

CASE STUDY: THE RELOCATION OF INTERMODAL FACILITIES

Introduction

Many truck-rail intermodal facilities are located in urban areas. Over time, due to growth in volumes and growth of surrounding development, these facilities often become capacity constrained, and efficient operations are hampered by congestion and encroachment of freight facilities and corridors. One response to this problem has been to relocate the facilities to sites where capacity can be expanded and the transportation infrastructure is relatively uncongested.

This case study presents two different experiences with relocation efforts—the Joliet Arsenal redevelopment, southwest of Chicago, and the Whitaker Intermodal Terminal, west of Atlanta. Although timelines for each of these projects are not all that different, there are significant differences in the processes from beginning to end of the projects. A comparison of these two experiences highlights key factors that contribute to the timely completion of such facilities and, conversely, factors that create delays and additional costs.

Joliet Arsenal Redevelopment

The Chicago area is commonly recognized as the major freight hub in the United States, serving all major modes of freight transportation. This is illustrated in Figure 1, which shows that a significant amount of U.S. intermodal traffic (i.e., truck-rail) flows through Chicago. Chicago is also recognized as a very congested freight hub, particularly for freight moving by truck and rail. For example, it has been noted that rail freight that takes approximately two days to travel from the West Coast to Chicago, can take another full day just to get through Chicago.¹ To alleviate this congestion, a number of projects have been implemented to improve the flow of freight traffic through the Chicago area (e.g., CREATE) or to relocate facilities out of central Chicago.

¹ Jack Lanigan, Sr., John Zumerchik, Jean-Paul Rodriquez, Randall Guensler, and Michael O. Rodgers, “Shared Intermodal Terminals and Potential for Improving Efficiency of Rail-Rail Interchange,” Transportation Research Board Annual Meeting, 2007, Paper #07-2563.

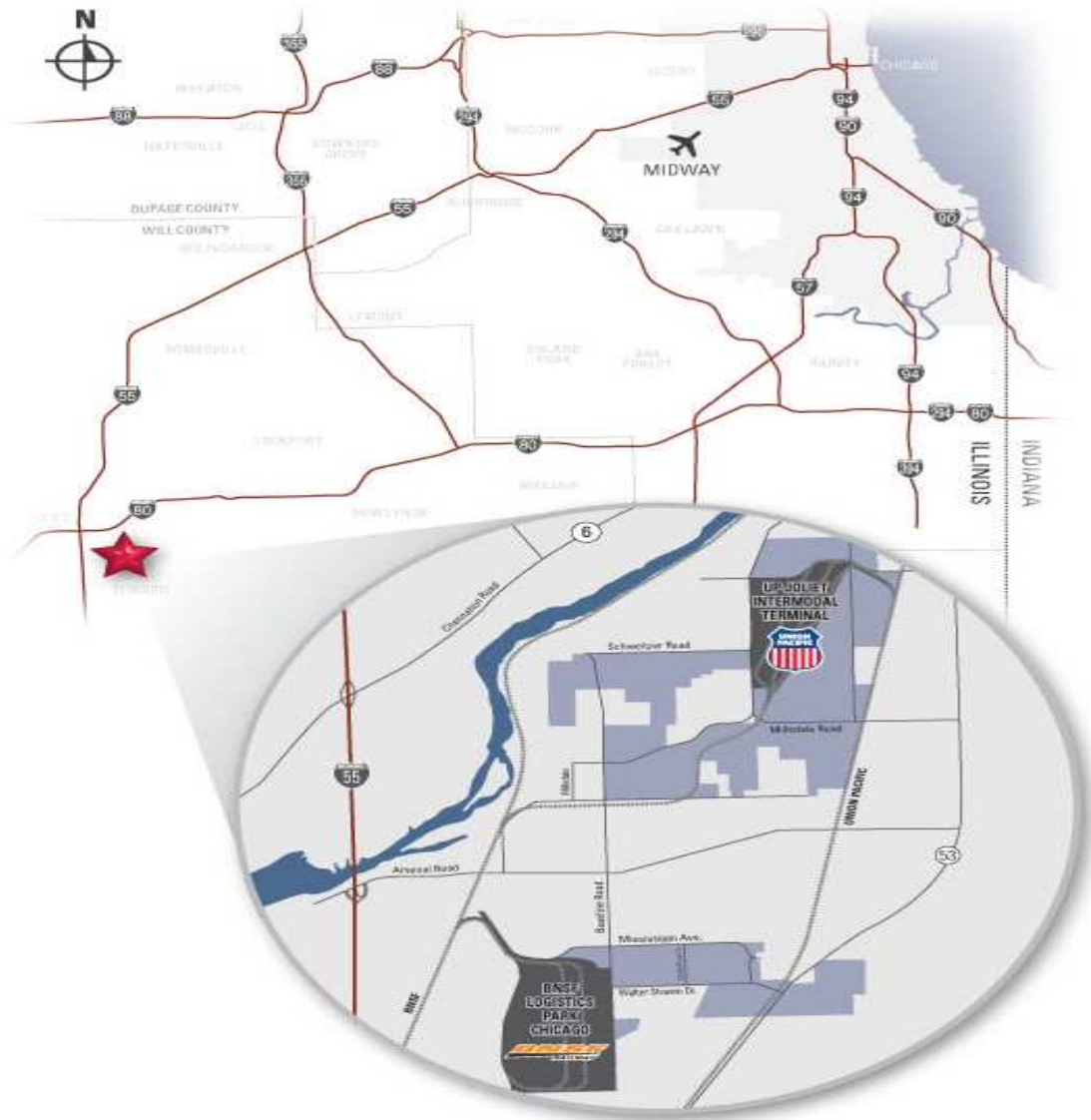
FIGURE 1
U.S. INTERMODAL TONNAGE²



A prime example of relocation out of the central Chicago area is the “brownfield” redevelopment of the abandoned Joliet Arsenal site and surrounding areas into an intermodal hub. The Joliet Arsenal site is located near two interstate highways and is served by two major railroads, BNSF and Union Pacific (UP). The lynchpins of this development are the CenterPoint Properties’ intermodal centers at Elwood (CIC-Elwood) and Joliet (CIC-Joliet). BNSF’s Logistics Park-Chicago (LPC) is located at CIC-Elwood, and UP’s Joliet Intermodal Terminal (JIT) is located at CIC-Joliet. As shown in Figure 2, these facilities are located about 40 miles southwest of downtown Chicago, near the intersection of Interstate highways I-80 and I-55. Synergies resulted in this development from the collocation of multiple freight facilities, such as transportation, warehousing, distribution, cross-docking, and container storage. The collocation of these facilities and proximity to the interstate highways also results in substantial drayage savings and more efficient utilization of trucking resources.

² Tonnage of Container on Flat Car and Trailer on Flat Car Intermodal Moves: 2006
http://www.ops.fhwa.dot.gov/freight/freight_analysis/nat_freight_stats/images/hi_res_pdf/intermodalrail2006.pdf.

FIGURE 2



History of the Joliet Arsenal Development

The Joliet Arsenal was opened in 1940 as two separate facilities, the Elwood Ordnance Plant and the Kankakee Ordnance Works. The two plants were deactivated in 1945 and combined

³ “CenterPoint Intermodal Center – Joliet, Illinois”
<http://www.centerpoint-prop.com/showAttachment.aspx?id=239>.

to form the Joliet Arsenal. The plant was reopened during the Korean War in the 1950s and continued operations through the Vietnam War. Major operations at the plant closed in the late 1970s.⁴ At its height, the plant employed almost 12,000 people in the 1940s, and was a magnet for migration to the area. The plant employed about 8,000 in the 1960s.⁵

In 1993, over 23,000 acres at the site were declared excess Army property. As part of the Illinois Land Conservation Act of 1995 (PL 104-106), the site was subdivided for both public and private use. Redevelopment plans included large tracts of land for the Abraham Lincoln National Veterans Cemetery (almost 1,000 acres), and the U.S. Forest Service's Midewin National Tallgrass Prairie (19,000 acres). President Clinton approved legislation to convert the former Joliet Army Ammunition Plant into a variety of civilian uses in February 1996.⁶ In addition, the government retained a portion as the Joliet Army Training Area. The Joliet Army Ammunition Plant was originally designated as a Superfund site in 1987⁷ and the Environmental Protection Agency (EPA) maintains portions of the property on the Superfund national priorities list.⁸

About 2,000 acres of the site were set aside for commercial and/or industrial development. Early visions for the Joliet Arsenal site redevelopment had included the construction of a third regional airport for the Chicago area.⁹ To spearhead economic development opportunities at the site, the state of Illinois established the Joliet Arsenal Development Authority (JADA) in 1995 (Public Act 70 ILCS 508/1). JADA was charged by the state with finding ways to replace jobs and revenue that had been lost when Arsenal closed in 1977.¹⁰ During the planning stages, the project brought together virtually all levels of government, more than a dozen public agencies, and private industry.¹¹

In October 1997, JADA sold 1,900 acres at the Joliet site to a California-based developer Transport Development Group Inc., which announced its plans for a cargo warehousing and transfer center to be built starting in 1998. In December 1997, Transport Development Group announced plans to construct a landfill on the site alongside the cargo handling facility. This led to almost immediate opposition from political leaders and veterans groups. This opposition reflects the outcome of an earlier proposal for the site that called for the creation of a \$100 million-ton landfill. It was believed that the landfill would have created a

⁴ Joliet Arsenal Development Authority, *Joliet Arsenal Area Transportation Plan Update*, May 2010, p. 9.

