

Isanti County
Rail Logistics Park

Market and Feasibility Report

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Contents

Executive Summary	7
Isanti County Economic Profile	11
Logistics flow through the region and the regional distribution market	15
Global trends in freight by mode	15
Significant freight generators (shippers or receivers)	15
NAFTA Opportunity (Canadian traffic particularly)	20
Site Location Factors for Rail	26
Regional and Local Freight by Product/Commodity and Major Users	29
Trans-load Terminals	34
Market Summary	35
Real estate market demand and pricing for developed industrial park sites.....	36
National Perspective	36
Regional Real Estate Market	37
Rail Site Market.....	44
Rail Site Design Criteria	48
Rail, truck and logistics providers’ insight into un-served needs and Isanti County location ..	52
Create a value proposition for the logistics customer at the proposed logistics park	53
Review Findings and Test of Value Proposition with Industry	54

Value proposition for freight generators and freight service providers to identify their level of commitment and schedule for investing in the park and commencing operations..... 55

A strategy for market acceptance and financial feasibility of rail park development 57

Appendix I 61

Financial Pro Forma 61

 Cambridge Site 61

 City of Isanti Site..... 68

 Braham Site..... 72

Appendix II 76

Global Logistics Flows and Trends..... 76

 Trends in Outsourcing..... 82

Table of Figures

Figure 1 Total Employment by Occupation (2010) 12

Figure 2 Employment by Major SIC (2010) 13

Figure 3 Isanti County Employment and Wages (2010 Q3) 14

Figure 4 Truck Volume by Route..... 17

Figure 5 Truck Volume - Minneapolis Region 18

Figure 6 Intermodal Routes to Major Inland Ports..... 19

Figure 7 Gateway Port Regions, Size and Forecast Growth 20

Figure 15 Map of Canada's Gateways to the US..... 22

Figure 8 Rail to Truck Intermodal Terminals – MSP 23

Figure 9 BNSF Terminal on W. Pierce Butler Road, St. Paul..... 24

Figure 10 Hinckley Connection Track for East Bound Moves 25

Figure 11 Rail Service Types 27

Figure 12 Major Intermodal Shippers, Minneapolis St. Paul Region 30

Figure 13 Comparison of Freight Generated by Industry Group by County and State..... 32

Figure 14 Taconite Mining and Steel Production Map..... 34

Figure 16 Industrial Real Estate Zones - Minneapolis St. Paul 40

Figure 17 Land Use Plan MSP 41

Figure 18 Type of Industrial Real Estate..... 42

Figure 19 Industrial Transactions First Quarter 2011 MSP 43

Figure 20 Industrial Land Sales, 5-50 ac, Metro Area, 7/2010-6/2011..... 44

Figure 21 Rail Customer Count by County (Count >10 shown) 45

Figure 22 Available Rail Sites for Sale by Metro Brokers..... 47

Figure 23 Team Track in City of Isanti..... 49

Figure 24 Generic Rail Site Design - Single Spur..... 50

Figure 25 Cambridge Site - Large Customer Example..... 51

Figure 26 SIC List of Candidate Industry 56

Figure 27 Phase 1 Plan Cambridge Site..... 63

Figure 28 Cambridge Site Development Cost Estimates 64

Figure 29 Cambridge Site Pro Forma..... 65

Figure 30 Cambridge Site Pro Forma Balance of Development..... 67

Figure 31 City of Isanti Site Plan 69

Figure 32 City of Isanti Site - Development Cost..... 70

Figure 33 City of Isanti Development Pro Forma..... 71

Figure 35 Braham Site Rail Conceptual Plan..... 73

Figure 36 Braham Site Development Cost 74

Figure 37 Braham Site Pro Forma 75

Figure 38 Global Origin of Freight by Value 76

Figure 39 Global Freight Flows..... 78

Figure 40 U.S. Share of World Merchandise Trade: 1990-2008..... 79

Figure 41 Leading World Ports by Cargo Weight 2007 (thousands of metric tons)..... 80

Figure 42 Top 20 World Container Ports by TEUs 81

Figure 43 Outsourced Logistics Services for US Companies (percent of outsourced operations - global and US) 83

Figure 44 Top 15 Global Third Party Logistics Providers 2008..... 83

Figure 45 Dray Range of IMX Terminals..... 86

Executive Summary

Isanti County and its three principal municipalities benefit from proximity to a well-established, major metropolitan area, Minneapolis St. Paul. Isanti County can excel among communities around the metropolitan area through its unique infrastructure and community attributes. Rail service from BNSF is just such an important asset. This report examines what economic benefit may be captured from this rail access by type of facility and real estate market conditions for developing a rail park.

Isanti County has the Hinckley subdivision mainline running through it. This line is not used for major freight flows between the Pacific Coast and Midwest or NAFTA trade. The line is principally in place to serve the Great Lakes port which has seasonal traffic and mining. In addition, the vast majority of freight terminals located in the region are in the metro area core or to the south along the major highways and rail lines with competitive east/west and north/south freight flows. The freight transfer facilities are not in Isanti County mainly because the location is out of route, adding cost to operations. For a freight terminal on rail to be successful, it must efficiently connect with the freight either by being on site already or a short truck dray in the same direction as its destination. Isanti County is not in the direction most freight is moving and it has a high local trucking rate to get into the market. Both factors make Isanti County less competitive for location of distribution or pure freight terminal operations. What could move successfully through a rail terminal in Isanti County is any raw material sourced in the immediate area or products that move long distances. Target rail customers then are companies which have a high value added to products and ship long distances, such as manufacturers and processors. Sites that can serve such customers cost effectively are necessary.

To create sites on the rail mainline with local BNSF service is easier in locations that have low density train volume. The St. Cloud subdivision, for example, requires local service trains to compete for track time with high volume, long haul train movements. The Hinckley subdivision has much lower train volume. In theory this benefits the Isanti County location through more reliable service and a lower cost of infrastructure for the initial connection to rail. In fact, the railroad engineer and operating superintendent have preliminarily agreed to allow the use of a spur to the Town of Isanti site rather than a full siding. In addition the Hinckley is not a signal controlled track structure so there is less cost for each turnout. It is still important to design the mainline access to optimize its use for multiple customers and smooth train operations because it helps service quality long after the facility is built. Rail connections are paid for by the customers generally and the more traffic that can be run through a connection, the lower the unit cost. For example, to recapture the cost of a simple spur connection to an industry [at \$440,000 turnout and 1200 feet of track for industry loading] at \$100 per carload over five years, then the annual carload volume required is 880. Rail economics are

generally volume driven. But there are exceptions, such as very high cost carloads, e.g., chemicals, plastics, dimensional loads. These loads can usually absorb a cost per car for infrastructure costs much higher than \$100 per car. Alternatively, if the commodity or product has a very high cost move, it could absorb \$500 per car in infrastructure cost. It all depends on the cost of competitive modes of transport. Rail is attractive because of its cost or it is the only mode available to move the product. The environmental benefits are a plus and will receive increasing public policy support.

The types of industry which will be attracted to Isanti County are those which do not rely on large volume metropolitan area truck delivery. Rather they need rail for inbound or outbound materials or products which are distant (500 plus miles). Such industry may locate just about anywhere there is a good business climate, improved rail sites, and an adequately trained work force. To differentiate Isanti County, the attraction of new industry will rely on both site availability and the creation of a focus on specific industry groups. This report identifies a few such industries and there are others (see Figure 26 SIC List of Candidate Industry). Also, the idea of inventorying major supplier requirements for the region is offered. Identifying supplier needs for existing regional business can be done as a collaborative work with the State and Minneapolis St. Paul regional leaders. Such an inventory will identify small and medium sized supplier companies who may benefit from establishing a plant within the region, in Isanti County particularly. This may also include manufacturing that is returning to the US from offshore and it could include existing small businesses that desire to get out of the urban center and own their own facilities as personal investments.

Other industry types reviewed and considered for the Isanti County included sand terminals, rail served business connecting to the Port of Duluth, intermodal terminals, bulk transfer terminals, and the like. Most of these were found to be unsuitable for the area either because the use is inconsistent with the long term vision of the community or because of the logistical disadvantage of an Isanti County location. One industry which is actively looking for terminal sites in the region is Wisconsin sand. These sands found just across the St. Croix River about 30-50 miles away are ideal for oil drilling operations and fracking gas reserves. The demand is strong and investors are willing to put a rail terminal in place to avoid the high cost of long haul trucking. Such a project (30 acres) could open up a larger parcel to rail, greatly lowering the cost to serve other adjacent sites. However, **such an operation would involve many heavy trucks and is not likely to generate significant property tax base**; the community should fully understand the nature of the operations before proceeding.

Trans-load terminals can create advantages for communities by bringing the cost advantage of rail shipping to more businesses not directly located on rail. However, to establish a terminal a volume of some 200 cars per month is required from current non rail shippers who will gain a cost advantage by shipping through the terminal. In a survey by BNSF of their relationship trans-loaders, only one customer for the trans-load network in the MSP area was listed from Isanti County. There is not a significant market base for development of a trans-load operation in Isanti County at this time.-

The Minneapolis St. Paul region's industrial real estate market is currently imbalanced. The economic slump has created an effectively illiquid marketplace with very low demand. However, the economic base of the region has both a strong manufacturing and distribution components. With a recovering economy the markets will return to balance and prices will again reflect the cost of production in sites and finished buildings. As a result of this demand level, the absorption rate for rail served industrial sites is close to zero. That is why the pro forma analysis in this report solves for break-even price rather than a return on investment based on absorption forecast. Isanti County should monitor rail site demand and pricing through its regional relationships for the next few years. When activity for rail sites reaches three to five sites per year and prices are above breakeven cost to the Isanti investor, a pro forma can be run for development planning.

The supply of rail access sites for industrial use in the region is extremely low. This creates a good opportunity for Isanti County which can produce sites at reasonable prices in the recovered market. The only limitation is that the customer who would move to Isanti will not be moving large volumes of regional freight. So while the customer list may be limited, the market is defined and viable during the economic growth cycle. In addition, it should be noted that if and when passenger rail uses the line, it will have positive rail control installed and turnouts will cost double or more the current cost. For now, it is a cost advantage to Isanti County sites.

The three rail park site candidates were evaluated in terms of infrastructure and development suitability. The cost of improving all three sites exceeds the current market value of sites in the metro area. Asking prices for industrial sites in the region are about \$2 per square foot or \$87,000 dollars per acre, but none have sold at that price during the past couple years. However, as demand recovers prices will rise making the City of Isanti site viable. The Cambridge site is difficult to phase due to the high cost of utility extension currently. It could potentially be considered for a single large user site, but competing shovel-ready large sites in superior logistics locations already exist with infrastructure in place. The Braham site is the most remote to the metro economy and utility infrastructure. The site will not be in play for years to come.

The best course of action for the community is to proceed with planning, zoning, and public project work so as to reserve these sites for their future industrial use. For example, as the City of Isanti decommissions its wastewater treatment plant, it should be done with a plan to improve the site for its eventual industrial use. As water and sewer trunks are improved in the direction of these sites for community growth, the incremental cost of serving the industrial sites will go down. In the case of land acquisition, some negotiation with owners as to future use and price could be negotiated prior to rezoning and land use changes. Meanwhile the price of urban sites will go up and the competitiveness of improved sites in a great community will be rewarded.

The BNSF industrial development team will be supportive of Isanti County efforts to create rail access sites. The availability of quality sites for select, high value manufacturing rail users should be promoted regionally to

create a distinctive identity for Isanti County. Recognition of Isanti County by site location professionals in corporate real estate is very limited. Once the sites and target industry niche are agreed upon by the community, then a concerted effort to create awareness is essential.

The preliminary approval for a BNSF connection to the site has been completed. Design calls for a simple turnout and spur. This greatly reduces the cost barrier to getting the first customer. A nominal cost of \$400,000 for rail infrastructure is estimated versus the entire cost of a siding the length of the property. This greatly expands the number of feasible customer projects for the site.

To be clear in terms of strategy for a logistics park in Isanti County, there is an opportunity to serve a need in the metro region with rail sites. Isanti County can help fill that need, but sites in Isanti County will offer no logistics advantage over other sites throughout the metropolitan area. In fact, Isanti County has a disadvantage for any shipper moving high volumes of freight within the region. The best strategy for Isanti County is to target industry which relies on rail freight to ship long distances. Especially look to companies that are high value added or offer specialized products which can include high freight costs of getting the product to end users in a national market. Rail is an enabler for these companies. The attraction to Isanti County will be labor availability, business climate, and bottom line costs of doing business.

Isanti County Economic Profile

Isanti County is the northern-most tier of counties in the Minneapolis-St. Paul Metropolitan Statistical area and has a population of over 40,000 people, many of whom commute into the urbanized metropolitan area for employment. The three principal cities in Isanti County are Isanti, Cambridge and Braham. These towns are located 35 to 50 miles north of downtown Minneapolis on Highway 65. Highway 95 provides access to Wisconsin to the east, and St. Cloud to the west. The county's proximity to Interstate 35 and the metropolitan area makes it a place of promise for companies ready to relocate or expand just north of the urban core.

Isanti County offers the closest tax-free "Jobz" development zones to Minneapolis. The Jobz incentive was created by the State of Minnesota in 2004 and provides for exemption of certain property taxes on improved real estate, and sales tax and income tax exemptions.

Northern Anoka County 9 (just south of Isanti County and much of Chisago County (to the east) are characterized by significant wetlands. The City of Isanti is the first community north of Blaine, a distance of 24 miles, to have city sewer and water services. The high, dry soils and city services found in Isanti County communities are important to many industrial users.

Isanti County is home to more than two dozen tech-intensive manufacturers in diverse industries – including metals, plastics, automotive parts, printing, testing labs, food processing and materials handling. Local companies provide finished goods or parts for medical devices, recreational vehicles, grain-handling equipment, food products, electronic equipment and other products.

Major employers include Team Industries with 140,000 square feet in Cambridge specializing in metallurgical work from machining to laboratory; Arrow Tank & Engineering in Cambridge specializing in custom tank fabrication, and Schlager in Cambridge specializing in manufacture of grain handling equipment. A number of smaller industries are located in the City of Isanti's planned industrial park five miles south of Cambridge and Braham is largely rural in its economic base with the exception of Aurelius Manufacturing and the rural electric coop headquarters.

Isanti County has been one of the fastest growing counties in the state, due to its high quality of life, lower land cost, and proximity to the Minneapolis and St. Paul. In 2002, Isanti was the 13th fastest growing county in the nation, based on new housing units. The County experienced rapid housing growth in the early 2000s, and

has been hard hit by the recession of 2008/9 with a sharp decline in construction. Population growth is expected to continue with the rebounding economy during the next few years. As the county seat, Cambridge is at the center of this sustained growth offering abundant parks and community facilities such as the Allina Medical Center, the Anoka Ramsey Community College and East Central Regional Library. Cambridge has also emerged as a regional shopping destination, Kohl's and Lowe's proceeded with new stores in Cambridge in spite of the recession and painful housing market. They joined Target, Super Wal*Mart, Menard's, Office Max and other big box retailers located on the east side.

Isanti County has a professionally diverse workforce. Nearly half of the workforce currently commutes to the Minneapolis/St. Paul metropolitan area. Expanding local employment opportunities have the potential to keep more of these employees in the county.

Figure 1 Total Employment by Occupation (2010)

	TOTAL	%
Executive, Managers, and Administrators	1313	11
Professional Specialty Occupations	2093	17
Sales Professionals	231	1.9
Technologies and Technicians	409	3.3
Sales Workers and Clerks	1129	9.1
Administrative Support Workers	2150	17
Technical, Sales, and Administrative: Field Occupations	38	0.3
Private Household Service	1	0
Protective Services	162	1.3
Other Services: Site Based	1832	15
Other Services: Field Based	62	0.5
Farming, Forestry, and Fishing	250	2
Precision, Craft, and Repair: Site Based	1255	10
Construction, Repair, and Mining: Field Based	380	3.1
Machine Operators, Assemblers, and Inspectors	318	2.6
Transportation and Materials Moving Workers	336	2.7
Handlers, Helpers and Laborers	348	2.8

Employment in Isanti County is generally in balance with regional employment distributions by sector. Retail trade and services are the largest sectors with 24% and 41% respectively. Some 9% of employees work in manufacturing which is close to the national average of 11%. Note the relatively low construction

employment which had been a significant sector prior to the economic downturn of 2008. Retail trade stands out as an area of proportionally high employment for Isanti County employees at 24% compared to metro and national averages of 12%.

Figure 2 Employment by Major SIC (2010)

	TOTAL	%
Agricultural, Forestry, Fishing (SIC Range 01-09)	156	1.26
Mining (SIC 10-14)	0	0
Construction (SIC 15-17)	686	5.56
Manufacturing (SIC 20-39)	1088	8.81
Transportation and Communications (SIC 40-49)	392	3.18
Wholesale Trade (SIC 50-51)	671	5.43
Retail Trade (SIC 52-59)	2907	23.6
Finance, Insurance And Real Estate (SIC 60-69)	628	5.09
Services (SIC 70-89)	5059	41
Public Administration (SIC 90-98)	720	5.83
Unclassified (SIC 99)	39	0.32

Wages are typically lower than in the Minneapolis/St. Paul core – a bottom-line advantage from local employers. Manufacturing wages are 31% lower than the metropolitan area. However, wages are essentially equal when comparing similar urban fringe counties such as Chisago County.

Figure 3 Isanti County Employment and Wages (2010 Q3)

Industry	Sector: Private only or all	Isanti County Employment	Isanti County Weekly Wages	Chisago County Weekly Wages	MSP Metro Weekly Wages	Isanti as % of Chisago	Isanti as % of MSP
Total, All Industries	Private	8,264	\$ 648	\$ 666	\$ 933	97%	69%
Natural Resources and Mining (1011)	Private	129	\$ 403	\$ 430	\$ 637	94%	63%
Construction (1012)	Private	295	\$ 709	\$ 1,206	\$ 1,099	59%	65%
Manufacturing (1013)	Private	1,143	\$ 865	\$ 811	\$ 1,253	107%	69%
Trade, Transportation and Utilities (1021)	Private	2,027	\$ 587	\$ 503	\$ 843	117%	70%
Information (1022)	Private	169	\$ 555	\$ 626	\$ 1,281	89%	43%
Financial Activities (1023)	Private	355	\$ 770	\$ 604	\$ 1,324	127%	58%
Professional and Business Services (1024)	Private	449	\$ 1,052	\$ 627	\$ 1,339	168%	79%
Education and Health Services (1025)	Private	2,566	\$ 705	\$ 788	\$ 857	89%	82%
Leisure and Hospitality (1026)	Private	836	\$ 201	\$ 210	\$ 393	96%	51%
Other Services (1027)	Private	292	\$ 331	\$ 381	\$ 570	87%	58%
Public Administration (1028)	Total, All Ownerships	549	\$ 770	\$ 859	\$ 1,026	90%	75%

Source: Minnesota Department of Employment and Economic Development

In terms of union representation of employees of private manufacturers, Minnesota ranked 22nd from the lowest rate of employees covered by a union agreement according to a 2009 study by Georgia State University. The rate of covered employees is 8.7% of the total private manufacturing work force.

