities (Figure 5-31); those suited to warehousing and logistics services (see background discussion in Section 4.1). Bulk commodities, such as Farm Products, drop down the rankings. The higher value commodities, including Miscellaneous Mixed Shipments, move up the rankings. Further analysis of commodities is provided in the discussion of domestic and international flows by direction (inbound, outbound, etc.) and mode (carload and intermodal) presented below.

**Figure 5-30: Chicago BEA Rail Cargo, Top Ten Commodity Groups**



Source: TranSystems derived from IHS Global Insight Transearch Data

**Figure 5-31: Chicago BEA Rail Cargo, Top Ten Warehouse-able Commodity Groups**



Source: TranSystems derived from IHS Global Insight Transearch Data

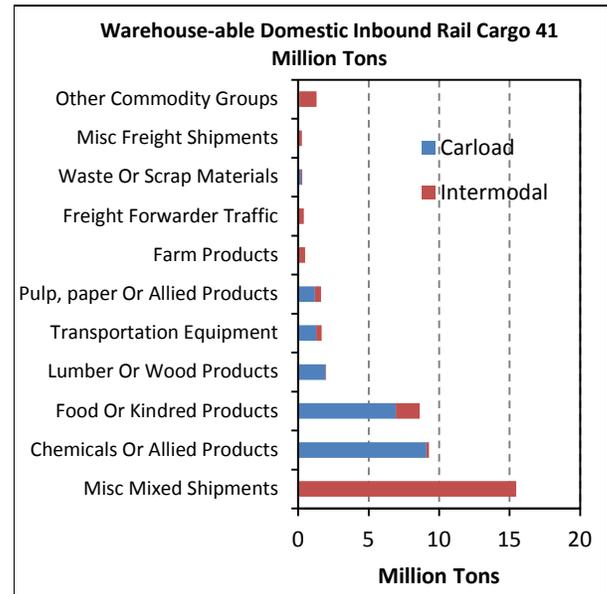
### 5.4.2 Domestic Inbound

The Chicago BEA had domestic inbound rail cargo of 108 million tons in 2009 with an estimated value of \$191 billion. Approximately 41 million tons (38%), valued at \$179 billion (94%) was classified as warehouse-able cargo.

The consultant team has provided a breakdown of this warehouse-able cargo by commodity group in Figure 5-32. The largest commodity group is Miscellaneous Mixed Shipments moving by intermodal rail service, accounting for 37% of the total. Other important commodity groups, but with a focus on carload rail service, are Chemicals or Allied Products and Food or Kindred Products.

Further refinement of the domestic inbound rail commodities is provided in Table 5-4, which shows more specific commodity types (STCC4). These top 25 inbound warehouse-able commodities amounted to 36 million tons in 2009. Intermodal rail service moved 47% of this cargo, predominantly as freight-all-kind shipments.

**Figure 5-32: Chicago BEA Domestic Inbound Rail Cargo, Top 10 Warehouse-able Commodity Groups**



Source: TranSystems derived from IHS Global Insight Transearch Data

**Table 5-4: Chicago BEA Domestic Inbound Rail Cargo, Top 25 Warehouse-able Commodities, 2009 (Million Tons)**

Commodity (STCC4)	Carload	Intermodal	Commodity (STCC4)	Carload	Intermodal
FAK Shipments	0.006	15.210	Nut or Veg Oils or By-products	0.567	0.000
Misc Industrial Organic Chemicals	3.430	0.014	Paper	0.396	0.159
Potassium or Sodium Compound	2.163	0.004	Animal By-prod, inedible	0.528	0.000
Soybean Oil or By-products	1.625	0.001	Railroad Cars	0.483	0.000
Plastic Mater or Synth Fibres	1.496	0.007	Wine, brandy or Brandy Spirit	0.158	0.287
Lumber or Dimension Stock	1.169	0.029	Plywood or Veneer	0.432	0.004
Flour or Other Grain Mill Products	0.961	0.000	Misc Food Preparations, Nec	0.029	0.400
Wet Corn Milling or Milo	0.844	0.001	Freight Forwarder Traffic	0.000	0.398
Sugar, Refined, Cane or Beet	0.788	0.002	Motor Vehicle Parts or Accessories	0.014	0.380
Motor Vehicles	0.785	0.000	Fertilizers	0.385	0.000
Chemical Preparations, Nec	0.734	0.046	Malt Liquors	0.283	0.084
Fiber, Paper or Pulpboard	0.762	0.010	Meat Products	0.317	0.002
Misc Indus Inorganic Chemicals	0.596	0.004	<b>Total Top 25</b>	<b>18.954</b>	<b>17.044</b>

Source: TranSystems derived from IHS Global Insight Transearch Data

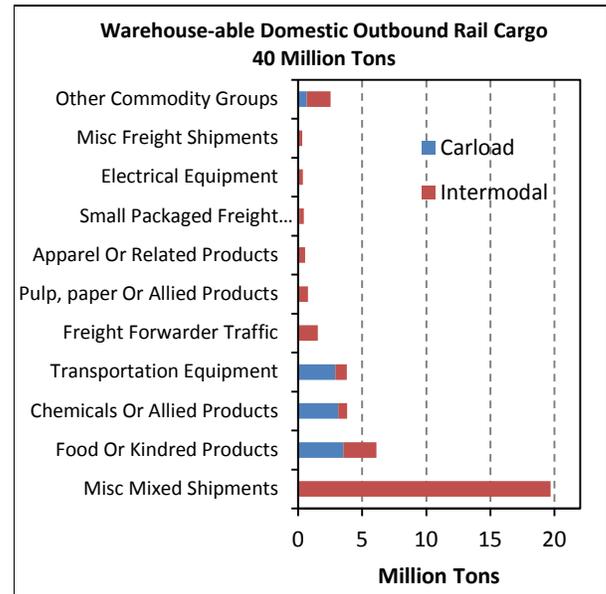
### 5.4.3 Domestic Outbound

The Chicago BEA had domestic outbound rail cargo of 61 million tons in 2009, valued at approximately \$255 billion. Approximately 40 million tons (or 66% of all tons), valued at \$245 billion (96% of total value), is classified as warehouse-able cargo.

The consultant team has broken down warehouse-able cargo by commodity group in Figure 5-33. The largest commodity group is Miscellaneous Mixed Shipments moving by intermodal rail service, which accounts for 49% of the total. Other important commodity groups, but with a greater focus on carload rail service, are Food or Kindred Products, Chemicals or Allied Products, and Transportation Equipment.

Further refinement of the domestic outbound rail commodities is provided in Table 5-5, which shows more specific commodity types (STCC4). These top 25 inbound warehouse-able commodities amounted to 35 million tons in 2009. Intermodal rail service moved 74% of this cargo, predominantly as freight-all-kind shipments.

**Figure 5-33: Chicago BEA Domestic Outbound Rail Cargo, Top 10 Warehouse-able Commodity Groups**



Source: TranSystems derived from IHS Global Insight Transearch Data

**Table 5-5: Chicago BEA Domestic Outbound Rail Cargo, Top 25 Warehouse-able Commodities, 2009 (in Million Tons)**

Commodity (STCC4)	Carload	Intermodal	Commodity (STCC4)	Carload	Intermodal
FAK Shipments	0.005	19.368	Small Packaged Freight Shipments	0.084	0.357
Motor Vehicles	2.370	0.003	Flour or Other Grain Mill Products	0.241	0.153
Freight Forwarder Traffic	0.000	1.540	Railroad Cars	0.388	0.003
Motor Vehicle Parts or Accessories	0.127	0.884	Chemical Preparations, Nec	0.258	0.092
Misc Food Preparations, Nec	0.028	0.945	Mixed Shipments, Multi-stcc	0.000	0.336
Soybean Oil or By-products	0.943	0.004	Misc Freight Shipments	0.004	0.315
Wet Corn Milling or Milo	0.839	0.055	Malt	0.314	0.002
Misc Indus Inorganic Chemicals	0.748	0.014	Nut or Veg Oils or By-products	0.258	0.005
Plastic Mater or Synth Fibres	0.713	0.027	Misc Printed Matter	0.000	0.256
Misc Industrial Organic Chemicals	0.557	0.095	Distilled or Blended Liquors	0.071	0.159
Potassium or Sodium Compound	0.622	0.019	Frozen Specialties	0.000	0.220
Prepared or Canned Feed	0.512	0.024	Pickled Fruits or Vegetables	0.031	0.180
Misc Fabricated Textile Products	0.000	0.526	<b>Total Top 25</b>	<b>9.114</b>	<b>25.582</b>

Source: TranSystems derived from IHS Global Insight Transearch Data

#### **5.4.4 Domestic Internal and Through**

The Chicago BEA had internal rail cargo of 3.5 million tons in 2009 with an estimated value of \$5.9 billion. Approximately 1.4 million tons (40%) with a value of \$4.8 billion (81%) is classified as warehouse-able cargo. Nearly all the internal cargo (99%) moved by carload service and the three largest commodities were Primary Iron or Steel Products, Motor Vehicles, and Grain.

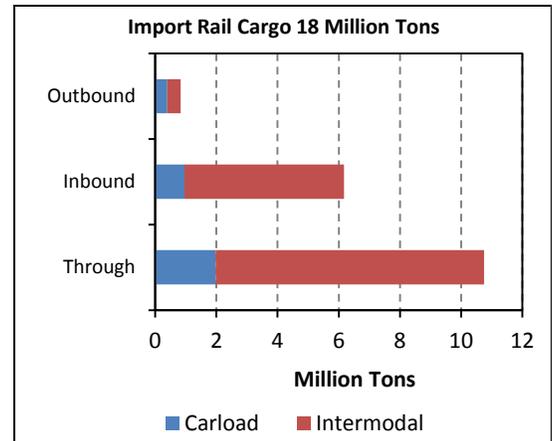
Domestic rail cargo moving through the Chicago BEA amounted to 408 million tons in 2009 with an estimated value of \$489 billion. An estimated 237 million tons (58%) with a value of \$451 billion (92%) is classified as warehouse-able cargo. The four largest through commodities were Miscellaneous Industrial Organic Chemicals, Coal, Grain and Freight-All-Kind Shipments. The latter are intermodal rail shipments moving through the Chicago BEA.

### 5.4.5 Non-NAFTA Imports

The Chicago BEA had import rail cargo, excluding cross-border NAFTA trade with Canada and Mexico, of 18 million tons in 2009. As shown in Figure 5-34, import cargo broke down into several flows. The inbound flow is of primary interest to this Study because it is imports moving by rail directly from international cargo gateways (for example, the Port of Seattle). The outbound flow is imports discharged in the Chicago BEA and directly railed to destinations outside the Chicago BEA. The through flow captures import cargo passing through the Chicago BEA. Intermodal rail is the principal mode for imports by rail, accounting for 81% of total tons and 85% of the inbound flow.

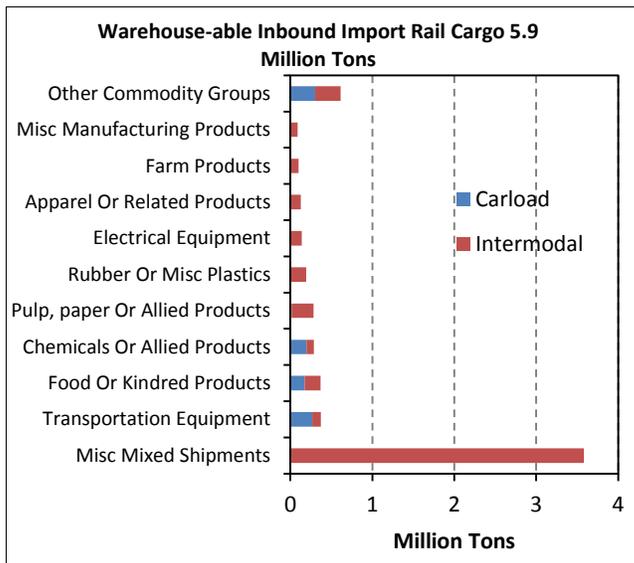
As stated earlier in Section 6, the database understates the volume of import cargo moving inbound to the Chicago BEA. A significant amount of import cargo is captured as domestic freight. For example, an international import can arrive at the port of discharge, enter an import distribution center near the port, and then depart the distribution center as a domestic rail shipment to the Chicago BEA.

**Figure 5-34: Chicago BEA Import Rail Cargo, 2009**



Source: TranSystems derived from IHS Global Insight Transearch

**Figure 5-35: Chicago BEA Inbound Import Rail Cargo, Top 10 Warehouse-able Commodity Groups**



Source: TranSystems derived from IHS Global Insight Transearch Data

Inbound import cargo amounted to 6.2 million tons with an estimated value of \$41 billion. Warehouse-able cargo accounted for 95% of total tons and nearly 100% of the value. A breakdown of warehouse-able cargo by commodity group is provided in Figure 5-35. The dominant commodity group is Miscellaneous Mixed Shipments moving by intermodal rail. Intermodal rail is the dominant transport mode for the other top ten commodities, with the exception of Chemicals, Food, and Transportation Equipment.

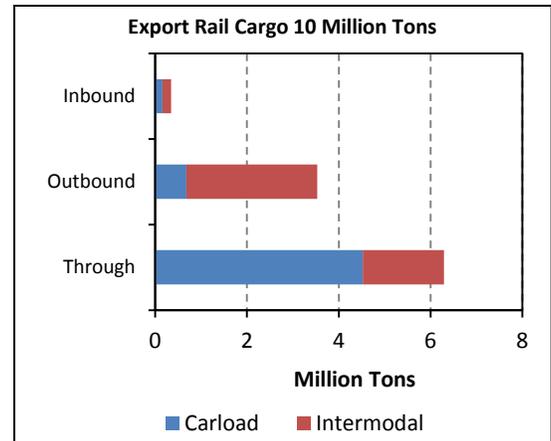
In the case of inbound warehouse-able cargo, the Los Angeles BEA (which includes the Ports of Los Angeles and Long Beach) was the origin for 49% of this cargo and 54% of the warehouse-able cargo moving by intermodal rail. Other important origins were the Seattle BEA (15% of total tons and 14% of the value), and the New York BEA (10% of total tons and 10% of the value).

### 5.4.6 Non-NAFTA Exports

The Chicago BEA had export rail cargo, excluding cross-border NAFTA trade with Canada and Mexico, of 10 million tons in 2009. As shown in Figure 5-36, the export cargo is broken down into several flows. The outbound flow is of primary interest to this Study because it is exports moving by rail directly from the Chicago BEA to international cargo gateways. The inbound flow is exports railed to the Chicago BEA and then shipped via ports in the Chicago BEA. The through flow captures export cargo passing through the Chicago BEA. Carload rail accounts for a slight majority (53%) of export cargo tons, but intermodal rail is the principal mode (81%) for the outbound flow.

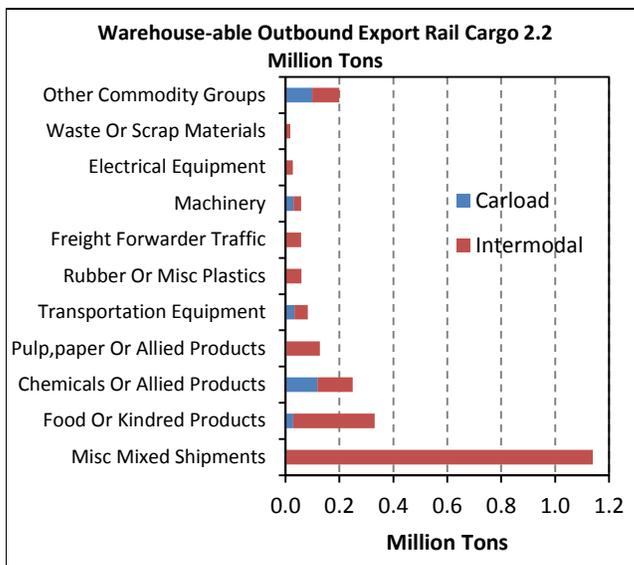
As stated earlier, the database understates the volume of export cargo moving outbound from the Chicago BEA. Some export cargo is also captured as domestic freight, moving in domestic equipment to the port of discharge where it is transloaded into marine containers.

**Figure 5-36: Chicago BEA Export Rail Cargo, 2009**



Source: TranSystems derived from IHS Global Insight Transearch

**Figure 5-37: Chicago BEA Outbound Export Rail Cargo, Top 10 Warehouse-able Commodity Groups**



Source: TranSystems derived from IHS Global Insight Transearch Data

Outbound export cargo amounted to 3.5 million tons with an estimated value of \$14 billion. Warehouse-able cargo accounted for 64% of total tons and nearly 96% of total value. A breakdown of warehouse-able cargo by commodity group is provided in Figure 5-37. The dominant commodity group is Miscellaneous Mixed Shipments moving by intermodal rail. Intermodal rail is the dominant transport mode for the other top ten commodities, with the exception of Chemicals.

In the case of outbound warehouse-able cargo, the Los Angeles BEA (which includes the Ports of Los Angeles and Long Beach) was the destination for 54% of this cargo and 51% of the warehouse-able cargo moving by intermodal rail. Other important destinations were the Seattle BEA (11%), the Norfolk BEA (7%) and the San Francisco BEA (6%), which includes the Port of Oakland.

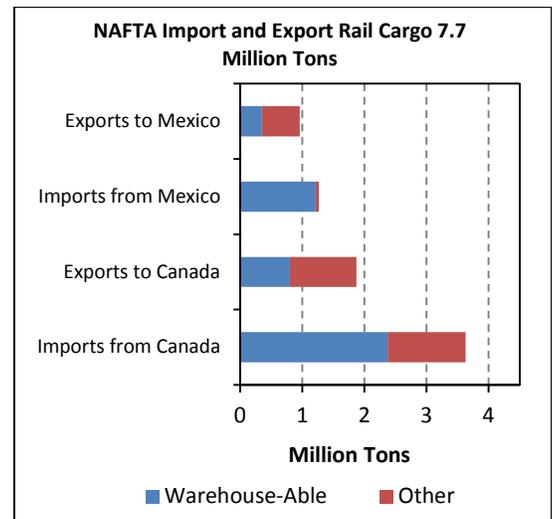
### 5.4.7 NAFTA

The Chicago BEA had total NAFTA import and export truck cargo of 8 million tons in 2009, with a total estimated value of \$8 billion. As shown in Figure 5-38, the largest cargo flows are with Canada – 3.6 million tons of exports and 1.9 million tons of imports. Trade with Mexico is smaller and more balanced with 1.3 million tons of imports and 1.0 million tons of exports.

The Mexican trade also has a higher percentage of warehouse-able commodities compared to the Canadian trade. Warehouse-able commodities account for 96% of Mexican imports and 36% of Mexican exports. By contrast, warehouse-able commodities account for 43% of Canadian imports and 65% of Canadian exports.

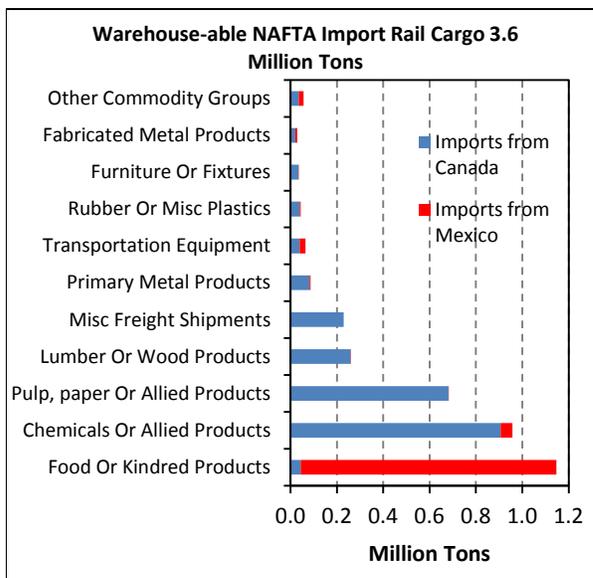
A breakdown of warehouse-able cargo by commodity group is provided in Figure 5-39 for imports and Figure 5-40 for exports. Food or Kindred Products is the largest import and the second largest export commodity group. Mexican imports are concentrated in the Food Products sector, while Canadian imports are distributed across a broader range of commodities.