⁵ *Strategic Plan for the Development of the Joliet Arsenal Development Authority Property*, University of Illinois at Springfield and Crawford, Murphy & Tilly, Inc., December 1999, p. 1.

⁶ "Clinton OKs Joliet Arsenal Site for Prairie, Development," *Chicago Sun-Times*, February 11, 1996.

⁷ "EPA Adds 99 Superfund Sites," *USA Today*, July 22, 1987.

⁸ Joliet Arsenal Development Authority, *Joliet Arsenal Area Transportation Plan Update*, May 2010, p. 9.

⁹ Michael Gillis "Joliet Arsenal Pushed as Site For 3rd Airport," *Chicago Sun-Times*, August 4, 1992.

¹⁰ Mary Podmolik, "Rail Facility Planned for Joliet Arsenal," November 21, 1997.

¹¹ Michael M. Mullen, "Centerpoint Intermodal Center," *Economic Development Journal*, April 2005, p. 2.

revenue stream to fund the development of a new industrial park. However, this plan proved untenable due, in part, to the nearby position of a military cemetery.¹²

Transport Development officially abandoned the landfill plan in February 1998, and the future of the site seemed uncertain until Transport Development sold the property to CenterPoint in the summer of 1998. CenterPoint promised not to develop a landfill and, instead, vowed to invest its own capital resources into the site to transform it into a major intermodal facility.

In 1999, JADA released a Strategic Plan for development of the site. Of major concern to the area was a relatively high unemployment rate. Thus, using the Joliet Arsenal site as an engine of local economic development was critically important. The Strategic Plan noted that “the availability of a large parcel of land in the region, in proximity to major transportation infrastructure of rail and highway, make the JADA property a prime location for a major intermodal transportation facility.”¹³

In support of the development of an intermodal transportation facility at the Joliet Arsenal site, the Strategic Plan cites two GAO studies that concluded long-term solutions to congestion and capacity issues facing Chicago transportation infrastructure should include “a multi-user intermodal terminal located near or in Chicago that would permit rail-to-rail connections,” and that “In support of the GAO report, the US DOT recommended a site outside the city in order to alleviate inner city truck congestion.”¹⁴ Figure 3 shows the CIC-Elwood site in 1998, prior to any development (with the future Partners Warehouse site serving as a landmark).

Importantly, the Strategic Plan noted that, in addition to being near major transportation corridors, the Joliet Arsenal site was also relatively well-buffered from conflicting land uses (as can be seen in Figure 3):

There are few, if any, other locations in the Chicago metropolitan area with so much transportation access yet so buffered from residential land uses. The parks’ biggest neighbor, the Midewin National Tallgrass Prairie, encompasses 19,000 acres of prairie restoration. The perpetually serene environment guaranteed by the presence of the Abraham Lincoln National Cemetery makes it a particularly desirable neighbor.¹⁵

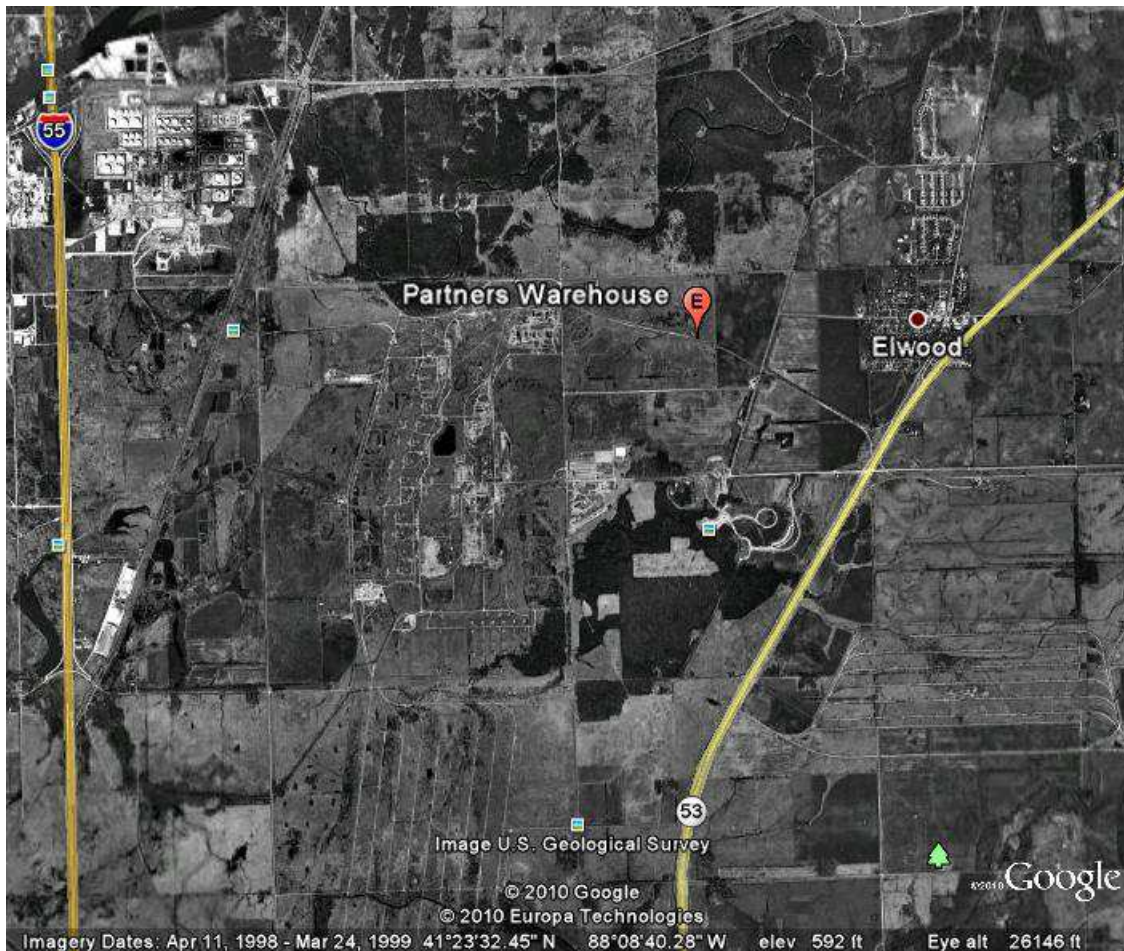
¹² ‘Developer Dangles Landfill Alternative, New Use for Joliet Arsenal Sought,’ *Chicago Sun-Times*, January 21, 1998.

¹³ *Strategic Plan for the Development of the Joliet Arsenal Development Authority Property*, University of Illinois at Springfield and Crawford, Murphy & Tilly, Inc., December 1999, p. 3.

¹⁴ *Strategic Plan for the Development of the Joliet Arsenal Development Authority Property*, University of Illinois at Springfield and Crawford, Murphy & Tilly, Inc., December 1999.

¹⁵ *Strategic Plan for the Development of the Joliet Arsenal Development Authority Property*, University of Illinois at Springfield and Crawford, Murphy & Tilly, Inc., December 1999, p. 7.

FIGURE 3
CIC–ELWOOD SITE, APRIL 1998¹⁶



In a separate transaction, CenterPoint acquired a 375-acre farm in May 1999 to increase the size of the proposed industrial park to almost 2,200 acres. Prior to commencing construction on the site, more than 1,200 separate structures on the property had to be demolished. Furthermore, the Arsenal’s status as a Superfund site meant that environmental remediation needed to be completed before new development could take place.¹⁷

The actual transfer of land from the U.S. Army was accomplished in the summer of 2000 through a Memorandum of Agreement and Deed (Memorandum) between JADA, in conjunction with CenterPoint, the U.S. Army, the U.S. Environmental Protection Agency and the Illinois Environmental Protection Agency. Key elements of the agreement provide

¹⁶ GoogleEarth.

¹⁷ Michael M. Mullen, “Centerpoint Intermodal Center,” *Economic Development Journal*, April 2005.

assurances regarding the cleanup of the parcel on terms acceptable to the developer.¹⁸ The memorandum determined the terms by which military property could be converted for private use and was the first time the Army had ever entered into such an agreement.¹⁹ The memorandum, thus, established a national model for subsequent conversions by private developers of military sites that are classified as excess.

Other important steps to getting the Joliet Arsenal development off the ground included the annexation of the industrial park into Elwood and creating a tax incremental financing (TIF) district to provide CenterPoint with tax incentives for developing the land. The proposed TIF district was opposed by local school districts from Joliet and Elwood on grounds that the districts would be denied property tax revenue from the industrial park for 23 years.²⁰ However, the Elwood Village Board approved the creating of a TIF district that called for \$100 to \$125 million in TIF support. The Board also approved annexation of the parcel and creation of a new I-4 flexible zoning designation (for manufacturing or distribution) to enable the development.²¹ In addition, financing was obtained from the Illinois Department of Commerce and Community Affairs (DCCA) to fund the construction of a new water and sewer system, and from IDOT and DCCA for road improvements.²²

In order to minimize conflict with nearby land uses, CenterPoint donated 83 acres to the Forest Service, 10 acres to Elwood and 60 acres to a wetlands conservation project.²³ These and other “side deals” helped to prevent a buildup in animosity from the community over any impacts in quality of life from the imminent industrial activity. In total, CenterPoint estimated that it dealt with 50 governmental entities while developing the project.²⁴

Description of Current Development

BNSF committed to operate the rail-truck transfer facility in August of 2000.²⁵ The company cited Alliance, Texas as the prototype for developing the Joliet site.²⁶ The budget for the

¹⁸ “Centerpoint Re-Development of Joliet Arsenal Advances with Approval of Elwood TIF District,” *PRNewswire*, June 13, 2000

¹⁹ Michael M. Mullen, “Centerpoint Intermodal Center,” *Economic Development Journal*, April 2005.