Logistics flow through the region and the regional distribution market

Global trends in freight by mode

Isanti County is not located in the path of any major freight corridors for global freight flows. The Port of Prince Rupert traffic moves by Canadian National rail to Chicago. The Northwest US port traffic (Seattle-Tacoma, and Portland) does move to and through Minneapolis-St. Paul over the BNSF St. Cloud subdivision, not through Isanti County. As a result there is no opportunity to participate in this traffic as an employment generator.

A complete section on global trade is offered at the end of the Appendix herein.

Significant freight generators (shippers or receivers)

Freight flows in and out of the Minneapolis region are a function of market size, industrial base and naturally available resources. This section defines the differences between these drivers and the characteristics of them by mode and location. Later in each section the site location requirements for each will be described.

There are five modes for freight: truck, rail, water, air, pipe or some intermodal combination of two or more modes. The most relevant modes for Isanti County are truck and rail. Understanding how these modes work is critical to matching compatible location with transportation infrastructure. Truck is agile with the ability to cost effectively and relatively move between any two points, or even be diverted if necessary. Truck is very good at getting to a warehouse door at an appointed time to aid in the efficient flow of work in distribution centers.

Rail, on the other hand, is better suited for commodities such as bulk food, energy, or dimensional loads which are heavy and low value per pound weight. A single rail car can carry 286,000 pounds. Trains can carry the equivalent of 250-350 truck loads depending on commodities and equipment types. Rail service works best where there is high density of traffic originating at a single place and destined for a single place. Unit trains

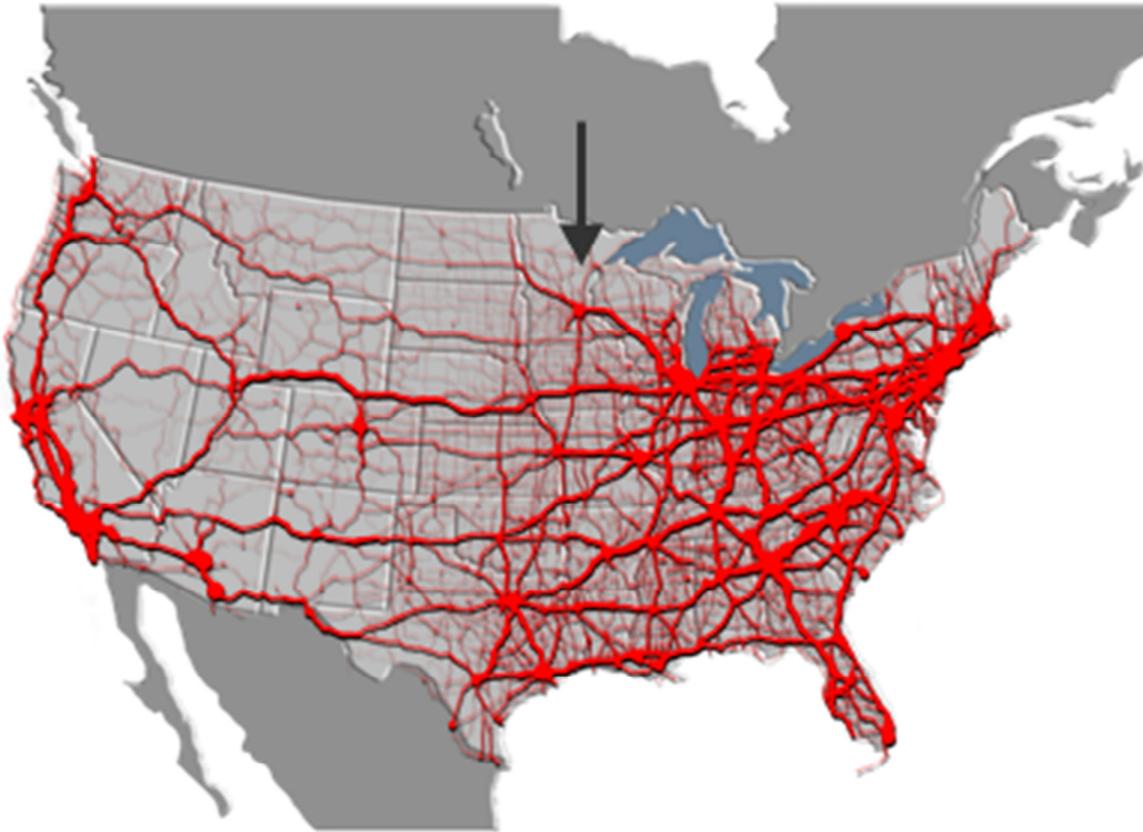
move from one single place to another single place in a truck like manner in terms of scheduled arrival and departure, but very few single customers have the volume to generate train loads of freight all going to the same place. That is why intermodal terminals were developed. It provides a timely, cost effective means of replacing the truck on long hauls. The alternative to unit trains is the traditional method of rail freight, merchandise traffic, which is pulled a car at a time from a customer's dock, switched frequently onto several trains before it arrives at its destination. Merchandise service is slower than truck but typically priced lower, suitable for commodities that can't support high transport costs in the retail cost. In the section below, the truck, truck and rail intermodal, and bulk rail services are described in depth.

Truck Market

The truck market moves most of America's consumer goods. Trucks can also be used in short haul of heavy commodities to locations which have no rail access or are too short to support rail service, but the consumer goods market is the primary focus of this section.

Market size drives volume of consumer goods. Most consumer goods are moved by truck. Long distance truck moves usually include a rail intermodal move. The end destination is a retail outlet or large customer location. The intermediate staging of goods is the distribution warehouse which is located based upon the receiver's strategy with respect to cost and service. Many distribution networks provide service to all end use customer/stores within 500 hundred miles, the distance a truck could drive overnight or next day availability. Others, with high density of stores, position distribution centers near all major markets for multiple driver deliveries within one day's shift, optimizing use of fleet and driver resources. Minneapolis is a major market with a significant number of distribution centers serving retail stores, however, it is close enough to Chicago that some distribution can occur overnight from a larger center near Chicago serving the entire Midwest. In addition its position as a potential freight hub has been limited geographically by the low population density to the north and west. So given its size as a market it has not centric enough to other markets to serve as a larger regional hub. Figure 4 indicates the volume of truck traffic in the region and displays this effectively.

Figure 4 Truck Volume by Route



Source: Federal Highway Administration, Freight Analysis Framework

Note the huge truck freight flows in the Chicago market and to the South and East. Within the Minneapolis region the main flow is through the I-94 corridor to Fargo where it splits and diffuses further. This is demand driven and the demand tapers off to the northwest. In Figure 5 note that I-35 to the north of Minneapolis has very little truck traffic. The black lines are shadows of the red volumetric lines. Also note that the lines radiating to the south (I-35) and southwest (MN169) carry at least double the volume that I-35 north of Minneapolis carries.

Figure 5 Truck Volume - Minneapolis Region



Source: FHWA Freight Analysis Framework

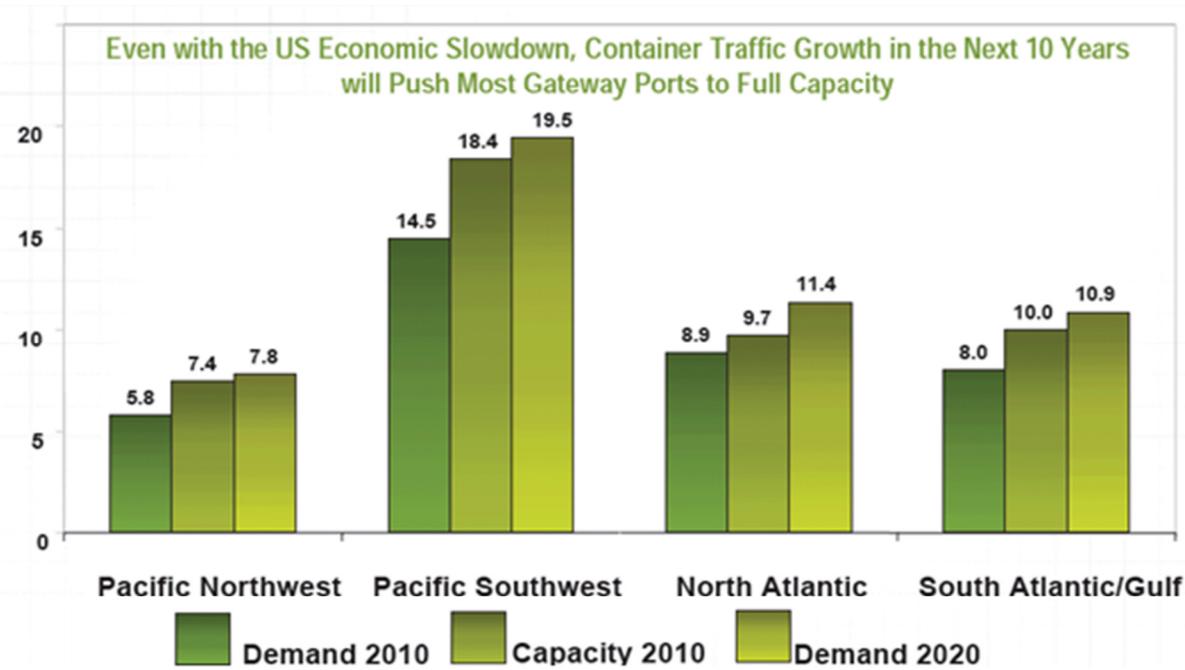
Rail intermodal

Rail intermodal traffic is an extension of truck movement. As a cost effective substitute to truck over long distances, rail intermodal only works when the volume and frequency can support the investment in equipment and terminals to provide truck like service. As a result much of the intermodal traffic that moves to the Midwest, including the Minneapolis region lands in Chicago and is trucked back to its destination. Figure 6 shows the major lanes for ports in the US. The size of the port locations indicate volume generally. Most of the traffic coming to the Midwest from the West Coast is coming from LA/LB. Figure 7 indicates the relative size in Twenty Foot Equivalent Units (TEUs). LA/LB is two and a half times the size of the combined ports in the North Pacific (largely Tacoma). Thus, the volume of freight moved over the BNSF line through Minneapolis is smaller than the more southerly transcontinental route to Chicago. In addition, the Canadian National runs service from a newly established port at Prince Rupert directly to Chicago via Duluth, MN. While the service has been established successfully, its volume is still very small at 343,366 TEUs in 2010, and the terminal capacity is limited to 500,000 TEUs.

Figure 6 Intermodal Routes to Major Inland Ports



Figure 7 Gateway Port Regions, Size and Forecast Growth



NAFTA Opportunity (Canadian traffic particularly)

The creation of the North American Free Trade Agreement some 15 years ago led to a rapid expansion of freight traffic across US borders with Canada and Mexico. More recent trucking agreements between the US and Mexico will further aid the flow of freight and disperse the concentration of flows from the south.

Mexican imports largely move by truck with some rail traffic. Cross Gulf float operations are in place but do not carry much volume. The largest centers for collecting freight from Mexico are Dallas, Kansas City and Chicago, from which it is routed to end destinations. This market has very little application for an Isanti County.

Canadian traffic moving into the US is driven by both the domestic Canadian production and international imports (see Figure 8 Map of Canada's Gateways to the US). Most of the Canadian production and population is in the Eastern Provinces. Canadian/US export production gateways are largely highway oriented toward Detroit, Buffalo and through New York State. To the west there are lightly used routes.

A new route based on the Port of Prince Rupert, British Columbia moves freight from Asia to the Midwest over the Canadian National (CN) Railway through Duluth Superior and Wisconsin into Chicago. That route does not pass through Isanti County and has no bearing on logistics opportunities there. While it may be possible to switch to a BNSF line, such cooperation is not likely. While Prince Rupert's new intermodal operation has been a success it still carries a very small volume of freight with current capacity is 500,000 TEUs per year. Even at full capacity, Prince Rupert is a small fraction of the 25.8 million TEU capacity at US West Coast ports.

The most intuitively promising freight lane for Isanti County is the development of traffic destined for Minneapolis trans-loaded over the Port of Duluth-Superior (Port). Operated by the Duluth Seaway Port Authority, the port is primarily a bulk port and is one of the largest in the Great Lake system. An analysis of the Port reveals several key factors affecting its potential. First it is closed three months of the year due to ice. This seasonality may be acceptable for commodities such as grain, but not for other production or consumption products. BNSF has discussed creating an intermodal gateway through the Port but the idea was abandoned. Intermodal containers through the Port would be out of position in comparison to the main flow of freight. It also is difficult for railroads which would establish intermodal service that is seasonal. Rail companies prefer year-round, sustainable operations for optimal use of resources. The Port has no natural market nearby, as it is 150 miles from the nearest population center. CH Robinson Worldwide recently studied the Port's opportunities for growth in new commodities and found demand lacking.

Among the commodities moved by the Port are iron ore and coal (80% of tonnage about equally split), windmill components for electric generation, outbound grain destined for Europe and Africa, inbound limestone and cement. None of these commodities lend themselves logistically to Isanti County.

Figure 8 Map of Canada's Gateways to the US



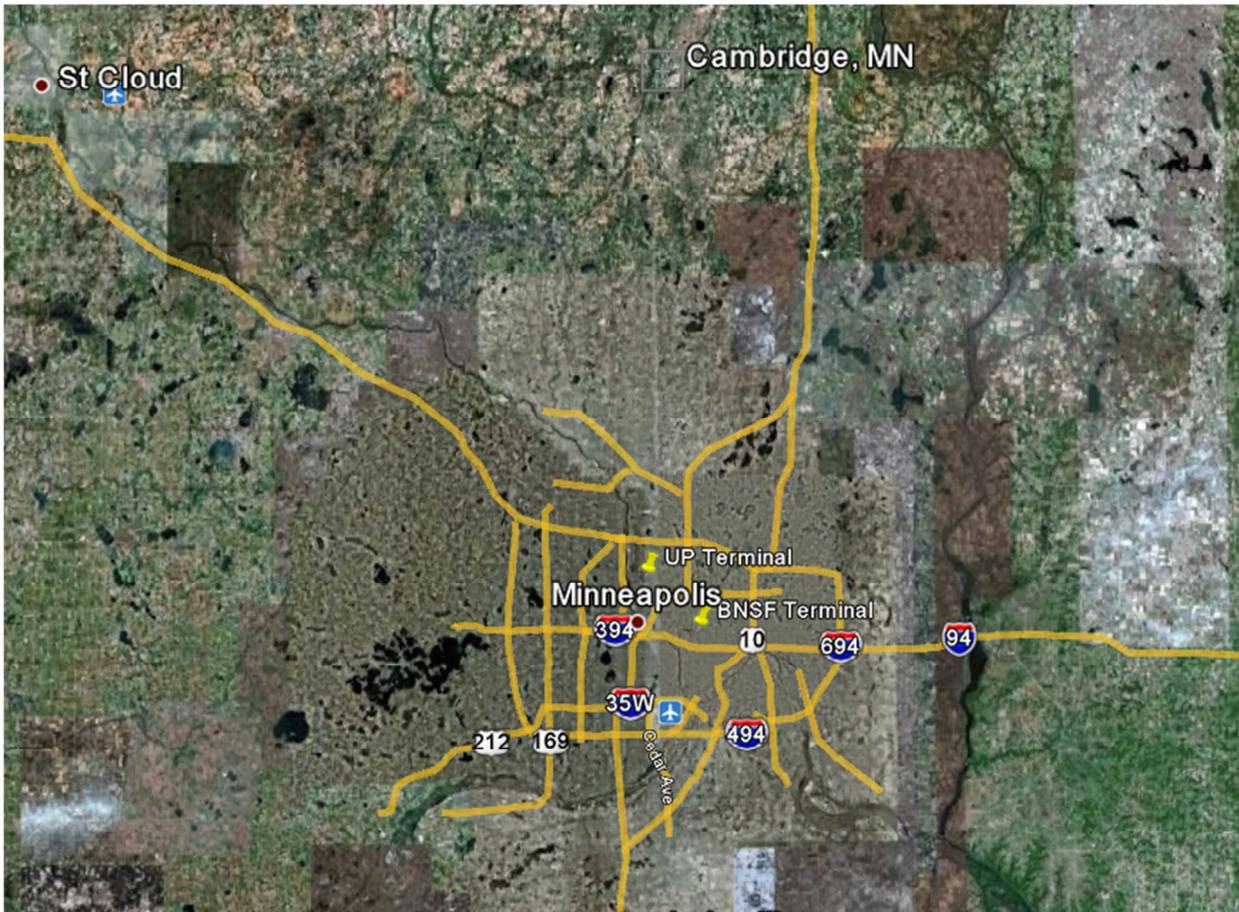
Source: http://www.pacificgateway.gov.bc.ca/northern_details.htm

Regional Terminals

There is intermodal traffic moving through the Minneapolis region and the region is significant in size, so that it can support a functional terminal. In fact, there are three terminals.

The largest intermodal terminal is operated by the BNSF. Located equidistant between Minneapolis and St. Paul it is at the heart of the region (Fig. 8). It provides service to Minnesota, the Dakotas, and parts of Wisconsin and Iowa. Over half the traffic moves by local dray within the I-494/694 ring. The terminal serves as a link between Seattle/Tacoma and Minneapolis (85% of volume) and Chicago and Minneapolis (15% of volume). The BNSF terminal handles 200,000 units (boxes not TEUs which are more typically truck trailer size) per year. Commodities include international containers (60%) and domestic containers (40%).

Figure 9 Rail to Truck Intermodal Terminals – MSP



Source: IANA and BNSF

The other intermodal terminal serving the freight community in Minneapolis is located adjacent to the BNSF regional merchandise yard. It is owned and operated by Canadian Pacific Railway on their lines just north of downtown Minneapolis. The typical volume is 60,000 containers and it has a capacity of 100,000.

As seen in Figure 9 below, terminals are optimally designed alongside mainline routes so that trains can pull in and depart without much handling. Terminal switches will pull blocks of rail cars in and out of loading tracks. The mainline for intermodal traffic is the line on the route of travel. For example, for the BNSF the terminal is alongside the Trans-continental mainline connecting Tacoma and Chicago.