**Figure 5-38: Chicago BEA-NAFTA Import and Export Rail Cargo, 2009**



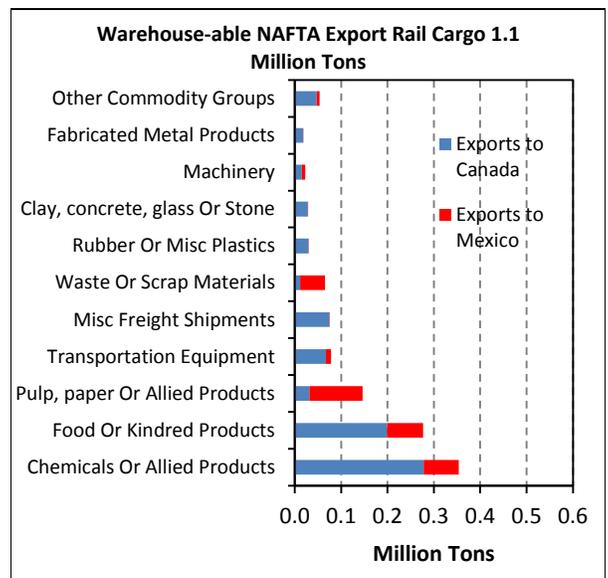
Source: TranSystems derived from IHS Global Insight Transearch

**Figure 5-39: Chicago BEA-NAFTA Import Cargo by Rail, Top 10 Warehouse-able Commodity Groups, 2009**



Source: TranSystems derived from IHS Global Insight Transearch Data

**Figure 5-40: Chicago BEA-NAFTA Export Cargo by Rail, Top 10 Warehouse-able Commodity Groups, 2009**



Source: TranSystems derived from IHS Global Insight Transearch Data

## 5.5 Waterborne Freight and the Port of Chicago

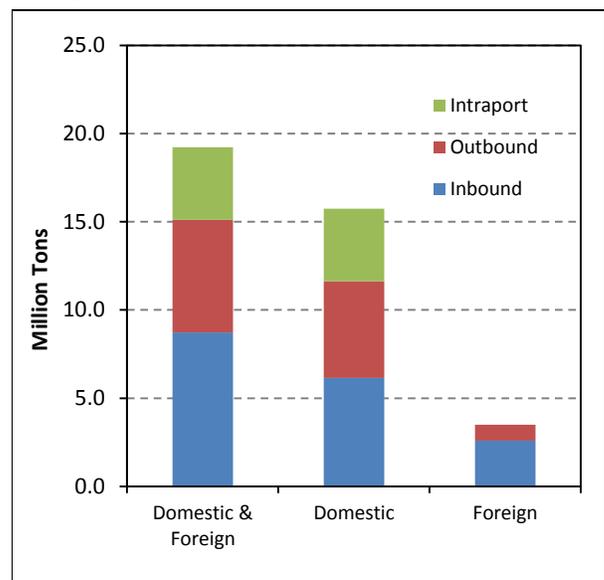
The Port of Chicago provides a link between the Great Lakes and the inland waterway system, and supports cargo transportation by deep-draft ship and shallow-draft barge. It also facilitates the interchange of cargo between water and rail and truck modes.

The Great Lakes system connects to the Atlantic Ocean via the St. Lawrence Seaway, while the inland waterway system extends south, via the Illinois and Mississippi Rivers, to the Port of New Orleans on the Gulf Coast, one of the nation’s largest deep-draft port systems. The Port of Chicago offers the following main facilities<sup>5</sup>:

- Iroquois Landing is located at the mouth of the Calumet River at Lake Michigan. It is a 100-acre, open paved terminal with ship and barge berths that have a navigational depth of 27 feet. It also has transit sheds that have direct truck and rail access.
- Lake Calumet operations and terminals are located at the junction point of the Grand Calumet and Little Calumet Rivers approximately six miles inland from Lake Michigan. The terminals offer berthing for Great Lakes ships and barges.
- The Illinois International Port District is the grantee and operator of Foreign Trade Zone #22, which comprises a 60-mile radius from Chicago’s city limits. There are two general purpose zones located in Chicago, one at Lake Calumet Harbor and another near O’Hare Airport. The Calumet Zone includes 400,000 square-feet of designated warehouse space and 20 acres of developable land for storage, handling, processing, manufacturing, and/or assembling foreign goods.
- The Port owns two grain elevators at Lake Calumet and also has liquid bulk storage capacity.

The Port of Chicago handles a range of lower-value bulk and break bulk commodities, including coal, petroleum products, chemicals, crude materials (such as stone, gravel, sand and iron ore), cement, steel products, and agricultural commodities. As shown in Figure 5-41, the Port of Chicago had total throughput of nearly 20 million tons in 2009, mostly domestic related cargo.

**Figure 5-41: Port of Chicago Cargo, 2009**



Source: Waterborne Commerce Statistics

<sup>5</sup> Source: [www.theportofchicago.com](http://www.theportofchicago.com)

## 5.6 Freight Opportunity Matrix

TranSystems analyzed commodity types coming to Chicago, and overlaid Logistics Park Calumet’s attributes based on interviews (in Section 5) to create high level cargo profiles that may (or may not) be eligible to locate logistics facilities in the Logistics Park Calumet area. Industry trends, such as truck driver shortages, or cargo transiting the Port of Prince Rupert were also considered. The result is Table 5-6, the Logistics Park Calumet Freight Opportunity Matrix. Use of Table 5-6 is intended to provide a high level understanding of potentially suitable commodity types (Column 1) and the attributes that Logistics Park Calumet has to offer (Row 1). Table 5-7 and 5-8 respectively display truck and rail volumes that support the opportunities shown in Table 5-6.

Truck driver shortages are causing logistics managers to consider the rail option when transit time and cost requirements are met. The Chicago area is a major U.S. intermodal rail hub, with service from all key U.S. ports. The existing Chicago rail infrastructure presents an opportunity to convert truck traffic to rail in light of the ongoing trend to shift to the lower cost rail option whenever possible.

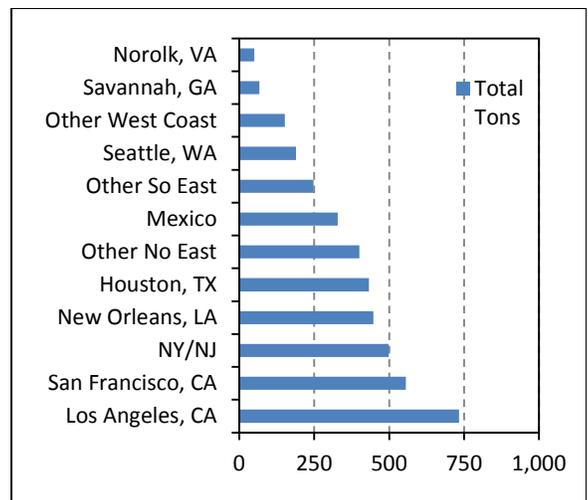
Figure 5-42 charts total inbound truck tons to Chicago by origin BEA, which capture the major origin ports. Los Angeles, San Francisco, New York/New Jersey, New Orleans, and Houston are the leading origin BEAs. Although Mexico is not a port, the consultant team has included it in Figure 5-42 because the length of haul from Mexico to Chicago may present opportunities to convert traffic that is currently moving by truck to rail.

Table 5-7 displays total trucked tons by commodity for the top five U.S. port origins and Mexico to Chicago in 2009. Groups 1 and 2 are best suited for rail based on their tolerance to longer rail transits as compared to truck. Shippers or third parties may be increasingly likely to consider the rail mode for these commodity groups as truck driver shortages and rising truck rates make rail more attractive.

More background, however, is required to determine specific transit needs. The Group 2 commodity, Fruit, may or may not require truck transportation. Actual cost savings between truck and rail can be demonstrated specifically for shippers of the commodity types listed in Table 2.

Logistics Park Calumet can strategically place these demonstrated advantages in trade magazines or publish them on-line to demonstrate the advantages of converting to rail and locating logistics facilities in Logistics Park Calumet. The key challenge will be to convince prospective tenants that Logistics Park Calumet has an advantage over other Chicago locations. Midwest distribution strategies that include Indiana, Ohio, and Michigan should be stressed, along with Logistics Park Calumet’s pro business environment. Specific items should include the following:

**Figure 5-42: Total Truckload Tons from Key U.S. Ports to Chicago in 2009**



Source: TranSystems derived from IHS Global Insight Transearch Data

- Aggressively identify “truck to rail” conversion opportunities for cargo trucked into the Chicago area:
  - Identify and market intermodal rail transit time advantages,
  - Demonstrate cost savings and reliability advantages over truck transportation (no driver shortages or large fuel increases),
  - Develop a White Paper that has strategies for consolidating freight at the coastal ports and Mexico prior to rail transportation to Chicago. These strategies should include building in extended inventory lead times, targeting commodities that can withstand longer lead times, and showing the Midwest regional distribution center advantages.
- Consolidate cargo moving over Halifax with Prince Rupert
  - Look for consolidation opportunities with other gateways by specifically finding out where the current distribution centers are and by determining whether Logistics Park Calumet is better in terms of service or cost effectiveness.

**Table 5-6: Logistics Park Calumet’s Opportunity Matrix**

Logistics Park Calumet’s Attribute	Logistics Park Calumet’s Major Attributes and Opportunities			
	Logistics Park Calumet’s Opportunity	Access to all U.S. Class I Railroads	Access to Midwest markets	Fastest China/Midwest transit terminates at the Canadian National’s Harvey Terminal
	Take advantage of rail cost savings as compared to truck transportation, given rising fuel costs and truck driver shortages.	Midwest distribution strategies covering Illinois, Indiana, Ohio, Michigan, and possibly adjacent states.	COSCO Hanjin service from China/Korea to Chicago is the fastest by 2 to 3 days.	Land, labor, business environment concerns are "tie breakers" after logistics needs are met.
Logistics Park Calumet’s Opportunity by Market Sector (High, Medium, Low)				
International Inbound Truck to Rail Conversion	Target trucked commodities that can handle longer rail transit (i.e. wine and spirits and furniture from the West Coast, and distribution center cargo from West, East, Gulf Coast ports, the Mexican border states, and other parts of Mexico).	Favored distribution area includes Chicago and population centers to the south.	No truck conversion opportunity from Prince Rupert	Incentives can overcome any transportation cost advantages of other area locations.
Canadian Cargo	Advantage if cargo is arriving on the Canadian National. Manufactured goods from Alberta or forest products from Ontario are prospects for Logistics Park Calumet, especially if the final destination is south of the Chicago area. Fertilizer may be viable, given Logistics Park Calumet’s southern proximity to agricultural states. However, this may require specialized facilities.	Because cargo is coming from Canada, better distribution center opportunities exist to the north of Logistics Park Calumet, UNLESS the major cargo distribution area is Chicago with a heavy concentration in Indiana, Ohio, Michigan, etc.	N/A – Prince Rupert cargo does not include Canadian sourced cargo.	
High-Value Cargo	Not all railroads will have sufficient transit times from the coasts.	Favors distribution area including Chicago and population centers to the south.	High-value cargo requires the fastest transit to mitigate inventory carrying costs.	
Auto Parts	Generally high-value, time sensitive cargo that favors truck; however, looking for ways to use rail.	Central location to manufacturers in Chicago, and Michigan, Indiana, Ohio, etc. May have to compete with better locations in Ohio and Michigan.	Auto parts imported from China require fastest rail transit if used to reduce inventory carrying costs.	
Manufacturing (Exports)	Manufacturers that often use a just-in-time inventory strategy favor truck transportation.	Raw materials sourced from Midwest, finished product distributed across the U.S.	Just-in-time cargo from China requires the fastest transit to meet production schedules.	
Agriculture	The Canadian National is the key railroad - others do not offer same location advantage.	Agriculture shippers in Indiana, Ohio, etc. can save additional transit to rail yards in western and northern Chicago locations.	The Canadian National Harvey Yard’s southernmost Chicago rail location enables shorter truck transit/costs for shippers in Ohio, Indiana, etc. who currently dray further towards Chicago. China is a main destination opportunity.	



<b>Logistics Park Calumet's Major Attributes and Opportunities</b>				
<b>Logistics Park Calumet's Attribute</b>	Access to all U.S. Class I Railroads	Access to Midwest markets	Fastest China/Midwest transit terminates at the Canadian National's Harvey Terminal	Labor, land cost and availability, and pro-business environment
<b>Logistics Park Calumet's Opportunity</b>	Take advantage of rail cost savings as compared to truck transportation, given rising fuel costs and truck driver shortages.	Midwest distribution strategies covering Illinois, Indiana, Ohio, Michigan, and possibly adjacent states.	COSCO Hanjin service from China/Korea to Chicago is the fastest by 2 to 3 days.	Land, labor, business environment concerns are "tie breakers" after logistics needs are met.
Distribution Center	Cargo arriving on the Canadian National is the main advantage, but access to other Chicago area railroads a plus.	Ideal for distribution areas including Chicago and states to the South. Have to compete with other Chicago locations, and established locations in Indiana, Ohio, etc.	A distribution center close to the Canadian National's Harvey Yard would save on truck drays to the distribution center.	Source: TranSystems

**Table 5-7: Top Five Port and Mexico Origins of Truck Commodities Eligible for Rail Conversion, 2009**

Commodity	Origin Port BEA or Country (Tons)				
	Los Angeles	NY/NJ	San Francisco	Other North East	Mexico
<b>Group 1: Rail Suitable</b>					
Warehouse & Distribution Center	139,466	404,614	112,888	305,940	
Wines or Spirits	6,495		172,867		71
Furniture or Fixtures	108,380		99		17,258
Canned goods	33,580	5,887	101	3,287	38
Food items	43	79	166		20,910
Steel or Metal Products	7,249	226	7	1,493	13,698
Beverages	4,338		578		6,817
Forest Products			418		688
<b>Sub Total Group 1</b>	<b>299,550</b>	<b>410,806</b>	<b>287,124</b>	<b>310,719</b>	<b>59,479</b>
<b>Group 2: Rail Eligible if Transit Time Acceptable</b>					
Fruit	82,770	5,483	117,684	53,851	36,301
Retail Items	155,656	4,136	2,404	576	36,223
Industrial Equip	9,216	34,485	407	25,703	80,525
Electronic Goods	38,551	19,630	8,911	4,677	35,660
Misc. Manufactured Goods	5,576	37	15		12,648
<b>Sub Total Group 2</b>	<b>291,770</b>	<b>63,771</b>	<b>129,421</b>	<b>84,807</b>	<b>201,357</b>
<b>Sub Total Groups 1 &amp; 2</b>	<b>591,319</b>	<b>474,577</b>	<b>416,544</b>	<b>395,526</b>	<b>260,836</b>
<b>Group 3: Usually Requires Faster Truck Transit</b>					
Reefer Vegetables	107,270		131,833		24,516
Precision Manufactured Goods	3,064	15,935	1,068	1,098	21,071
<b>Sub Total Group 3</b>	<b>110,334</b>	<b>15,935</b>	<b>132,902</b>	<b>1,098</b>	<b>45,587</b>
<b>Group 4: Not Suitable for Rail, or Requires Special Equipment</b>					
Petroleum Prod			3,881	1	46
Vehicles and parts	8,077	963		1,690	4,780
Fresh Fish	5,080	4,763		913	389
<b>Sub Total Group 4</b>	<b>13,157</b>	<b>5,725</b>	<b>3,881</b>	<b>2,605</b>	<b>5,215</b>
Other	18,153	2,386	2,298	1,098	16,356
<b>Grand Total</b>	<b>732,963</b>	<b>498,623</b>	<b>555,626</b>	<b>400,327</b>	<b>327,994</b>

Source: TranSystems derived from IHS Global Insight Transearch Data

**Table 5-8: Rail Cargo Canadian Origins to Chicago, 2010**

Commodity	Canadian Origin (Metric Tons)				
	Ontario	Alberta	British Columbia	Saskatchewan	Quebec
<b>Group 1: Suitable for Warehousing</b>					
Forest Products	141,980	38,775	91,022	0	181,312
Misc. Manufactured Goods	72,075	220,736	274,575	1,317	44,932
Steel or Metal Products	31,403	7,816	21,218	2,628	20,361
<b>Sub Total Group 1</b>	<b>245,157</b>	<b>267,327</b>	<b>386,815</b>	<b>3,945</b>	<b>246,604</b>
<b>Group 2: Requires Bulk or Specialized Equipment or Facilities</b>					
Agricultural Products	44,548	34,232	4,729	42,864	93
Rock, Stone, Minerals, Glass	194,594	8,714	0	13,540	18,246
Fertilizers	761	4,384	0	2,052,476	0
Chemicals	512,499	412,606	2,034	13,387	135,023
Petroleum Prod.	72,266	64,645	44,591	116,971	3,629
<b>Sub Total Group 2</b>	<b>824,668</b>	<b>524,580</b>	<b>51,353</b>	<b>2,239,238</b>	<b>156,991</b>
Other	92,890	4,524	2,890	2,154	14,599
<b>Grand Total</b>	<b>1,163,015</b>	<b>796,431</b>	<b>441,058</b>	<b>2,245,336</b>	<b>418,195</b>

Source: TranSystems derived from IHS Global Insight Transearch Data

## 6 RAIL INFRASTRUCTURE ANALYSIS

### 6.1 Rail Intermodal and Carload

The following three main freight rail carriers are located in Logistics Park Calumet:

- The Canadian National Railway,
- CSX Transportation, and
- The Union Pacific Railroad.

#### 6.1.1 Canadian National

The Canadian National Railway Company is one of two major freight railroads based in Canada. Its corporate offices are located in Montreal, Quebec, with U.S. operations based in Homewood, Illinois. The American operations are also referred to as the Southern Region. As a Canadian corporation, the Canadian National does business in the U.S. through the Grand Trunk Corporation, a subsidiary holding company for the Canadian National's properties in the U.S. The Grand Trunk, a Delaware corporation, virtually controls the Canadian National's entire U.S. rail operating companies including:

- The Grand Trunk Western Railroad;
- The Elgin, Joliet & Eastern Railway;
- The Illinois Central Railroad; and
- The Wisconsin Central Ltd.

The Grand Trunk Corporation is classified as one of seven U.S. Class I railroads. The Canadian National reports its annual operating and financial results to the Surface Transportation Board as the Grand Trunk. However, the Canadian National prefers to market its transportation and logistics services in the U.S. under the brand name "CN".

According to the Canadian Government, the Canadian National's operating subsidiary, the Illinois Central Railroad, is the second largest Canadian-owned employer in Illinois. The Canadian National is a true North American railroad, with extensive operations across the entire width of Canada and along the entire length of the Mississippi River Valley.