²⁰ “Arsenal Industrial Park Land Transfer Near,” *Chicago Tribune*, May 20, 2000.

²¹ “Centerpoint Re-Development of Joliet Arsenal Advances with Approval of Elwood TIF District,” *PRNewswire*, June 13, 2000.

²² “Centerpoint Re-Development of Joliet Arsenal Advances with Approval of Elwood TIF District,” *PRNewswire*, June 13, 2000.

²³ Michael Brick, “Village Says, ‘Yes, in My Backyard,’ to Rail Center,” *The New York Times*, July 17, 2002.

²⁴ Michael Brick, “Village Says, ‘Yes, in My Backyard,’ to Rail Center,” July 17, 2002. *The New York Times*.

²⁵ Lawrence H. Kaufman, “BNSF to Develop Intermodal Terminal, Auto Facility in Joliet,” *Journal of Commerce Online*, August 10, 2000.

²⁶ Michael W. Blaszk, “The 21st Century Freight Yard: BNSF’s Logistics Park Near Chicago,” *Trains Magazine*, January 1, 2003.

project, at \$941 million, was deemed “Centerpoint's largest, and riskiest, deal” as it eclipsed the company’s own market capitalization.²⁷

BNSF Logistics Park-Chicago (LPC) is part of the 6,000 acre CenterPoint Intermodal Center (CIC) complex located in the Joliet and Elwood, Illinois area. The CIC-Elwood development is 2,500 acres, with BNSF Logistics Park-Chicago occupying 770 acres. Other tenants of CIC-Elwood include Wal-Mart, DSC Logistics, Georgia Pacific, Potlatch, Sanyo Logistics, Partners Warehouse California Cartage, Maersk, and Bissel.²⁸ Construction began in 2000. Partners Warehouse committed to constructing a 300,000 square-foot warehouse and distribution center served by the BNSF yard in October 2001.²⁹ The facility opened in October 2002.

Union Pacific’s new Joliet Intermodal Terminal (UP-JIT) is located in the 3,600 acre CenterPoint Intermodal Center in Joliet, IL (CIC-Joliet), and is two miles north of CIC-Elwood and BNSF’s Logistics Park-Chicago. UP-JIT occupies 785 acres. The park is zoned for a third Class I intermodal facility.³⁰ Construction began in August 2009 and the facility opened in August 2010.

Figure 4 is the GoogleEarth view of CIC-Elwood and BNSF’s LPC in June 2009 (construction had not yet started on UP’s JIT). This is the same site as that shown in Figure 3, which was taken in April 1998.

²⁷ “Stock Price Rises This Year for Oak Brook, Ill.-Based Real Estate Trust Firm,”

Knight-Ridder Tribune Business News: Chicago Tribune – Illinois, November, 21 2000.

²⁸ <http://www.centerpoint-prop.com/projects/article.aspx?id=151&mode=INFRASTRUCTURE>.

²⁹ “CenterPoint Announces 300,000-Sq.-Ft. Build-To-Suit at Joliet Arsenal,” *PR Newswire*, October 2001.

³⁰ “CenterPoint Intermodal”

<http://www.centerpoint-prop.com/projects/article.aspx?id=209&mode=INFRASTRUCTURE>.

FIGURE 4
CIC-ELWOOD SITE, JUNE 2009³¹

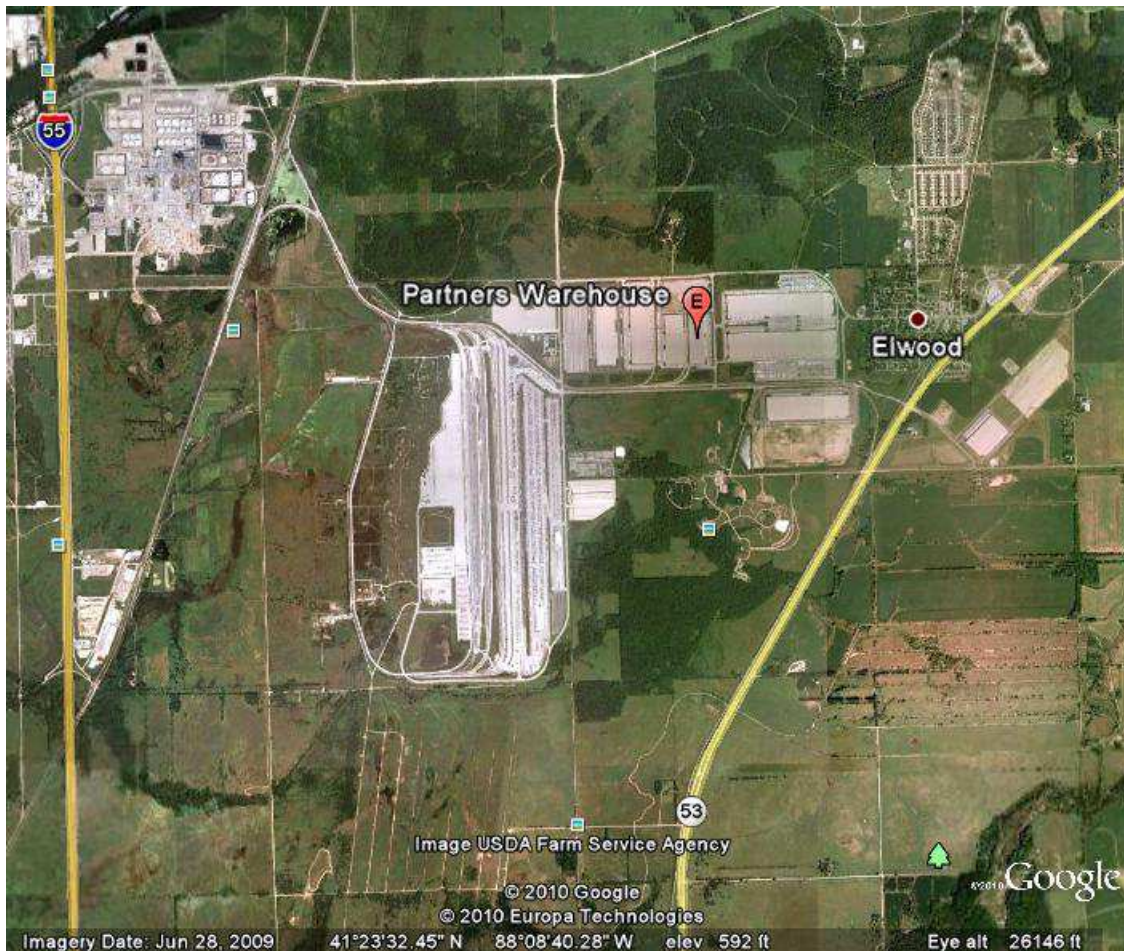
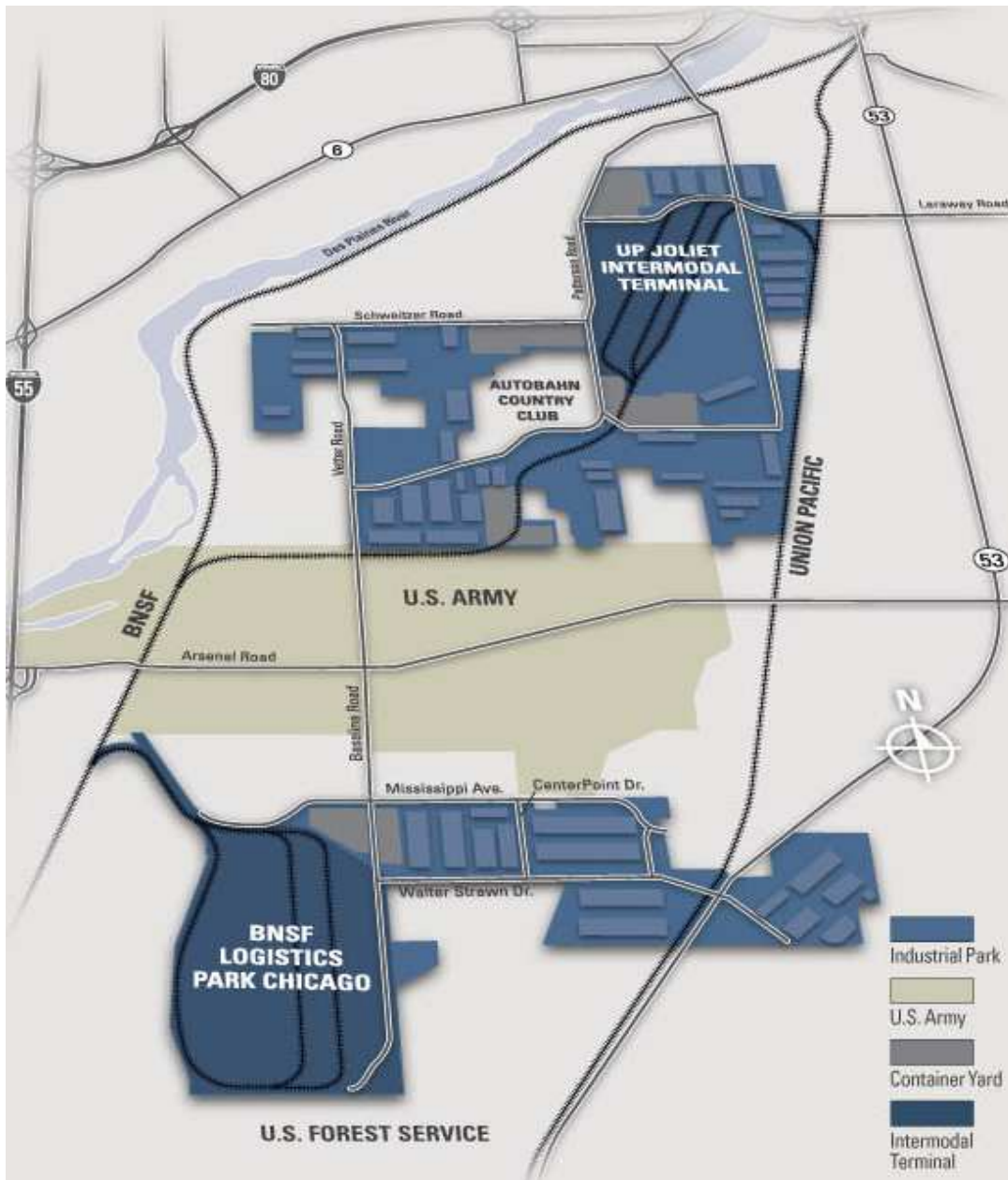