Figure 10 BNSF Terminal on W. Pierce Butler Road, St. Paul



Source: Google Earth

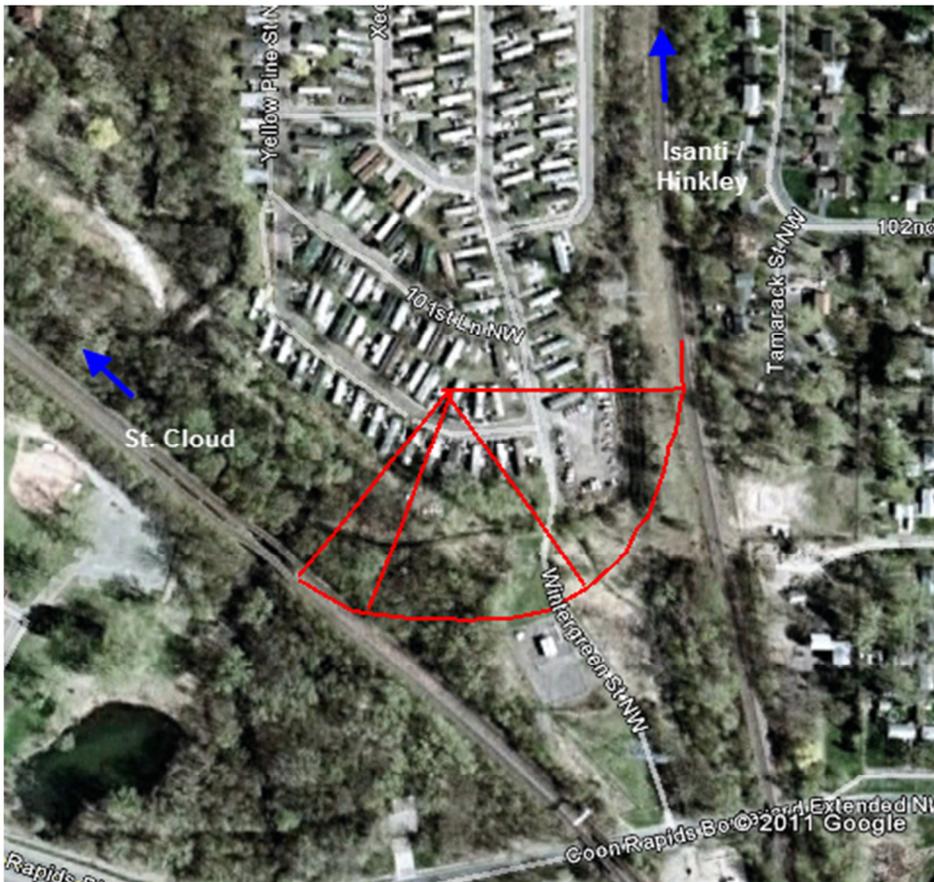
Most importantly, these terminals are located for the ease of rail movement and access to customers. Both terminals are located at the center of the market being served and served outlying areas well beyond their proximate metropolitan market. If the BNSF terminal were ever to be relocated, and there are no plans to do so, it would most appropriately be located somewhere on the trans-continental mainline with uninterrupted rail (no crossings for two miles) and quick access to interstate highway.

A significant factor in the Minneapolis and St. Paul market are the local dray rates. A dray is a move from the terminal to the customer dock or return. The metropolitan area is divided into three rate zones, all within the traditional MSA. The rates are \$130, \$150 and \$180 plus fuel surcharge per dray for Zones 1-3 respectively. Isanti County, is outside these three zones, so a receiver of a container from either rail intermodal terminal would pay \$235 plus fuel surcharge to have a loaded container picked up or dropped off. If the customer doesn't have a container to return, the dray company will charge a total of \$570 plus fuel surcharge to drop off a container. Within the three metro zones drivers can drop loads at one dock and pick up another load at a nearby dock so the customer is only charged one way. These rate structures have been in place by convention among trucking companies and drivers for decades and are not likely to be changed. Bottom line is that local trucking fees penalize Isanti County locations for the extra five to twenty miles north of the Anoka County line.

The possibility of establishing a separate intermodal terminal on rail in Isanti County was discussed at three different levels of BNSF management. The train move from the transcontinental mainline onto the Hinckley subdivision (Superior Line running through Isanti County) would be very difficult. An east bound train would have to pull into a passing siding, the engine moved to the other end of the train, and reverse move back up the Hinckley to Isanti County. There is currently no connection track and constructing one would require

property acquisition, wetlands mitigation and a very tight turn or bridge structure. Figure 11 Hinckley Connection Track for East Bound Moves shows the current approach to intersection of the St. Cloud and Hinckley subdivisions. The red curve shows the approximate connection track path on a radius of 500 feet (tightest allowed rail curve, but still not desirable for road train movements and today's longer rail cars). The handling time to get loads moved onto a short distance train would frustrate shippers. And the cost of building a separate terminal would make the service infeasible for customers who could truck from current terminals.

Figure 11 Hinckley Connection Track for East Bound Moves



Therefore, Isanti County is not located on a mainline that has intermodal service available. Further, any Intermodal customer in the County pays a significant premium for local truck service to and from the intermodal ramps. The only type customer who could overcome these facts is a large operator with its own fleet that can route drivers efficiently. Even then, the location of a distribution center in Isanti would most importantly have to be at the center of the weighted balance of distribution area. That is unlikely since populations density is skewed to the south of Minneapolis region.

Site Location Factors for Rail

To verify the logistics location drivers, a survey of major corporate users was conducted. The survey included real estate or logistics management of companies such as Target, 3M, General Mills, and Donaldson. All confirmed that a location in Isanti County for distribution would be severely handicapped by its distance to the center of infrastructure, highway access and market centrality.

Industrial base creates freight volume through the supply of raw materials, inbound parts and outbound products. While truck is often used to support industry, some major industries also need rail to be cost effective in their logistics. This logistics segment is a potential customer for Isanti County.

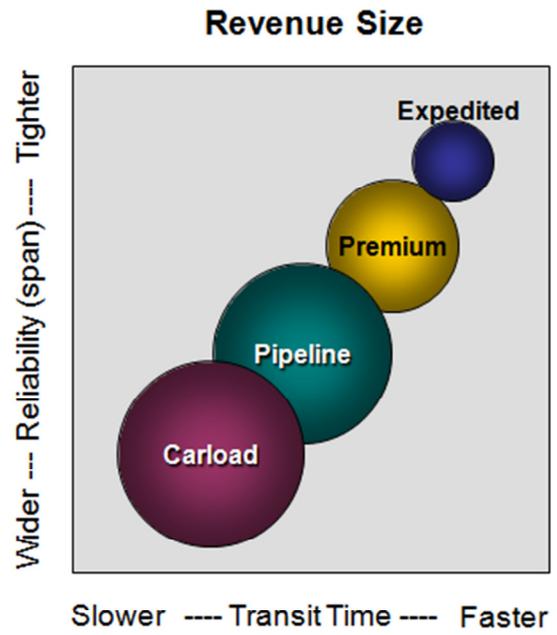
Types of Rail Service and the Industries Served

There are distinct service products offered by rail. Beginning with the Canadian National in the mid 1990s, Class 1 railroads moved back to scheduled operations to improve service. In that process railroads recognized that unit train operations were optimal for capacity utilization and profit potential.

Figure 12 Rail Service Types shows the four distinct type of rail service offered. Each of these have different operating requirements and facility designs vary based on both type of service and industry group. For example, while bulk product moves in unit train service it loads by dragging a train under a loading chute. Conversely, automobile trains operate as unit trains, but load in blocks of no more than five cars for end loading. Each of these products tends to align with industry groups that rail serves. They are discussed individually below and then evaluated for applicability to the Isanti area for possible location.

Figure 12 Rail Service Types

Service	Characteristics
Expedited	■ Fastest scheduled service directly integrated into customers' supply chain
Premium	■ Train service coordinated with handoffs
Pipeline	■ Unit train service focuses on inventory stockpiles
Carload	■ Multiple handlings of cars, including pick-up/delivery



Intermodal is a major segment of the freight market today and is presented in greater detail in the previous section. Several points should be summarized in the context of rail serving industry here. Intermodal service consists of trains carrying truck trailers or containers which will start and finish their movement being pulled by a truck. The reason intermodal trains typically don't move short distances is the cost and delay of putting the trailers and containers on and off the train. Intermodal works best moving 300 truck loads over 500 miles or more frequently. That is why it started and still works best between places like ports and major markets, both of which provide high density traffic on a routine schedule. This market is discussed above in detail and while Minneapolis is appropriately served by rail (Figure 6 Intermodal Routes to Major Inland Ports) the location of a terminal in Isanti County is not feasible. Industry in Isanti County does and will use rail as part of an intermodal solution to reach global markets. Containers are not just used for consumer goods today. They also provide conveyance of export grain and other bulk materials because of the low cost "back haul" to the ports.

Automotive rail service moves cars from manufacturing plants or auctions to distribution centers in other parts of the country distances over 500 miles. Truck hauls are used for shorter distances, again, because of the cost of handling cars/trucks on and off rail cars. Isanti is not likely a candidate for the location of either an auto plant (within 50 miles of an existing UAW plant) or an auto auction which needs to be close to very large market to generate sufficient traffic volume.

Chemical traffic is a very strong sector for rail business. Chemicals may include hazardous materials, plastic resin, ammonia (for fertilizer or water treatment), solvents and the like. These are typically tank car moves which are both safer and more secure on rail property, rather than highway truck routes.

Agricultural products such as grain and feeds are well suited for rail due to the high bulk and low value of the products moved. The grain market has moved to unit train conveyance almost exclusively due to cost savings. The result has been concentration of grain harvests at rail served terminals in the farm belt which move to either distributors or ports.

Metals are another product well suited for rail. Very heavy, metals weight out on trucks very quickly. This market includes not only primary metals such as plate or coil products, but can also include scrap.

Energy has several components. The largest by far served by rail is coal. Petroleum is typically moved through a pipe line. Windmill components have also been moved by rail. However, the rail portion of the move is from port or production plant directly to the erection site or as close to it as possible. Asphalt is an energy byproduct that moves by rail.

Food and Consumer products have long been moved by rail. Today unit trains of refrigerated box cars move fresh fruit across the county. Bakeries rely on carload shipments of flour. Canned goods have mostly moved to trucks although with property planning, these products could move back to rail, or at least an intermodal platform for transport.

Aggregates and ores are well served by rail. Aggregates may be used in production facilities, fracking (hydraulic fracturing of rock) for natural gas, road construction, construction materials like roofing shingles or cement plants. Sand is a significant component of the aggregates market.

Lumber and Forest products are another rail centric group. It is unlikely that the origin of the products would locate in Isanti County; however, a resurgence of construction activity could attract a receiving terminal. Such terminals typically need ten to fifteen car spots with outside lay down and sheds for protection of some product. The land area is 10 to 20 acres generally.

Other smaller markets include municipal solid waste, dimensional loads like large farm equipment, and the like. As long as there is sufficient volume and consistent requirement for equipment to move back and forth routinely, rail can serve the freight need.

Regional and Local Freight by Product/Commodity and Major Users

In considering all these products shipped by rail, it is appropriate to look at the freight volumes moving in and out of the Minneapolis St. Paul region to determine which producers or receivers of the freight could be candidates for an Isanti County site. The following chart shows the top freight volumes moving by truck and rail intermodal (

Figure 13 Major Intermodal Shippers, Minneapolis St. Paul **Region**) and then those moving by the general market
(Figure 14 Comparison of Freight Generated by Industry Group by County and State).

Figure 13 Major Intermodal Shippers, Minneapolis St. Paul Region

<u>Shipper</u>	<u>City</u>	<u>Percent of Total Volume</u>
CROWN CORK & SEAL	Faribalt	1
CUMMINS ENGINE	Fridley	1
EXPEDITORS INTL	Eagan	11
GEORGE A HORMEL	Austin	1
GUY METALS	Blaine	1
ICE Logistics	St. Cloud	1
JOHN DEERE	various	10
KUEHNE & NAGEL	Eagan	4
LYNDEN INTERNATIONAL	Brooklyn	1
NACA/Vanguard Logistics	St. Paul	2
NATIONAL STARCH & CHEMICAL	various	1
POLARIS IND	Medina	1
SBBS	Casselton, ND	1
SENECA FOODS	Janesville, WI	1
THREE M	St. Paul	5
TSC CONTAINER FREIGHT	Minneapolis	2
TUFFYS PET FOODS	Perham	2
VIRACON	Owatonna	2
Percent of Total Volume for Period		48

Source: PIERS

Statistics on shippers may come from multiple sources. They may include government records of international shipments, such as above in Figure 13, or they may come from actual gate surveys completed by the terminal operator. In any case the data is far from statistically perfect. Many entries are made by administrative offices so that the address of companies is not related to the movement of goods. However, in the case of Figure 20 the goods are known to have moved through Minneapolis St. Paul. It is difficult to know which company is asking for the goods to be shipped. In some cases, the obvious name of a major manufacturer make the identification easy. Many companies outsource logistics to third party logistics operators which are asset based so that company is indicated as the shipper. Such is the case with Kuehne & Nagel and NACA which operates through agreement locally with Vanguard Logistics. These 3PLs could be working for one company or many companies to create greater efficiency in consolidating freight to individual locations and sharing overhead. In any event the list of about half the traffic gives us an idea of what is moving and who is sending it.

Also note that the locations indicated for the originating city are largely in Minneapolis St. Paul or south of it. Very few large generators are located north of the metro, the exception being Guy Metals in Blaine with 1% of the traffic.

In terms of commodities shipped, these show up in data as well. They can only give a general sense of the types of products, in the case of shipped commodities, in the Minneapolis region that are generating freight. Research indicates that intermodal shipments to locations outside the region include products such as corn starch, passenger vehicles/snow, bee keeping machinery, couscous (grain based pasta), dry ripe vegetable seeds, household cooking equipment, fabricated textiles, paper products, glass containers, non fresh milk and plastic products. This is not very revealing except that there are no bulk commodities listed.

In terms of general freight, freight flows can also be defined by the number of facilities located in an area categorized by industry group. The Minnesota Department of Transportation provides a map of freight generator locations by type establishment. While it does not measure volume, it gives a sense of the proportion of each industry group to identify those sectors that have found success in each area. Figure shows the data from this map and compares Isanti County to a representative urban county, Hennepin, and the State as a whole.

Figure 14 Comparison of Freight Generated by Industry Group by County and State

Geographic Area	Isanti		Hennepin		Minnesota		Isanti Strengths
	count	% of Total	count	% of Total	count	% of Total	
Agriculture, Forestry, Fishing	3	3%	15	0%	450	3%	
Construction	2	2%	50	1%	238	1%	
Manufacturing	74	76%	2349	58%	9349	57%	
Mining, Quarry, Oil, Gas	0	0%	3	0%	76	0%	
Retail Trade	7	7%	130	3%	564	3%	
Transportation and Warehousing	1	1%	82	2%	612	4%	
Utilities	2	2%	23	1%	226	1%	
Wholesale Trade	9	9%	1409	35%	4756	29%	
Total	98	100%	4061	100%	16271	100%	

Legend:  over represented industry group by number of establishments
 under represented industry group by number of establishments

Source: MN DOT, Minnesota Freight Facilities Map

Industry group percentage distribution of freight generating facilities is similar between Hennepin, a representative large urban county, and the State as a whole. However, Isanti County has two sectors that show strength above urban and State averages. Manufacturing is a strong sector. Construction is also over represented; however, it is not a sustainable indicator of economic growth. Under represented in Isanti County are Transportation and Warehousing and the Wholesale Trade sectors which concur with the logistics findings earlier. These later industries are very sensitive to market centricity and dray cost. Isanti County is at a disadvantage in both factors. The data on this table is by number of facilities only and does not represent volumes. Interpretation of the data is directional, not quantitatively accurate. An individual, properly registered with business licenses as a manufacturer of fishing flies in his lake home garage and shipping daily by UPS across the globe, can be reported as a freight generating facility. The same could be true for Isanti, Hennepin or the State data, however.

Summary of BNSF Market Discussions

Turning to rail freight specifically, a survey of BNSF marketing people focused on commodities that could potentially be logistically feasible for Isanti County. Although there are now over one hundred active projects for BNSF service in their Minnesota, Iowa, and Kansas region, few came up in response to what might fit in Isanti. These few opportunities are discuss individually here.

Taconite mined in Northern Minnesota is a commodity that BNSF hopes to move more. Minnesota taconite mines fill 80% of US demand for iron ore (per BNSF research). Ores and specifically taconite are very heavy

and fit the rail or barge mode. There are two components from the ore that is mined. Pellets are rich in iron ore and are shipped by barge through the lakes to steel mills (Figure 15 Taconite Mining and Steel Production Map). Taconite tailings are very hard and being tested for use in highway surfaces to improve wear characteristics. Logistics for the ore are the cheapest means of moving between the processing plant at the mine and the manufacturer. As you can see most steel production is located on the lakes and that traffic will move barge. Other mills will utilize rail in the move. However, there is no role for Isanti County unless it attracts a steel production facility to be a receiver of the ore. Steel production is located near to its customers. Even in the case of the mini mills which started as rebar only plants supporting the construction industry, plants were located within 500 miles (a day's truck run) of markets and as centric as possible. Logistically, it is very unlikely that Isanti County would be centric to such a market for even rebar, especially in competition with existing steel producers in the Midwest. Taconite tailings present a better potential if the State of Minnesota starts using it for highway projects. According to the MNDOT, traditional aggregate supplies for highway construction will run out in 10-15 years. Currently, taconite tailings are being tested for use as a surface on roads as the tailings are too heavy and costly to move to replace aggregate in the entire paving mix. However, such terminals are typically located as close to road projects as possible, operated for the period of a major repaving project, and then terminated. This is not seen as an attractive, sustainable, job producer for the County.

Figure 15 Taconite Mining and Steel Production Map



Source: American Iron Ore Association

Aggregates are another potential for Isanti County. Sand is mined nearby in Wisconsin. Any of that sand used in the Minneapolis-St. Paul region for consumption would likely move by truck. However, sand used in fracking for natural gas in Pennsylvania or oil production in Texas could move by rail. If Isanti is the most cost-effective location for such a terminal, then it could be used to underwrite infrastructure to start a rail logistics park. There would be a high volume of truck activity associated with the project to feed the rail terminal.

Ethanol plants are typically built near raw material production. The same is true of grain terminals. The intensity of agriculture is greater south of Minneapolis and it is unlikely that agricultural terminals or a full-scale ethanol plant would be located at Isanti County. The biodiesel plant in Isanti County is focused on “non-food grain” feed stocks, but is expected to remain relatively small.