Like most freight railroads, the Canadian National has been aggressively investing in the development of its intermodal business. According to the Canadian National's 2010 Annual Report:

*The intermodal commodity group is comprised of two segments: domestic and international. The domestic segment transports consumer products and manufactured goods, operating through both retail and wholesale channels, within Canada, domestic U.S., Mexico, and transborder. The international segment handles import and export container traffic, directly serving the major ports of Vancouver, Prince Rupert, Montreal, Halifax and New Orleans.*

*The domestic segment is driven by consumer markets, with growth tied to the economy. The international segment is driven by North American economic and trade conditions. For the year ended December 31, 2010, revenues for this commodity group increased by \$239 million, or 18% when compared to 2009. The increase was mainly due to higher volumes from overseas markets, particularly through the Ports of Vancouver and Prince Rupert, domestic retail shipments, the impact of a higher fuel surcharge, and freight rate increases.*

Also according to its 2010 Annual Report, the Canadian National received 57% of its intermodal revenues from international traffic and 43% from domestic traffic. In 2007, the Canadian National received 52% of its intermodal revenues from international traffic with the balance from domestic. Thus, it appears that international traffic is of growing importance for the Canadian National.

While the recent recession adversely impacted the Canadian National's intermodal traffic, it appears to have rebounded nicely. According to the Canadian National's 2010 Annual Report, intermodal carloads for 2010 increased 17% over 2009 and 6% over 2008.

**Figure 6-1: The Canadian National Railroad Network**



Source: The Canadian National Railroad Web Site

In its presentation at the Bank of America Merrill Lynch 2011 Global Transportation Conference in May, the Canadian National management highlighted three growth areas for its intermodal business segment:

- Calgary Logistics Park,
- Prince Rupert, and
- Container moves to Asia.

The last two of these three growth areas directly impact the Logistics Park Calumet development area.

The Canadian National is unique in the railroad industry since it is the only Class I railroad to serve major deepwater ocean ports on both the Atlantic and Pacific coasts. In terms of total containers handled in 2010, the Canadian National-served seaports in Canada are ranked as follows:

- Metro Port Vancouver, British Columbia (2.51 million twenty-foot equivalent units<sup>6</sup>);
- Montreal, Quebec (1.33 million twenty-foot equivalent units);
- Halifax, Nova Scotia (0.44 million twenty-foot equivalent units); and
- Prince Rupert, British Columbia (0.34 million twenty-foot equivalent units).

**Figure 6-2: Container Terminal at Port of Prince Rupert**



Source: Port of Prince Rupert website

<sup>6</sup> Twenty-foot equivalent unit (TEU) is a standard unit of measurement of container throughput volume. One 20-foot container equals one twenty-foot equivalent unit and one 40-foot container equals two twenty-foot equivalent units.

The west coast port of Metro Vancouver is Canada's largest container port by volume, and ranked North America's fifth largest by total throughput. It has approximately four times the container handling volume as Prince Rupert, spread around four separate container terminals. Metro Vancouver actually consists of what were originally three separate competing port authorities located around the city of Vancouver, British Columbia. These three competitors were consolidated into a single port authority in 2008. Three railroads serve this port complex (and share in this growth): the Burlington Northern Santa Fe, the Canadian National, and the Canadian Pacific.

The Port of Montreal is Canada's largest east coast port handled by volume. This port primarily handles container traffic moving between North America's industrial heartland and the Northern European and Mediterranean markets. Located at the head of the St. Lawrence River, this port is open all year. Montreal's U.S. volume represents about 25%-30% of its total throughput. More than 90% of its volume comes from the Midwest and less than 10% comes from the Northeast and other areas.

The Mediterranean Shipping Company is the second largest containership carrier in the world ranked by vessel fleet capacity. In 2010, the Mediterranean Shipping Company replaced APM-Maersk as the number one ranked carrier for U.S. export volumes. The Mediterranean Shipping Company is the top ranked container carrier by volume using the Port of Montreal.

Both the Canadian National and the Canadian Pacific serve the Port of Montreal. The Canadian Pacific transports approximately 75% of this port's Midwest traffic into Chicago. The Mediterranean Shipping Company is currently the only steamship line using the Canadian National between Montreal and Chicago.

By contrast, the Canadian National exclusively serves the Port of Prince Rupert. In 2007, the Canadian National invested \$25 million in the new intermodal terminal at Prince Rupert to serve the Fairview Container Terminal. Prince Rupert's marine container terminal incorporates on-terminal radiation scanning of every container, which facilitates efficient container movement by rail from Prince Rupert, across the Canada-U.S. border to Chicago.

The Canadian National's sole intermodal terminal in metropolitan Chicago is located in Harvey, Illinois, along the east side of the former Illinois Central mainline, on the former Markham Hump Yard site. When the Markham Hump Yard first opened in 1926, it was one of the largest railroad classification yards in the country. Records indicate that the yard was three and one-half miles long, occupied 650 acres, and had 113 track miles. The yard was rebuilt into two separate hump yards in 1950 for \$3 million. By 1989, the original layout had become obsolete and the Illinois Central no longer needed Markham Yard's capacity. The southbound hump yard was closed in 1989, and the northbound hump yard was closed in 1990. These closures left a substantial amount of excess real estate in the middle of the yard (north of 171<sup>st</sup> Street), available at no cost for conversion to a modern intermodal terminal.

The Illinois Central Railroad was an early intermodal pioneer. The Illinois Central began Trailer on Flat Car service in 1955, using rebuilt flatcars and its own trailers to establish overnight service between Chicago and Memphis. Their first Chicago area intermodal terminal was located off South Water Street, where the New East Side neighborhood is today. The Illinois Central then moved its intermodal terminal about five miles south, on the site of the Chicago Produce Terminal at 27<sup>th</sup> and Ashland on Chicago's southwest side.

The first intermodal terminal located in Harvey was Illinois Central's Moyers Intermodal Terminal. It opened in 1993 on land that Markham's northbound hump yard occupied.

The opening of the new St. Clair River rail tunnel on the U.S.-Canadian border near Port Huron, Michigan, in 1994 resulted in significant growth for the Canadian National's intermodal business. Crowded conditions at its Railport Terminal (formerly that of the Grand Trunk Western) located at 47<sup>th</sup> and Archer in Chicago left the Canadian National with limited capacity in spite of increasing customer demand. In December 1996, the Canadian National moved its intermodal operations from Railport to the new Gateway Intermodal Terminal, built on 67 acres immediately north of the Moyers Terminal. Construction and operation of this original Gateway facility was a joint venture between the Illinois Central and the Canadian National. This joint venture was facilitated by close proximity of the Grand Trunk Western/Canadian National and the Illinois Central mainlines at the north end of Markham Yard, where the Grand Trunk Western/Canadian National line crosses under the Illinois Central. A connecting track was built at this location allowing the Grand Trunk Western/Canadian National direct access to the new terminal.

Following the Canadian National's 1999 acquisition of the Illinois Central Railroad, the two intermodal terminals in Harvey were combined into a single facility and expanded into the current Canadian National Gateway Intermodal Terminal. The existing terminal covers approximately 120 acres with room to expand. The main gate is located on Center Avenue, just south of 167<sup>th</sup> Street. The facility is open 24 hours per day Monday - Friday, and 7am – 11pm on weekends. Located adjacent to this facility is the Canadian National's automotive transfer facility, as well as its Chicago Grain Distribution Center, which together occupy approximately 35 acres.

**Figure 6-3: CN Chicago Intermodal Terminal**



Source: Chicago Southland Economic Development Corporation

The Canadian National currently provides domestic intermodal service between Chicago and major cities in Canada, including overnight service between Chicago and Toronto, as well as service to Montreal, Edmonton, and Vancouver. In the U.S., the Canadian National provides service between Chicago and Memphis, Tennessee; Jackson, Mississippi; and Mobile, Alabama. The Canadian National provides door-to-door service for North American intermodal customers as well as for marketing its terminal-to-terminal services to intermodal marketing companies like Chicago-based Hub Group.

In July 2010, the Canadian National announced plans to build a new logistics park in the south suburbs that would include over 2.5 million square feet of warehousing space. This development would be built on several hundred acres of Canadian National-owned land directly south of the Harvey intermodal terminal, along the west side of Ashland Avenue, in the communities of East Hazel Crest and Homewood. The Canadian National's own promotional material identifies this development as "Logistics Park Chicago". It is conceptually similar to the Canadian National's Calgary Logistics Park, which it first announced in February 2010.

By 2010, the only remnants of the original Markham Yard still in service were the original Northbound Receiving and Southbound Departure Yards, both located south of 171<sup>st</sup> Street. The original brick yard office building was still visible along the north side of 171<sup>st</sup> Street in the middle of the yard. Located in the extreme southeast corner of the original Markham Yard footprint was the locomotive servicing area, and Woodcrest Shops which opened in 1971.



The Canadian National operates several proprietary transload facilities within the boundaries of the Harvey intermodal terminal. The Canadian National's Harvey Cargoflo terminal is a multi-commodity dry bulk transfer facility currently handling, but not limited to, plastics. This facility covers 8.5 acres, and has a capacity of 25 railcar spots. Its operating hours are Monday-Friday 7:30am to 4:30pm. The Canadian National's Chicago Grain Distribution Center is also located within the Harvey intermodal terminal. This facility is used primarily to transfer bulk grain products from railcars to steamship containers for export, and has a capacity of 22 railcar spots. It also has the capability to transfer product from railcars to bulk trucks for local delivery. It operates 24 hours from Monday-Friday and 12 hours on weekends.

In November 2010, the Canadian National and the North American Stevedoring Company, LLC announced construction of a new multi-modal steel transloading facility at the Port of Chicago. The North American Stevedoring Company, LLC is a division of Quebec Stevedoring Company Ltd. The new facility is located at Iroquois Landing at the Port of Chicago on 190 acres of land. It is designed to offer producers multi-modal transportation options by rail, truck, intermodal container, inland barge, and ocean-going vessel for steel coil, sheet, plat, bar, structural, pipe and tube products, as well as dimensional loads and heavy equipment.

The Canadian National has two additional regional transload and distribution facilities located within Chicago. The Canadian National's Chicago Distribution Center for paper and wood pulp (Stellar Warehouse) is located at 5000 S. Homan Avenue. Its Chicago Distribution Center for lumber, panel, and other building products is located at 3501 West 51<sup>st</sup> Street. Both of these facilities are located on the Canadian National's Elsdon Subdivision which is in the process of being sold to CSX. Both facilities will most likely be relocated to a site with direct Canadian National rail service.

Under Finance Docket No. 35522, filed with the Surface Transportation Board in July 2011, CSX Transportation proposes to acquire the right to operate over a 22.3-mile portion of the Canadian National Railway's Elsdon Subdivision rail line between Munster, Indiana (MP 31.0) and Elsdon, Illinois (MP 8.7). The Grand Trunk Western Railway Company currently owns and operates Elsdon Subdivision. The Grand Trunk Western Railway Company's use of the line has decreased since the Canadian National acquired the Elgin Joliet & Eastern Railway, which allowed the Canadian National's subsidiary railroads to divert traffic from the Line to the EJ&E alternative route. CSX Transportation currently has trackage rights over the Line. In the 1980's, CSX Transportation obtained trackage rights between Munster, Indiana and Thornton Junction, Illinois when CSX Transportation abandoned its line north of Munster. CSX Transportation's Monon Subdivision trains currently operate between Munster and CSX Transportation's connection with the Baltimore & Ohio Chicago Terminal's Chicago Heights Branch at or near the Elsdon Subdivision Station C.J., at or near the Grand Trunk Western milepost 22.6. The Canadian National would continue to operate under a trackage-rights agreement to provide rail service to its existing customers.

### **6.1.2 CSX Transportation**

The closest CSX intermodal terminal to Logistics Park Calumet is located in Bedford Park, Illinois, but CSX currently provides rail carload service within the Logistics Park Calumet development boundaries via its Chicago Heights Subdivision. This route consists of a stub-ended branch line running 8.1 miles from Harvey Junction, a connection with its Barr Subdivision in Blue Island on the north, to Thornton on the south. At one time, CSX tracks ran all the way through Chicago Heights to Faithorn, Illinois. South of Faithorn, the track belonged to the Milwaukee Road, which used trackage rights on the Baltimore & Ohio Chicago Terminal to reach Faithorn from their main yard in Bensenville. This line was part of the Milwaukee Road's original mainline between Chicago, Terre Haute, and Bedford, Indiana.

The portion between Faithorn and Hooper, Illinois was finally abandoned in 1980. The Milwaukee Road and its subsequent owner, the Canadian Pacific eventually obtained trackage rights to operate over the CSX mainline between Dolton Junction and Terre Haute, Indiana. Today, the Indiana Rail Road owns these trackage rights, which acquired them from the Canadian Pacific in 2006. The Indiana Rail Road is a regional railroad based in Indianapolis, Indiana, that CSX primarily owns ([www.inrd.com](http://www.inrd.com)). From 1900 to 1915 the Baltimore & Ohio Railroad operated six commuter trains per day between Grand Central Station and Chicago Heights with stops in Harvey, Thornton, and Glenwood.

The Chicago Heights Subdivision leaves Harvey Junction headed due south, and swings under I-57 to run along the north side of National Railway Equipment's Dixmoor plant at milepost 1. It then passes the Wyman-Gordon site in northwest Harvey and connects with the Grand Trunk Western/Canadian National mainline near Broadway Avenue in Harvey (CSX milepost 2.9). Originally, the CSX had their own track here which crossed over the Grand Trunk Western/Canadian National mainline at Park Avenue, to run along the south side of these tracks. Just west of Halsted Street, the CSX leaves the Grand Trunk Western/Canadian National track to return to its own line (CSX milepost 3.9). A Team Track was originally located along the east side of the main track just past milepost 4 and north of 162nd Street in South Holland, adjacent to Multi-State Transmission. It appears this siding is still in place, but probably not in service.

The "South Holland Industrial Spur" comes off the west side of the main track at milepost 5.6, just north of Armory Drive. This spur track crosses over Canal Street and runs back to the former Levolor plant which is where it ends today. Along the east side of the main track at this location, a siding once served Bell Fiber. The largest remaining customer on this line is probably Material Services, Inc., located at milepost 7.3 in Thornton. The main track terminates just north of Glenwood Road.

Local train service is provided out of Barr Yard in Riverdale for the South Holland Industrial Park. Barr Yard is the CSX's primary carload classification yard in the Chicago Terminal. The Chicago Heights Subdivision has been well maintained and is in reasonably good shape for what is basically an industrial spur track. It was designed and engineered for a much higher level of traffic than what it has seen in recent years. It is currently rated for a maximum gross weight on rail of 286,000 lbs. per car. A wholly-owned subsidiary company, the Baltimore & Ohio Chicago Terminal Railroad actually owns the CSX tracks in the Chicago Terminal, including the Chicago Heights Subdivision.

The CSX does not have any transload terminals or public warehouses in the Chicago Terminal located directly on their railroad. However, two facilities in the south suburbs that are open to reciprocal switching or that CSX shortline partners serve are listed on their website as part of their Warehouse Service Group. The CSX's MetalNet includes the Transload Service LLC (Kinder Morgan) facility in Chicago Heights, which the Union Pacific serves and which is open to reciprocal switching. Their Building Materials Warehouse Network includes a facility in Riverdale that American Transloading Services operates. The Indiana Harbor Belt serves this facility.

The CSX operates a wholly-owned bulk transloading company called TRANSFLO. This company provides transload service between railcars and trucks for a wide variety of liquid and bulk commodities. Their only Chicago area terminal is located in East Chicago, Indiana, but there have been some very preliminary discussions about developing a new terminal in the Logistics Park Calumet development.

### **6.1.3 Union Pacific Railroad**

The Union Pacific Railroad operates a regional intermodal terminal in the south suburban community of Dolton, a location the railroad refers to as ‘Yard Center’. This facility is located adjacent to the eastern edge of the Logistics Park Calumet development area at 147<sup>th</sup> Street (Sibley Blvd.) and Indiana Avenue. Yard Center was originally the main freight yard and locomotive servicing facility in Chicago for the Chicago & Eastern Illinois Railroad, a small regional railroad whose territory was best described by its name.

In 1969, ownership of the Chicago & Eastern Illinois Railroad was split between predecessor companies of the Union Pacific and CSX. Today, both railroads share ownership of the mainline between Dolton Junction and Woodland, Illinois that runs through South Holland, Thornton, and Chicago Heights. Union Pacific identifies this line as their Villa Grove Subdivision. The Union Pacific still uses a portion of the original Yard Center facility in Dolton as a regional carload classification yard. The Union Pacific serves several local carload customers in Dolton out of this facility.

The FHWA Intermodal Connector for the Dolton/Yard Center terminal runs from South Indiana Avenue to East Sibley Boulevard (Illinois 83) to I-94, a distance of just over two miles. The main entrance to the terminal is located off the east side of South Indiana Avenue about five blocks north of 147<sup>th</sup> and Sibley. It can also be accessed via the 147<sup>th</sup> Street/Sibley Boulevard exit off I-57. It currently operates 24 hours per day, seven days per week.

The Union Pacific provides intermodal service between this terminal and major cities in Texas, including Dallas, Houston, and San Antonio, as well as connecting service to and from Mexico via the Laredo Border Gateway. It recently opened new intermodal terminals in Dallas and San Antonio and operates the only through rail intermodal service between Chicago and major Mexican cities including Monterrey, Guadalajara, and Mexico City. Reports say that this facility handles shipments of auto parts from Mexico destined to the Ford Motor Assembly Plant in Chicago. Schneider National, JB Hunt, and Pacer International are major users of this service. Most of the traffic handled at this terminal moves in 48 and 53 foot domestic intermodal containers, with a small number of intermodal trailers.

The Union Pacific’s terminal has about half the lift capacity of the Canadian National’s intermodal terminal in Harvey. The Union Pacific, however, has no plans to expand their terminal at this time. The Dolton terminal covers about 107 acres, making it one of the smaller intermodal terminals in the Chicago area.

The Union Pacific is improving their Dolton Yard, which should improve operations and increase intermodal volumes, if NAFTA continues to increase trade between the U.S. and Mexico. Strong anecdotal evidence also suggests that companies are shifting manufacturing capability from Asia back to North American locations within Mexico to better serve the U.S. market. This combination of factors could also result in a corresponding increase in the area’s truck traffic.

Chicago Heights, Illinois is about five miles due south of Logistics Park Calumet, at the intersection of Illinois Route 1 and U.S. Route 30. In the 1890’s, Charles Wacker originally led a group of developers to establish this community as an outer-ring industrial suburb. The Canadian National’s Elgin Joliet & Eastern mainline and the Union Pacific’s Villa Grove Subdivision both run through this community. Both railroads serve a significant number of local carload customers. The Union Pacific operates a large automobile unloading terminal on the north side of Chicago Heights, along the east side of State Street. It also serves Bulkmatic Transport Company, which operates a large bulk transfer facility on State Street.

Chicago Heights is also home to the Chicago Heights Terminal Transfer Railroad. The Chicago and Eastern Illinois Railroad and the Kilgallen family originally owned this railroad. The Kilgallen family likely still holds an interest, which is why the name still exists, even though the Chicago Heights Terminal Transfer Railroad is operated as an integral part of the Union Pacific. The Chicago Heights Terminal Transfer Railroad operates approximately half a dozen miles of track on the east side of Chicago Heights.

## 6.2 Transload Opportunities

Site specific transload opportunities in Chicago's south suburbs are somewhat limited.