Figure 5 shows a current schematic of CIC-Elwood and CIC-Joliet, which together, are advertised by CenterPoint as the nation's largest inland port. Relative to Figures 3 and 4, CIC-Elwood and BNSF's LPC are south of Arsenal Road, while CIC-Joliet and UP's JIT are north of Arsenal Road (not shown in Figures 3 and 4).

³¹ GoogleEarth.

FIGURE 5
SCHEMATIC OF CIC- ELWOOD AND CIC-JOLIET³²



Promotional materials from CenterPoint highlight advantages of the facility such as shorter drays, fewer drivers required with more turns per day and reduced carbon footprint due to

³² “CenterPoint Intermodal Center – Joliet, Ill,”
<http://www.centerpoint-prop.com/showAttachment.aspx?id=239>.

close proximity of facilities (such as warehousing, distribution and container storage) within the immediate area. Also highlighted is the location close to I-55 and I-80 and the public transportation available for the area's workforce.³³

JADA Transportation Plan

With the development and growth of the Joliet Arsenal site as an intermodal hub have come congestion and capacity issues regarding the area's transportation corridors. In 2004, a transportation plan for the area was developed with a key objective being:

[T]o identify a subset of planned transportation investments that could be used as a starting point in a consensus-building exercise among area stakeholders that would lead to the implementation of important transportation projects.³⁴

In May 2010, the plan was updated. A number of local stakeholders participated in the development of the plan as members of the JADA Study Oversight Committee (SOC). Members of the SOC included JADA, Will County Governmental League (WCGL), Will County Center for Economic Development (CED), Will County, the Regional Transportation Authority (RTA), Pace, Metra, and the Chicago Metropolitan Agency for Planning (CMAP). The plan was presented to the SOC over several meetings. Presentations were also made to major local employers, IDOT, Midewin National Tallgrass Prairie, City of Joliet, Empress Casino of Joliet, and Chicagoland Speedway.³⁵

The updated plan noted the importance of Will County's transportation infrastructure for national and international freight transportation, but that local mobility can be problematic due to the volume of truck traffic generated by the facilities and at-grade rail crossings. Both were anticipated to worsen in the future and the resulting congestion would likely minimize the area's transportation advantages.³⁶

Developing a short list of transportation projects was seen as a way of generating agreement among stakeholders on which projects were most critical. This short list was then to be used as a means of building support for these projects. One recommendation for promoting these projects was through the formation of a transportation management association (TMA) for the area. In May 2010, a companion piece to the updated transportation study was issued to

³³ "CenterPoint Intermodal Center – Joliet, Ill,"

<http://www.centerpoint-prop.com/showAttachment.aspx?id=239>.

³⁴ Joliet Arsenal Development Authority, *Joliet Arsenal Area Transportation Plan Update*, May 2010, p. 1.

³⁵ Joliet Arsenal Development Authority, *Joliet Arsenal Area Transportation Plan Update*, May 2010, p. 2.

The Chicago Metropolitan Agency for Planning (CMAP) is the official regional planning organization for the northeastern Illinois counties of Cook, DuPage, Kane, Kendall, Lake, McHenry, and Will. By state and federal law, CMAP is responsible for developing the region's long range plan.

³⁶ Joliet Arsenal Development Authority, *Joliet Arsenal Area Transportation Plan Update*, May 2010, pp. 22-23.

determine the feasibility of establishing a (TMA) in southwest Will County. According to the document:

A TMA represents the interests of businesses and local officials whose goal is to improve mobility in a region through advocacy and transportation demand management (TDM) programs. Illinois has several TMAs operating within its borders and there are approximately 150 TMAs nationwide.³⁷

It was believed that the TMA could facilitate the dialog necessary for building consensus and promoting the implementation of key transportation projects in the area. One of its functions would be to serve as a coordinator for those projects involving multiple jurisdictions.³⁸

Will County Cargo Container Storage Model Ordinance

Another factor in the growth of the Joliet Arsenal as a major intermodal hub is the need for storage of cargo containers. In 2006, it was expected that at least another 200 acres would be needed for future cargo container storage.³⁹ It was posited that both users of the intermodal facilities and neighbors of the facilities (e.g., residential) would ideally like to see any cargo container facilities located as close as possible to the intermodal facilities. Not only would such a location enhance the efficiency of intermodal operations, but it would minimize the negative impacts on surrounding areas.⁴⁰

In 2006, Will County developed a model ordinance for the storage of containers that is designed to avoid or mitigate conflicts with other land uses and also allow for anticipated future needs for cargo container storage. The model ordinance was expected to serve as a template for governmental units within the county to use as they draft or revise their own ordinance. The model ordinance and its companion Cargo Container Facility Checklist can be found in Appendices 1 and 2. Among other things, the model ordinance addresses typical encroachment issues such as location of facilities, distances from other land uses, noise and lighting issues, and screening and landscaping requirements.

Norfolk Southern Whitaker Terminal - Austell, GA

Norfolk Southern's main intermodal facility in the Southeast had been Inman Yard in northwest Atlanta. In the early 1990s, the railroad looked for an alternate site as congestion and capacity constraints were a concern at the Inman facility. Not only was intermodal traffic projected to increase significantly, but the city of Atlanta was growing around the

³⁷ Joliet Arsenal Development Authority, *TMA Feasibility Study for Southwest Will County, Illinois*, May 2010, p. 4.

³⁸ Joliet Arsenal Development Authority, *Joliet Arsenal Area Transportation Plan Update*, May 2010, p. 39.

³⁹ http://willcountycd.com/content/Container_Policies.aspx.

⁴⁰ http://willcountycd.com/content/Container_Policies.aspx.

Inman facility. At 150 acres, Inman was not large enough to continue in its role as Atlanta's largest intermodal terminal.⁴¹ Traffic at Inman had grown consistently through the 1980s from 97,401 trailers and containers in 1982 to 169,727 units in 1988.⁴² Total intermodal handling activity within Atlanta had grown between 1980 and 1990 from 212,000 to 454,000 units.⁴³ These factors made the expansion of Inman an undesirable and difficult option for Norfolk Southern, and the railroad looked for a new location for its major Southeast intermodal facility.

In 1993, Norfolk Southern purchased 830 acres for a new intermodal site, 14 miles west of Inman near Austell on the Norfolk Southern main line. Although physically close to metro Atlanta, Austell was a small community of 4,500 with a territory of five square miles that had seen almost no population growth since 1980. While the city had little available space for residential development, in 1985, the City of Austell incorporated the territory that would eventually become Whitaker and a former thread mill for the planned Sweetwater Industrial Park.⁴⁴ Already by the 1980s, local officials faced criticism that they had prioritized industrial development for the area over residential development. By 1990, it was clear that Austell and South Cobb County had a substantial surplus of industrial land. The failure of the Sweetwater Industrial Park, which had been subsidized by \$8 million in industrial revenue bonds issued in 1986 by the Downtown Development Authority of Austell, seemed to support this conclusion.⁴⁵ Figure 6 shows the locations of Inman and the Whitaker site near Austell.

⁴¹ "Railroad Developing Plans for Piggyback Facility," Dana Dratch, *Atlanta Journal and Constitution*, November 4, 1993.

⁴² "Norfolk Southern Doubles Capacity in Atlanta," *Lloyd's List International*, June 16, 1989.

⁴³ Christopher Mayer "Atlanta Achieves Major Growth as Piggyback Centre – Expands Intermodal Freight Services," *Lloyd's List International*, October, 25 1990.

⁴⁴ Katie Long "Despite Boom, Austell Has No Place to Grow," *Atlanta Constitution and Constitution*, November 28, 1988.

⁴⁵ "Supply Outstrips Demand at Austell Industrial Park," *Atlanta Journal and Constitution*, March 15 1990.