Trans-load Terminals

Another opportunity explored is the development of a truck/rail trans-loading terminal, much like the Progressive Rail facility at Lakeville. Progressive Rail operates a 50-acre transfer terminal in Lakeville, MN. The

operation is very diverse with bulk products from ethanol to plastics and a warehouse for mixed freight. Its success is based on providing cost savings to nearby origins or destinations through use of long haul rail connections with other railroads. For this company to replicate success in Isanti County, they require an existing density of in route truck traffic that can be converted to rail. Such a terminal would fit on a small property of 10-20 acres but require a significant rail infrastructure investment to start up. A terminal operation in Isanti County would serve industry not on direct rail and located outside the north ring of the Minneapolis metropolitan area. In direct discussion with Progressive Rail regarding their interest in establishing such a terminal in Isanti County, Jeff Gillman, VP, indicated that they would be interested in operating a terminal, but that the County would have to develop the business first (volume of 200 carloads per month) in order to establish a terminal.

In a survey by BNSF of their relationship trans-loaders, only one customer for the trans-load network in the MSP area was listed from Isanti County. There is not a significant market base for development of a trans-load operation in Isanti County at this time.

Market Summary

In summary, there are few high volume traffic generators that would move to Isanti County because of a logistics advantage (St. Croix, WI sand being an example). Even today, rail customers tend to locate around the I-94 route for expansion from the core Minneapolis St. Paul industrial areas. In addition, there may be Brownfield (contaminated) sites in the Twin Cities that will be coming on the market during the next ten years that provide land with both infrastructure and proximity to the market. However, land costs are higher due to the cost of clean-up and higher demand for land in the urban core. Isanti is not attractive as a logistics point because of the predominantly east/west flow of traffic and the highway and rail system through Isanti County is north/south.

Isanti County's greatest opportunity for rail based industry is attracting those smaller facilities that need rail but its principals also want a high quality of life in the community to attract skilled labor and management. These companies would need to be serving a unique, distant market where transportation costs are not a competitive factor in winning the business. The rail would become an enabler for those facilities if their products are difficult to fit on a truck, hazardous, or low volume per weight.

Real estate market demand and pricing for developed industrial park sites

National Perspective

The real estate sector has stabilized after the financial crisis of 2008 and resulting economic adjustment. Nationally, the industry has seen illiquidity in some markets, especially where heavy investment and growth occurred just prior to 2008. Housing is now working through foreclosures as the Federal Reserve keeps rates for home financing low enough to create some liquidity in that marketplace. In commercial real estate, however, much of the inventory is either owner occupied or occupied by long term lease. The recessionary adjustment in property values is retarded by the long term contracts in place on assets. So even though October 2008 through March 2009 was the bottom of the stock market and consumer confidence, real estate assets are still moving through stages of the cycle with a lag. In an economic downturn the first stage for commercial real estate is consolidation of space used creating vacancy that is either for sale by owners or sublease available. At this stage all new development stops except for completion of construction beyond 20% of project investment with contracts started. The next stage as lease terms end is the adjustment of rents downward. Land for development is illiquid so that the few deals completed are typically not representative of market value, even adjusted for the downturn's lower economic velocity. Real estate investor funds are scarce. Today we are still in the late stages of this part of the cycle.

The next phase of the cycle in response to an already growing economy is increased demand. This creates some absorption of space at relatively low rents and begins to establish market prices. If the economic recession is mild and brief, rents are very little affected. If the economic recession is strong and long, then investor expectations for recovery of full occupancy is long term at best. Therefore, investors will rent facilities at dramatically low rents (well below reproduction cost) on a shorter term to provide some cash flow until rents return to replacement cost levels and are sustainable.

What has made the current downturn unusual is the rapid shift in economic base, productivity, and logistics. The rise of global production has drained much of the labor intensive work that can be outsourced to

emerging markets. Domestically, productivity gains from technology have and will continue to reduce the space requirements of business for the same level of output or service. Logistics remains in flux as the transport mode of choice, truck, continues to face scrutiny by regulators and cost pressure from fuel costs. All these factors suggest that trying to base an economic development strategy on the economic opportunities of yesterday will not work going forward.

Using an integrative approach then, the commercial real estate market is assessed in light of all the changes. It is likely that much of the business investment for this decade will focus less on offices and industrial space and more on creating competitive advantage through lowering costs. More important than the cost of space will be the location of the real estate. For offices it will be a focus on telcom connectivity, labor quality and their quality of life, commute ease, education, etc. Industrial real estate will be utilized because of its logistics options (competitive volumes, modes, carriers and access to the most origins and destinations) and the efficiency of connections (minimal handlings, delays and errors). These factors make it essential that any real estate market assessment for industrial space include a full understanding of the logistics platform that will work for a site location.

Regional Real Estate Market

The Minneapolis St. Paul region's industrial market is driven by three key ingredients: Regional distribution (retailers primarily); local area distribution and service companies; and manufacturing or processing. A fourth kind of industrial product, terminals, is not typically recognized as a class by the real estate industry. Terminals are not investor grade facilities and tend to have low cost building improvements, although the infrastructure costs can be higher than investor grade product. Each will be addressed below.

Regional Distribution

Minneapolis serves as a regional distribution center for some companies but not all. The area can be effectively served directly from the greater Chicago area. Many companies design their distribution networks around fewer centers to serve the nation and in such cases Minneapolis would not be a location. Some retailers have a broader rural distribution of retail outlets, e.g., Wal*Mart, so their centers tend to be rural areas. (Wal*Mart serves Minneapolis out of an Iowa distribution center). For some Minneapolis works well in their network to serve the Dakotas, parts of Iowa and Wisconsin. Those centers tend to be 250,000 to

300,000 square feet in size on 10-20 acres, are not directly rail served (may utilize intermodal) and locate proximate to interstate highways.

Local Distribution and Service

Local distribution and service industry are the bulk of the Minneapolis regional market. These businesses are in Minneapolis to serve Minneapolis-St. Paul and surrounding area. The bulk of customers are within the metro area proper. Thus their logistics is impacted by local trucking costs. In Minneapolis the average size of an industrial building in Minneapolis is 50-75,000 square feet. If the regional distribution space was excluded the average for local distribution would drop to 50,000 square feet or three to five acre sites.

Manufacturing

Manufacturing in the region has grown up over years with the many corporations that are global today. Much of the manufacturing for global companies must migrate to parts of the world where they are closer to the customer, or where lower labor costs allow them to stay competitive. As a result, while there is a strong manufacturing base in the region, it is typical of the national average despite the headquarters of some huge corporate citizens like 3M, Medtronic, Ecolab and others. From a logistics perspective manufacturers can chose locations for a host of reasons. Chief among them is the origin of the inventor, or leadership talent. During growth of the company, facility expansion requirements include skilled labor, a level playing field in terms of taxes and business climate, functional logistics and in some cases proximity to raw materials or markets. There is much more detail to site selection and it can vary depending on type of manufacturing.

Terminals

Terminals as a class of real estate can be small or massive. Small terminals could be trans-loading operations for carriers (e.g., truck terminals, sort centers) in the less than load business, or they can be mode transfer locations such as ethanol trucked from small producers and loaded onto rail for shipment to major metro tank farms and blending for the retail market or conversely, inbound plastics from refineries destined to a small injection mold manufacturer. Mid size facilities may be a mixture of modes and commodities, run by third party logistics providers, transport carriers, or warehouse operators. They can be a mix of outside and inside storage with sites of 50-100 acres. Large terminals are usually dedicated for the use of the investor and could be coal terminals for mines or power plants or regional rail classification yards. Minneapolis has all of these type facilities.

Industrial Real Estate Market Trends

The current statistics on the Minneapolis-St. Paul industrial real estate market are encouraging. The total market inventory of space is over 320 million square feet. For the first time in three years, the direct vacancy

rate in the industrial real estate market has begun to decline although slightly to a rate of 7.5% or 24 million square feet. The region's low unemployment rate (6.9%) compared to national rate of 9.2% is reflected in the vacancy rate. Even at the height of good economic activity markets typically have a structural vacancy rate of around 5% due to obsolescence of building. The brokerage industry also tracks the portion of the market that is both physically vacant and could become vacant when a tenant moves out within the year. This measure is "available" and is 12 % for Minneapolis. The available space represents the choices available to companies searching for space. In terms of vacancy Minneapolis is a good market compared to many other areas of the US.

During the past two years average asking rents for warehouse space have declined 10% as vacancy rose and economic activity failed to regain its momentum quickly. Current rents are 4.00 per square foot on a net lease. Tenants will pay a net lease rent plus all or most all of their prorated cost of taxes and operation expenses for the building. These expenses can add \$1 to \$2 dollars per square foot in cost to the tenant. The average rents reflect both the age of much of the product and the stability of the market which attracts institutional investors with a lower capitalization rate requirement due to lower risk.

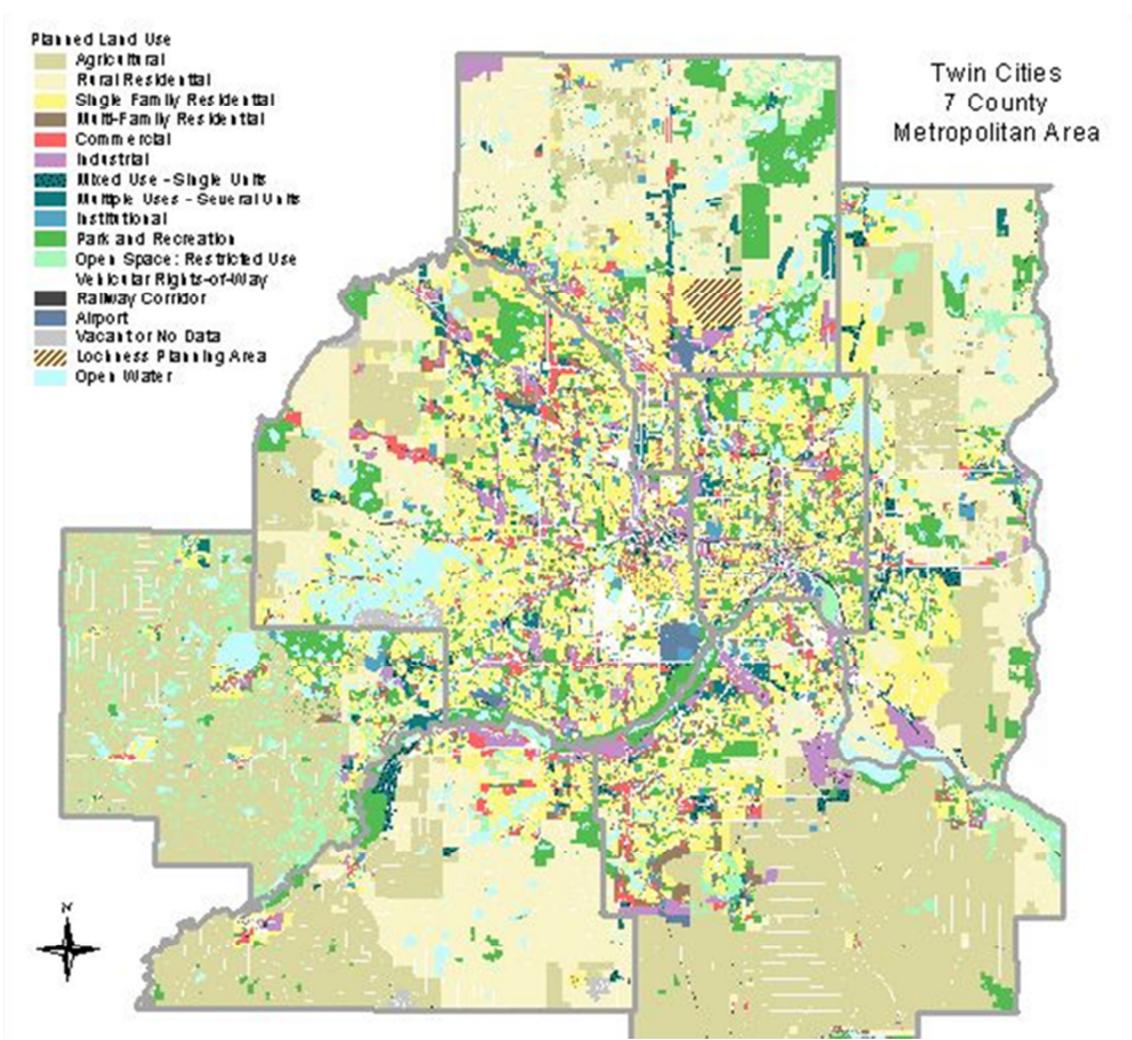
Absorption rate indicates the change in occupancy of space. It is affected both by tenant contraction and new construction negatively. Conversely, growth in leased and occupied space creates absorption and reduces the vacancy rate mentioned above. In Minneapolis St. Paul the absorption rate was essentially flat during 2010 with a few "build to suit" (lease space contracted prior to construction) projects finished. In the first quarter of 2011, there was essentially no new industrial construction and there was a rise in absorption for the first time in years confirming the turnaround in the trend of the vacancy rate. So while rents are low and vacancy is high relative to historic values, the trend is turning and investors and users will both be looking to position their real estate holdings favorably before rates escalate and availability gets tight. It is a good time to study the market for the next opportunity.

Data from real estate professionals surveyed indicate much more detail in terms of the submarkets within Minneapolis St. Paul. Due to the combination of community zoning and land use rules, transportation planning and infrastructure over the years, and the growth of working communities in the region, industrial uses tend to create distinct nodes for a variety of reasons. Some nodes may be related to rail infrastructure put in place over 100 years ago. Others are centric to major commercial airports. Yet others are interstate highway centric. These nodes are usually clear from land use maps or today, most conveniently, aerial maps. The real estate industry divides the metropolitan area up into submarkets to offer distinct analysis on the types of real estate product and users that tend to occupy them. These zones are also geographic slices of the metropolitan map. Figure 16 shows zone boundaries. Data indicates that the most intensely industrial zones are Northwest, Southwest, South Central and North Central sub markets totaling 230 million square feet (70% of all industrial space). North Central includes the Roseville and Blaine areas and essentially all the space is

is the most important consideration, but certain infrastructure must be in place depending on the type of facility. If office (R&D) oriented, then housing and proximate retail of a desirable nature is critical. If a processing plant, then water and power can rise in importance.

The Future Land Use Plan of the Metropolitan Council is a composite of local land use with some expectation of future demand for uses. The industrial land use (lavender in color) is clearly centered around the core of the region facing its way along major transportation corridors, generally east to west. With the exception of the southwestern border of Anoka County in the Cities of Anoka and Ramsey, there is no significant industrial land use. The Blaine industrial parks are small. For a prospect driving from the metro area to Isanti County to look at rail sites, the drive up route 65 through northern Anoka County creates a perception of leaving the metro area.

Figure 17 Land Use Plan MSP



Source: Metropolitan Council/Datafinder.org

In terms of the type of industrial space (Figure 17 Land Use Plan MSP), over half the space is local distribution and service space. Nearly a third is manufacturing and specialty industrial space reflecting the strong manufacturing base in the area. Depending on the broker source only 18-20 percent of the space is large distribution (typically 2-500,000 square feet) used to distribute over a large region of the country. A Jones Lang LaSalle broker is quoted as saying, "this is not a distribution center market." This later fact is logistically consistent, and in fact Minneapolis is not used by many retailers for a distribution hub at this time. If truck costs were to rise to \$6-7/gallon for fuel and not come down, then a network of more, smaller warehouses would evolve over time, and more inbound traffic would arrive by intermodal rail without trucking from Chicago.

Figure 18 Type of Industrial Real Estate

Building Type	million square feet	vacancy	% of total
Bulk Warehouse	64	10%	20%
Office Warehouse	138	7%	42%
Office Showroom	35	11%	11%
Other Industrial (mfg./specialty)	90	6%	28%
Total	327	8%	100%

source: local survey

Figure 19 Industrial Transactions First Quarter 2011 MSP

Industrial Property Leases, Q4 2010 and Q1 2011

Square Feet	Tenant	Location
140,000	Dedicated Logistics	Brooklyn Park (Northwest I-94 Corridor)
106,000	NFI Distribution	Scott County (Southwest)
60,000	Mocon	Northald Park BC (Northwest)
130,000	Great Northern Corp	Brooklyn Park (Northwest I-94 Corridor)
100,000	Lifetouch	Dakota County (South Central)
118,000	Catepillar	93rd Av. (Northwest)
130,000	Diversified Distribution	Brooklyn Park (Northwest I-94 Corridor)
61,000	Minneapolis Select	Dakota County (South Central)
67,000	Restaurant Technologies, Inc.	Dakota County (South Central)
88,000	Columbia Pipe	Eagan (South Central)
145,000	Davisco	Scott County (Southwest)
80,000	Schwarz	Burnsville (Southwest)
75,000	General Marketing	Eden Prairie (Southwest)

Industrial Property Sales, 2010

		\$ Sale Price per square foot	
116,000	CIMA Labs	Southwest	43
132,000	FR Investment Properties	Northwest	33
96,000	CSM Equities LLC	Southwest	45
76,000	7624 Boone Ave Investors, LLC	Northwest	42

Source: Compilation of local broker reports

Serviced Industrial Land

In terms of improved site transactions (land with sewer and water services), a recent sale to Liberty Property Trust at Rogers, MN (I-94 exit Northwest of MSP) sold for \$.92 per square foot (fully improved pad ready land). Parcels in the same development sold for \$2.25 per square foot in 2007. Numerous references from brokers and appraisers noted that some communities were willing to give away land for new industry that promised substantial quality jobs. During the past year, July1, 2010 to July 1, 2011, a search of the real estate and appraisers data base for Minnesota shows that very few transactions of industrial land took place in the Minneapolis-St. Paul area. In fact, most were for workouts between related parties for cleaning up the books or liability protection. None of the sites are known to have rail. Note that the only arms length transaction was in Elk River for \$1.05 per square foot for about 6 acres. In Rogers a government sold a 30 acre parcel for \$.14 per square foot (note appraiser valued parcel at \$.67/sf). The list of sales are provided in Figure 20 Industrial Land Sales, 5-50 ac, Metro Area, 7/2010-6/2011

Chisago County has sold land to induce business location at multiple locations. According to a representative of the County's Tax Appraiser's office, Patrick Poshek, no vacant industrial parcels have been sold in the County for some years, but for sales by the County HRA/EDA in business parks that it has developed. Sales by

the HRA/EDA are recorded at either \$1 or some other fraction of the market value. The use of low cost land has been used across America as an inducement tool by communities to attract new jobs.