Since the Canadian National and CSX Transportation are still restructuring their Chicago area operations, their final carload marketing strategy in Chicago's south suburbs is unknown. However, the Canadian National has already publicly indicated it favors new industrial development along the former Elgin Joliet & Eastern mainline, generally in the area between Joliet, Illinois and Griffith, Indiana. The Canadian National is moving its main carload switching operations from Markham to Kirk Yard in Gary, Indiana. Thus, if the Canadian National wanted to expand carload service/operations anywhere in Chicago's south suburbs, it would most likely be adjacent to the former Elgin Joliet & Eastern mainline. It is possible that the Canadian National's final development plans for its own Logistics Park Chicago development in Homewood may include some kind or form of transload facilities, but these plans have not been finalized.

The Elgin Joliet & Eastern originally served the LogistiCenter Industrial Park in Sauk Village, which is located at the intersection of Illinois Route 394 and the Canadian National/Elgin Joliet & Eastern mainline. This industrial park, which still has over 100 acres available for development, would appear to be a good location to focus rail-based industrial development efforts. In 2011, Winpak Manufacturing announced they had selected a site in the LogistiCenter Park for a new manufacturing plant. One of the factors in Winpak's selection of this site was access to mainline rail service. The Canadian National also has rail-served sites available along the former Illinois Central mainline in University Park.

CSX Transportation's Chicago Heights Branch serves a number of potential sites in the South Holland Industrial Park but current ownership of these properties needs to be confirmed before proceeding with any development. The transload market in the immediate Logistics Park Calumet development area will probably not support multiple terminals on the same railroad within such a limited area. Thus, the South Suburban Mayors and Managers Association needs to decide which site to support, South Holland Industrial Park or Wyman-Gordon.

The Wyman-Gordon site is somewhat unique. Today, the CSXT Chicago Heights Branch serves this site, but the CSX is in the process of acquiring control of the Canadian National's Elsdon Subdivision which runs adjacent to the south side of this site. This mainline has GWR capacity of 286,000 lbs. Conceivably, a spur track could be constructed off the Canadian National line into the Wyman-Gordon site. The project team recommends further study and analysis of the Wyman-Gordon site as a potential transload terminal and rail-served industrial park.

The CSX and Union Pacific jointly own the mainline between Dolton Junction and Woodland Junction, but the Union Pacific provides local service on this line. There are no suitable industrial sites on this line between Dolton Junction and Chicago Heights. South of Yard Center, this line runs through residential neighborhoods in South Holland before it crosses over I-80. South of I-80 the line runs through the Material Service Quarry in Thornton and then through the Cook County Thorn Creek Forest Preserve.

There are only four industrial sites in the immediate Logistics Park Calumet study area with active rail carload service today. These are:

- Allied Tube & Conduit, Harvey;
- Fuchs Lubricants, Harvey;
- South Holland Industrial Spur, South Holland; and
- Material Services, Thornton.

The Union Pacific's current Reciprocal Switching Tariff shows the following rail-served customers in Dolton, Illinois:

- Innophos, and
- Smurfit Stone Container.

While Chicago Heights is technically not included within the Logistics Park Calumet study area, it does appear to represent the best opportunity for rail transload development. The Union Pacific/CSX Transportation mainline crosses the Canadian National/Elgin Joliet & Eastern mainline at this location. There are already a fair amount of local rail-served industries and rail-served property sites in Chicago Heights. The Canadian National and the Union Pacific serve several sites that provide serious opportunities for rail transload terminals.

Probably the biggest drawback for Chicago Heights, in addition to a Cook County property tax issue, is the challenging highway access. Most of the prime development sites in this community are at least five miles from the closest limited access highway. There is also an overhead clearance restriction where U.S. Route 30 passes under the Union Pacific mainline in Chicago Heights.

We recommend that future transload business development activities be concentrated in the Chicago Heights area, focusing on sites that multiple rail carriers could serve.

### 6.3 Rail Industry Overview

The rail freight industry is the classic niche business. It is highly specialized, serving relatively limited numbers of customers, commodities, and origin-destination pairs. In 2009, more than half of all originated rail carloads consisted of just two commodity types: coal and intermodal. In descending order, the next four commodity groups represented 25% of total rail carloads:

- Chemicals,
- Farm products,
- Food and kindred products, and
- Non-metallic minerals.

In terms of tons originated, almost half of all rail traffic in the U.S. in 2009 consisted of coal shipments, followed by grain, which accounted for approximately 10% of total tonnage.

Rail carload is a long-haul business. An average length of haul for freight railroads in 2009 was 918 miles, or more than twice the average truck haul length. The typical rail freight carload shipment averaged 64.2 tons, or more than three times that of the truckload industry. Rail carload generally serves "heavy products" that are sensitive to transportation costs. These tend to be lower value commodities where transportation

costs represent a higher percentage of the final production costs. Rail carload shipments typically “weigh” out before they “cube” out while this relationship is reversed for most truckload shipments.

One niche market where the railroads continue to do relatively well is in the transport of new automobiles. Today, over half of all new automobiles are still shipped by railcar. A significant number of imported automobiles move by rail, yet very few auto parts still move by rail. This situation is reversed for the food industry. Bulk raw materials for the food processing industry, like flour and sugar, continue to move by railcar, while little if any finished or packaged food products move by railcar. A similar situation exists for plastic grocery bags, where covered hoppers deliver the raw material consisting of plastic flakes and pellets, and trucks ship out the finished product.

Certain truly unique markets remain. While relatively few raw potatoes move by rail anymore, it has been estimated that about 40% of all frozen French fries that McDonald’s purchases move by railcar. While fresh oranges no longer move by rail, Tropicana moves large quantities of packaged orange juice in refrigerated unit trains out of central Florida to distribution centers in northern New Jersey and Cincinnati, Ohio.

Rail intermodal traffic volume is about evenly split between international and domestic. While major truckload firms like J.B. Hunt, Schneider, Swift, and others have recently begun moving large numbers of shipments in intermodal service, these shipments collectively represent about 5% of all truckload shipments nationwide. UPS, Inc. is the rail industry’s largest customer by revenue with approximately 20% of all UPS surface shipments moving rail intermodal for some portion of their journey. Terminal-to-terminal transit times in most primary intermodal lanes today average 1-2 days longer than comparable over-the-road transit times for single driver operations. Service in secondary intermodal lanes is rarely competitive with trucks.

The rail boxcar is the freight car that comes closest to resembling a truck trailer. At one time, the boxcar was the most widely used freight car in service and remains the most common type of railcar. In 2005, the top 25 commodities represented 80% of total boxcar traffic. The top 10 boxcar commodities are listed below:

- Paperboard
- Motor vehicle parts
- Pulp
- Printing paper
- Scrap paper
- Plywood
- Beer
- Newsprint
- Wood particle board
- Paper

The single largest boxcar commodity is paperboard, sometimes referred to as brown paper, which accounts for almost one-fifth of all boxcar tonnage and is used for packaging material. This is one of the industry’s fastest growing carload commodities due in large measure to the growth of internet shopping. Motor vehicle parts shipments in boxcars tend to consist of bulky body parts that do not load well into trailers. Most of the beer shipped in boxcars comes from two major breweries in Mexico.

In recent years, most of the growth in the rail carload sector has been related to energy production. Shipments of low sulfur Wyoming coal for domestic power production remain strong. Ethanol shipments are down after the original ethanol surge faded a few years ago, but the commodity remains a key part of the industry’s traffic base. The exploitation of Bakken Shale oil and natural gas fields are generating substantial amounts of new carloads. The sand and drilling pipe required by drilling activities moves inbound by rail while much of the oil produced from these fields is also moving outbound by rail to refineries around the U.S.

Transload facilities accommodate the transfer of processed materials and packaged goods between railcars and trucks using conventional methods such as forklifts and cranes. Transflo facilities accommodate the transfer of liquid or flowing commodities in bulk between railcars and trucks using specialized pumping equipment.

### **CREATE Programs**

Another source of rail development in Chicago's south suburbs is the CREATE Program. From its website, "CREATE is a first-of-its-kind partnership between the U.S. Department of Transportation, the State of Illinois, the City of Chicago, Metra, Amtrak, and the nation's freight railroads. A project of national significance, CREATE will invest billions in critically needed improvements to increase the efficiency of the region's passenger and freight rail infrastructure and enhance the quality of life for Chicago-area residents."

There are four CREATE Program component projects located in the south suburbs, which are the following:

- Component Project B15 – TCS Blue Island Yard Running Track (Blue Island, Riverdale, Dolton);
- Component Project B16 - Thornton Junction Connection (South Holland);
- Component Project GS23a - Cottage Grove Avenue and the Indiana Harbor Belt/CSX Grade Separation (Dolton); and
- Component Project WA11 - Dolton Interlocking Upgrade (Dolton, Riverdale).

There are six additional component projects located in the Blue Island – Alsip area. None of these projects are currently scheduled for construction and none have funding commitments as of this date. Full details on these projects can be found on the CREATE website at [www.createprogram.org](http://www.createprogram.org).

Trucks currently transport approximately 69% of all domestic freight tonnage. Every rail intermodal move begins and ends with a truck. The American Trucking Association's seasonally adjusted Truck Tonnage Index for April 2011 was up 4.8% year-over-year for the 17<sup>th</sup> consecutive monthly gain. The Illinois Trucking Association is a member of the Board of Directors for the Chicago Southland Economic Development Corporation.

The south suburbs account for one quarter of the region's economic activity in the Motor Freight industry, according to The Metropolis Freight Plan, which Metropolis 2020 released in December 2004. The three south suburban freight centers that Metropolis 2020 identified span over a dozen municipalities and "boast a concentration of freight businesses and a convergence of several rail lines, intermodal terminals and expressways". In terms of average daily truck counts, three of the region's heaviest travelled highways are Interstate Routes 80, 94, and 294 in southern Cook County.

In addition to the concentration of truck terminals in Cook County's southern suburbs, there is an equally significant concentration of trucking activity east of the area in the northern half of Lake County, Indiana.

The following trucking companies operate terminals in Cook County's southern suburbs:

- UPS Freight – South Holland
- FedEx Freight – Chicago Heights
- Yellow Roadway – Sauk Village
- ABF – Sauk Village
- C.R. England – South Holland
- Eagle Express-South Holland
- Cresco Lines – Harvey
- ARKA Logistics, Inc – Markham

- Saia, Inc. - Markham
- Schneider National - Homewood
- USA Truck – South Holland
- US Xpress – Markham
- Illiana Distribution System - Markham
- Pro Freight Express – South Holland
- Shepley Motor Express – Thornton
- Quality Carriers, Inc. - Markham

UPS, Inc. is the trucking industry's single largest for-hire carrier by revenue, followed by FedEx Corporation. In 2010, UPS and FedEx combined grossed more than the entire North American rail freight industry. Ryder Truck Leasing operates a large maintenance shop and fuel facility in Harvey at Lathrop Avenue and 171<sup>st</sup> Street. Penske Truck Rental operates a comparable facility less than a mile away on 172<sup>st</sup> Street in South Holland.

Intermodal truckers with terminals in the area include:

- Adams Trucking – Markham
- Chicago Road Express – Chicago Heights
- Cowan Systems – South Holland
- Fore Transportation – Harvey
- Gold Star Trucking – Tinley Park
- Illinois Transport – South Holland
- Kiswani Trucking – South Holland
- Mason Dixon - Alsip
- Metro Intermodal Ltd. – Lansing
- Morgan Southern – Calumet City

Local companies also operate several steamship container depots, which are the following:

- Chicago Heights Intermodal/Chicago Road Express – Chicago Heights,
- FORE Transportation – Harvey,
- Illinois Transport – South Holland,
- Integrated Industries – Harvey,
- Pro Trailer Repair – Alsip, and
- Strictly Trailer Repair CY – Alsip.

Since 2009, South Suburban College has partnered with Star Truck Driving School to offer truck driver training at its campus in South Holland, Illinois. This special accelerated course provides an emphasis on local pick-up and delivery operations and is designed to provide comprehensive training in all facets of safe, defensive driving in demanding local conditions. This school trains for both Class A and B commercial drivers licenses. Class A licenses allow drivers to operate a tractor/trailer combination and Class B licenses allow drivers to operate a straight truck. An examiner from the Secretary of State performs the corresponding vehicle tests on South Suburban College's campus. Once students successfully complete the required classes and tests, the Secretary of State issues a training certificate and license.

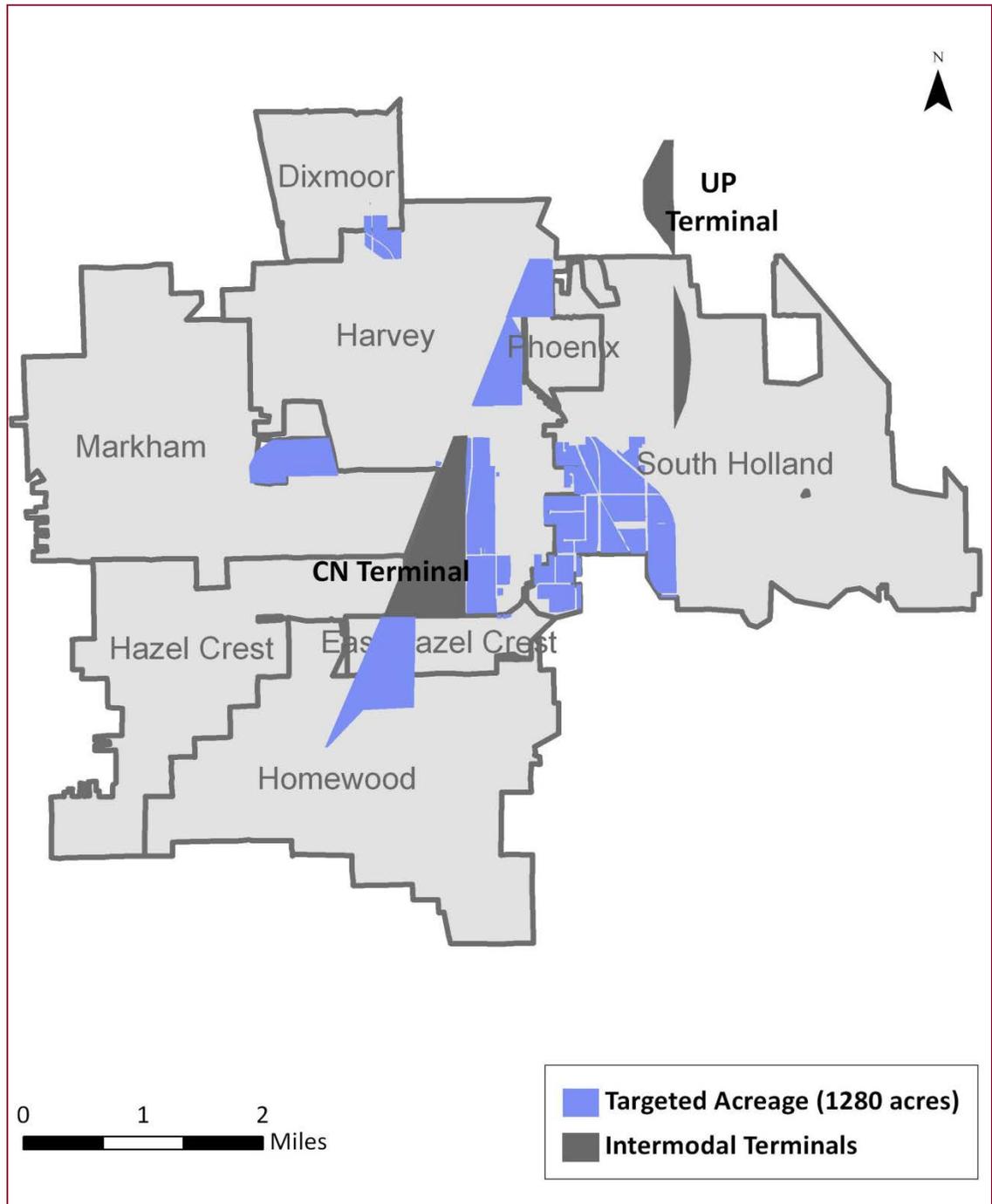
## **7 STRATEGIC ACTION PLAN FOR LOGISTICS PARK CALUMET**

### **7.1 Strategic Action Plan**

This study's findings have shown a strong value proposition for Logistics Park Calumet.

The Strategic Action Plan builds on Logistics Park Calumet's strengths and addresses the challenges to advance its development as a logistics hub. The Plan recommends several actions to enhance the marketing, infrastructure, and funding channels for Logistics Park Calumet's successful development. The proposed actions are derived from the analysis undertaken in this study and on initiatives that Logistics Park Calumet's leadership already have underway. These proposed actions are described below under the following sections: Marketing, Site and Site Information, Infrastructure Development, Infrastructure for International Trade, Development Programs and Incentives, Funding Strategies, and Workforce Development. The consultant team has also provided additional supporting information for some of the recommended actions in Section 8 of this report.

**Figure 7-1 Logistics Park Calumet (House Bill 1606 Boundaries)**



Source: SSSMA

## 7.2 Marketing

### **Marketing Tools**

The Strategic Action Plan suggests that Logistics Park Calumet begin a marketing campaign, create a web site, and develop a strong PowerPoint presentation and trade show brochure that show and promote Logistics Park Calumet's unique and competitive logistics assets. Logistics Park Calumet's representatives should continue to attend trade shows and other public and industry forums to raise awareness of Logistics Park Calumet both locally and within the logistics sector.

### **Marketing to Developers**

Logistics Park Calumet should continue to market its assets to developers and brokers, while building upon existing relationships with Chicago area industrial real estate developers who are interested in the Logistics Park Calumet region. The immediate goal is to help potential developers identify suitable sites for acquisition and development. The initial phase in this process is to identify the top sites suitable for conversion or redevelopment as warehouse sites. For the purpose of warehouse development, the consultant team recommends that Logistics Park Calumet's representatives establish a minimum development property size of 10 acres. Logistics Park Calumet should produce detailed information that developers can use to start their planning process. (Please see, Site Information Action below.)

### **Marketing to End-Users**

## 7.3 Sites and Site Information

### **Develop Strategies for Specific Sites**

Logistics Park Calumet should continue to develop marketing resources, including updated, detailed site information (please see below), for the prime development sites and locations within Logistics Park Calumet. These sites should be marketed primarily for development as warehouse and distribution centers. They consist of:

- Brownfields undergoing assessment and/or remediation,
- Trailer and container storage yards suitable for redevelopment,
- Surplus rail carload switching yards,
- Existing vacant land in useable condition,
- Abandoned former manufacturing buildings not suitable for conversion, and
- Underutilized industrial assets suitable for redevelopment.

Since the mid-1990s, the City of Chicago's Departments of Environment and Planning/Development have administered an extensive brownfields initiative. This program has a number of examples relevant to redevelopment in Cook County's southern suburbs. The consultant team recommends further review of this program in detail in a future phase of this project.

When marketing Logistics Park Calumet, prospective users will find the availability of shovel-ready/pre-certified sites very important. Developers and brokers tend to favor shovel-ready sites over other sites since most end users want to move into a new facility within six months from actual site selection. The South Suburban Mayors and Managers Association/Chicago Southland Economic Development Corporation should prepare its own internal updated and detailed plan on how to bring individual sites to shovel ready status. One example of a detailed plan like this could be the State of Indiana Shovel Ready Program. The

Indiana program is designed to specifically enhance the marketability of individual sites. Funding for this work may be available through a HUD Challenge Grant. These plans will ultimately be shared with actual developers selected for specific sites. As part of this process, this study strongly recommends that the South Suburban Mayors and Managers Association continue its present aggressive program of environmental assessment and remediation.