FIGURE 6
ATLANTA METRO RAIL MAP⁴⁶



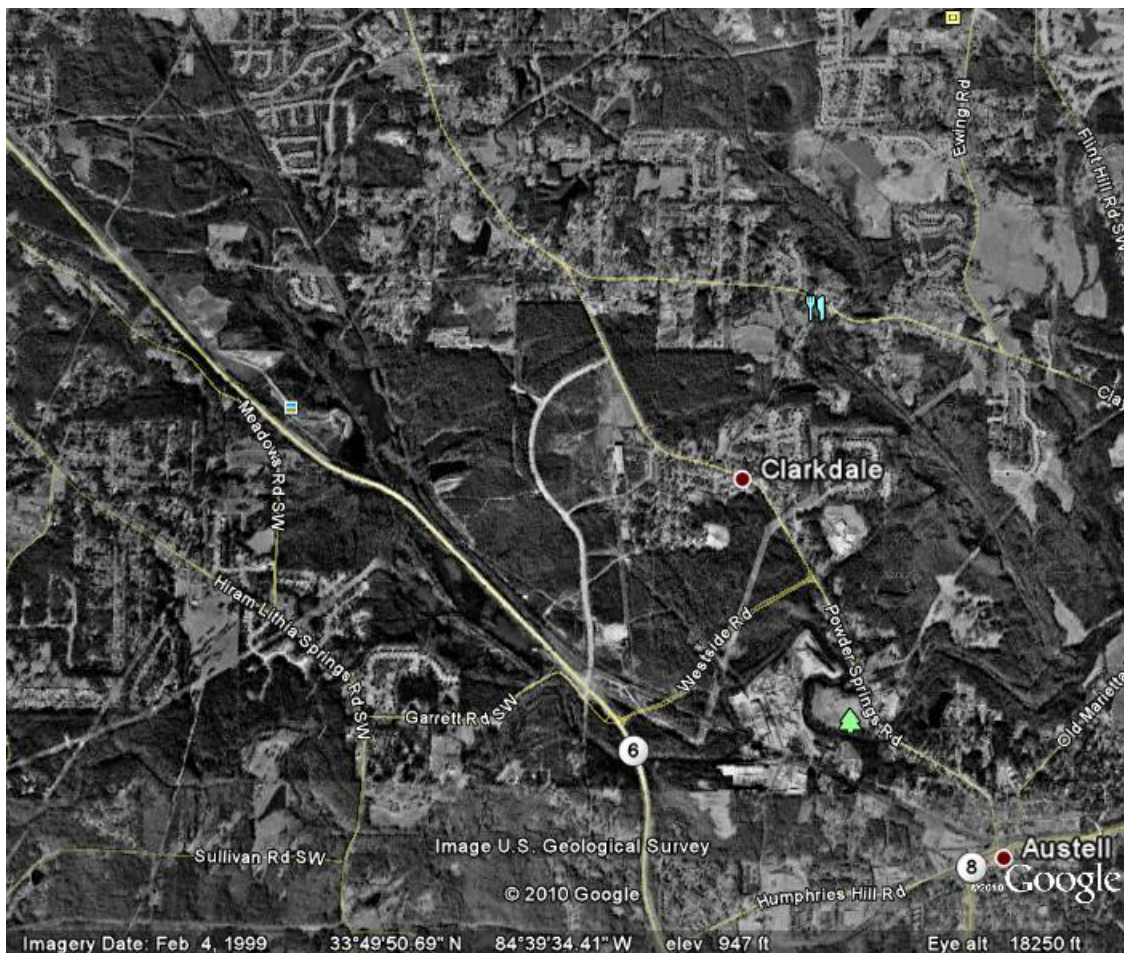
In June 1992, the Austell Planning and Zoning Commission voted unanimously to recommend that the City Council rezone 425 acres of the Sweetwater Industrial Park for heavy industrial use, despite significant public protest.⁴⁷ The developer that sought the zoning change, Bessemer, did not end up acquiring the property. Yet, the approval of the zoning change signaled that the city government was ready, in principal, to accept a heavy industrial use for the property.

Figure 7 shows the Whitaker site in 1999, prior to development. The site is in the northwest portion of Austell, west of Clarksdale and on the east side of Highway 6. Figure 7 indicates much more existing development surrounding the Whitaker site than the Joliet site (see Figure 3).

⁴⁶ Atlanta Logistics Innovation Council, "Atlanta – Major Intermodal and Freight Rail Hub" <http://www.logisticsatlanta.com/rail.asp>.

⁴⁷ Dana Dratch, "Protests go Unheeded as Austell Planners Back Industrial Rezoning," *Atlanta Journal and Constitution*, June 18, 1992.

FIGURE 7
WHITAKER INTERMODAL TERMINAL DEVELOPMENT SITE, FEBRUARY 1999⁴⁸



Development History

Although Norfolk Southern purchased the land at the Whitaker site in 1993, the project was postponed until traffic levels justified construction.⁴⁹ While most of the site was already zoned for industrial use, a small portion (approximately 110 acres) needed to be rezoned.

In early discussions with local and county officials, Norfolk Southern received positive feedback for the project as an economic stimulus for the area. Largely because of this positive feedback, Norfolk Southern did not feel it was necessary to make significant efforts to involve local residents in the planning stages of the project. However, by the time the

⁴⁸ GoogleEarth.

⁴⁹ Conversation with Joel Harrell, Norfolk Southern, March 2010.

project was ready for to go forward in 1996, there was strong public opposition to the project:

The residents of Austell, Clarkdale, Cobb County and other nearby jurisdictions jumped to the understandable conclusion that trains and truck traffic, noise, pollution, and congested roads would disrupt their peace and destroy their property values. ...

In the fall of 1996, NS belatedly discovered that local residents were, to put it mildly, up in arms. ...

Opposition came from Clarkdale, Cobb County and nearby city of Powder Springs. The Atlanta Regional Commission, an influential regional planning group, spoke out against the project, citing concerns about land use, environmental issues and the need to protect Clarkdale's historic character.⁵⁰

There were numerous conflicts between the railroad and local citizens and levels of government during the planning and construction of the Whitaker Intermodal Terminal. Here, an overview of these conflicts is provided, but it is not the intent to detail each and every one.

The first major conflict between the parties occurred in 1996, when the City of Austell denied Norfolk Southern's rezoning request on the small parcel. In addition to the projected noise that the facility would create, residents also expressed concerns regarding traffic. Norfolk Southern estimated that within 10 years, as many as 3,542 trucks would enter or leave the yard on a peak weekday—147 per hour.⁵¹ Norfolk Southern took the issue to Federal Court, using the Interstate Commerce Commission Termination Act of 1996 (ICCTA) as support for its position that local zoning and state regulations are preempted when interfering with interstate commerce.⁵²

Around the time of this lawsuit, Norfolk Southern belatedly began putting together an internal team to manage public stakeholder issues. Up until this time, Joel Harrell, Resident Vice President of Norfolk Southern, said that he was basically performing such activities by himself.⁵³ On the other side, the community decided that the most effective response was

⁵⁰ Barbara Faga, *Designing Public Consensus*, John Wiley & Sons, Inc., 2006, p. 45.

⁵¹ "Cobb, Fulton Neighbors Fight Proposed Rail Yards," *Atlanta Journal and Constitution*, September 30, 1996.

⁵² Barbara Faga, *Designing Public Consensus*, John Wiley & Sons, Inc., 2006, p. 48; Conversation with Joel Harrell of Norfolk Southern, March 2010.

⁵³ Barbara Faga, *Designing Public Consensus*, John Wiley & Sons, Inc., 2006, p. 45; Conversation with Joel Harrell of Norfolk Southern, March 2010.

“stonewalling” and that acknowledging or discussing the project would undermine their opposition to it.⁵⁴

In summer of 1997, Norfolk Southern applied for a wetlands permit from the U.S. Army Corps of Engineers (USACE). It also had to have a review conducted of how its proposed facilities would potentially affect neighborhoods in Clarksdale, which were on the National Register of Historic Places.⁵⁵

In August 1997, Federal judge Robert L. Vining ruled that, under the preemption authority conferred by ICCTA, local governments lacked authority to block construction of the facility.⁵⁶ After this decision, the City of Austell realized that the facility could be built without local approval and its construction was inevitable. Therefore, the City decided to negotiate and settle with the railroad. Norfolk Southern donated land for recreational and other purposes and the City issued necessary permits and closed some city streets on the site.⁵⁷ However, other municipalities (including Clarkdale and Powder Springs) and Cobb County still opposed the project.

In January 1999, the USACE issued conditional permits for the project. Norfolk Southern agreed to enhance buffers between the facility and residential areas, reconfigure lighting for the facility and perform additional noise monitoring. Construction began in October 1999.⁵⁸ However, Cobb County filed a lawsuit to stop construction. In an October 2000 civil trial in Cobb County, the jury decided in favor of the railroad, and in Spring 2001, Cobb County finally gave up its opposition to the project after spending \$2.2 million on lawsuits. Norfolk Southern agreed to operate the yard at only 40 percent of capacity in the first three years and the parties agreed to reassess the impacts of the facility then.⁵⁹

Current Operations

Service began at the John W. Whitaker Intermodal Terminal in July 2001, with its formal dedication occurring in October 2001. Figure 8 shows the facility as of April 2010. The 450 acre Whitaker Intermodal Terminal has been recognized as the largest intermodal facility east of the Mississippi River. It serves as the Southeast hub of Norfolk Southern’s hub and spoke

⁵⁴ Barbara Faga, *Designing Public Consensus*, John Wiley & Sons, Inc., 2006, p. 48.