Figure 20 Industrial Land Sales, 5-50 ac, Metro Area, 7/2010-6/2011

Address	City	Use of Property	Land Size (sq ft)	Zoning	Close Date	Price per sq ft	Market Value	Deed Type	Concessions	Acres
17796 Industrial Circle NW	Elk River	Industrial-Land	280,526	BP	5/16/2011	\$1.05	\$730,500.00		No Concessions	6.44
							\$ 2.60			
County Road 81	Rogers	Vacant Land	1,363,999	LI	2/23/2011	\$0.14	\$907,100.00	WD	Government	31.31
							\$ 0.67			
24083 108th St NW	Zimmerman	Vacant Land	416,869	al	1/4/2011	\$0.31	\$74,900.00			9.57
							\$ 0.18			
SWC of 4th Ave & CR #83	Shakopee	Vacant Land	1,945,389	I1	12/28/2010	\$1.28	\$3,500,000.00	WD	Related Parties	44.66
							\$ 1.80			
Johnny Cake Rd	Apple Valley	Vacant Land	814,155	I-1	9/1/2010	\$3.74	\$831,900.00	QCD	Related Parties	18.69
							\$ 1.02			
284th St	Other MN	Vacant Land-Warehouse	449,539	I	9/10/2010	\$0.99	\$295,200.00	WD		10.32
							\$ 0.66			
River St W	Monticello	Vacant Land-Industrial	281,833	I2	8/30/2010	\$0.67	\$282,300.00	WD	Related Parties	6.47
							\$ 1.00			
Dairy Lane	Jordan	Vacant Land-construction	690,426	I1	7/22/2010	\$1.01	\$117,300.00	WD		15.85
							\$ 0.17			

Rail Site Market

Industrial rail sites have several important infrastructure elements in common. All have ample capacity water and sewer connections. All have paved access with truck radius turns except in older urban areas where improvements are difficult to update the road system to current standards. The standard today is based on close proximity to four lane highways with traffic signals preferred in high traffic areas. Gas distribution lines are the standard in industrial parks in the region. Gas availability to an industrial site becomes a requirement to compete. In addition with regard to rail served sites, the following quote from a broker's report is encouraging:

Quoting from the Grubb & Ellis quarterly report at the end of 2010:

"Increased demand for more centrally located industrial locations has been seen with

many users seeking space in the Midway submarket between downtown Minneapolis

and St. Paul. While many of these users are seeking spaces less than 10,000 square feet,

it does represent an increased desire to locate centrally. Rail access has also been a recent

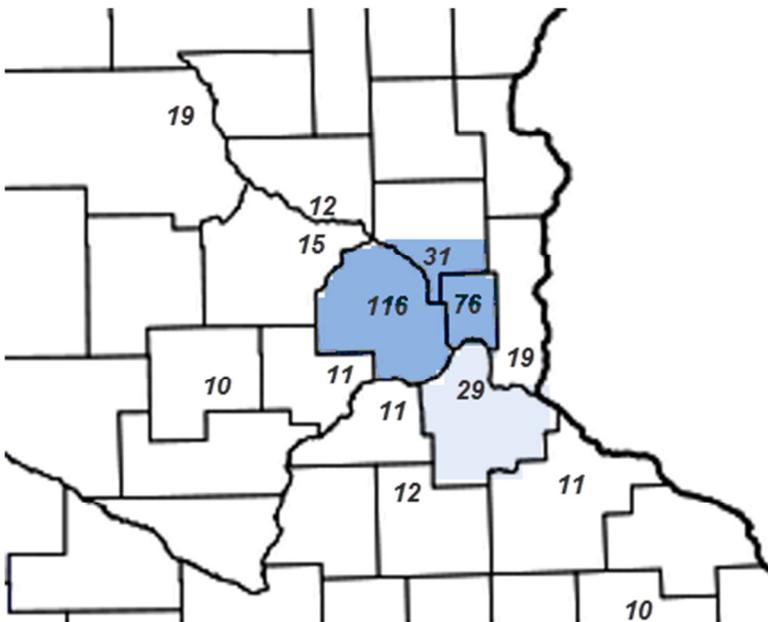
driver seen among industrial space requests. Available sites with rail access are still very

tough to come by with most being taken off the market quickly. Cost continues to be the large driver in tenants' decision making looking not only at the initial base rent and concession package but also analyzing the taxes and operating expense component. Flexibility to allow for expansion, contraction and even termination has been key for tenants in their decision making process.”

It should be noted that this is an observation which is supported more by the absence of available sites than any significant upturn in demand for rail sites.

Figure 21 Rail Customer Count by County (Count >10 shown) shows the geographic concentration of rail customers within 100 miles of Minneapolis. The data counts the number of customers by county where there are ten or more customers. The highlighted counties are the most densely populated with rail customers. Note the high degree of concentration and the skew of customers along the river and to the south where agriculture supports rail activity.

Figure 21 Rail Customer Count by County (Count >10 shown)



Source: Railroads

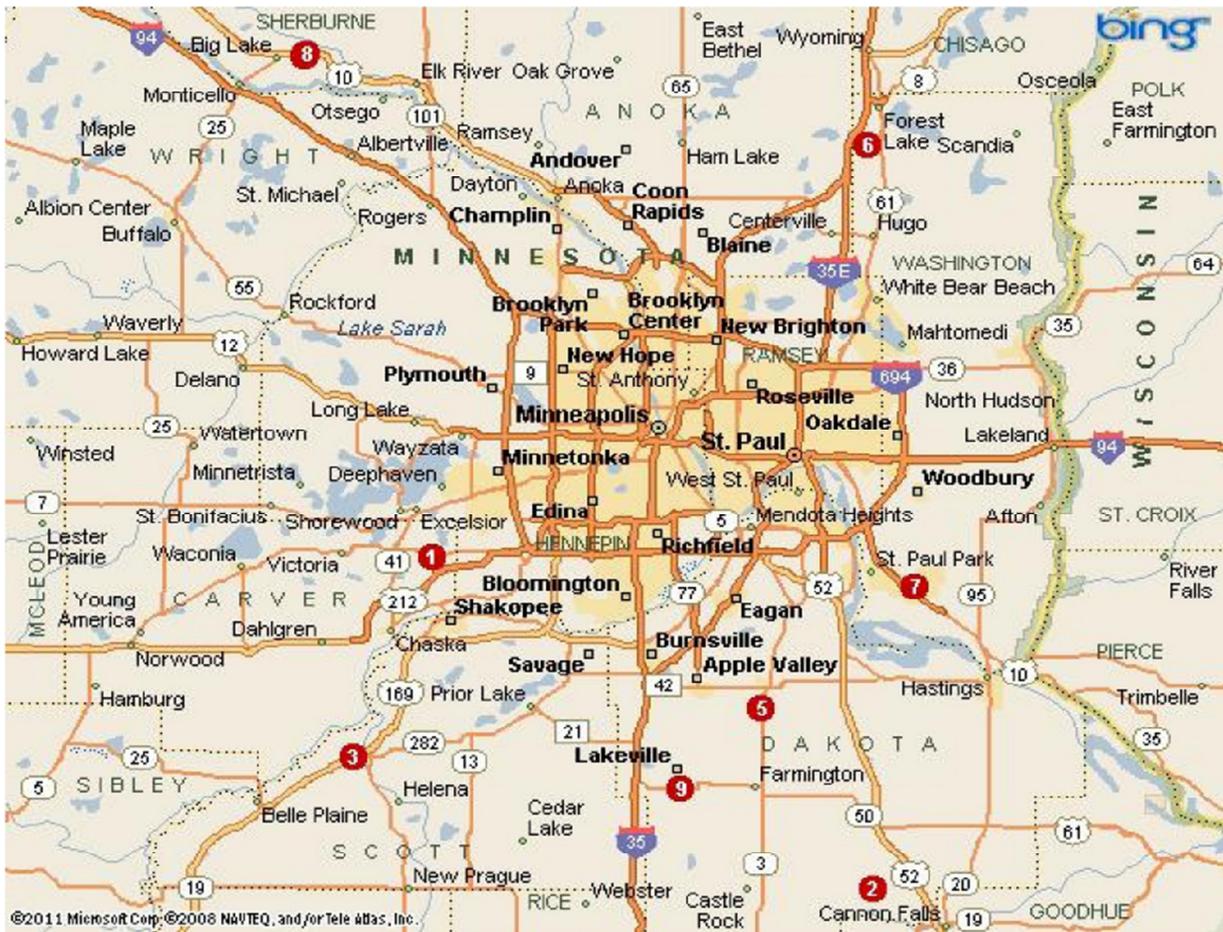
While Isanti County has rail available, the cost of connection is high versus older urban core locations which may have rail switches and spurs in place from previous use. Isanti County is also disadvantaged by the cost of trucking into and out of the urban core. It is very unlikely that any tenant serving the Minneapolis market for

distribution or service would consider an Isanti County location. However, to the extent that a business uses rail for a national market and its competition is not driven by local trucking, then an Isanti County site could provide a viable option, if reasonably priced rail access were available. Recall that trans-loading (truck to rail or rail to truck) becomes an option for using rail when located anywhere in the region. The only two options for efficient rail site access are high volume users or a large park developed over years that can spread the cost of rail over many smaller volume users. Such volume would need to be 200 cars per month in order of magnitude for typical commodity traffic. Some commodity types can support smaller traffic volumes, e.g., chemicals, plastics, due to high value and limited alternate shipping modes.

In terms of rail site availability, it is scarce. A search of the broker data base returned a list of 9 sites which are listed in Figure 22 Available Rail Sites for Sale by Metro Brokers. Of these one was in fact not served by rail at all. Of the 8 remaining most were 20-30 miles from the core metro area. Some sites did not have utilities available to the property. The Big Lake area has the most competitive sites at \$2 per square foot. All other viable sites are south of the metro area.

Figure 22 Available Rail Sites for Sale by Metro Brokers

Map #	Location	Improved / use	Size (ac)	Asking Price /sf	Rail Access
1	NW of Powers Blvd and Lake Dr, Chanhassen	Yes/office	17	\$ 2.17	yes/TWCR
2	Great Western Industrial Park, Randolph	no	151	\$ 1.50	yes/Prog. difficult/ across hwy
3	Acorn Acres, Jordan	no	62	neg.	BNSF
4	Remmele Engineering Land, Big Lake	yes	10	\$ 2.00	Prog. R
5	CR 42 & Hwy 3-JJT Business Park, Rosemount	no	35	\$ 3.85	no
6	206th St and Fenway Ave, Forest Lake	no	23	\$ 2.75	CP
7	9020 Hemingway Ave, Cottage Grove	no	38	\$ 4.06	neg.
8	Big Lake BNSF Rail, Big Lake	yes	25	\$ 3.00	Prog. R
9	SE of Hwy 70 and Highview Ave, Lakeville	no	30	neg.	BNSF
N/A	Liberty Lane, Becker, MN				

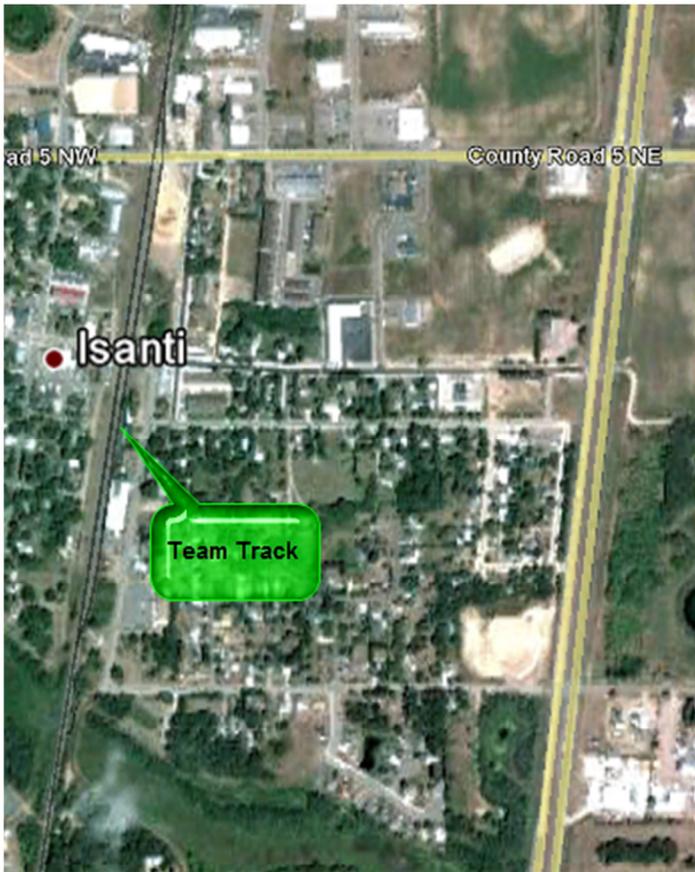


Rail Site Design Criteria

All quality rail sites have one thing in common. Rail sites are functionally efficient for the rail road operations through engineering design standards which are driven by safety and ease of operations. The most common problem with poor design is manifest through accidents such as derailed equipment or poor service which no one wants.

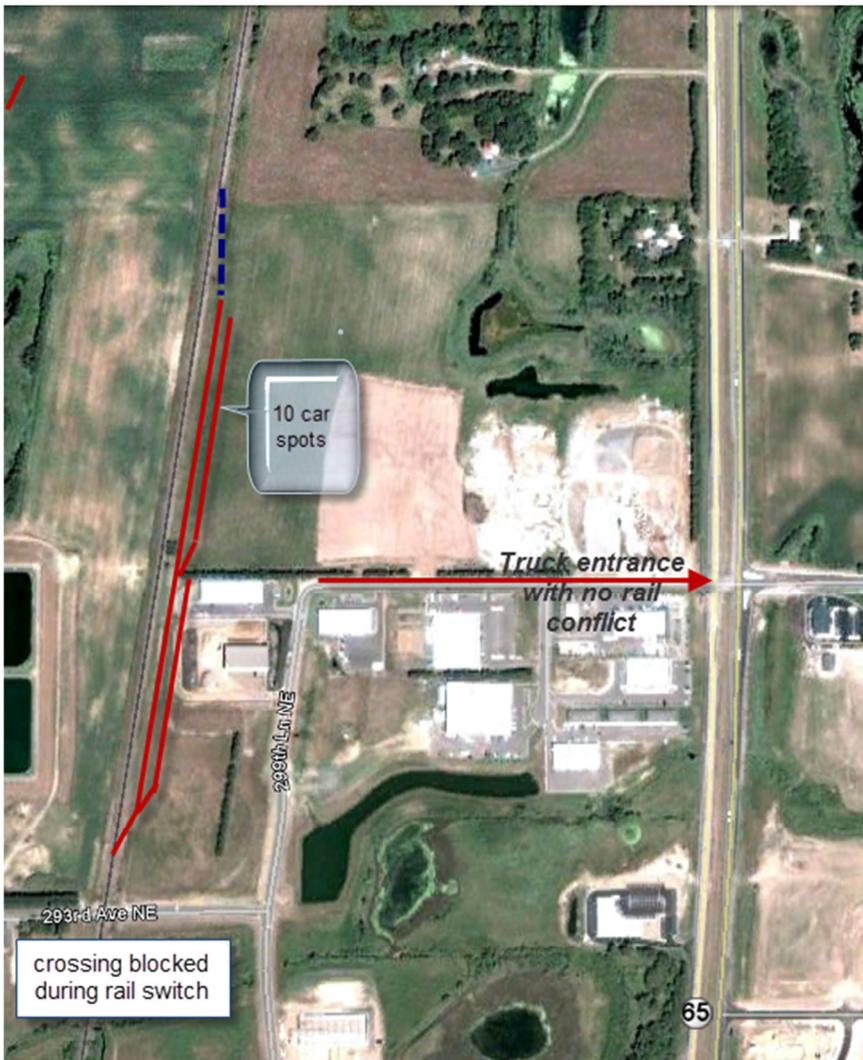
Customers which do not have access to direct rail sidings at their site often transfer their loads via truck or barge to rail loading points, e.g., team tracks or trans-loaders. Team tracks are simply rail sidings or spurs which have public road access to a piece of track where a car can be left for a couple days to be loaded or unloaded by the customer. Some have platforms to allow freight loading equipment such as forklifts to enter the car and load truck trailers. Others require hand loading/unloading or specialized equipment depending on the cargo. Figure 23 Team Track in City of Isanti shows the team track currently recognized by BNSF that is in the City of Isanti. Note that team tracks cannot be used for hazardous materials and non-hazardous wastes; oils including vegetable and animal fats; environmentally sensitive materials; Chemicals which could impact groundwater or storm water including salts, fertilizers or plastic pellets; or explosives. They are commonly used for general merchandise, bagged supplies or equipment on flat cars, such as tractors.

Figure 23 Team Track in City of Isanti



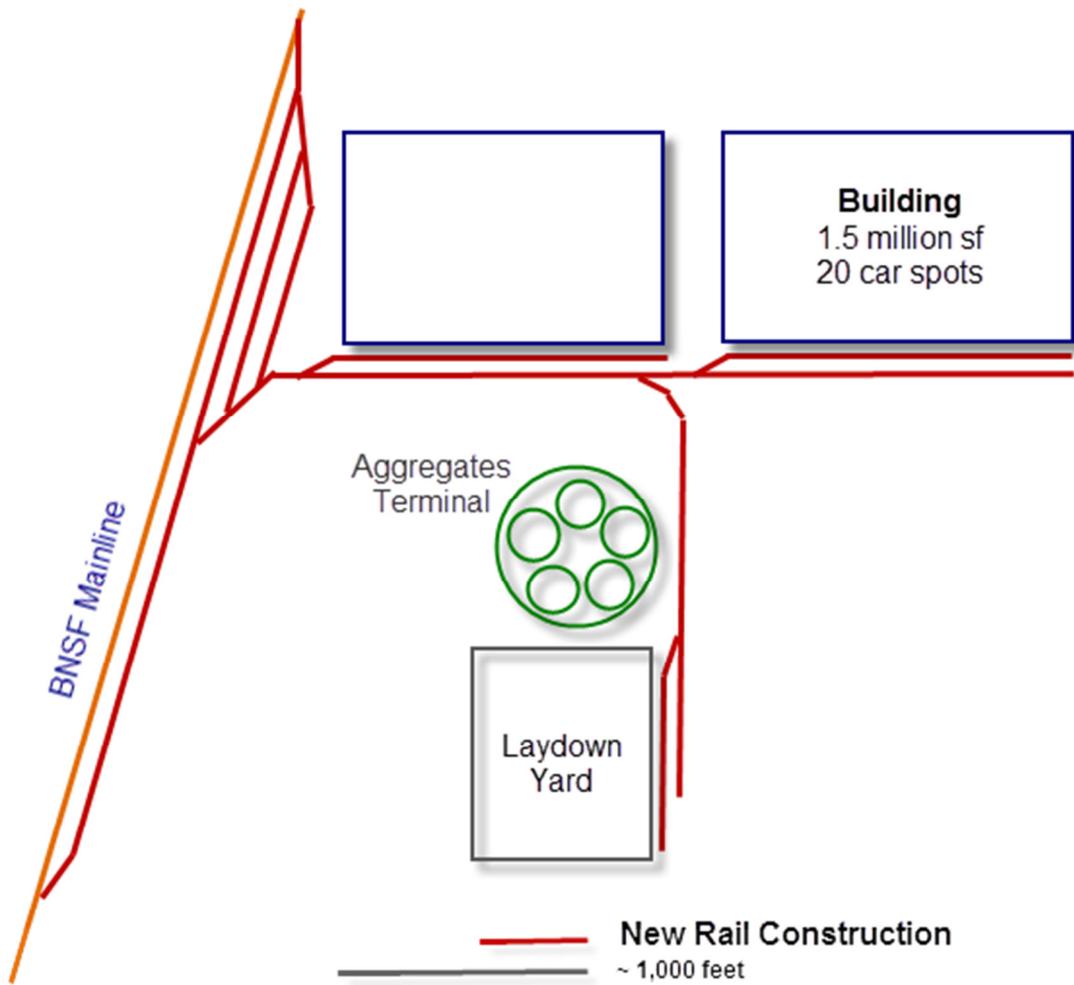
The amount of infrastructure required for access to a site is dependent on the activity level on the line being accessed and availability of local switching crews. Busy mainlines could require mile long clearing sidings costing over a million dollars. On mainlines that are not controlled with signals (sometimes called 'dark territory') with only a few trains passing per day and an available local switch crew to service the site, a simple turnout and spur can serve a site. This type access could cost as little as \$300,000 dollars. To open up a new site within an industrial park which has car storage and/or power run around already built, access to the site could cost \$150,000 dollars. The more cars being spotted (placed) at a time by switching crews, the more on site track will be required to spot loads and pull empties. Figure 24 Generic Rail Site Design - Single Spur shows a simple sketch of rail design to a new site off a low density mainline.