### **Develop Site Information**

Logistics Park Calumet should continue to generate site information on its GIS-based web site that shows detailed site information and agreements with property owners on their plans for developing or selling property. This information should incorporate cost analysis of property taxes and cost of operations compared to other regions in Illinois. Examples include the following:

- Detailed description of each property site including total acreage;
- Maps and GIS data identifying each property site;
- Current list of all property owners and their parcels for each parcel contained within each site;
- Complete transportation access data for each site including distance to both the Canadian National and Union Pacific intermodal terminals, as well as all relevant commercial truck access;
- Best estimate on each site's current environmental condition and the current status of any environmental inspection or remediation efforts currently underway at the site;
- Current assessed valuation for property tax purposes for all parcels in each site; and
- A list of government financial incentives available for each site.

Based on the region's overall layout, especially relative to the Canadian National Gateway Intermodal Terminal, these are most but not all of the specific sites within the immediate Logistics Park Calumet area that appear to offer the most promise generally for redevelopment into logistics warehouses or distribution centers. They offer a combined area of approximately 515 acres<sup>7</sup>.

- Fore Transportation Terminal, Harvey: 50 acres
- Harvey Northeast Intermodal Site A: 30 acres
- Harvey Northeast Intermodal Site B: 30 acres
- Clarke Logistics/Fuchs Lubricants Property: 30 acres
- Harvey Ready-Mix/Asphalt Property: 40 acres
- Harvey-Phoenix Logistics Site: 90 acres
- South Holland Indiana/State Street Corridor: 70 acres
- CN Logistics Park Chicago, East Hazel Crest/Homewood: 175 acres

The Wyman-Gordon site in northwest Harvey is too far from either the Canadian National or Union Pacific intermodal terminals for development as an intermodal logistics warehouse. However, it may have potential as a rail-served transload center or rail-served industrial park. The consultant team recommends that the Wyman-Gordon site should be treated as a unique development project separate and apart from the larger Logistics Park Calumet development project. The environmental remediation work at the Wyman-Gordon site was completed in mid-2012. Dixmoor and Harvey jointly own this site, so the South Suburban Mayors

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<sup>7</sup> For information purposes only, this study includes CN's own development plan and schedule for Logistics Park Chicago, already underway. Specific property owners also identified additional sites, which are still in private hands. The property sizes shown are rough estimates only and may or may not reflect actual property size available for future development activities. None of these sites would be considered shovel ready today although some are closer to this goal than others.

and Managers Association/Chicago Southland Economic Development Corporation may want to lead this overall development effort with the Cook County Bureau of Economic Development's help.

### **Redevelopment of Existing Buildings**

The above analysis does not include any existing buildings in use now that might be converted, expanded, or demolished, such as those located on the north side of 171<sup>st</sup> Street east of Center in Harvey, or along Armory Drive in South Holland. The research team has held preliminary discussions with the Village of South Holland's municipal staff about redeveloping existing in-use buildings within the South Holland Industrial Park. The research team recommends that the Village conduct a more in-depth land use analysis of their industrial park to identify specific individual sites with potential for warehouse conversion and redevelopment. The Village of Romeoville may be a good model for this analysis, which has produced an excellent industrial multi-use zoning map for their community.

## **7.4 Infrastructure Development**

### **Sub-Regional Infrastructure**

Identify sub-regional infrastructure needs and develop infrastructure plans for key elements – roads, sewers, storm water management, etc. In particular, work with the new South Suburban Mayors and Managers Association broadband grant to create the infrastructure to provide broadband services to logistics industrial parks.

### **Local Road Network**

During the past five years, the Illinois Department of Transportation and the Illinois State Toll Highway Authority have successfully completed a series of programs to rebuild major highways and roadways in Chicago's south suburbs. (Please see, Section 8.7 for specific projects and additional discussion of the local road network.) While this regional roadway improvement was a major benefit to the overall Logistics Park Calumet project, it did not include any improvements to the local Intermodal Connectors (principally 167<sup>th</sup> Street and Center Avenue) at the Canadian National Gateway Intermodal Terminal. However, the State has addressed improvements to these connectors with a commitment of \$4 million for the complete rebuilding of 167<sup>th</sup> Street between Center Avenue and Armory Drive in South Holland. These improvements are scheduled for completion in early 2013. This project will further enhance the local roadway network serving Logistics Park Calumet.

The Cook County Bureau of Economic Development, the Cook County Highway Department, and the City of Harvey, with the South Suburban Mayors and Managers Association's support, also submitted an application for \$13.7 million under the federal TIGER Discretionary Grant program to fund improvements on Southland Intermodal Connectors. The U.S. Department of Transportation released the results of the TIGER 3 application process in mid-December 2011. They did not select the Southland Intermodal Connector Project for funding. This does not preclude the South Suburban Mayors and Managers from resubmitting this project, however, under any future TIGER Discretionary Grant Application program. The South Suburban Mayors and Managers Association/Chicago Southland Economic Development Corporation should continue to monitor the TIGER process.

### **Site Specific Access**

Within this project's limited scope, it was not feasible to examine any roadway issues at either the Wyman-Gordon site or the Harvey-Phoenix site. The consultant team recommends that commercial truck access at both locations be analyzed in more detail in this project's next phase.

### ***The Union Pacific Intermodal Terminal***

The consultant team also recommends that the South Suburban Mayors and Managers Association further study possible commercial truck routes between the Union Pacific intermodal terminal in Dolton and specific Logistics Park Calumet development sites in Harvey and South Holland.

## **7.5 Infrastructure for International Trade**

### ***Foreign Trade Zone***

The Chicago Southland Economic Development Corporation should apply for foreign trade zone status.

The short-term plan should be to qualify Logistics Park Calumet as a pre-designated General Purpose site within Foreign Trade Zone 22. This is a somewhat shorter process that still requires a specific “activation” process once an actual tenant or user is in place. However, it will accomplish most economic development goals and will still get Logistics Park Calumet noticed in the developer community. The long-term objective is for Logistics Park Calumet to become a fully-functioning specific General Purpose Site within Foreign Trade Zone 22’s existing regional boundaries. This will require the full cooperation and active support of Foreign Trade Zone 22’s grantee, the Illinois International Port District.

While not as complicated as a TIGER Grant Application, an application for Foreign Trade Zone status does require a certain level of professional expertise and a substantial amount of detailed information. There are a number of professional consulting firms that specialize in the preparation of Foreign Trade Zone applications. The South Suburban Mayors and Managers Association may want to consult with one or more of these firms before beginning the application process. Many of these same firms offer professional Foreign Trade Zone management services once it has been established.

### ***Customs Inspection Station***

The Chicago Southland Economic Development Corporation should continue to pursue having a customs inspection station in the Logistics Park Calumet area. Currently, Global CFS, Inc. and Channel Distribution Corporation each operate a U.S. Customs and Border Protection Centralized Examination Station in Bensenville and Itasca respectively.

In May 2011, a representative of the U.S. Customs and Border Protection Service visited Fore Transportation’s offices in Harvey and indicated that a third Central Examination Station (CES) license will be issued for the Chicago area in 2013. The Customs agent indicated that this third station needed to be near the Canadian National Gateway Intermodal Terminal, preferably on Fore’s property. However, the agent indicated the Central Examination Station would be located there only if the local roadway infrastructure was able to handle the increased traffic.

The combination of a Central Examination Station, Foreign Trade Zone status, and rebuilt Intermodal Connectors, would be a powerful force for regional economic development in the Logistics Park Calumet project area.

## **7.6 Development Programs and Incentives**

### ***Benchmarking of Development Programs***

Most of the region’s recent warehouse and distribution center development has occurred in the municipalities of Aurora, Bolingbrook, and Romeoville. All three communities share good reputations within

the broker and developer community. The consultant team suggests that the South Suburban Mayors and Managers Association/Chicago Southland Economic Development Corporation help local south suburban communities with a formal benchmarking process to see how local communities compare with the current primary regional development locations.

### **Property Tax**

The South Suburban Mayors and Managers Association/Chicago Southland Economic Development Corporation should continue to address property tax levels. By its nature, Logistics Park Calumet will be competing with existing developments located in the region and tax levels may play a deciding factor in site selection. While numerous trucking companies have located large-scale terminals in the Logistics Park Calumet area, there is anecdotal evidence (from brokers and developers) that comparatively higher property taxes have been a barrier to large-scale warehouse development in Cook County. The South Suburban Mayors and Managers Association/Chicago Southland Economic Development Corporation should undertake a detailed analysis and comparison of property tax assessment levels and property tax rates with neighboring locations, including Will and Kane Counties.

### **TIF Program**

Tax Increment Financing is an economic development tool that helps local governments attract private development and new businesses. Tax Increment Financing Zones are currently in place in Dixmoor, Harvey, Phoenix, and South Holland. The City of Harvey used some of its Tax Increment Financing revenues to help jumpstart the reconstruction of 167<sup>th</sup> Street. The South Suburban Mayors and Managers Association/Chicago Southland Economic Development Corporation should continue to work with the municipalities to develop Tax Increment Financing plans for properties available for development.

## **7.7 Funding Strategies**

Within the last five years, the South Suburban Mayors and Managers Association and its public sector development partners have been extremely successful in securing federal and state funds for a variety of programs. (Please see, Section 9.5 for additional background information and examples). The South Suburban Mayors and Managers Association/Chicago Southland Economic Development Corporation should build on this success and continue to develop a range of funding sources for advancing the Logistics Park Calumet project. The sponsors should, for example, conduct a more detailed analysis of existing federal financing programs, like Build America Bonds, to determine their overall applicability to the Logistics Park Calumet project.

### **House Bill 1606**

Work to ensure HBI 606 is passed as a funding source so that a development authority can invest in the area's infrastructure.

### **Southland Land Bank**

Logistics Park Calumet should work with the Chicago Southland Development Fund and Cook County to create a funding source to pay for property acquisition for the Southland Land Bank, so that U.S. Environmental Protection Agency funds can also be used to more effectively remediate sites.

## **7.8 Workforce Development**

The South Suburban Mayors and Managers Association/Chicago Southland Economic Development Corporation should continue working with the area's community colleges to develop extensive logistics-related training programs.

## 8 ADDITIONAL INFORMATION FOR A STRATEGIC ACTION PLAN

### 8.1 Introduction

The following discussion addresses in more detail some of the industry trends and specific initiatives that drive and form part of the Strategic Action Plan presented in Section 7.

### 8.2 Export Trends and Opportunities

#### 8.2.1 *The National Export Initiative*

In September 2010, President Obama’s Export Promotion Cabinet released its “Report to the President on the National Export Initiative”. This ambitious plan calls for doubling U.S. exports in five years. It is estimated that this level of increase will support two million additional U.S. jobs<sup>8</sup>. In addition to the National Export Initiative, two other programs designed to boost exports are the Trans-Pacific Partnership agreement, and the United States-Korea Free Trade Agreement.

***Improvements in the U.S. transportation and supply chain infrastructure are critical for exporters to quickly and inexpensively get their goods to ports.***

Maintaining a globally competitive, user-focused U.S. supply chain infrastructure is critical to the success of the National Export Initiative and to sustained American economic growth. The Departments of Commerce and Transportation have entered into a Memorandum of Understanding to work together and with stakeholders to develop and implement a comprehensive, competitiveness-focused national freight policy. The resulting policy will foster end-to-end U.S. freight infrastructure improvements that facilitate the movement of goods for export and domestic use. The goal is to improve the competitiveness of U.S. supply chains in domestic and international commerce and national economic development, while supporting environmental sustainability and livable communities. Canada, the European Union, and other competitors have already adopted similar policies that promote their supply chains and national development. Many of the United States’ most important exporters are farmers located in rural areas and manufacturers that have built plants in rural areas to keep production costs low. The Federal Government needs to make sure that these exporters, like their counterparts in the urban markets, are connected to export ports through a systematic and smoothly functioning network of airports, railroads, roads, and waterways.

***The Trans-Pacific Partnership and the United States-Korea Free Trade Agreement are designed to strengthen U.S. ties in the Asia-Pacific region.***

Through the Trans-Pacific Partnership Agreement negotiations, the United States is working with an initial group of like-minded countries to negotiate a 21<sup>st</sup> century regional agreement that will advance U.S. economic interests in the rapidly growing Asia-Pacific region. Korea is a rapidly growing market and the United States’ seventh largest trading partner. As key competitor countries implement their own trade agreements with Korea and others in the region, the Trans-Pacific Partnership and the United States-Korea Free Trade Agreement can help level the playing field for U.S. exporters in these important markets.

*The shortest distance between the U.S. Midwest and South Korea is via the Calumet Gateway and the Port of Prince Rupert. Hanjin Shipping is the largest container carrier in Korea and a major user of the Port of Prince Rupert.*

<sup>8</sup> The U.S. Department of Commerce has established a website at [Export.gov](http://Export.gov) to support the National Export Initiative and to help U.S. companies grow their exports.

**Canada and Mexico play a special role as the United States' largest export markets and are therefore ideal starting points for new exporters.**

Canada and Mexico, the United States' neighbors and North American Free Trade Agreement partners, are the largest export markets for U.S. goods and services. Because the trading relationship is well established and market access barriers are relatively low, these markets are a high priority for broadening American companies' exporting base. In addition to benefiting from the competitive advantages of doing business with a Free Trade Agreement partner country, U.S. companies will find these markets more accessible from a shipping, logistics, and payment standpoint.

*Logistics Park Calumet's intermodal terminals connect the Chicago Region with all of Canada and most of Mexico.*

**Europe remains an important market, given the huge base trade and deep commercial ties.**

Average annual U.S. goods exports to the European Union are approximately \$250 billion – about 25% of total U.S. merchandise exports to the world. Therefore, any market access gain with the European Union can translate into commercial benefits. In 2008, U.S. services exports to the European Union totaled more than \$224 billion, representing 43% of all U.S. services exports to the world. The European Union is a natural target for U.S. export promotion efforts that encourage companies to begin exporting or expanding into new markets.

*The Canadian National's Harvey intermodal terminal connects Logistics Park Calumet with Europe via the Ports of Montreal and Halifax.*

### **8.2.2 Export Market Impacts and Opportunities**

In 2010, Illinois' top three trading partners by dollar volume were Canada, Mexico, and China.

Canada and Mexico combined accounted for more than one-third of Illinois' total international trading volume. All of the top three countries are directly linked with Logistics Park Calumet's development via the Canadian National and Union Pacific intermodal service. Japan was ranked seventh. South Korea was ranked Illinois' 16<sup>th</sup> largest trading partner by dollar volume. Implementation of the proposed Korea-U.S. Free Trade Agreement will probably impact Korea's ranking here.

In 2010, Illinois was the sixth ranked state for exports by dollar value. The top ten Illinois export industries are:

- Machinery, except electrical
- Chemicals
- Computer and electronic products
- Transportation equipment
- Electrical equipment
- Food and kindred products
- Fabricated metal products
- Miscellaneous manufactured products
- Plastics and rubber products
- Primary metals

The largest Illinois-based exporting companies include:

- Abbott Labs (North Chicago)
- Archer Daniels Midland (Decatur)
- The Boeing Company (Chicago)
- Caterpillar, Inc. (Peoria)
- Deere & Company (Moline)
- Motorola (Schaumburg)

Illinois ranks number one in the Midwest as a destination for foreign investment. According to the Illinois Office of Trade, more than 170 export managing/trading companies and 125 international freight forwarders and custom house brokers maintain offices in Illinois. Over 70 nations maintain consulates in the state and over 30 international banks have established branches or representative offices in Chicago.

Illinois agriculture was a strong component of the export story. For the top 25 6-digit harmonized system commodities in 2010, based on dollar value, agricultural commodities ranked as follows:

- 5<sup>th</sup> – Soybeans, whether or not broken;
- 14<sup>th</sup> – Brewing or distilling waste (from ethanol); and
- 16<sup>th</sup> – Corn, other than seed corn.

There are several regional firms that specialize in exporting grain products by steamship container. These include:

- C&D (USA), Inc. in Oak Brook,
- The DeLong Corporation in Wisconsin, and
- North Star Container LLC in Naperville.

The Illinois Soybean Association based in Bloomington has been involved with U.S. soy export promotion activities since the mid-1960s. Today, 13% of all U.S. soybean exports originate in Illinois. China currently imports 25% of U.S. soybeans. Most soybeans grown in Illinois come from the counties in the eastern part of the state that straddle I-57 between University Park and Champaign.

### **8.2.3 The Korean Free Trade Agreement**

In October 2011, Congress ratified the Korean U.S. Free Trade Agreement and President Obama signed it into law on October 21, 2011. This agreement should be implemented sometime in early 2012. It will be the first U.S. free trade agreement outside of the western hemisphere. The Korea-U.S. Free Trade Agreement will immediately eliminate duties on two-thirds of current U.S. agricultural exports to Korea, including corn, soybeans, and pork that farmers in Illinois and Indiana produce.

In 2010, South Korea was the Chicago Customs District's fourth largest trading partner by dollar value. Illinois ranked fourth among states in agricultural exports in 2010. The largest single agricultural export category was soybeans and related products.

The Port of Prince Rupert is the closest North American seaport to the Korean peninsula, and the most direct route to get Midwestern farm products to this new market. It is more than 1,000 miles closer to Busan, Korea than Los Angeles. Hanjin Shipping, the largest container line in Korea, is already a major user of Prince Rupert.

## **8.3 Foreign Trade Zones**

Foreign Trade Zone 22 was established in 1975 and extends 60 miles from Chicago's city limits. The Illinois International Port District, acting as Grantee administers it. As of May 2010, there were eighteen General Purpose Zone sites located within Foreign Trade Zone 22's boundaries, covering just over 2,800 acres. The largest of these, Site 5, covered 1,468 acres at the CenterPoint Intermodal Center located in Elwood, Illinois.

General Purpose Foreign Trade Zone Subzones have been growing more important in recent years. They have become one of the prerequisites for a successful inland port or intermodal logistics park development. In 2010, the Fort Worth-based Alliance Foreign Trade Zone 196 was ranked as the top “General Purpose Foreign Trade Zone” in the U.S. for the third consecutive year in terms of the value of foreign goods imported.

Foreign Trade Zones exist in virtually every major U.S. inland distribution market. The Kansas City Foreign Trade Zone covers 10,000 acres, more than any other Foreign Trade Zone in the country. Shelby County, Tennessee has a large, well-developed Foreign Trade Zone that extends down into northern Mississippi as well as across large portions of western Tennessee. Foreign Trade Zone 72, based in Indianapolis, is built around the success of the FedEx hub located at Indianapolis’s airport and hometown pharmaceutical producer Eli Lilly.

Foreign Trade Zones are secure areas under supervision of U.S. Customs and Border Protection that are considered outside the customs territory of the United States for the purposes of duty payment. Located in or near customs ports of entry, they are the U.S. version of what are known internationally as free trade zones. Authority for establishing these facilities is granted by the Foreign Trade Zones Board under the Foreign Trade Zones Act of 1934, as amended (19 U.S.C. 81a-81u), and the Board’s regulations (15 C.F.R. Part 400). The Board’s Executive Secretariat is located within the Import Administration of the U.S. Department of Commerce, Washington, D.C. 20230.

Qualified public or public-type corporations sponsor Foreign Trade Zones, which may operate the facilities themselves or contract with public or private firms for their operations. The operations are conducted on a public utility basis, with published rates. A typical general-purpose zone provides leasable storage/distribution space to users in general warehouse-type buildings with access to all transportation modes. Most zone projects include an industrial park site with lots on which zone users can construct their own facilities. Subzones are usually private plant sites the Board authorized through zone grantees for operations that cannot be accommodated within an existing general-purpose zone.