⁵⁵ Barbara Faga, *Designing Public Consensus*, John Wiley & Sons, Inc., 2006, p. 43; Conversation with Joel Harrell of Norfolk Southern, March 2010.

⁵⁶ Barbara Faga, *Designing Public Consensus*, John Wiley & Sons, Inc., 2006, p. 48; Conversation with Joel Harrell of Norfolk Southern, March 2010.

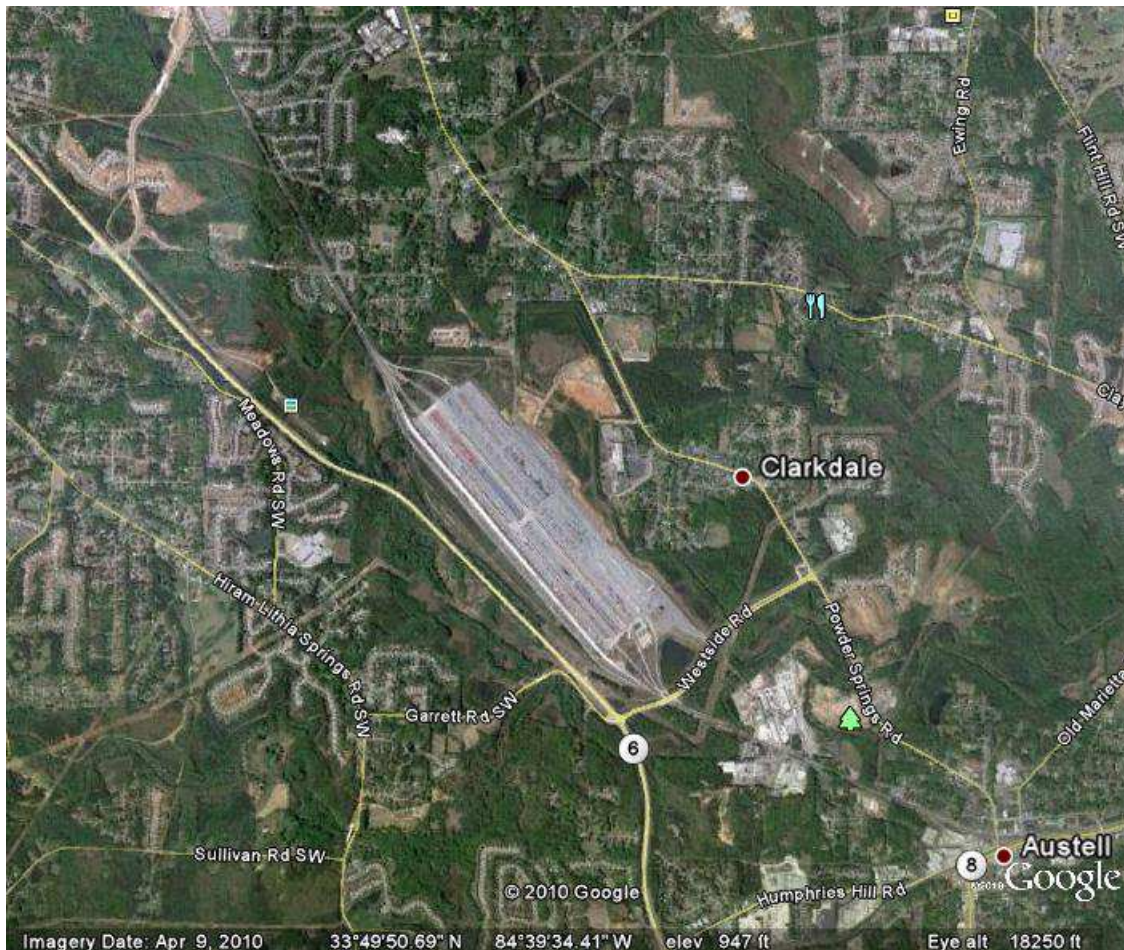
⁵⁷ Conversation with Joel Harrell of Norfolk Southern, March 2010.

⁵⁸ Conversation with Joel Harrell of Norfolk Southern, March 2010.

⁵⁹ Barbara Faga, *Designing Public Consensus*, John Wiley & Sons, Inc., 2006, p. 49.

system and provides service for the ports of Charleston, Savannah, Miami and Jacksonville. The facility handles a mix of domestic and international freight.⁶⁰

FIGURE 8
WHITAKER INTERMODAL TERMINAL, APRIL 2010⁶¹



Conclusion

The creation of new intermodal facilities at Joliet and Austell represented relocations into suburban areas that were more amenable to the operations and growth of the facilities. Nevertheless, the examples show that, while suburban intermodal yard locations have relatively lower impacts on surrounding communities, the impacts on communities must still be addressed. While the timelines for these projects from conception to completion are

⁶⁰ <http://www.logisticsatlanta.com/rail.asp>.

⁶¹ GoogleEarth.

comparable, they faced significant differences in how they developed. The Joliet facility had a development course that, while not free of disputes, avoided the legal battles that plagued the development of Austell. The development of intermodal hubs at Joliet and Austell provide insights into how differences in situational factors, and how the actions of involved stakeholders shape the process and outcomes of such projects.

Perhaps, the primary situational factor that distinguishes these projects is the impetus for the development of the site. In the case of Joliet, it was the public sector that initiated the brownfield redevelopment of an abandoned military facility for the purpose of local economic development to replace the jobs lost through the base closure. In fact, a redevelopment authority, JADA, was established to plan and actively pursue redevelopment of the site. In turn, JADA formed a partnership with a private developer, CenterPoint Properties, to accomplish the redevelopment. In the case of Austell, it was the railroad that initiated the project, creating the prospect of a large industrial site being located in the midst of small communities. While the leadership of the town government was supportive of the project, the town itself had not yet embraced the concept when the project was officially announced. This led to significant legal challenges stretching from 1996 to 2000.

Another important situational factor distinguishing the projects is the proximity of the sites to potentially incompatible land uses. In the case of Joliet, the site was relatively isolated from residential areas and other potentially conflicting land uses. Due to its prior function as an ammunition plant, the site already had significant buffering from residential populations. In contrast, the Whitaker site was closer to incompatible land uses, including its proximity to the historic district in Clarkdale.

Regarding the contribution of stakeholder activities to the process and outcome of the respective projects, arguably the most significant difference between the projects was the effort at communication and cooperation among stakeholders. This difference is related to the situational factors noted above and is also a matter of circumstance (e.g., based on initial feedback, Norfolk Southern thought they had buy-in from relevant stakeholder groups).

From the start, the Joliet Arsenal redevelopment effort encouraged communication and consensus-building among levels of government, citizenry and developer interests. This was largely fostered by the establishment of JADA. According to Michael Mullen of CenterPoint, extensive communication among the various parties involved was essential for the success of the project:

Extensive communication led to a determination of the most beneficial use of the land for both Will County and the entire metropolitan Chicago region. During the pre-

planning period, a series of open meetings with the people of Will County provided public opinion regarding the development plan.⁶²

In the case of Austell, efforts at communication and cooperation were relatively minor at the start. This was partially tied to the hostile response that had been received by a previous land developer who had tried to rezone the property as heavy industrial. However, this miscalculation turned out to be a significant factor in determining the course of the project. Another factor that likely led to poor communication on the part of local citizens was that the effort initiated with the railroad and was not something that the community sought (in contrast to JADA). In the view of Barbara Faga, whose firm was hired by Norfolk Southern as a consultant on the project, a better outcome could have resulted had there been better lines of communication between the parties:

It is safe to say that Clarkdale could have gained much more by working with the railroad. If a project appears to be moving forward, the first thing neighborhoods should do is climb on board and get their fair share. Otherwise, no one is going to hand it to them. That said, Norfolk Southern's early lack of engagement with the public short-circuited the process from the start. The railroad viewed public opinion as peripheral to its efforts to get the project underway, and only came to grips when the opposition became troublesome. The railroad got its project built, but by failing to engage the community early, the costs in both time and legal fees were extensive. By refusing to engage in any meaningful discussion or compromise, residents who opposed the rail yard deprived themselves of concessions that would have benefitted their neighborhood, their property values, and their lifestyles. In this case, honest dialog between the two parties could have resulted in a better outcome for both.⁶³