Figure 24 Generic Rail Site Design - Single Spur



Larger customer sites, whether single customer or multiple customer parks, will require more track infrastructures off of the mainline track. Because of the level of activity and difficulty of switching cars, a storage track and run around for power units are common. These designs are site specific but can easily require the construction of track as shown in Figure 25 Cambridge Site - Large Customer Example.

Figure 25 Cambridge Site - Large Customer Example



Preliminary cost estimate for rail construction for this example is \$5 million if the mainline siding is constructed on private property outside the work area of railroad crews. This work can be phased as shown in the Appendix but the bulk of the cost would need to be completed in the first phase. In this scenario it is likely that a local industrial switch could work the park and leave cars out for pick up by a road train.

Rail, truck and logistics providers' insight into un-served needs and Isanti County location

As discussed earlier in the rail market section, the Hinckley Subdivision from Superior to Minneapolis is largely used for transit between the lake port at Superior and connection to the rest of the BNSF system at Minneapolis. That connection does not allow a through move (continuous train move without power needing to run around the train) for a move from Isanti back to the west or the reverse. All traffic must go into the main yard for further handling. There are very few customers along this line and the railroad and Port of Duluth's efforts to build traffic have been limited. A strategic initiative by the railroad to further study the line was conducted this year and has found limited development opportunity. Specifically, there is hope for the development of sand materials which is expected to have limited supply during the next ten years. Further, there is considerable effort to develop moves related to iron ore, but for the Isanti area those moves will not involve sites within the county. It should be noted that railroads tend to prefer large volume customers whose traffic is moving a significant distance, say over 500 miles. The most likely products moved by traditional merchandise trains (an intermodal terminal is not suitable for Isanti County) will be heavy, long haul goods or products. Typically these products are also relatively low value to weight as well.

The line is not heavily traveled which does give opportunity to locate more business with sidings along the line. That creates a more receptive atmosphere for development of a rail park which the railroad would support, given appropriate clearance of the main for local switching activities. The BNSF has expressed an interest in switching new traffic rather than interchanging with an on-site switch contractor. This can provide a more cost effective move for customers depending upon volumes. Large volume customers typically desire direct service from a Class 1 carrier such as BNSF.

C. F. Robinson Worldwide has both a service to the freight industry that matches the freight customer with providers and the company also provides a consulting service. Recently C. F. Robinson completed a study for the Port of Duluth to find additional freight and in particular freight that could increase utilization of existing idle capacity. In an interview with the principals who conducted the study for the Port, the bottom line was not encouraging. The study found that there were no new market opportunities and the volumes of freight that move over the port during summer peak could not be increased because the shippers and alternative transportation providers want to maintain a consistent year round flow of the traffic that is moving.

Metropolitan area truck transportation providers noted that Isanti would not be cost effective for local dray due to the rate structure that has been in place for decades and would not easily change. In short, there is not enough volume to create balanced traffic (a revenue load in each direction). Thus, the pricing of loads, in

addition to being outside the local dray rates for the metro, would also pay a two times premium for a driver not being able to deliver and pick up a revenue load for each direction.

Short line railroads interviewed had a common theme. With a substantial traffic base, they will invest in a new terminal. First it is important to know that short lines are private companies which profit from providing a niche, high quality service in a location that has significant demand. The short lines create moves where trucking is priced high for the shipper and there is a cooperating Class 1 carrier which will provide a competitive rate to capture the business if it involves an origin or destination beyond the short lines track structure. Successful short line operations such as Progressive Rail and their Lakeville, MN terminal capture business from surrounding areas that would move by truck, but for the better rates and acceptable service offered by rail. The key to their Lakeville terminal is that it is proximate to numerous shippers and receivers and the freight does not move out of route; they also are reputed to provide exceptional customer service. Other terminals exist within the metropolitan area and are served by short lines, but all tend to be centric to dense industrial/traffic generating areas. For a short line to be successful at Isanti County, there would need to be a significant industrial base requiring freight moves beyond the metro. That does not exist in the near term. In addition, any rail service in the County is now offered by BNSF and since the economic downturn in 2008 are anxious to grow the business to better utilize crews.

Create a value proposition for the logistics customer at the proposed logistics park

The highest value industrial customer for the Isanti County area which would use rail is a manufacturer or processor that will employ the available labor force and not adversely impact the quality of life for the community. Companies which do metal processing, food related processing (high water users), chemical plants, plastics and emerging market products such as wind turbines could be possible uses.

The rail would be an enabler, but not a driver of their location. The strong economic proposition for attracting a new industry will rely upon the State of Minnesota's competitiveness, the attraction of Minneapolis St. Paul metro for its infrastructure and business support, and the high quality and availability of labor locally in Isanti County.

The availability of ready to construct sites with direct rail service can be a significant attraction to Isanti County. While the market for these sites is currently very low, it is expected to return. The shortage of such rail sites creates opportunity for communities with sites should all the other requirements be satisfied.

Review Findings and Test of Value Proposition with Industry

In a survey of more than ten corporate real estate professions including those at major corporations within the Minneapolis St. Paul metro, e.g., Target, General Mills, Minnesota Mining and Manufacturing, Donaldson Company, and others, there was a general consensus on the following points.

- None surveyed have considered a location north of the metro area. They find that the infrastructure and growth of the metro has largely moved to the South in the direction of infrastructure and the agricultural production areas. This also aligns with the movement of freight connecting Chicago and major markets.
- Labor is the first priority for many surveyed. They look for locales where there is a good relationship between workers and employers; a good supply of qualified applicants; a growing labor market to support the business expansion in years ahead; competitive wages; and a place with a good quality of life for recruiting executive talent. To be clear, the importance of labor is secondary for uses such as distribution centers where the transportation costs are paramount and labor then becomes the key to community location within a zone that has favorable logistics costs. In such cases, Isanti County is disadvantaged by transportation cost, so an economic development strategy would not be driven by transportation cost advantage. Rail transport becomes an enabler, not a driver of location by new industry.
- One corporate site selection professional commented favorably on Isanti County as a location for labor given both the existing labor base that commutes to MSP jobs and the ease with which workers in the north metro area could commute to Isanti. This respondent suggested a good labor pool is available given a commute up to 25 minutes.
- About half the respondents noted that when the final three site candidates were selected, incentives became an important differentiator to drive favorable economics in the company's final site decision.

Value proposition for freight generators and freight service providers to identify their level of commitment and schedule for investing in the park and commencing operations

In the current economy logistics is undergoing consolidation and efficiency investment. In this environment there was only one freight generator (a truck/rail terminal for sand) that expressed an immediate interest in an Isanti County location. However, based on the freight infrastructure, logistics trends, and market opportunities, there is opportunity in Isanti County for businesses which use rail and ship or receive from distant locations. Most counties do not have Class 1 rail access and in particular non-controlled mainline which lowers the cost to connect to the rail. [Note that if and when passenger rail uses the line, it will have positive rail control installed and turnouts will cost double or more the current cost.]

It is unlikely that any regional distribution (MSP area) users will find the County an attractive location due to the cost of trucking from outside the metropolitan area. Also, the site is not suited for an intermodal terminal and access to a terminal from Isanti County is disadvantaged by high dray costs.

So if the glamour of big distribution centers with thousands of trucks coming and going is not likely, what works in Isanti County? There are many manufacturers which provide support to other industries in the Upper Midwest and require raw materials which can cost effectively arrive by rail. For this section these will be named Regional Suppliers.

Regional suppliers for large producers in the area could support the manufacture of glass or plastic containers, disposable items related to the paper industry, or something as simple as recycled plastic products or wood pallets. It is recommended that the State of Minnesota create an inventory of major supply needs for the region and focus on the supplier location for these needs. If there is a deficit of supply within the region then existing or new suppliers should be approached about locating near the region for satisfying the demand with lower transportation cost.

In addition, there is the opportunity to take advantage of natural resources in the area for the creation of steel production within the Midwest. However, there are many more centric and established plants that can be or have been retrofitted in the Midwest. It is not likely that the iron ore mined in the area would attract a production facility, but it is worth discussing with the State of Minnesota regarding its appetite to capture that kind of industry. Such a plant would likely produce for the regional market which may include rebar for construction, or sheet for equipment manufacturers. Known manufacturers in the Chicago area and along the lower Mississippi now compete for that business. And Isanti County is a true long shot for such a facility, but it is conceivable.

The final, and most promising, logistical target is a very niche manufacturer which has high value added to its product and can locate just about anywhere to serve its domestic US market. Examples of this exist already in Cambridge. The manufacturer or processor may locate here simply for the quality of life and stability of the labor pool, and the presence of a rail site enables the location.

The following table provides a list of potential industries known to use rail and could have market opportunity both as a regional supplier or as a niche industry in high quality manufacturing. This list is not a complete list. It is a list of typical medium size plants in industries that will likely benefit from rail access. The larger industry segments to consider are those in food processing, plastics, metals and chemicals.

Figure 26 SIC List of Candidate Industry

**Standard Industrial Classification
List of Candidate Industry for Isanti County**

SIC	Name/Description
2448	Panels for prefabricated metal buildings-mfg
2543	Pallet racks, except wood-mfg
2653	Pallets, corrugated and solid fiberboard-mfpm-mfg
2657	Paperboard backs for blister or skin packages-mfpm-mfg
2671	Plastics film, coated or laminated: for packaging-mfpm-mfg
2819	Chemicals, laboratory: inorganic-mfg
2851	Paints, waterproof-mfg
3053	Packing, metallic-mfg
3089	Plastics molding, for the trade-mfg
3421	Hunting knives-mfg
3479	Plastic coating of metals for the trade-mfg
3499	Powder metal products, custom molding-mfg
3531	Snowplow attachments-mfg
3545	Machine tool attachments and accessories-mfg
3556	Macaroni machinery

A strategy for market acceptance and financial feasibility of rail park development

Time Frame

Of the three sites studied, all would require some form of rezoning and code adjustment to allow typical rail uses. The City of Isanti will need to relocate its wastewater ponds prior to development and then work could be completed within a season. Cambridge and Braham have both annexation and acquisition of property which could take a year or more. The pro forma statements that follow assume all of this is done by the time planning, design and permitting begins. Thus, the actual sale of sites is 1-2 years beyond the start of the design work.

Feasibility

The real estate development process is based upon a predicted profit after all the hard and soft costs of producing the finished site or building are put in place and conveyed to a final customer. In this feasibility study only the larger components of cost are factored into a cash flow statement representing the time and cost of carry for the production period. The recovery of capital is based upon sale of real estate. For the past couple of years, the real estate market has been dominated by contraction and consolidation of business. The market has so little activity and most of that is not typical of a willing seller and willing buyer's behavior. The market is generally termed illiquid. As a result the sale prices in the cash flow model (pro forma for development) are set near the project's breakeven price. If the market sale price reaches the stated sale price from the pro forma, then the investor could go forward with expectation of breaking even on the investment. Any other price input at this time would be pure speculation. In fact there have been no industrial land sales in Isanti County for the past two years, according to the County tax assessor's office.

The cost components in the model are based upon local information. Acquisition of land is set at double the assessment value of the property in its current use where applicable. This is based upon experience in acquisition, but it does not assure acquisition, especially in areas with long held family farms. Willing sellers are essential because condemnation can only be used for public right-of-ways and cannot be used to help a community achieve more general economic development goals. The cost of infrastructure is based upon engineering reports and interviews with current civil engineering professionals working for each jurisdiction. Additional calculations for some specific design elements are based on measurement and average cost factors

to provide an order of magnitude cost. No warranty is given for the actual cost of project completion at the values shown. The pro forma is designed to give elected leaders an idea of the financial impact of moving forward on a particular project. In addition, it provides a means of measuring the relative feasibility of the three projects side by side.

Rail costs are based on best estimate of design requirements and current cost of materials. The operating and engineering officials from BNSF have the designs for review and have not yet completed their review. It is likely that modifications will be made. Such changes will be incorporated into a final version of this report when they are available.

In the Appendix each of the three sites under review has a pro forma which generally indicates the cost and time frame for development. Observations about the merit of each follow.

Braham Site

The Braham Site is the most remote from the Minneapolis Saint Paul region's core resulting in additional time and trucking expense. Basic utilities will need to be extended about a mile and a half. Distribution gas service is over 14,000 feet away and no cost to extend is available from the gas utility until volumes are established. An on-site water tank and wastewater lift station are required. The break even land price is \$80,000 per acre. See Figure 36 Braham Site Pro Forma. This is not a feasible site in the current economy.

Cambridge Site

The Cambridge Site is approximately one section of land. It has a mile of rail frontage and road right of way on all other sides. Ideally for rail park design, the major highway would be located on one side and the rail on the opposite side of the parcel. The configuration for this site will require all industrial truck traffic to cross over the rail crossing which may be blocked from time to time by train movement, in particular switching. The site has relatively small wetlands impact although most of the wetlands are located alongside the rail boundary. The land is relatively level and sandy, good for development. Utilities for water and sewer are about 4,000 feet away and can complement the overall development of the Cambridge urban area. Electric service is proximate to the site with a substation utilizing four 69KVA feeds located adjacent. The lack of gas distribution in the area must be accommodated if the site is to be subdivided for multiple tenants. It is possible that a very large user of the entire site could feasibly create a new tap into the high pressure distribution line. Service to a single large user does not establish a retail gas service according to gas company sources.

The costs excluding gas distribution are summarized in

Figure 28 Cambridge Site Development Cost Estimates
Figure 28 Cambridge Site Development Cost Estimates and based on work provided by SEH, the City's consulting engineer, for extension of water and sewer. Site grading is included to the extent of improvements built, however, it is not included for storm water or building pads because detailed site engineering is not complete. The rail design is based upon both a phases approach from the south and the development of service from the northern end of the site.

Breakeven land prices for both the Phase 1 and entire site large user scenario are well above current market prices. The best option for this site is to consider it for a mega site if such a requirement arises. As a mega site however, the community would need to evaluate how this site stacks up against other large sites and whether there is a need. It is not ideal as a mega site due to its distance from the Interstate highway network and its remoteness from a diversified supplier base. It also lacks 230 KVA transmission lines. There is fully redundant 69KV power near the site at Opportunity Industrial Park and with the nearby peaking plant which offers very reliable power for smaller users. This site is best considered as a long term development option. It will take time to address zoning issues and reach out to property owners to determine if they may be willing sellers at some point in time. The cost of utility extensions to the site will be reduced if some of the costs can be allocated to other developments in the area. Time, growth and development will create an opportunity to share the cost of utility extensions, improving overall development economics.

City of Isanti Site

The City of Isanti Site is an extension of an existing industrial area, but importantly, it can be designed to provide rail service to existing or future industry in the area. Unfortunately it still requires truck traffic from the parcel to move back across rail, and it is adjacent to parks and recreational uses. It should be carefully separated from recreational uses to avoid children wandering into such a dangerous area. A key advantage of this site is public ownership of the property needed for the first phases of a rail-served industrial park.

The cost of development excludes the deactivation of wastewater treatment ponds and restoration of land. This process will be a prerequisite to any development for industry. It is anticipated that while the restoration is taking place, earth work can be completed with the design of finished site elevations and storm ponds to create a rail industrial park. Additionally, the cost for water and sewer extension through the site includes looping lines back down 3rd Avenue North. These improvements are all included in the cost estimates, but in fact may have benefit to other adjacent areas. The cost estimates are summarized in Figure 32 City of Isanti Site - Development Cost.

The close proximity to gas distribution differentiates the City of Isanti site from the other two in terms of feasibility for smaller site development. The cost associated with rail development is for a full siding as shown in Figure 31 City of Isanti Site Plan. The design submitted to the BNSF review team is for a single spur which would greatly reduce the cost of rail service. Depending on the results of this review, the cost per acre could

go down. In addition, the improvements to highway access to MN 65 are included for the northern entrance. It is likely that a first sale can be completed on the south end of the property without these significant improvements. However, these improvements will ultimately be required and it is urged that they be factored into the average cost of the development.

The pro forma for the City of Isanti site which includes heavy rail and secondary highway access via 299th Avenue NE, shows a per acre cost for land well in excess of current market in the metro area. It is recommended that this site proceed with periodic review as plans for decommission of the treatment facility progress. It is important to plan future land uses now as part of ongoing programs so that when the market comes back, the place for growth will be ready.

Appendix I

Financial Pro Forma

A pro forma of development cost and break even revenue presented in this Appendix can be used to gauge the investment requirements and financial return for development of sites at the three locations under study. These are high level cost estimates and do not represent final engineering estimates with completed plans. The costs are based on conceptual plans and order of magnitude cost estimates which were provided by the civil engineers representing the three jurisdictions. Development assumes annexation by the nearest municipality and acquisition of property from existing owner occupants at a price of twice current market value. Acquisition of owner occupied properties with multiple family owners and a long heritage of farming the subject land can be difficult without condemnation rights being utilized by the municipality. The respective legal counsel for each jurisdiction should advise on the use of condemnation.

Natural Gas availability is marked unknown on two sites because the proximity of distribution line service is 14000 feet away from the Braham site and 8000 feet away from the Cambridge site. While there is a transmission line close to all the sites, the transmission gas line is high pressure and cannot be tapped for a local customer.