In 2009, there were 168 Foreign Trade Zone projects that were fully active during the year, with operating subzones in more than 114 of them. The number of facilities using subzone status during the year was 261. The combined value of shipments into general-purpose zones and subzones totaled over \$430 billion, compared with \$692 billion the previous year. General-purpose sites received nearly \$76 billion in merchandise. Total shipments received at subzone sites amounted to \$354.7 billion. Some 82% of zone activity took place at subzone facilities, which is consistent with the pattern of the last 15 years.

Industries in 2009 that continued to account for most zone manufacturing activity included oil refining, automotive, pharmaceutical, and machinery/equipment sectors. Approximately 58% of the shipments received at zones involved domestic status merchandise. The level of domestic status inputs used by Foreign Trade Zone operations indicate that Foreign Trade Zone activity tends to involve domestic operations that combine foreign inputs with significant domestic inputs. In 2009, approximately 330,000 persons were employed at some 2,500 firms that operated under Foreign Trade Zone procedures during the year.

The top 15 foreign-status products by value received in 2009 at General Purpose Zones in the U.S. were:

- Consumer electronics
- Other metals/minerals
- Vehicles
- Petroleum products
- Textiles/footwear/leather
- Other electronics products/parts
- Vehicle parts
- Iron/steel
- Machinery/equipment
- Ships/boats
- Other consumer products
- Beverages and spirits
- Pharmaceutical products
- Electrical machinery & equipment
- Chemical products

The Foreign Trade Zones program offers manufacturers and distributors located in the U.S. numerous benefits, but a few benefits account for most of this program's users. These benefits include:

- Duty deferral,
- Duty exemption of re-exports,
- Duty elimination on waste, and
- Weekly entry.

A Foreign Trade Zone is considered to be outside the commerce of the United States and U.S. Customs territory. Duty deferral occurs since customs duty is not due until the merchandise enters American commerce. Therefore, no customs duty is ever due on imported merchandise that is exported back out of the country without entering the U.S. commerce or duty exemption of re-exports. The same principle applies on duty exemption on waste. Imported materials that are lost or destroyed in the production process never reach the commerce of the U.S. and therefore are duty-exempt.

On May 18, 2000, an important amendment to the Foreign Trade Zone Act was passed. Foreign Trade Zone users were provided the opportunity to file weekly customs entries and no longer had to pay for each and every entry's processing. Regardless of location, every U.S. importer pays a 0.21% merchandise processing fee for each and every formal entry that U.S. Customs processes, usually through the importer's customs broker. There is a minimum of \$25 and a maximum of \$485 processing fee per entry. If entries have a value of over \$230,952, then the processing fee would be the maximum of \$485. The savings under this provision can be substantial.

Each customs port of entry is entitled to at least one zone project. Additional zone projects may be approved if it can be shown that the existing project is not adequately serving the public interest. General-purpose zone sites must be located within 60 miles or 90 minutes driving time of the outer limits of the customs port of entry.

Usually applicants are state and local agencies or public type corporations. Port authorities and economic development agencies are the most prevalent. The Chicago Southland Economic Development Corporation could perform the role of applicant here if their charter allows under Illinois state law. The consultant team recommends that the Chicago Southland Economic Development Corporation consult counsel before beginning the application process. Corporations submitting applications must be qualified to apply for a zone grant of authority under the laws of the state in which the zone is to be located.

The actual application requires written proof of authority to apply including:

- A certified copy of the state enabling legislation (The Secretary of State or Clerk of the General Assembly can provide this.),
- A copy of pertinent sections of the Grantee's charter or organization papers, and
- A certified copy of the Grantee's resolution authorizing the transmittal letter's execution and the application's submission.

Prior to preparing the actual application several key questions will need to be answered.

- *Who will serve as the Zone Grantee?*  
The Grantee is typically a public corporation. (The Chicago Southland Economic Development Corporation could qualify.) The proposed Grantee must qualify to serve as a Grantee under state enabling legislation concerning Foreign Trade Zones and should be an organization that represents a broad segment of the community's economic interests. (Illinois' Foreign Trade Zone state enabling legislation can be found at 50 ILCS 40/1, Chapter 24, par. 1361.)
- *Which site or sites will serve as the community's General Purpose Zone?*  
The General Purpose Zone can be comprised of several non-contiguous sites. Industrial park areas with companies who are confirmed to be prospective users normally receive the highest priority. Sites set aside for industrial and commercial development are also often included. If sites are owned by parties other than the Grantee or other public entities, care must be taken to assure that all parties understand the potential benefits and obligations.
- *Who will oversee and finance the operation of the Zone project?*  
Will it be the Grantee or some private organization? In either case, the prospective Grantee must be able to demonstrate how public utility principles will be applied in the Zone project's management and use.

If the Zone project is to be established as an additional Zone project adjacent to a particular port of entry, an application fee of \$3,200 is required. If the Zone project is to be established under the entitlement provision, no fee is required. The application itself consists of the following:

- A Transmittal Letter,
- An Executive Summary, and
- Five Required Exhibits.

The Executive Summary briefly describes:

- The type of organization making the application and its legal authority to do so;
- The type of Zone authority requested;
- The proposed Zone site or sites, and the larger project of which the Zone is a part;
- Project background or impetus for establishing the project;
- Relationship of the Zone project to the community's economic development plans; and
- Plans for operating and financing the Zone project.

The five required exhibits consist of detailed information as specified in 15 CFR, Chapter IV, Part 400, on the following subjects:

- Authority to Apply,
- Site Description,
- Operations and Financing,
- Economic Justification, and
- Maps.

Once staff from the Foreign Trade Zones Board receives the application, they review it for sufficiency. If they find that the application is deficient or has missing required information, they will return it to the applicant within 20 days. If the application is found to be sufficient, then the Board formally files the application, assigns it a docket number, and notifies the applicant. This normally occurs within 45 days of submission.

Typically, applications not involving manufacturing under Zone procedures take 10 to 12 months for processing and review. Applications that involve manufacturing under Zone procedures typically take 12 months or longer; however, applications that involve Foreign Trade Zone manufacturing authority that meet so-called "fast-track review" procedures may be processed more quickly. A grant of authority for a zone or subzone shall lapse unless the Zone project is activated pursuant to 19 CFR, part 146, and is operating within five years from a Board order (authorizing the zone or subzone) issued after November 7, 1991.

Pre-designation means companies (like third-party logistics firms and public warehouse operators) do not have to apply for a designation once they establish a facility within the Site's boundaries. Since the Foreign Trade Zone Board already designates General Purpose sites, companies can contact the Grantee to skip the designation application and simply begin the activation process. After the Foreign Trade Zone Board's approval, the company can start operations. Activation usually takes approximately three months. A fee schedule covers the activation process.

In January 2011, the Illinois International Port District, as Grantee of Foreign Trade Zone 22, received approval from the Foreign Trade Zone Board for a new form of zone administration known as an "Alternative Site Framework". This new form of Zone administration was designed to shorten the approval time required and provide Zone grantees with more flexibility.

The consultant team recommends that the South Suburban Mayors and Managers Association contact the Executive Director of the Illinois International Port District to determine the current status of the Alternative Site Framework's implementation and determine how these new procedures might impact an application covering Logistics Park Calumet's General Purpose Subzone.

The current regulations of the Foreign-Trade Zones Board are published in the Code of Federal Regulations at Title 15, Part 400 (15 C.F.R. Part 400). The regulations of the U.S. Department of Homeland Security's U.S. Customs and Border Protection Division for these Zones is at Title 19, Part 146 (19 C.F.R. Part 146). Information on foreign-trade zones is available on the Foreign-Trade Zone website at <http://www.trade.gov/ftz>. The consultant team recommends that all of these sites be consulted for the most recent regulations regarding Foreign Trade Zones before beginning any application.

## 8.4 U.S. Customs and Border Protection Division Centralized Examination Station

The current procedures and processes for the establishment of a U.S. Customs and Border Protection centralized examination station can be found in the Code of Federal Regulations (CFR) Title 19, Chapter I, part 118. A centralized examination station is a privately operated facility, not in the charge of a customs officer, at which merchandise is made available to customs officers for physical inspection. A centralized examination station may be established in any port or any portion of a port or any other area under the port director's jurisdiction.

Procedures for establishment of a customs examination station are detailed in part 118.2 as follows:

When a port director makes a preliminary determination that a new customs examination station should be established, or when the term of an existing customs examination station is about to expire and the port director believes that the need for a customs examination station still exists, he will announce, by written notice posted at the customhouse and by any other written methods he may consider appropriate (such as normal port information distribution channels, trade bulletins or local newspapers), that applications to operate a customs examination station are being accepted. This notice will include the general criteria together with any local criteria that applicants must meet (see part 118.11) and will invite the public to submit any relevant written comments on whether a new customs examination station should be established or on whether there is still a need for a customs examination station. Applications will be accepted only in response to the port notice and must be received within 60 calendar days from the date of the notice. Public comments must be received within 30 calendar days from the date of the notice.

In the Chicago area, public notice to advise the importing community of the opening of the customs examination station application process is made via the Port of Chicago "Pipeline" online publication. Written comments or inquiries regarding the customs examination station application or selection process should be directed to:

Customs and Border Protection  
2571 Busse Road, Suite 306  
Elk Grove Village, Illinois 60007  
Attn: CBP Officer and CES Coordinator  
(847) 616-4060, ext. 129

19 CFR, 118.11, covers the contents of an application to operate a customs examination station. The Customs Service requires eight specific pieces of information for a successful application. Once they have selected an operator, the Customs Service will provide the successful applicant with an agreement to operate the customs examination station between three years and six years. Such agreements cannot be transferred, sold, inherited, or conveyed in any manner. At the agreement's expiration, an operator wishing to reapply may do so pursuant to part 118.3 and his application will be considered de novo.

## 8.5 Review of Federal and State Funding Programs

An enterprise zone is a specific area that the State of Illinois designates in cooperation with a local government to receive tax incentives and other benefits to stimulate economic activity. Enterprise Zone Benefits include:

- Investment Tax Credits,

- Jobs Tax Credits,
- Illinois Sales Tax Exemptions,
- Utility Tax Exemptions, and
- A Property Tax Reduction in Cook County.

The following south suburban communities currently have enterprise zones in place:

- Chicago Heights
- Dixmoor
- Harvey
- Hazel Crest
- Phoenix
- Sauk Village

Within the last five years, the South Suburban Mayors and Managers Association and its public sector development partners have been extremely successful in securing federal and state funds for a variety of programs. These activities include the following:

- Initiated the assessment and clean up of brownfield conditions on potential logistics sites with over \$3.6 million in U.S. Environmental Protection Agency grants.
- Obtained over \$2 million in grants from the Illinois Department of Commerce and Economic Opportunity towards the reconstruction of 167th Street in Harvey.
- Awarded a \$2 million grant from the Illinois Department of Transportation's Economic Development Program towards the reconstruction of 167th Street in Harvey.
- Secured a \$98,000 grant from the U.S. Economic Development Agency, matched with \$100,000 in in-kind services, to build upon previous planning and research and to develop a master plan for the development of the Southland logistics industry cluster in 2011-2012.
- Secured over \$400,000 in grants from the Regional Transportation Authority and Cook County for a market analysis and for planning of potential Southland transit-oriented development projects.
- Secured a \$2.35 million U.S. Housing and Urban Development Sustainable Communities Challenge grant, primarily to seed an investment fund and land bank. They will be used to leverage private investments in transit-oriented development and collocated logistics sites to implement the Green TIME Zone strategy.

## 8.6 Indiana Shovel Ready Program

The Indiana Economic Development Corporation's Shovel Ready Program reduces potential costs of site development for businesses and enhances the marketability of certified sites. Minimum standards include<sup>9</sup>:

- Executive level community support (mayor, county commissioner, town council president) demonstrating a local commitment to expedite local permitting, when necessary.
- Clearly identified property ownership; a local economic development organization, local unit of government, developer, end user, or utility should own or option the property.
- Provision of the following maps: an ALTA (American Land Title Association) map, a site map showing the lot layout, a U.S. Geological Survey Topographical Map, and an aerial map.
- Sufficient infrastructure in place.
- Phase I Environmental Site Assessment that a certified professional performed within the prior six months. (A Phase I Report and supporting information based on ASTM standards E 1527-00 or E 1527-05.) Provide liability protection documentation for remediated sites.

<sup>9</sup> <http://iedc.in.gov/programs-initiatives/indiana-shovel-ready-program>

- Wetland delineation demonstrating that impacts to Indiana’s waters will be avoided or that the Indiana Department of Environmental Management has approved the mitigation plan.
- Clearly defined water and wastewater infrastructure to property line or demonstrated ability to build and pay for infrastructure up to the property line.
- Clearly identified transportation infrastructure to property line or demonstrated ability to construct and pay for infrastructure up to the property line.
- Clearly identified electric infrastructure to property line or demonstrated ability to build and pay for infrastructure up to property line.
- Clearly defined natural gas infrastructure to property line or demonstrated ability to pay for infrastructure up to the property line.
- Clearly identified high speed communications infrastructure to property line or demonstrated ability to build and pay for infrastructure up to property line.

### 8.7 Review of Roadway Network

During the past five years, the Illinois Department of Transportation and the Illinois State Toll Highway Authority have successfully completed a series of programs to rebuild major highways and roadways in Chicago’s south suburbs. The following regional roadways have been successfully rebuilt as part of this program:

- I-80 between the Indiana State Line and the I-294 junction in Markham;
- I-90 between the Indiana State Line and the I-294 junction in Lansing;
- I-294 between the I-80 and I-90 junctions in Markham;
- I-294 between the I-80 junction in Markham and the 95<sup>th</sup> Street interchange in Oak Lawn;
- I-80/I-294 at the Illinois Route I (Halsted St.) interchange in Harvey; and
- U.S. Route 6 (159<sup>th</sup> St.) between Illinois Route I and I-294 (in Harvey).

While this regional roadway improvement was a major benefit to the overall Logistics Park Calumet project, it did not include any improvements to the local intermodal connectors at the Canadian National Gateway Intermodal Terminal. These connectors consist of the following local roadways:

- Illinois Route I (Halsted St.) between 159<sup>th</sup> Street and the I-80 interchange;
- 171<sup>st</sup> Street between Ashland Avenue and Illinois Route I;
- Center Avenue between 159<sup>th</sup> and 171<sup>st</sup> Streets; and
- 167<sup>th</sup> Street between Center Avenue and Halsted Street.

The Illinois Department of Transportation maintains Illinois Route I (Halsted Street), which is in relatively good condition. It is a Class III truck route. 171<sup>st</sup> Street is maintained under the Cook County Highway Department’s jurisdiction. They rebuilt 171<sup>st</sup> Street between Halsted Street and Ashland Avenue in 1997 and between Ashland Avenue and Wood Street in 2008.

The two most critical roadways remain 167<sup>th</sup> Street and Center Avenue. 167<sup>th</sup> Street is a Secondary Urban route maintained under the City of Harvey’s jurisdiction. In September 2011, the State of Illinois committed \$4 million for the complete rebuilding of 167<sup>th</sup> Street between Center Avenue and Armory Drive in South Holland.

In August 2011, the U.S. Department of Transportation released its final Notice of Funding Availability for a third TIGER Discretionary Grant program. In early September, the Cook County Bureau of Economic

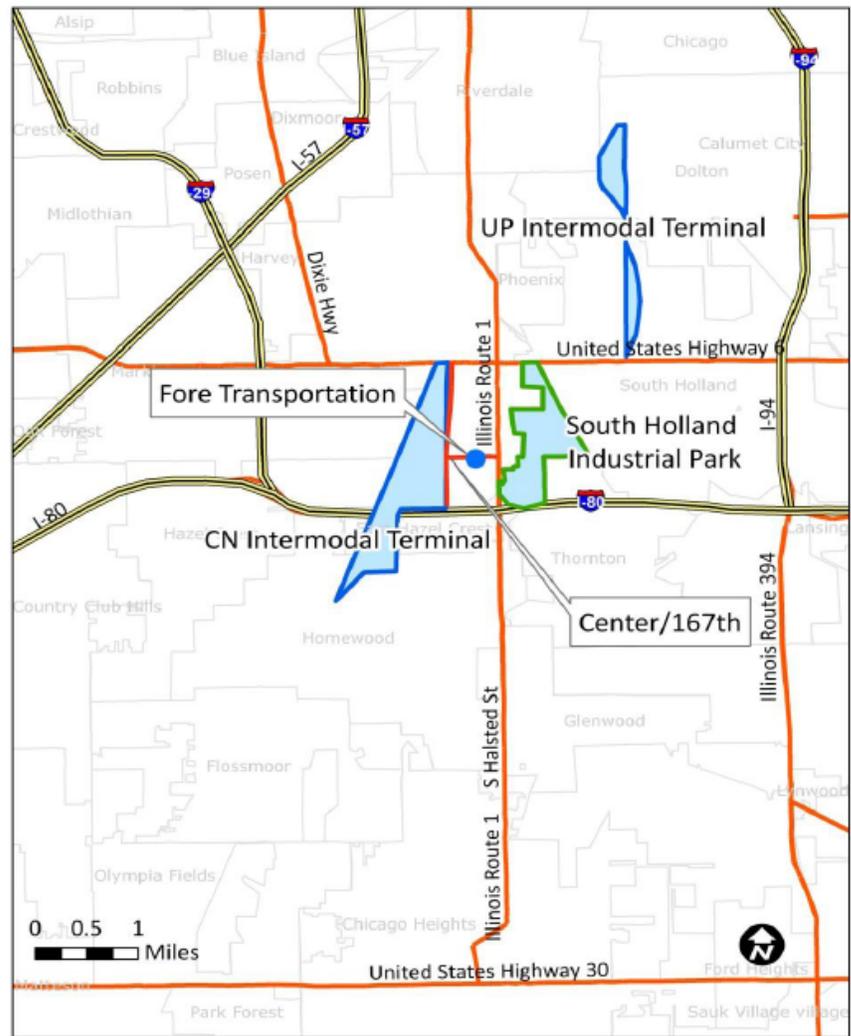
Development, the Cook County Highway Department, and the City of Harvey, with the South Suburban Mayors and Manager’s support, agreed to apply for \$13.7 million in TIGER grants to improve several intermodal connectors in the south suburbs. A major project in this grant application was to rebuild 1.51 miles of Center Avenue to restore it to a State of Good Repair as well as to improve traffic flow by doing the following:

- Rebuilding the entire roadway to modern commercial truck route standards,
- Adding additional turning lane capacity as needed,
- Enlarging the intersection on 167<sup>th</sup> Street and Center Avenue, and
- Enlarging the intersection on Center Avenue at the Canadian National Gateway Intermodal Terminal’s main entrance.

Smaller supplemental projects designed to improve regional commercial truck flows include,

- Upgrading street lighting on Halsted Street/Illinois Route 1 between 159<sup>th</sup> Street and the I-80 interchange;
- Completing a regional traffic impact analysis to determine optimal locations for new and upgraded traffic signals;
- Upgrading existing traffic signals and installing new signals along intermodal connectors, according to the regional traffic impact analysis;
- Installing signs along Tollway routes and I-94 to improve commercial truck access using intermodal connectors to the Canadian National and Union Pacific intermodal terminals;
- Installing truck route signs along local Class II and Class III truck routes; and
- Developing an online commercial truck operations database for Logistics Park Calumet.