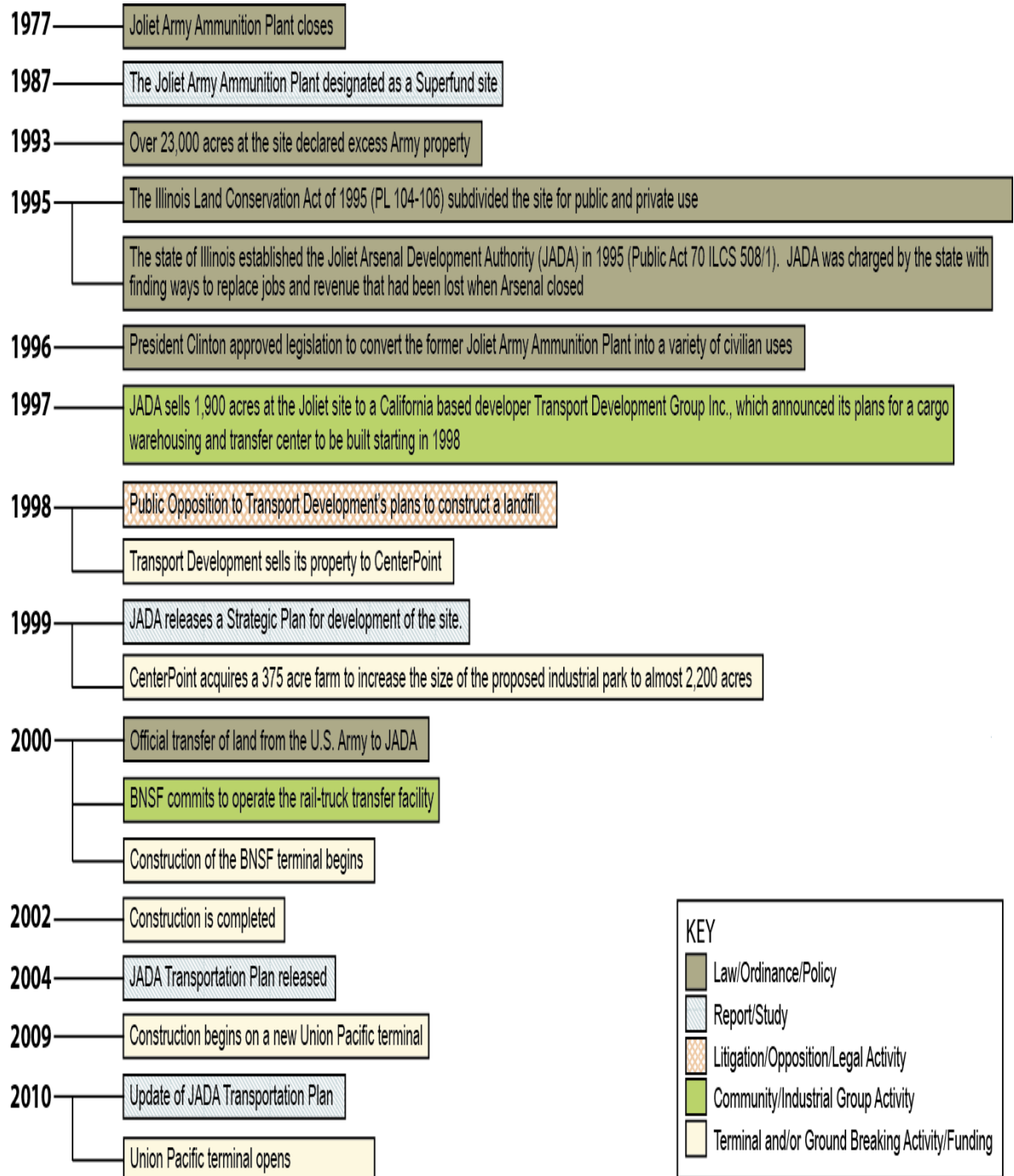
Differences in situational factors and the efforts at communication and outreach between the Joliet and Austell projects can be seen as primary explanations for the degree of cooperation versus conflict between developers of the facilities and the communities in which they are located. Again, the timelines of the projects are not all that different, but stakeholder interaction and efforts in the Joliet case can be characterized as largely cooperative while, in the case of Austell, such activities were largely adversarial. While both projects ultimately came to fruition, these differences had a significant impact on the process, and the time and resources expended to complete the projects.

Figure 9 is a timeline of the Joliet Arsenal redevelopment. Figure 10 is a timeline of the Whitaker Intermodal Terminal development.

⁶² Michael M. Mullen, "Centerpoint Intermodal Center," *Economic Development Journal*, April 2005, p. 2.

⁶³ Barbara Faga, *Designing Public Consensus*, John Wiley & Sons, Inc., 2006, p. 52.

**FIGURE 9
JOLIET ARSENAL REDEVELOPMENT TIMELINE**





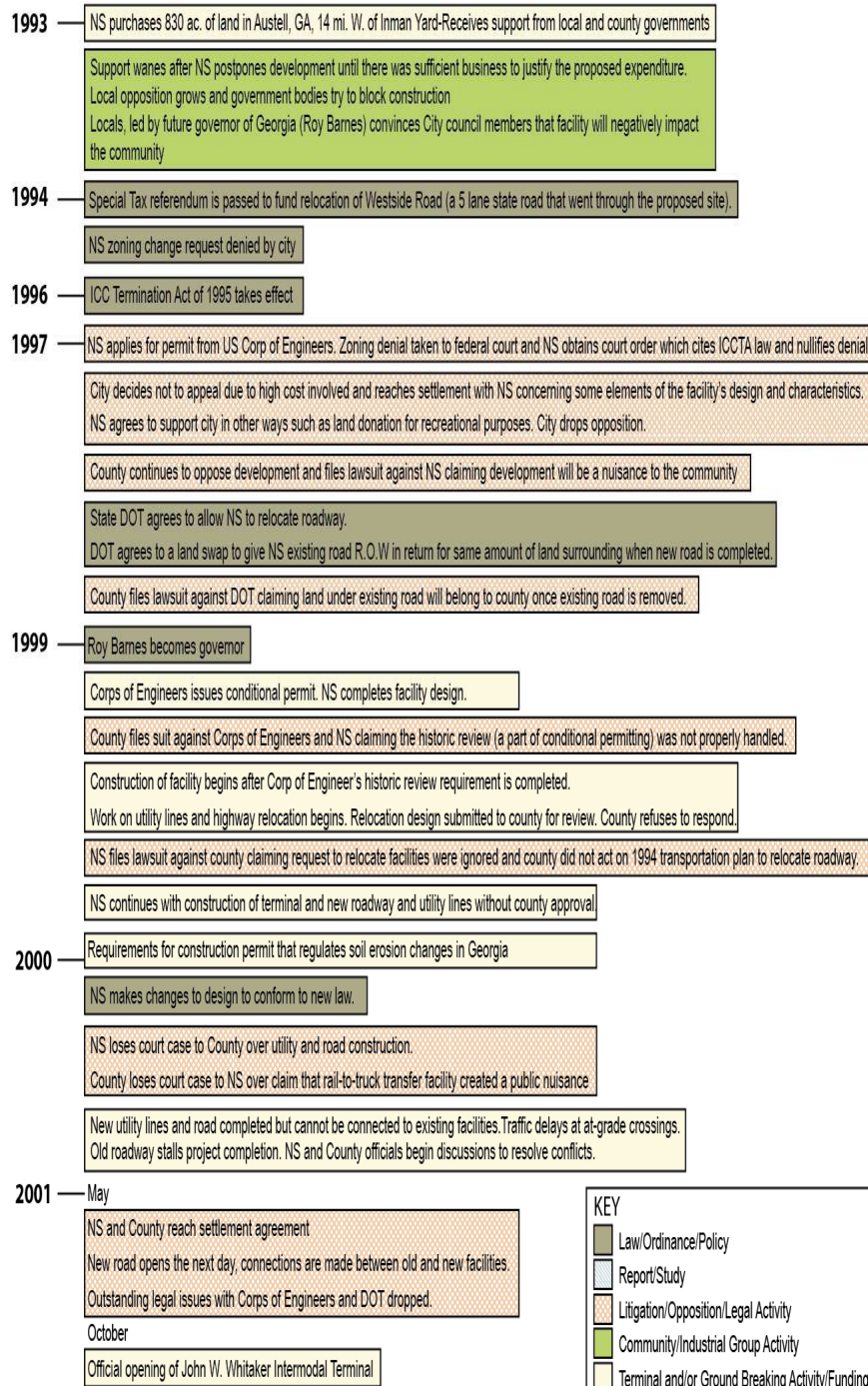
Brief History: NS Inman Yard operations exceed capacity >>> Yard expansion not possible

ISSUE: Site not zoned for intended use and NS requested zoning change.

ICCTA 1995 "Preempted state and local govt. regulations of construction and operation of certain rail

ISSUE: Road and utility lines relocation.

**FIGURE 10
WHITAKER INTERMODAL TERMINAL TIMELINE**





APPENDIX 1

Cargo Container Facility Checklist

- ____ 1. Does the site have sufficient access from public right-of- ways?
- ____ 2. For separation distance, is the cargo container more than 1000 feet from any residentially zoned property?
- ____ 3. Does the facility have adequate insurance and can provide a certificate of insurance prior to the issuance of a special use permit?
- ____ 4. Is the location of the facility in the most intense industrial/manufacturing zoning district?
- ____ 5. Have you submitted a lighting plan for the site?
- ____ 6. Is the lot size a minimum of 20 acres?
- ____ 7. Does the proposed paving consist of asphalt, concrete or other approved materials?
- ____ 8. Is the amount of off-street parking spaces proposed at least one per on-site employee?
- ____ 9. What type of water system are you using (well and septic, municipal, etc.)?
- ____ 10. Does the site plan provide adequate means for emergency vehicles to access cargo containers?
- ____ 11. Is proper signage used?
- ____ 12. What type of materials is being stored?
- ____ 13. Has a site plan been included?
- ____ 14. Do all buildings meet height requirements?
- ____ 15. Has a traffic study been submitted?
- ____ 16. Has a landscape plan been included?
- ____ 17. Does your facility have technology systems to monitor/track movement of cargo containers?