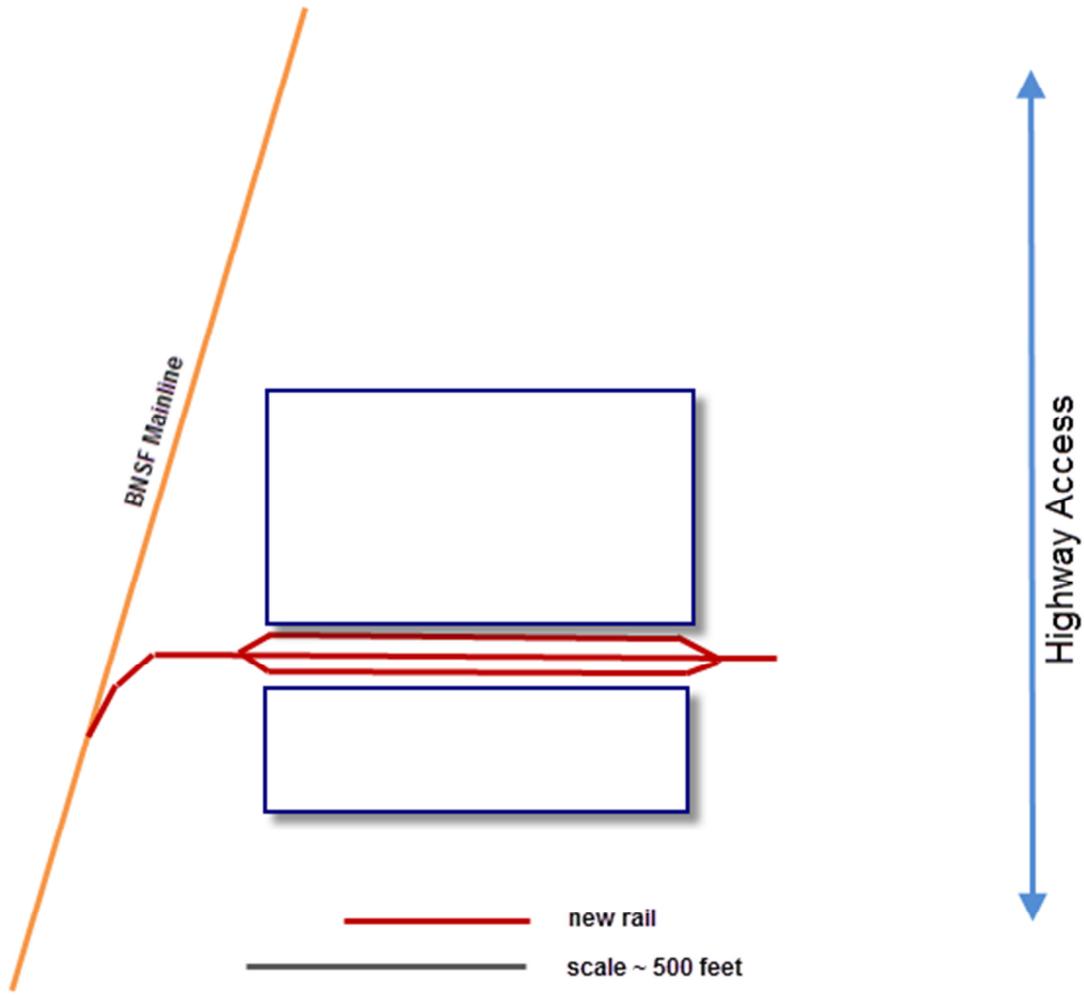
Cambridge Site

This site is approximately one section of land with multiple family farms and a large number of parcels to acquire. While the land is generally good for development, it does have several wetlands along the rail boundary which impact the efficiency of development of the sites against the rail, particularly if the Southwest quadrant of the parcel, which is closest to water, sewer and power, is developed as phase 1. The figure below shows a configuration for development as phase 1 only. An earlier figure (Figure 25 Cambridge Site - Large Customer Example) shows more optimal development of rail for the entire parcel. As a result this site is better developed for a few large users rather than phased development. With approximately 635 usable acres, the site qualifies for a major plant. The downside to attracting a very large industry is the distance that the plant would need to draw labor. It is not uncommon for large plants to have minimal labor per square foot,

however. A site this size may only require a thousand employees. In addition, if the plant was processing materials, it would need heavy gas, power and utilities. While this may open the door to a direct tap into the transmission line, it would probably require all of the water and sewer utilities, and likely require better power service (minimum 230 KVA loop). All of these resources can be achieved at a price, but the site selection criteria for mega site plants is very competitive and usually only those sites with land acquired and utilities in place make the final candidate list. In addition such large plants usually locate more centric to the supply chain and distribution network for the product being produced. Thus, it is a very low probability that such a mega site could be attractive to a large user. One such option might be a steel plant utilizing the local iron ore resources and Great Lakes shipping connections to other ores needed to produce high quality steel.

The figure below shows one possible layout for development of Phase 1 only. It assumes the 185 acres is sold in three 60 acre parcels, but other configurations may be developed depending on demand.

Figure 27 Phase 1 Plan Cambridge Site



The development costs below are based on Figure 27 Phase 1 Plan Cambridge Site and Figure 25 Cambridge Site - Large Customer Example for the layout of rail and sites. A table of development cost is below.

Figure 28 Cambridge Site Development Cost Estimates

Cambridge Site Development Cost		
	Phase 1	All
Net Usable Acres	185	636
Cost to Acquire	\$ 2,127,000	\$ 7,657,200
Highway Access	\$ 1,587,500	\$ 6,097,000
Rail Connection	\$ 2,420,000	\$ 5,435,000
Electric (substation in place)	\$ -	\$ -
Water	\$ 772,200	\$ 1,351,350
Waste Water	\$ 2,815,810	\$ 5,056,880
Natural Gas Connection	unknown	
Design and permitting	\$ 300,000	\$ 100,000
Total Construction & Design Cost	\$ 10,022,510	\$ 25,697,430
Cost per acre	\$ 54,176	\$ 40,405

Using the development costs for Phase 1 and a sales price that creates a break even return, the following pro forma depicts the cash flow.

Figure 29 Cambridge Site Pro Forma

Cambridge Site						
Cash Flow Statement - Phase 1 only						
Item	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Cost to Acquire	\$ (2,127,000)					
Highway Access	\$ (793,750)	\$ (793,750)				
Rail Connection		\$ (2,420,000)				
Electric						
Water	\$ (386,100)	\$ (368,100)				
Waste Water	\$ (1,407,905)	\$ (1,407,905)				
Natural Gas Connection		unknown				
Design and permitting	\$ (270,000)	\$ (30,000)				
Total Construction	\$ (4,984,755)	\$ (5,019,755)				
Bond Cost @ 5%	\$ (80,000)	\$ (253,238)	\$ (321,887)	\$ (337,982)	\$ (159,881)	\$ (167,875)
Revenue from Sales		\$ 3,900,000		\$ 3,900,000		\$ 3,900,000
Net Cash Flow	\$ (5,064,755)	\$ (6,437,748)	\$ (6,759,635)	\$ (3,197,617)	\$ (3,357,498)	\$ 374,627
Assumptions:	Sale of Three Parcels @ 60 ac each					
	Sale Price per acre:		\$ 65,000			

The following cash flow chart represents a continuation of the development after Phase 1 to complete the entire development in large parcels of 150 acres each. The smaller the sites are, the higher the infrastructure cost per acre. While these parcel sizes are not typical of industrial park sites for the targeted industry herein, they are used to demonstrate cash flow in a reasonable time table. It should also be emphasized that the price per acre is not market driven, but used to solve the pro forma for break even. This is the price needed and sales volume for the project to break even. This is not a good investment of public funds.

Figure 30 Cambridge Site Pro Forma Balance of Development

Cambridge
Site
(continued)

Balance of Site Developed

Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
\$ (5,530,200)					
\$ (4,509,500)					
\$ (3,015,000)					
\$ (579,150)					
\$ (2,241,070)					
(\$100,000)					
\$ (15,974,920)					
\$ -	\$ (780,015)	\$ (519,015)	\$ (544,966)	\$ (272,214)	\$ (285,825)
	\$ 6,000,000		\$ 6,000,000		\$ 6,000,000
\$ (15,600,293)	\$ (10,380,307)	\$ (10,899,323)	\$ (5,444,289)	\$ (5,716,503)	\$ (2,328)
Sale of 451 acres in 3 sites					
Sale Price per acre:		\$ 40,000			

City of Isanti Site

The City of Isanti currently owns a large parcel west of the BNSF mainline and current industrial park. This property is currently used in part for wastewater treatment. With plans for relocating the wastewater treatment ponds, that portion of the land has been planned as an industrial park. Referencing Figure 31 below, which is based on prior engineering work by Bolton & Menk, Inc., development costs estimates were summarized in Figure 32 City of Isanti Site - Development Cost. Then a pro forma for development and sale of parcels over six years is in Figure 33 City of Isanti Development Pro Forma. Note that the land sales price is designed to break even with development cost and does not represent current market value. This is a guide that predicts the land sale price if the City desires to break even on the project, given the no additional cost for gas distribution and electric distribution from neighborhood sources. It also does not deal with the cost of site work for storm water which can be accomplished as part of the decommissioning of the wastewater treatment facility.

The preliminary approval for a BNSF connection to the site has been completed. Design calls for a simple turnout and spur. This greatly reduces the cost barrier to getting the first customer. A nominal cost of \$400,000 for rail infrastructure is estimated versus the entire cost of a siding the length of the property. This greatly expands the feasible market for potential rail use customers.

Figure 31 City of Isanti Site Plan

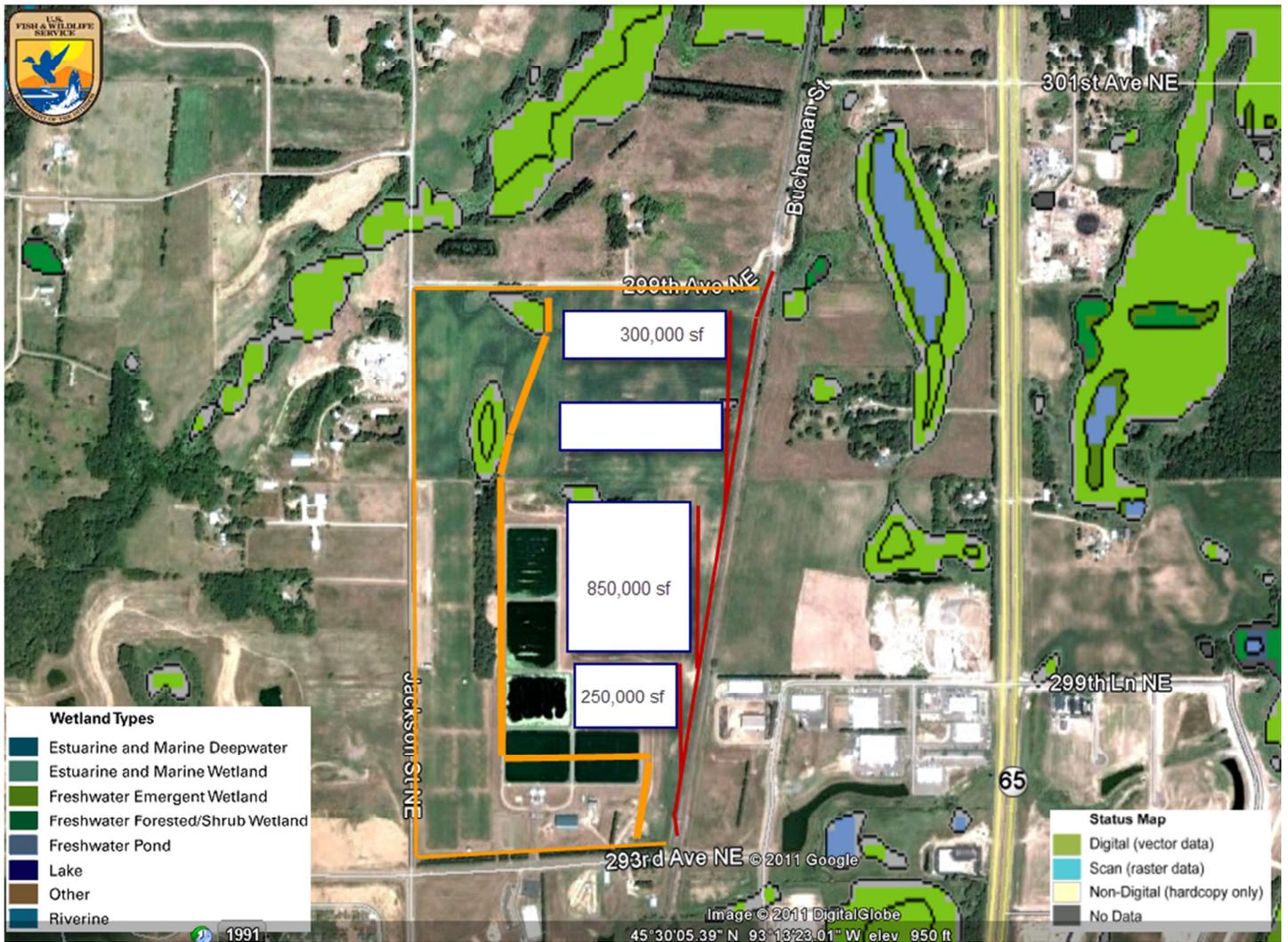


Figure 32 City of Isanti Site - Development Cost

**City of Isanti Site
Development Cost**

Net Usable Acres	100
Cost to Acquire	\$ -
Highway Access	\$ 2,599,500
Rail Connection	\$ 2,375,000
Electric (substation in place)	\$ -
Water	\$ 440,000
Waste Water	\$ 580,000
Natural Gas Connection	
Design and permitting	\$ 100,000
Total Construction & Design Cost	\$ 6,094,500
Cost per acre	\$ 60,945

Figure 33 City of Isanti Development Pro Forma

City of Isanti - Cash Flow Statement

Item	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Cost to Acquire	\$ -					
Highway Access	\$(1,299,750)	\$(1,299,750)				
Rail Connection		\$(2,375,000)				
Electric	\$ -					
Water	\$ (220,000)	\$ (220,000)				
Waste Water	\$ (290,000)	\$ (290,000)				
Natural Gas Connection						
Design and permitting	\$ (70,000)	\$ (30,000)				
Total Construction	\$(1,879,750)	\$(4,214,750)				
Bond Cost @ 5%	\$ (80,000)	\$ (97,988)	\$ (208,624)	\$ (219,056)	\$ (107,508)	\$(112,884)
Revenue from Sales		\$ 2,100,000		\$ 2,450,000		\$2,450,000
Net Cash Flow	\$(1,959,750)	\$(4,172,488)	\$(4,381,112)	\$(2,150,167)	\$(2,257,676)	\$ 79,440
Assumptions:	Sale of Parcels: 1 @ 30 and 2 @ 35 ac each					
	Average price per acre:			\$ 70,000		

Braham Site

Braham is the furthest site away from the metropolitan area and will require all utilities be extended about a mile and a half. The gas distribution system is 8,000 feet away as well. Road and rail crossing improvements are budgeted as new roads given the current condition of the adjacent avenue which is deemed the best access back to a two lane MN TH 65. Local plant capacity for water and sewer can accommodate a 200,000 gpd industrial user, but the cost of utility extension to this rail site is high. Utilities are readily available at the current industrial park north of the town. Therefore, this site is an option for a rail user, but not a likely fit for any industry given better options closer to the metro at lower prices. This site is not recommended for development. The details of this calculation follow in maps and tables.

Figure 34 Braham Site Rail Conceptual Plan

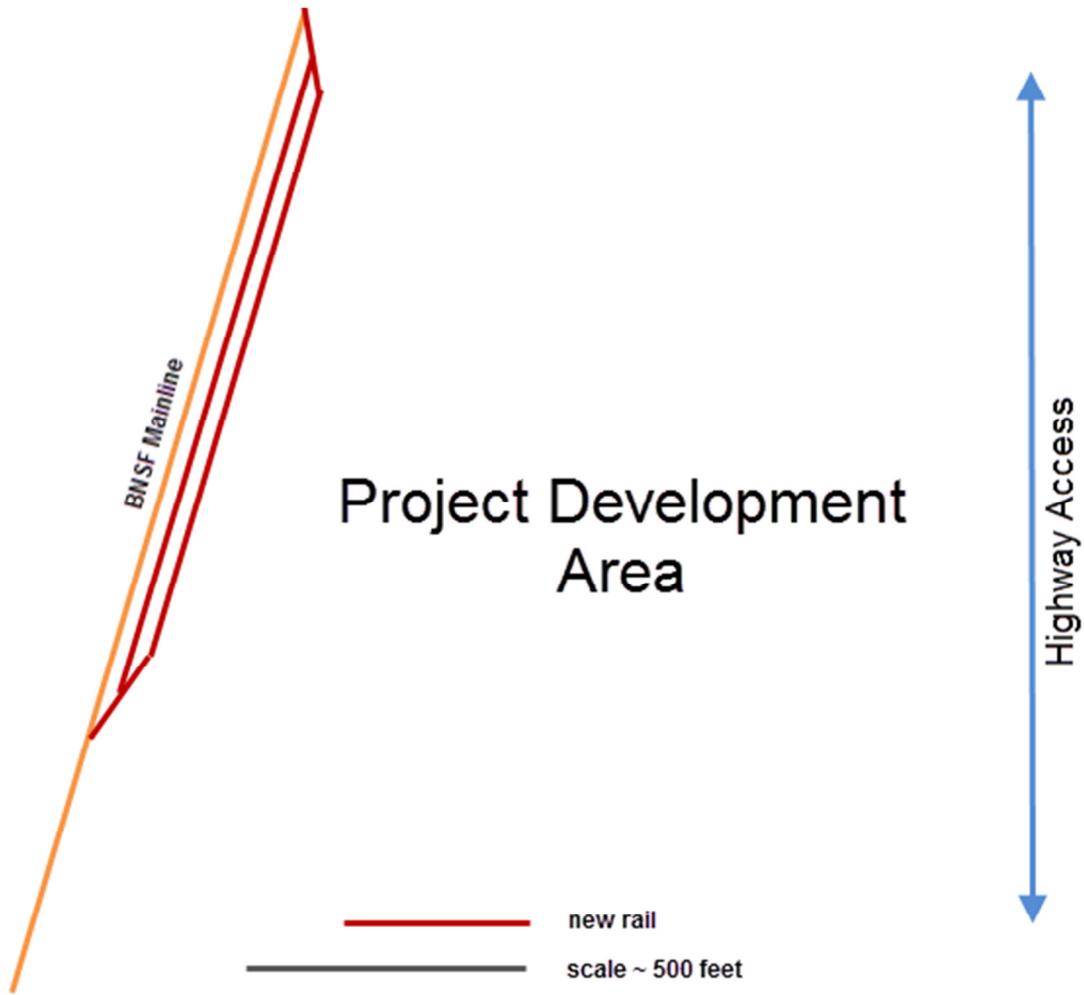


Figure 35 Braham Site Development Cost

Braham Site Development Cost

		Cost
Net Usable (acres)	116	
Cost to Acquire		\$ 1,300,200
Highway Access		\$ 2,379,500
Rail Connection		\$ 2,090,000
Electric		
	Substation	\$ 1,200,000
Water		\$ 850,000
Waste Water		\$ 500,000
Natural Gas Connection		N/A
Design and permitting		\$ 200,000
Total Cost		\$ 8,519,700
	Cost per acre	\$ 73,446