**Figure 8-1: Regional Highway Map**



Source: TranSystems

This TIGER Discretionary Grant Application was submitted on October 31, 2011. The U.S. Department of Transportation released the results of the TIGER 3 application process in mid-December 2011 and did not select the Southland Intermodal Connector Project for funding. This does not preclude resubmitting the Project under any future TIGER Discretionary Grant Application program.

Roadways within the South Holland Industrial Park remain in relatively good condition overall. However, if truck traffic significantly increases, additional roadway improvements may be required in the future, especially on main arterials like Armory. As part of the Harvey project, the intersection of 167<sup>th</sup> Street and Illinois Route 1 will be rebuilt with improved truck turning radii.

The Illinois Department of Transportation began work in 2011 on a multiyear project to add an additional lane in each direction on I-80 between U.S. Route 45 in Tinley Park and U.S. Route 30 on Joliet's east side. The Illinois State Toll Highway Authority has included plans for a new full interchange between I-57 and I-294 in Markham in its most recent multiyear capital plan. Thus, major highway investments in the Chicago's south suburbs continue.

It should also be noted that in late 2010, the Canadian National completed work on a new gate inside the fence at the Gateway Intermodal Terminal in Harvey.

In 2010, the Canadian National announced plans for a new logistics park development to be located on 175 acres of their property in the far southeastern corner of Markham Yard. This area today is the site of Woodcrest locomotive shops as well as the remaining portion of the Markham carload classification operation. It straddles the border of Homewood and East Hazel Crest and has roadway access via Ashland Avenue north to 171<sup>st</sup> Street or via 175<sup>th</sup> Street east to Illinois Route 1 (Halsted). Ashland Avenue is classified as C-1 between 171<sup>st</sup> Street and Ridge Road. These roadways appear to be in good condition today and do not require any immediate investment.

There are currently two remaining vertical clearance restrictions near Logistics Park Calumet. One is located on U.S. Route 6, 1.27 miles east of Illinois Route 1 in South Holland where the Union Pacific mainline crosses over U.S. Route 6. The other is U.S. Route 30 just east of Illinois Route 1 in Chicago Heights where the Union Pacific mainline crosses over U.S. Route 30.

## **8.8 Illinois House Bill 1606 for Logistics Park Calumet's Development**

The South Suburban Mayors and Managers Association and its member municipalities are using existing county, state, and federal programs to address the infrastructure challenges facing progress with Logistics Park Calumet's development. These resources, however, are insufficient and/or inappropriate by themselves to facilitate private investment in a redevelopment project on the scale of Logistics Park Calumet.

The South Suburban Mayors and Managers Association and its partners should therefore follow CenterPoint's example, which secured the Illinois General Assembly's passage of a novel value capture mechanism. The General Assembly permitted a development's sponsor to reinvest new payroll tax revenues that arose from the project to meet its development costs, creating a substantial source of public funding dedicated to the project.

### **8.8.1 Illinois House Bill 1606**

The key provisions of the Brownfields Redevelopment and Intermodal Promotion Act emerged from conversations among the consultant team, the South Suburban Mayors and Managers Association, and

Representative William Davis, the Illinois House Representative for the Logistics Park Calumet communities. Representative Davis introduced the bill in the Illinois General Assembly's 2011 Session. It was later refined in meetings with House leaders and their staff and demonstrated a need for the South Suburban Mayors and Managers Association to form new development partnerships to present a bill acceptable to the legislature. These partnership arrangements are now under discussion, and the bill will be resubmitted during the 2013 Session.

HB 1606 would facilitate public and private investments in infrastructure, predevelopment activities, and development of logistics and light industrial businesses. It would capture taxes that new logistics or light industrial jobs would generate in Logistics Park Calumet and redirect this revenue to the "South Suburban Brownfields Redevelopment Fund". HB 1606 would also cap this tax revenue at \$6 million per year over a twelve year period.

HB 1606 would also authorize creation of a Board to appoint a "management entity" to act as an administrator subject to Board oversight. The managing entity would perform the following functions: create a master plan for Logistics Park Calumet's development as a logistics-industrial park, facilitate the elimination of predevelopment and infrastructure impediments to redevelopment, recommend approval of investments from the Fund to the Board, market sites, facilitate the hiring of local and disadvantaged group contractors and workers, ensure high environmental standards and good neighbor practices in development and operations, and perform other functions of a limited redevelopment authority.

The need to pass HB 1606 when other public funding mechanisms exist to stimulate economic development becomes evident in the face of obstacles to business site development that exist in Chicago's south suburbs and the measures that the South Suburban Mayors and Managers Association and its partner organizations have taken to facilitate development.

### **Obstacles to Redevelopment**

The basic obstacles to redevelopment in Logistics Park Calumet become apparent in a quick review of parcel level data or while traveling through the area:

- *Some Inadequate Roads:* Some critical sections of Logistics Park Calumet's roads cannot handle heavy truck traffic. "Intermodal connector" roads are especially needed to link intermodal terminals to the area's expressways.
- *Brownfields:* All of the 1,280 acres of Logistics Park Calumet are previously used industrial land. Most of these acres will require at least a Phase I assessment when they are repurposed. Hundreds of acres will likely require a Phase II assessment, if not an environmental cleanup.
- *Land Fragmentation:* Modern warehouses typically require more than 20 acres for development. Logistics Park Calumet contains over 500 acres in blocks of contiguous and vacant or underused land that meets this criterion. Most of these sites have multiple owners and the land must be assembled under common ownership to be ready for development.
- *Obsolete or Derelict Structures* remaining on some Logistics Park Calumet sites add to the costs of making sites shovel ready.

More subtle impediments lie in the limitations of existing programs for facilitating redevelopment.

## 8.8.2 Current Redevelopment Mechanisms

### **Infrastructure and Intermodal Connector Road Improvements**

Truck movements through Logistics Park Calumet became easier during the last five years and routes continue to improve. Yet a quick review of cases in which truck route upgrades were made or attempted demonstrates the need to make the process more nimble and responsive to business:

- *Pace of the Surface Transportation Program:* Recent reconstruction on southern Cook County's major arterial highways, including 159<sup>th</sup> Street and the Halsted and I-80 interchange, made Logistics Park Calumet's connections to the national highway system more efficient. However, these improvements were planned and executed over a time table of five or more years, in keeping with the standard Surface Transportation Program protocols. This pace is too slow for responding to emerging business opportunities.
- *Uncertainty and Delay of Transportation and Economic Development Programs:* Since 2009, heavy trucks can barely use a two-block section of 167<sup>th</sup> Street, a key link in the six-block route between I-80 and the Canadian National terminal gate. This two-block section needs to be rebuilt.

For more than 18 months in 2010-11 local and state officials struggled to put together approximately \$4.8 million in public funding. This process required the following:

- A contribution from the City of Harvey, which has been deeply in debt. Harvey was able to make this contribution because it had funds in its tax increment financing district for this area.
- A liberal interpretation of the acceptable use of federal like disaster relief funds, which IDCEO was only able to secure after months of discussion.
- One-third of IDOT's entire Economic Development Program budget for FY 2011.

During this 18 month period, the Canadian National, a private investor of tens of millions of dollars in Logistics Park Calumet, was uncertain as to whether or not its core business would remain viable for lack of a basic public service.

- *Fierce Competition for Major Federal Funds:* This report also discusses Center Avenue, a Cook County road, that provides an alternative connection between the Canadian National terminal gate and the I-80 Halsted Street ramp. It is designed for moderate auto traffic and must be rebuilt to carry hundreds of heavy trucks that will call on the Canadian National daily, for a cost of approximately \$15 million.

Once Cook County's Highway Department recognized Logistics Park Calumet's potential, it reprogrammed dollars budgeted for resurfacing Center Avenue to pay for engineering plans, a matching contribution, and fees for the professional preparation of a federal TIGER III grant proposal for the road's reconstruction.

Although Cook County's proposal epitomized TIGER III's goals for sustainable economic development and job creation, it did not survive TIGER's intensely competitive third round. The County will make another Center Avenue proposal in the recently announced TIGER IV round, but competition will be equally stiff.

- *Competition and Matching Requirements for Modest Road Improvements:* In the ongoing development of Logistics Park Calumet, it is likely that other situations will become apparent in which timely public infrastructure upgrades will be necessary for developing strategic sites, if not the overall project.

A potentially important resource to meet these needs will be the federal Economic Development Administration's Infrastructure Improvement Program. This program can provide 50% of project costs, typically for infrastructure projects within the range of \$500,000 to \$5 million that directly create jobs. However, this program is extremely competitive and requires a 50% match for selected projects. To resolve infrastructure problems with the speed and assurance necessary to engage private investment, Logistics Park Calumet's managing entity will require a flexible and dedicated public funding source that may be used to match or serve in place of these grants.

### **Brownfields Assessment and Cleanup**

The South Suburban Mayors and Managers Association has developed a track record for using public programs to address brownfield problems. This track record places it in a strong position to deal with Logistics Park Calumet's large environmental contamination issues. The South Suburban Mayors and Managers Association's very success in this area, relative to most not-for-profit organizations or local governments, demonstrates the need for additional resources to accelerate the pace and expand the scope of brownfield remediation in Logistics Park Calumet. Through steady work over the last five years, the South Suburban Mayors and Managers Association has achieved the following results:

- They have secured a \$1 million area-wide assessment grant. (The U.S. Environmental Protection Agency's largest award for this activity type.) The South Suburban Mayors and Managers Association will use these funds to conduct 35 Phase I site investigations and six Phase II assessments, largely in the Logistics Park Calumet area. The primary impediment to this program, which involves no charge to the property owner, has been their reluctance to have brownfield investigations conducted on their land. This problem suggests that brownfield sites may frequently need to be transferred to owners who are prepared to make investments to realize value from their property.
- A brownfields revolving loan fund, originally capitalized with a \$1 Million Grant (the largest amount that the U.S. Environmental Protection Agency provided for this purpose). The South Suburban Mayors and Managers Association has recapitalized its revolving loan fund twice, investing some \$2.6 Million dollars over the last three years. Approximately \$1.2 Million of these funds have been invested in remediating a 30-acre portion of a proposed logistics site that two of its member municipalities own in the Logistics Park Calumet area. This project, like the experience of brownfields programs across the country, indicates that an area that potentially contains hundreds of brownfield acres could require tens of millions of dollars and many years to remediate.
- The South Suburban Mayors and Managers Association member municipalities have successfully applied for U.S. Environmental Protection Agency brownfield cleanup grants, sometimes with the South Suburban Mayors and Managers Association's help. Two of these applications are pending. These grants are for a maximum of \$200,000 per site, which is rarely enough to remediate a brownfield problem but provides a useful compliment to other investments.
- The South Suburban Mayors and Managers Association requires that the sites it helps remediate participate in the Illinois Environmental Protection Agency's Voluntary Site Remediation Program. In this program, the brownfield property owner pays the Illinois Environmental Protection Agency to

review and approve plans for site investigation and cleanup. When the cleanup is completed according to the State's specifications, the Illinois Environmental Protection Agency issues a "Letter of No Further Remediation" which is a virtual requirement for brownfield property owners to secure financing for site improvement. The Illinois Environmental Protection Agency also operates a program to police and stop activities that are polluting properties and threatening public health. However, the Illinois Environmental Protection Agency currently has no funded program through which it contributes to the costs of remediating brownfields.

The process of brownfield remediation with public funding and oversight in Illinois is outlined in Figure 8-2. The following features of this process limit its value as a means of remediating Logistics Park Calumet's extensive brownfield problems:

- The sequential process of Phase I historical review, Phase II active site investigation, and Phase III cleanup according to an Illinois Environmental Protection Agency-approved plan takes months to carry out, even if funding for all phases of the work is in hand. Funding provided through the U.S. Environmental Protection Agency must be secured in annual rounds for each stage of the process and will necessarily require years to complete.
- The U.S. Environmental Protection Agency's funding rounds are highly competitive; so there is no assurance, or even a strong likelihood, that cleanup funding will be approved for a site with an approved Phase II site investigation. While the South Suburban Mayors and Managers Association can mitigate these risks for some sites with its revolving loan fund, public funding for brownfields remediation cannot be expected for any given project.
- An applicant for the U.S. Environmental Protection Agency's brownfield funds must also have effective access to the land in question to receive site investigation funds and must own the land to receive a cleanup grant or loan. The managing entity or a public or private partner must be prepared to execute a plan for the site that they and the U.S. Environmental Protection Agency approved to remediate with public dollars.

The South Suburban Mayors and Managers Association will continue to pursue brownfield remediation with public funds to achieve Logistics Park Calumet's redevelopment. If they want to maximize the scale and value of brownfield funding from existing public sources and redevelop strategic sites in a timely manner that engages private investors and accelerates the process, they will need a flexible and dedicated source of land acquisition and brownfield cleanup funds.

### **Shovel Ready Funds**

Other states, including Indiana, recognize the challenges of predevelopment and offer "shovel ready" programs through which private property owners may obtain state grants to cure brownfield, infrastructure, or building obsolescence problems and prepare sites for redevelopment. Illinois would benefit from but does not currently offer such a program. HB 1606 would effectively provide a shovel ready program for property owners in the Logistics Park Calumet project area.

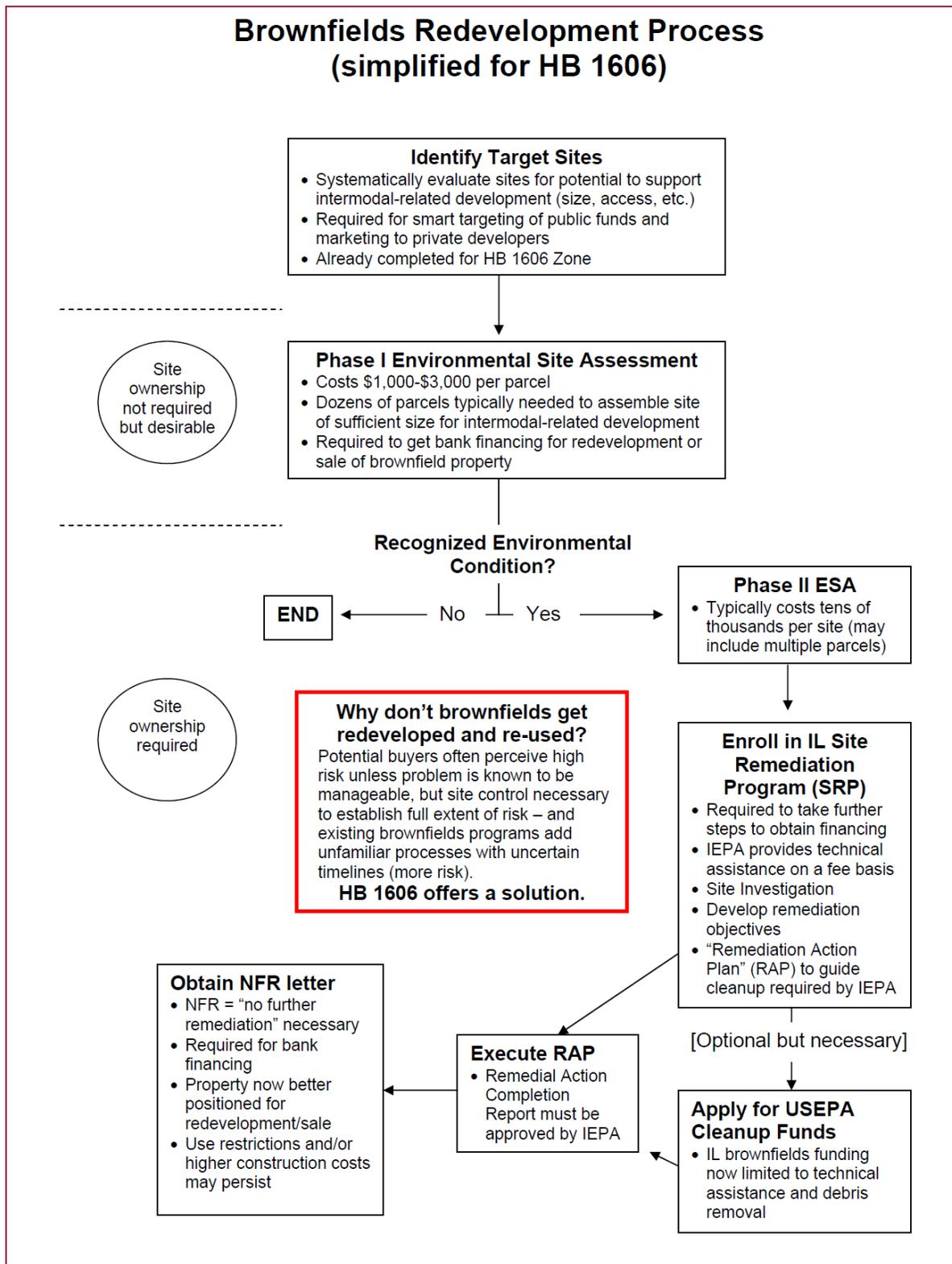
### **Enterprise Zone**

The entire Logistics Park Calumet area lies within an Illinois Enterprise Zone. From a business site development standpoint, an Enterprise Zone location's principal advantage is the sales tax waiver on construction materials for business building projects. These taxes equal approximately 8% of the building materials' price. Therefore, if materials are approximately 33% of a construction project's total cost, the

Enterprise Zone's tax savings may lower total project costs 2 to 3%. While this is a significant savings, it is not applicable to the site acquisition and preconstruction preparation stages. It thus is not usually large enough in itself to drive a decision about whether to invest in a project.

The Enterprise Zone also offers additional incentives regarding accelerated asset depreciation and subsidies for employee training, which can be helpful to a business permanently located in the Zone. However, they do not directly benefit site development.

**Figure 8-2: Brownfields Redevelopment Process**



### ***New Market Tax Credits and Illinois Finance Authority Programs***

As sites within Logistics Park Calumet are prepared for private investment, the federal New Market Tax Credits program could potentially finance individual projects there with capital at below market rates. The Illinois Finance Authority likewise offers several programs in which banks loan at below market interest rates for fully defined individual projects.

The Brownfield Fund's managing entity will use these types of federal and state programs to help finance individual projects at advanced stages in Logistics Park Calumet's development. The managing entity will need to provide incentives and participate in land assembly, brownfields remediation, and related predevelopment work, if necessary, to position sites for private investment to reach a development phase when these programs could apply.

### ***Tax Increment Finance Districts***

Tax increment finance districts are widely used throughout metropolitan Chicago. Local governments use tax increment finance districts to commit incremental increases in property taxes resulting from new developments as a means of financing those developments. Unlike most state and federal economic development programs, tax increment finance districts can provide funds with considerable flexibility at an early development stage. They can generate enough funding to make other infeasible projects practical (e.g. providing funding for building substantial businesses on vacant properties). While a tax increment finance district can be an effective tool for implementing an individual building project, usually located within one municipality, there are several reasons why tax increment finance districts would not be appropriate or effective as the primary means of publicly assisted development funding for Logistics Park Calumet:

- *Complexity of Formation:* To compete in the market for logistics investments and plant locations, an intermodal logistics park must be able to offer a coherent set of benefits to the businesses it plans to attract (e.g., proximity to freight transportation assets, a Foreign Trade Zone, or public sector financing incentives). However, it would be extremely difficult for Logistics Park Calumet to forge such a common offering to the market based on a tax increment finance district.

While a tax increment finance district in Illinois is established through the state legislature's authority, a tax increment finance proposal arises from the agreement of all of the local governmental bodies from which incremental tax revenues would be drawn. To provide adequate financing, tax increment finance districts generally include school districts, townships, and all local government units that derive revenue from the property tax levy. Securing the agreement of all participating jurisdictions is often the most time consuming and expensive aspect of forming a tax increment finance district.