APPENDIX 2

AN ORDINANCE REGULATING THE LOCATION AND USE OF CARGO CONTAINER FACILITIES FOR GOVERNMENTAL UNITS WITHIN WILL COUNTY

Statement of Purpose

The objective of this ordinance is to regulate cargo container facilities throughout Will County, referred to herein as the "County", and municipalities as defined herein. Governmental units refers to the County and each municipality, respectively. These facilities should meet the following purposes:

To provide for safe and orderly storage, staging, and maintenance of cargo containers in a manner that minimizes the noise, dust, traffic congestion, aesthetic blight and other adverse environmental impacts of such a use upon the participating governmental units.

To ensure that the cargo container facilities are operated in a safe manner based upon such factors as the permitted height of stacking of such containers, the cargo within the containers, the location and surface used, methods of securing the containers so as to prevent safety hazards, and accessibility for emergency and maintenance equipment.

To ensure adequate visual screening and landscaping of cargo containers from the public right-of-ways and adjacent properties is provided.

To ensure that the site is of sufficient size to accommodate the clean, safe and orderly storage and maintenance of cargo containers with adequate lighting and signage, in accordance with this ordinance.

SECTION 1: DEFINITIONS: The following definitions shall apply to this ordinance.

1. **Cargo Containers:** Means an industrial, standardized reusable vessel that was:

a. Originally, specifically or formerly designed for or used in the packing, shipping, movement or transportation of freight, articles, goods or commodities, and/or,

b. Designed for or capable of being mounted or moved on a rail car, and/or,

c. Designed for or capable of being mounted on a chassis or bogie for movement by truck trailer or loaded on a ship.

2. **Cargo Container Facilities:** Means any site in which the principal use is the movement, storage on a non-permanent basis, staging, or redistribution of cargo containers either on or off of a chassis, but not to include railroad operations that are subject to jurisdiction of the U.S. Department of Transportation Surface Transportation Board.
3. **Chassis:** Means that portion of a semi-trailer configuration that is the non-powered portion that provides a way of transporting the cargo container.
4. **Permanent:** Means a time limit of storage that exceeds six (6) months on site without being utilized for transportation purposes.
5. **Racking:** Means a method of storing a chassis on end in an upright position where the bed is perpendicular to the ground.
6. **Spotting Tractor:** Means a tractor utilized to pull a chassis only within the cargo container yard. Not utilized for over-the-road hauling.
7. **Stacking:** Means a method of storing cargo containers or a chassis in a vertical manner where the floor of the container or bed of the chassis remains parallel to the ground.
8. **Staging/Storage:** Means the outdoor locating and containing cargo containers on and off a chassis, or the chassis by itself until a method of transportation is established and utilized.
9. **Tractor:** Means that portion of a semi-trailer configuration that is utilized to power and pull the chassis.
10. **Truck Trailer:** See Chassis.

SECTION 2: LOCATION: The location of these facilities are prohibited in all zoning districts except as a special use in the governmental unit's most intense industrial/manufacturing zoning district, provided they meet the requirements established in this ordinance and special use provisions.

SECTION 3. REQUIREMENTS: All cargo container facilities shall be subject to the following provisions:

1. **Access:** Cargo containers on or off a chassis may not be stored in a manner that impedes access to public right-of-ways, public utility or drainage easements, adjacent structures, and buildings.
2. **Lighting:** Cargo container facilities shall provide adequate lighting on site including at all entrances and exits. A lighting plan must be submitted and approved in conjunction with a special use permit. Lighting shall not affect adjacent properties.

3. **Materials stored:** Materials stored in the cargo containers shall not include any material that is required to be placarded as Class 7 (radioactive materials) according to the U. S. Department of Transportation (DOT) Emergency Response Guidebook (ERG). All other materials stored at the facility should be properly placarded according to the ERG.
4. **Minimum Lot Size:** Cargo container facilities shall have a minimum lot size of twenty (20) acres.
5. **Noise:** Cargo container facilities shall make every effort to contain noise within the site. In the event noise becomes excessive, it shall be treated accordingly as a public nuisance violation in accordance with the governmental unit's ordinances.
6. **Paving:** Cargo container facilities shall be paved in accordance with each governmental unit's standards, including drainage and storm water detention. The paving must consist of asphalt, concrete, or other materials found to be acceptable to the governmental units. Gravel, grindings, or tar and chip surfaces are not allowed.
7. **Parking:** No portion of any required off-street parking or loading/unloading areas shall be used for the storage of cargo containers or similar storage devices. The minimum amount of off-street parking spaces shall be one per employee, but not less than six (6) spaces, and one space per 500 sq. ft of gross floor area of any structure located on site.
8. **Racking Height:** Racking of a chassis shall be limited to fifty-seven (57') feet in height. When a racked chassis exceeds thirty (30') feet in height, an additional one-foot (1') shall be added to all setbacks (from property line) for each additional one-foot (1') of height for the racked chassis.
9. **Screening and Landscaping:** Screening shall be provided within a landscape easement, a minimum width of 100-feet, adjacent to public right-of-ways and non-industrial zoning districts. Screening shall be a combination of fencing, berming, natural vegetation and landscaping in accordance with the governmental unit's standards. A berm shall contain a 3:1 slope and a minimum height of fifteen (15) feet. Additional landscaping may be required around the entire perimeter of the facility, subject to site plan review by the governmental unit. A landscaping plan must be submitted in conjunction with a special use permit.
10. **Separation distance:**
 - a. No storage of a cargo container or a chassis shall be closer than 1000 feet from any property zoned or used for residential land uses or be stored closer than thirty (30) feet to any existing structure or building on site.
 - b. No side-by-side grouping shall exceed twenty (20) containers or twenty (20) chassis in width and no end-to-end grouping shall exceed two (2) containers or two (2) chassis in length. Thirty (30) foot paved access drives shall be maintained at all times on all sides of a grouping.
11. **Signage:** No signage, other than company identification logos, shall be allowed on any cargo container unless approved in accordance with each governmental unit's sign ordinance.

12. **Site Plan:** A site plan must be submitted in conjunction with the special use permit.

13. **Stacking Height Cargo Containers:** Cargo containers shall not be stacked more than three units high. When stacked, an additional thirty (30) feet shall be added to all setbacks for each additional level of stacked containers.

14. **Stacking Height Chassis:** Empty chassis shall not be stacked more than five units high.

SECTION 4: CARGO CONTAINER MAINTENANCE FACILITY: Any business that engages in the maintenance and repair of cargo containers, not located within a storage facility, that removes containers from the chassis, shall be subject to the same requirements as a cargo container facility. This may include facilities or operations engaged in the conversion of cargo containers for a secondary use or sale.

SECTION 5: CONTAINER MODIFICATIONS: Cargo containers may not be modified or retrofitted for on site habitation. Containers shall be prohibited from having windows, heating and cooling, plumbing, or multiple entrances. Cargo containers are allowed to have electric and ventilation systems installed that would be necessary to meet the minimum codes and standards for lighting and air circulation for storage purposes.

SECTION 6: FIRE SUPPRESSION AND INSURANCE: All cargo container facilities must provide adequate means for fire and emergency vehicles (as approved by the governmental unit's fire protection agency) to access cargo containers both on and off a chassis in the event of an emergency. All facilities engaged in storage and stacking, must carry adequate insurance and provide a Certificate of Insurance prior to issuance of a special use permit.

SECTION 7: STRUCTURAL INTEGRITY, SURETY FOR REMOVAL:

1. Any cargo container stored or kept on property under the jurisdiction of the governmental unit shall be safe, structurally sound, stable, and in good repair.

2. Any Cargo container that becomes unsound, unstable or otherwise dangerous shall be immediately repaired or removed from the property where kept, subject to the governmental unit's requirements.

3. Any cargo container stored or kept in violation of the governmental unit or any municipalities' ordinances shall be deemed a dangerous condition and a public nuisance and may be immediately removed by the governmental unit.

4. Any cost or expense associated with the removal of the violating cargo containers is the responsibility of the property owner. All associated costs

including but not limited to legal fees and court cost, shall constitute a debt due and owed to the governmental unit and shall be recordable as a lien upon the land of the cargo container storage facility and/or property owner.

SECTION 8: EXISTING CARGO CONTAINERS FACILITIES: Any cargo container facility which existed lawfully on a parcel at the time of the adoption of this ordinance, or of any subsequent amendment thereto, shall be removed from the property within six (6) months of the adoption of this ordinance, unless such cargo container facility meets the requirements of this Ordinance or a special use permit approved by the governmental unit.

SECTION 9: PAYMENT IN LIEU OF TAXES: The governmental unit, as a condition of a special use permit, may require a payment in lieu of taxes (P.I.L.O.T).

SECTION 10: DEDICATION OF RIGHT-OF-WAY: Cargo container facilities shall dedicate right-of-way to the governmental unit for public highway and other public purposes. The dedication shall be in a form acceptable to the governmental unit and shall be made at no expense to the governmental unit.

SECTION 11: RESPONSIBILITY FOR PUBLIC IMPROVEMENTS: Cargo container facilities shall design and install, at no expense to the governmental unit or each governmental unit, public improvements adjacent to the facility at the time and in the manner specified by the governmental unit in conjunction with the development or subdivision of the Parcel, whichever occurs first. The improvements shall be engineered, reviewed, approved and installed according to the procedures and conditions set forth by the governmental unit.

SECTION 12: This Ordinance is severable and the invalidity of any portion hereof shall not be deemed so as to invalidate the remainder.

SECTION 13: This Ordinance is strictly intended to only make those amendments specified herein. No other amendment or repeal is intended or made hereby.

SECTION 14: This Ordinance shall take effect immediately upon its passage.

PASSED this _____ day of _____, 20____.