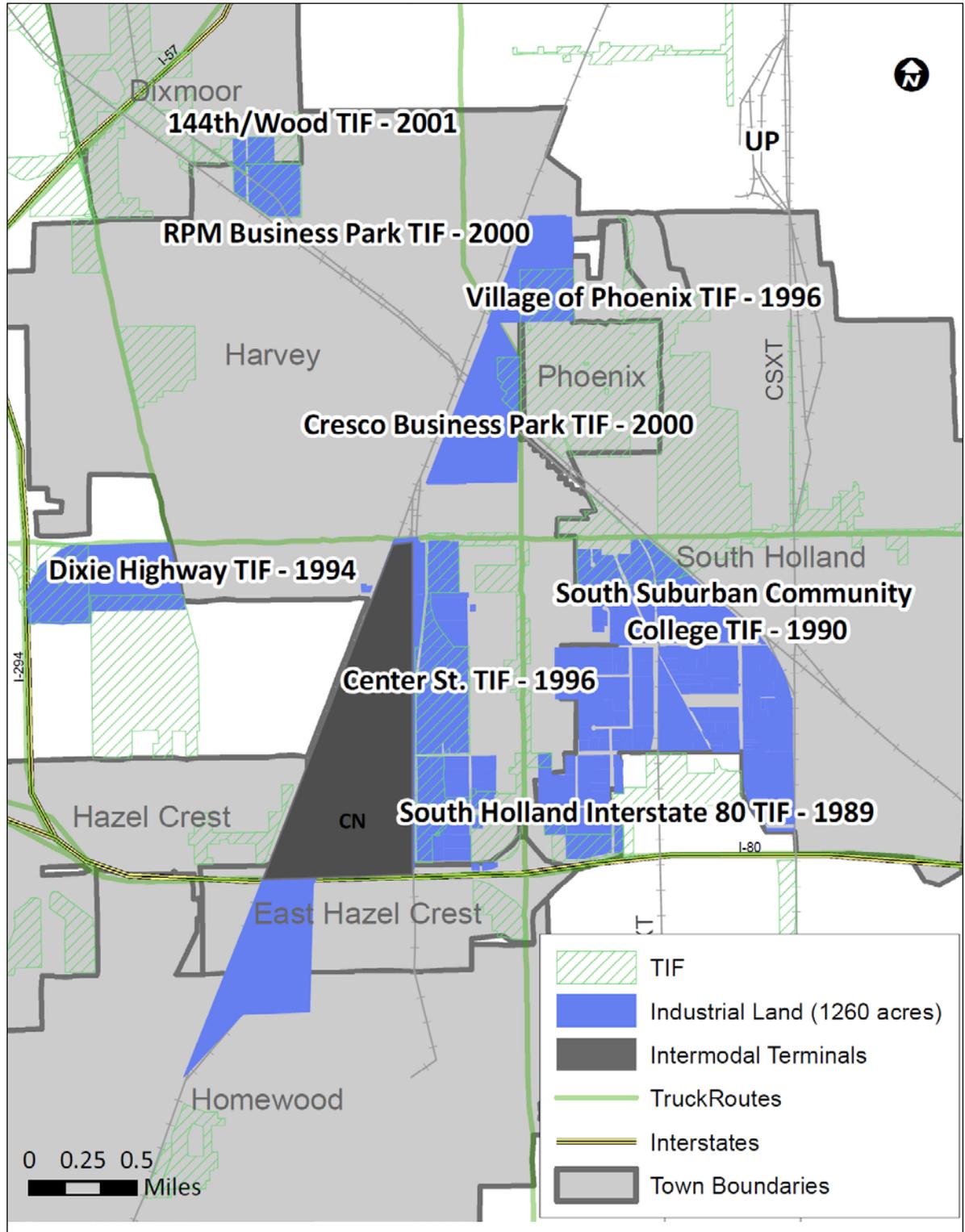
Logistics Park Calumet encompasses 1,280 acres lying within eight municipalities, 21 school districts, and 38 local taxing bodies. Eight tax increment finance districts are also currently in place in Logistics Park Calumet area municipalities. Local governing bodies would need to decide how to modify or close these tax increment finance districts as well as agree to terms for a new series of tax increment finance districts or a large inter-jurisdictional tax increment finance district, in order for Logistics Park Calumet to present a consistent package of benefits to the market. Although all the municipalities within Logistics Park Calumet support the project, the probability of securing the necessary unity in tax increment finance agreements is low, and the cost of pursuing such a financing alternative would be high.

- *Bonding Considerations:* Although several tax increment finance districts within the Logistics Park Calumet area have stimulated redevelopment, most tax increment finance districts within Logistics Park Calumet remain vacant. Aside from the limited potential for a small tax increment finance district to be recognized in the market, one reason that these south suburban tax increment finance districts have not been more effective is that they are generally “pay-as-you-go” tax increment finance districts, rather than instruments that offer bond financing. The weak financial condition of most of the municipalities in which these tax increment finance districts are located and their small scale has generally made bond issuance prohibitively expensive. However, a project on Logistics Park Calumet’s scale could more readily issue bonds, particularly with backing from the funding stream that HB 1606 would create.
- *Allocation of Costs and Benefits:* Reliance on a tax increment finance district as a major source of economic development financing places a heavy burden on low-income communities. These communities would have to finance redevelopment without support from the broader and more affluent community. Yet this cost allocation is appropriate for most tax increment finance projects since they mainly benefit the communities that established them or nearby communities.

Logistics Park Calumet’s funding from state and local resources is especially appropriate since it would create jobs in Logistics Park Calumet’s communities, solidify the Chicago region’s position as a national intermodal freight center, avoid or shorten hundreds of daily truck trips thus reducing the Chicago region’s traffic congestion and air pollution, and relieve the burden of social payments in an area of chronic unemployment and poverty.

Logistics Park Calumet’s communities will maintain their current tax increment financing districts, and with the aid of the managing entity, will probably form additional tax increment finance districts to support individual projects within Logistics Park Calumet. These local contributions will supplement the resource established through HB 1606.

**Figure 8-3: TIF Districts in Logistics Park Calumet**



### 8.8.3 The Precedent of CenterPoint Development Projects

Perhaps the clearest demonstration of the need for HB 1606 is that CenterPoint Properties, the nation's most successful developer of large scale logistics parks, secured legislative support to establish state-authorized development authorities for its major logistics projects in Illinois.

- CenterPoint formed a working relationship with the *Joliet Arsenal Development Authority*, an entity the Illinois Legislature established in 1995 as a vehicle for local participation in the transfer and development of federal property (through *Public Act 70 ILCS 508/1*).

The Joliet Arsenal Development Authority collaborated with CenterPoint to secure public funding for brownfields remediation and infrastructure necessary to attract developers to build a new intermodal terminal and adjacent logistics park. Since that time, the intermodal terminal and adjacent logistics park was built. It now employs over 4,000 workers and continues to grow.

- In 2009, the *Intermodal Facilities Promotion Act (30 ILCS 743/1)* became law in Illinois. This Act established a fund with essentially the same revenue source as HB 1606 and directed it to a similar purpose. CenterPoint developed two new intermodal terminals and an adjacent logistics park on greenfield property that the City of Joliet annexed. These new developments are projected to employ 14,000 workers upon full build out.

CenterPoint's projects differ from Logistics Park Calumet in several material ways; fundamentally the CenterPoint projects are built in exurban locations while Logistics Park Calumet is an infill project in established, interior suburbs. A comparison of these locations earlier in this study pointed out some competitive advantages that this difference gave the Logistics Park Calumet site as a logistics location. Logistics Park Calumet has a more pressing need for flexible funding dedicated to redevelopment activities, given this project's potential impact on the area's real estate development, environment, and social structure.

- CenterPoint's exurban sites are contiguous blocks of land acquired without the difficulty of assembly from many owners; Logistics Park Calumet sites include noncontiguous properties still in many owners' hands, although all of them are within a five-minute drive of the Canadian National's terminal gate.
- The Joliet CenterPoint projects involved greenfield locations that did not pose serious environmental challenges in site development. Logistics Park Calumet, however, must remediate multiple brownfield sites, each with a complex history of industrial use.
- CenterPoint sites are far from existing population centers and thus do not have nearby neighbors. There was thus little need for "good neighbor" design and operational practices. These sites, however, require long worker commutes and long truck drays for container movements within metropolitan Chicago.

Logistics Park Calumet sites within established communities require high standards of environmental design, green transportation technology, and thoughtful operating practices to mitigate environmental impacts on adjacent neighborhoods. Logistics Park Calumet's relatively central location reduces the length of truck drays within the region. Its presence in communities that suffer from chronic unemployment and poverty also offers the potential for short commutes and infusions of purchasing power and taxable wealth.

- While a major industrial developer conceived and implemented the CenterPoint projects, Logistics Park Calumet's champion is a council of governments organization that is working to build on its constituent communities' assets.

This comparison underscores the need for a state-authorized project development authority in Illinois to create Logistics Park Calumet. It also indicates that Logistics Park Calumet's basis for public benefit is as worthwhile as that for CenterPoint's logistics park projects.

#### **8.8.4 Refinements of HB 1606**

The consultant team, the South Suburban Mayors and Managers Association, and Representative Davis discussed the needs and precedents for HB 1606 in their meetings with Illinois House staff and leadership. House staff and leadership suggested ways in which some of this bill's provisions could be clarified or modified to address potential legislative concerns. The more substantive of these refinements are noted below to explain why this bill's key provisions are drafted in their present form and why enactment of these provisions represent next steps in Logistics Park Calumet's advancement and in a value capture mechanism for its redevelopment.

##### **Logistics Park Calumet's Area and Boundaries**

HB 1606's original draft had Logistics Park Calumet extended into more municipalities and to all of their industrially zoned areas. Legislative leadership was concerned that these boundaries were too broad and would divert too much state revenues to be acceptable.

Accordingly, Logistics Park Calumet's boundaries were reduced to parcels within a five-minute drive of the Canadian National's terminal gate. Large redevelopment sites could be readily assembled within five years from parcels within these boundaries. These considerations explain the noncontiguous nature of Logistics Park Calumet and HB 1606's area map. Broader areas beyond the five-minute drive time and additional land assembly configurations within this range will also gain impetus for redevelopment along with the designated area for HB 1606.

##### **Logistics Park Calumet's Businesses and Workers**

HB 1606's earlier versions sought to capture a portion of the additional state tax revenue that Logistics Park Calumet would have created and would have diverted this revenue to brownfield redevelopment. This tax would have mainly consisted of state income tax gains from people whose jobs derived from Logistics Park Calumet. These jobs were defined in terms of the North American Industrial Classification codes for transportation, distribution, and industrial businesses.

House leadership considered these classifications as too broad and saw them as a potential drain on state revenue from businesses and workers that would not actually benefit from Logistics Park Calumet's development.

The proposed bill limits participating types of businesses to the Urban Land Institute's "Guide to Classifying Industrial Property" in the primary categories of warehouse distribution, light manufacturing, and freight forwarding. Additional groups of businesses and workers will benefit from Logistics Park Calumet, including wholesalers, transportation equipment suppliers and servicers, and construction workers during building development, as well as retail and service businesses in south suburban towns whose benefits would be calculated in multiplier effects.

### **Management**

HB 1606 charges the “Managing Entity” with creating and implementing a master plan for Logistics Park Calumet’s development, securing Board approval of each use of the Brownfield Fund, managing the Fund’s overall performance, ensuring extensive minority and local participation in contracting and permanent jobs, achieving high levels of sustainable design and operating practices, and acting creatively to ensure the project’s overall success. A revised version of HB 1606 considers two project management options.

The present draft of HBI606 effectively assigns the managing entity role to the South Suburban Mayors and Managers Association. This council of governments organization for the south suburbs has developed capacities that uniquely qualify it to perform some aspects of the managing entity role. These accomplishments achieved in partnership with public agencies and supportive not-for-profit organizations include the following:

- Continuous improvement of a robust GIS system that maintains parcel level data on the ownership, infrastructure, assessed value, applicable public incentives, and known brownfield information for all potential logistics business sites in Logistics Park Calumet and industrial properties throughout the south suburbs;
- Ongoing brownfield assessment and remediation using all public funding sources at maximum available levels;
- Coordination of the formal input of south suburban municipalities regarding programming of state and federal transportation investments in their area;
- Coordination of the south suburban community colleges when developing new manufacturing and logistics job training programs;
- Leveraging a \$2.3 million HUD Sustainable Communities Challenge Grant in 2012 with foundation and bank investments to provide \$1.7 million for what will ultimately be a \$6 to \$15 million fund to underwrite transit- and cargo-oriented development projects in the south suburbs;
- Creation of a master plan for development of Chicago’s south suburban logistics cluster in 2012 through a grant from the federal Economic Development Administration; and
- Continuing promotion of south suburban development opportunities via a professional website [www.chicagosouthlandedc.org](http://www.chicagosouthlandedc.org); a monthly online newsletter with over 2,000 subscribers including dozens of industrial development firms, industrial real estate brokers, and logistics company managers; a quarterly forum on south suburban business opportunities consistently attended by over 150 corporate and public agency managers; and one-to-one meetings with prospective investors seeking opportunities in the south suburbs, which typically occur several times a week.

Through this stream of activity, the South Suburban Mayors and Managers Association is well positioned to formulate and promote logistics development opportunities within Logistics Park Calumet and generate a pipeline of potential logistics development projects that may receive support through the Brownfield Fund.

Nevertheless, the South Suburban Mayors and Managers Association lacks some of the capacities that a managing entity must have for a development project that is Logistics Park Calumet’s size. It does not have in-house attorneys and financial experts who could assess and underwrite multi-million dollar real estate transactions. Perhaps most significantly, the South Suburban Mayors and Managers Association has not previously acted as the developer of a major industrial real estate project.

Accordingly, the South Suburban Mayors and Managers Association and its partners have decided to explore alternatives through which a public agency or private development firm with deep financial, legal, and

industrial development experience would act as the Brownfield Fund's managing entity, possibly in partnership with the South Suburban Mayors and Managers Association. When this exploration is complete and commitment is secured from an outstandingly qualified organization, the South Suburban Mayors and Managers Association and its partners will return to the Illinois Legislature with a revised bill that fulfills HB 1606's goals.

### ***Approved Activities, Budget, and Financing***

HB 1606 would allow the following activities to be performed and paid for through the Brownfield Fund: upgrading public infrastructure, preparing sites for private investment through brownfield remediation, assembling land, clearing obsolete structures, and performing other steps necessary to offer shovel ready sites for the construction of logistics or light industrial businesses. Through HB 1606's South Suburban Brownfields Redevelopment Fund provisions, the managing entity or private owners who are preparing their sites for development may perform approved activities consistent with Logistics Park Calumet's master plan.

At this time, too many factors are unknown to accurately project the costs of completing approved activities throughout Logistics Park Calumet. Among these uncertainties are the following: the extent of brownfield problems on sites that have not yet been professionally investigated, the extent to which land may need to be acquired rather than improved by current owners to make it shovel ready, and the extent to which other public resources may be secured through competitive applications to resolve predevelopment problems. HB 1606's sponsors, however, believe that an allocation of up to \$6 million per year from the incremental in state income taxes that newly employed workers would pay could sufficiently leverage other public and private investments. Logistics Park Calumet could therefore become a reality within 12 years of HB 1606's passage.

Up to 15% of the revenues that would accrue to the Brownfield Fund each year could be used to compensate the managing entity for its expenses in administering the Logistics Park Calumet redevelopment program, including operation of the Brownfield Fund.

At the end of the twelve year project period, monies accruing to the South Suburban Brownfields Redevelopment Fund that have not been allocated for approved activities will be returned to the State's general revenues.

### ***Build Out and Operations***

In a conventional industrial park development the roles of participants and the sequence of actions are simple and clear to all parties. A managing entity acquires the park property and improves it so that sites are ready for development. The managing entity constructs buildings on a build-to-suit basis for individual companies that buy or lease the property and/or develops multi-use buildings in which space is leased to end user companies.

In the publicly sponsored development of Logistics Park Calumet, roles are somewhat complicated by the need to minimize public investment while achieving the project's objectives. To make this process clear to legislators and parties involved in Logistics Park Calumet's development, HB 1606 defines steps in the development process, which are summarized in the following points and illustrated in the accompanying diagram:

- I. Upon HB 1606's passage, the managing entity partnership will perform the following tasks to prepare the project for development:
  - Create a Master Plan for the Logistics Park Calumet project area,

- Identify prime development sites with complete files of information regarding these properties in GIS and other formats, and
- Underwrite and issue South Suburban Brownfields Redevelopment bonds to finance development activities.

## 2. Concurrently

- Private property owners and public owners of priority redevelopment sites will be invited to apply for assistance from the South Suburban Brownfields Redevelopment Fund’s managing entity to prepare their sites for redevelopment consistent with the Master Plan’s objectives and standards. This assistance will include securing all possible aid from existing public programs and supplementing this support as necessary with allocations from the South Suburban Brownfields Redevelopment Fund.

Applicants for this assistance may be the sites’ current owners or developers who acquire and assemble land to improve it to realize Logistics Park Calumet’s opportunities. Under the current draft of the bill, Fund allocations will be made in the form of reimbursements for approved activities. The Board will review and approve or reject each application for assistance according to a standard and documented procedure.

- When current owners are not able or willing to perform necessary predevelopment steps, the managing entity will facilitate sale of the property to private owners who are committed to carrying out predevelopment.
- If a collaborative owner cannot be secured for a priority property, the managing entity will acquire and then improve the site with South Suburban Brownfields Redevelopment Fund resources. Improved sites will be sold to private owners for full development; proceeds from these sales will be added to the South Suburban Brownfields Redevelopment Fund.
- When a site does not require predevelopment work or when this work is completed, the managing entity will assist the owner in securing financing from established public programs and conventional private sources to build out the site for business activity in keeping with the Master Plan. Prior completion of the site’s predevelopment work should ensure that existing channels are sufficient to finance this development.
- As Logistics Park Calumet’s sites move through the redevelopment process, the managing entity will maintain communication with public agencies regarding the condition of public infrastructure that serves the development area. To the extent that matching or supplemental funds are needed to complete vital infrastructure improvements or perform them in a timely manner, these funds may be provided in a grant or loan to a public entity from the South Suburban Brownfields Redevelopment Fund.

### **Governance and Oversight**

The State of Illinois will establish the South Suburban Brownfields Redevelopment Fund Board of Directors and the South Suburban Brownfields Redevelopment Fund and will hold the Board accountable for the Fund. The managing entity will be responsible to the Board. The Board will set policies and guide the project’s strategic direction. The Board will review the project’s quarterly performance, including a report of all of the Fund’s transactions. The Illinois Department of Commerce and Economic Opportunity will maintain project oversight on behalf of the State, and the Board will make semi-annual reports on the program’s performance to the Illinois Department of Commerce and Economic Opportunity.

To ensure appropriate input from the communities served and professional guidance without becoming unwieldy, the Brownfields Redevelopment Board will consist of seven members:

- Three representatives from the municipalities in the Logistics Park Calumet area, with membership rotating among these municipalities annually;
- A representative from the South Suburban Mayors and Managers Association; and
- Two individual volunteers, who are experienced industrial developers, brokers, logistics company executives, or bankers serving the logistics industry.

**Figure 8-4: Logistics Park Calumet Project Build Out & Operations**