Figure 36 Braham Site Pro Forma

Braham Site - Cash Flow Statement

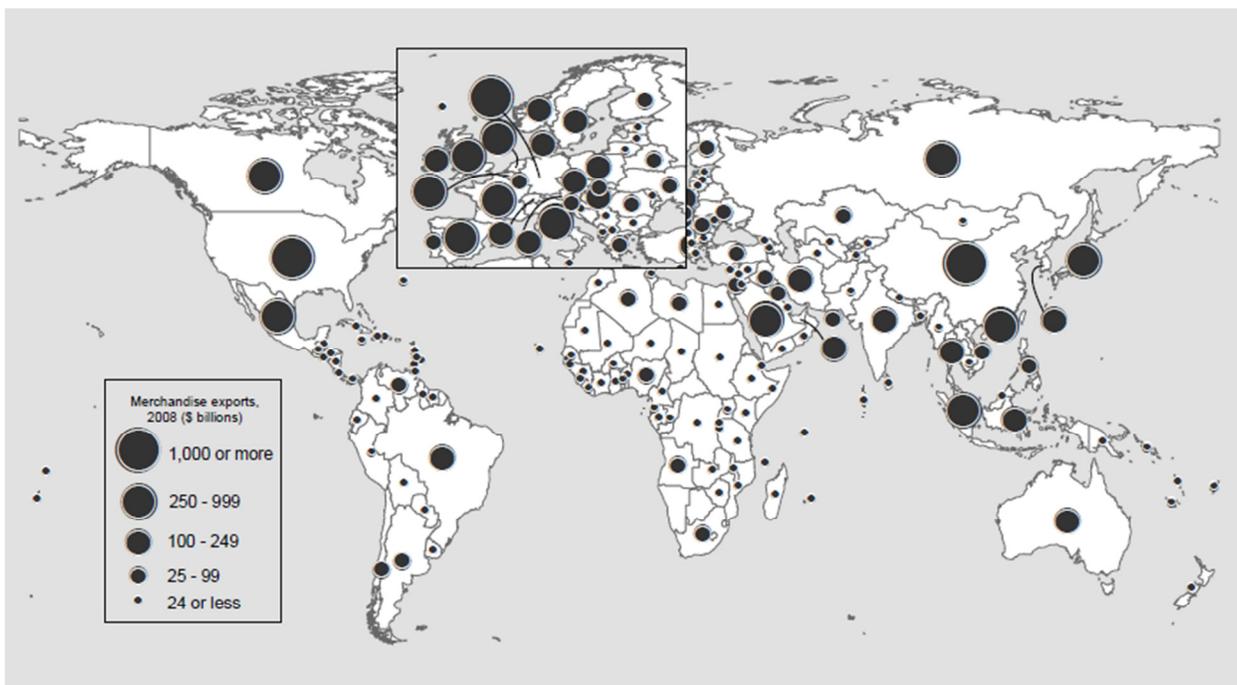
Item	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Cost to Acquire	\$(1,300,200)					
Highway Access	\$(1,189,750)	\$(1,189,750)				
Rail Connection		\$(2,090,000)				
Electric-Substation		\$(1,200,000)				
Water	\$ (425,000)	\$ (425,000)				
Waste Water	\$ (250,000)	\$ (250,000)				
Natural Gas Connection		N/A				
Design and permit	\$ (140,000)	\$ (30,000)				
Total Construction	\$(3,304,950)	\$(5,184,750)				
Bond Cost @ 5%	\$ (80,000)	\$ (169,248)	\$ (124,947)	\$ (131,195)	\$(137,754)	\$(144,642)
Revenue from Sales	\$ 6,240,000				\$ 3,040,000	
Net Cash Flow	\$(3,384,950)	\$(2,498,948)	\$(2,623,895)	\$(2,755,090)	\$(2,892,844)	\$ 2,514
Assumptions:	Sale of Parcels: 1 @ 78 and 1 @ 38 ac Average sale price per acre:					
			\$ 80,000			

Appendix II

Global Logistics Flows and Trends

Globally trade is continuing to increase as production shifts to low cost providers and emerging markets. Freight largely consists of bulk commodities, both dry and liquid, and palletized freight which can be put in a variety of containers. The global trade grew dramatically from the mid 1990s until the economic recession in 2008.

Figure 37 Global Origin of Freight by Value



Source: United States Department of Transportation, et al

In 2008, about 13 percent of world freight exports from more than 200 countries (\$2.1 trillion out of \$16 trillion) were bound for the United States. Of this amount, 55 percent was ocean borne cargo, 20 percent was air cargo, and about 25 percent was carried by land modes of transportation (USDOC CB FTD 2009). For the United States' top three trading partners, the portion of their exports bound to the United States were:

Canada at 78 percent; China at 19 percent; and Mexico at 80 percent. (US Department of Transportation, 2010)

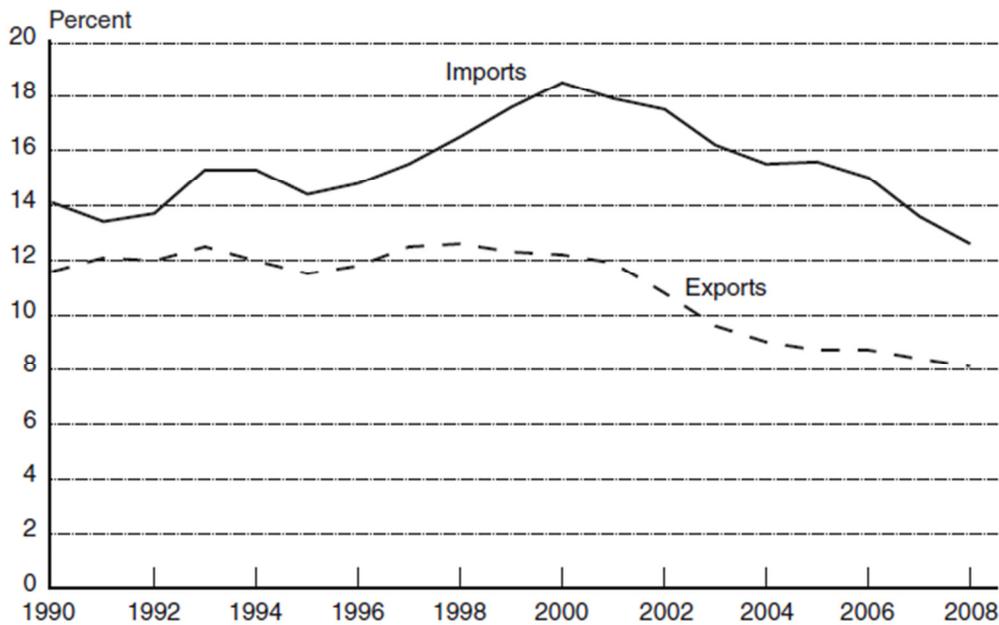
The origin of freight throughout the world shows the extent of development in Asia and South America, particularly Brazil, during the past two decades Figure 37 Global Origin of Freight by Value shows the diversification of sourcing by freight value. As freight systems and communication technology combined with relaxed political tensions to boost freight flows. The risk to business for investing in foreign markets diminished and the sourcing of materials and production quickly responded to find competitive advantage. Shipping responded with a huge growth in the vessel fleets, particularly container ships, which have most recently been put in slow service or mothballed awaiting the full return of freight volumes.

A significant proportion of global freight originates from the world's leading economies. In 2008, the world's top five economies by Gross Domestic Product (GDP)—the United States, Japan, China, Germany, and France—together accounted for:

- 35 percent of global goods exports (\$5.6 trillion out of \$16 trillion),
- 50 percent of global GDP (\$30.1 trillion out of \$60.9 trillion), and
- 28 percent of world population (1.9 billion out of 6.8 billion people)

The largest ocean lanes for movement of consumer goods (excludes raw materials and bulk product) is shown in Figure 38 Global Freight Flows. The red lanes are the largest and provide well over half of the US market imports. This focus on West Coast ports, particularly Los Angeles and Long Beach (LA/LB), was reconsidered by importers and shipping lines after the port labor issue in 2002 that idled LA/LB for weeks. The resulting stock outs by major retailers drove a change in supply chain logistics that diversified the ports of entry. In the process ocean container lines noted that they could avoid the necessity of long transcontinental rail moves by a limited number of providers by calling at ports closer to the end destination markets, particularly on the Gulf of Mexico and East Coast US. Receivers also shifted away from receiving containers at distribution centers, opting for a more optimal "Import Receiving Center" at port side. Such centers have been developed in LA/LB, Houston, Savannah, and Norfolk to a lesser extent. The primary purpose of these import receiving centers is to unload international containers and restuff the loads into domestic size containers or trailers which are road ready at an optimal (current law) 53' in length. These "domestic loads" are then shipped to the retailer's network of distribution centers which are located based on the optimal outbound dray to stores (a function of store distance and density). The other advantage of port side centers is access to items for express shipment to retail stores for stock-out avoidance. The import receiving centers are now used by major retailers and in some cases through third party handlers for smaller retail operations or limited product types, e.g., seasonal items. It is a trend driven by cost efficiency and service demands.

Figure 39 U.S. Share of World Merchandise Trade: 1990-2008



Source: US DOT, Research and Innovation Technology Administration, Bureau of Statistics

In terms of scale when measured by cargo weight, US ports don't make the top ten World List which is dominated by China (see Figure 40 Leading World Ports by Cargo Weight 2007 (thousands of metric tons)). The largest US ports are South Louisiana (13th), Houston (16th) and New York (21st). South Louisiana is almost entirely a bulk port spread over a hundred miles of the Mississippi River with much of the port volume trans-loaded onto rail or barge. Houston has a significant import of crude oil to feed refineries, but is also growing rapidly as a merchandise port. New York/New Jersey has all kinds of freight with emphasis on finished goods to serve the Northeastern US. The dominant freight volume lands at warm water ports and the most rapidly growing ports are in the Southeastern US. The Midwest and, particularly the upper Midwest, are equidistant to these coasts and receive freight through the North American freight network.

Figure 40 Leading World Ports by Cargo Weight 2007 (thousands of metric tons)

Rank	Port name	Country	Tons
1	Shanghai	China	561,446
2	Singapore	Singapore	483,616
3	Ningbo-Zhoushan	China	471,630
4	Rotterdam	Netherlands	401,181
5	Guangzhou	China	341,363
6	Tianjin	China	309,465
7	Qingdao	China	265,020
8	Qinhuangdao	China	245,964
9	Hong Kong	China	245,433
10	Busan	South Korea	243,564
11	Dalian	China	222,859
12	Nagoya	Japan	215,602
13	South Louisiana	United States	207,785
14	Shenzhen	China	199,190
15	Kwangyang	South Korea	198,190
16	Houston	United States	196,014
17	Antwerp	Belgium	182,897
18	Chiba	Japan	169,202
19	Ulsan	South Korea	168,652
20	Kaohsiung	Taiwan	149,225
21	New York/New Jersey	United States	142,614
22	Yokohama	Japan	141,758
23	Hamburg	Germany	140,923
24	Incheon	South Korea	138,139
25	Port Kelang	Malaysia	135,514

Source: American Association of Port Authorities

In terms of scale when measure by container traffic only, the top world ports include only LA/LB. Note that during the recent economic slowdown in 2008 the US port also slowed down. Yet, China and Arab ports grew quickly. China continued to fuel is economic growth with exports to the remainder of the world and Arab oil products began to utilize containerization for not only liquid product, but also oil based products like plastic resin.

Figure 41 Top 20 World Container Ports by TEUs

Rank in 2008	Port name	Country	2007	2008	Percent change, 2007-2008
1	Singapore	Singapore	27,932	29,918	7.1
2	Shanghai	China	26,150	27,980	7.0
3	Hong Kong	China	23,881	24,248	1.5
4	Shenzhen	China	21,099	21,414	1.5
5	Busan	South Korea	13,270	13,425	1.2
6	Dubai	United Arab Emirates	10,653	11,828	11.0
7	Ningbo	China	9,360	11,226	19.9
8	Guangzhou	China	9,200	11,001	19.6
9	Rotterdam	Netherlands	10,791	10,800	0.1
10	Qingdao	China	9,462	10,320	9.1
11	Hamburg	Germany	9,900	9,700	-2.0
12	Kaohsiung	Taiwan	10,257	9,677	-5.7
13	Antwerp	Belgium	8,177	8,664	6.0
14	Tianjin	China	7,103	8,500	19.7
15	Port Klang	Malaysia	7,120	7,970	11.9
16	Los Angeles	United States	8,355	7,850	-6.0
17	Long Beach	United States	7,312	6,488	-11.3
18	Tanjung Pelepas	Malaysia	5,500	5,600	1.8
19	Bremen/Bremerhaven	Germany	4,892	5,501	12.4
20	New York/New Jersey	United States	5,400	5,265	-2.5

KEY: TEUs = twenty-foot equivalent units. One 20-foot container equals one TEU, and one 40-foot container equals two TEUs.

Source: US DOT, Research and Innovation Technology Administration, Bureau of Statistics

In 2008, U.S. freight gateways handled more than \$3.4 trillion (in current dollars) of international merchandise trade. From 2007 to 2008, merchandise exports rose 12 percent, and imports rose 7 percent. Since 1990, the leading U.S. freight gateways have handled increasing volumes of freight as the movement of traded goods to and from the United States has expanded. From 1990 to 2008, the value of U.S. international merchandise trade grew from \$889 billion to \$3.4 trillion, increasing at an average annual rate of 8 percent. In inflation-adjusted terms (using chained 2000 dollars), this trade grew about 7 percent per year, from \$837 billion to more than \$2.6 trillion. During this period, the growth in merchandise trade spurred the development of

marine, air-cargo, and border-crossing facilities to connect domestic U.S. origins and destinations to markets abroad.

Nearly all international shipments require the use of more than one mode of transportation to reach their final destinations. For example, a shipment of imported goods arriving at a maritime port is transferred to rail or truck to continue its journey. Railroads tend to carry commodities long distances at low prices, while trucks often carry commodities shorter distances and more quickly.

Waterborne vessels account for more U.S. international trade, both in terms of tonnage and value, than any other mode—78 percent of the weight and 45 percent of the value of U.S. merchandise trade in 2007. Water transportation is less dominant in terms of value because high value-per-ton commodities often move by air and truck, particularly in U.S. trade with Canada and Mexico.

Intermodal rail traffic—the transport of containers or truck trailers by rail—has significantly increased during the past two decades.

Trends in Outsourcing

An important segment of the movement of U.S. international freight is the third-party logistics providers (3PL) industry. The Council of Supply Chain Management Professionals defines third party logistics as “outsourcing all or much of a company’s logistics operations to a specialized company.” Such outsourcing, allows shippers to focus on their core business activity while entrusting transportation, warehousing, customs-related, and other value-added activities to specialists able provide such services. In the United States, the use of 3PL providers by both large and small businesses has increased over time. The third-party logistics providers (3PL) industry could be categorized into asset-based and nonasset-based companies. Asset-based 3PLs own their own trucks and distribution centers. They are more suitable for large corporations requiring long-term contracts and value-added international transportation management services (Cain 2007). Asset-based 3PLs often work in conjunction with freight forwarders. Nonasset-based 3PLs do not own the vehicles or equipment used in providing their services. These firms are the majority of 3PLs. They contract with trucking companies, other carriers, and distribution centers for whatever they need to fulfill their services. This provides them more flexibility than the asset-based firms and they are able to offer expedited and customizable supply chain solutions.

Over the past decade, many companies have turned to outsourcing services not core to their line of business (Capgemini et. Al. 2009). Transportation and warehousing are the two most frequently outsourced activities. Figure 43 summarizes the most common outsourced operations. Figure 44 shows the leading global 3PL providers in 2008. Note that CH Robinson Worldwide is Minneapolis based and is a non-asset based provider.

Figure 42 Outsourced Logistics Services for US Companies (percent of outsourced operations - global and US)

Logistics activity	All regions	North America
Domestic transportation	86	75
International transportation	84	70
Customs brokerage	71	73
Warehousing	68	71
Forwarding	65	61
Cross-Docking	39	40

Figure 43 Top 15 Global Third Party Logistics Providers 2008

Providers	Gross revenues (millions)
DHL Supply Chain & Global Forwarding	37,100
DB Schenker Logistics	21,000
Kuehne & Nagel	20,087
Nippon Express	19,014
Panalpina	9,855
CEVA Logistics	9,304
UPS Supply Chain Solutions	9,055
C.H. Robinson Worldwide	8,579
DSV Solutions Holding A/S	7,094
Geodis	7,000
Agility	6,474
SDV International Logistics	5,851
Sinotrans	5,743
Expeditors Int'l of Washington	5,634
DACHSER GmbH & KG	5,292

SOURCE: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, based on Armstrong & Associates, Inc. A&A's Top 50 Global Third-Party Logistics Provider (3PL) List, available at 3plogistics.com as of Nov. 1, 2009.

In summary, Global trade is very dynamic with industry-wide changes that continue to influence and shape the global freight industry. The principal forces that are likely to affect future international merchandise trade and freight movements include the following:

- Changes in U.S. reliance on imported consumer products,
- China's expanded role in the world economy and global trade,
- Fluctuations in fuel prices and transportation costs,
- Environmental concerns, and
- Rise in Internet shopping and on-demand deliveries.

These global forces and the pace of U.S. reliance on imported consumer products may affect the movement of freight from, to, and within the United States. Increased freight movements resulting from growth in worldwide merchandise trade could affect U.S. freight gateways and the relative dominance of particular seaports, airports, and land border crossings.

Like other leading world economies, the United States has seen its domestic economy shift from manufacturing and agriculture to an emphasis on service and information industries (USDOT FHWA 2007a). As the output of the U.S. information and service sectors expanded, American demand for consumer goods continued to increase steadily over the last two decades (Moran and McCully 2001). At the same time, U.S. businesses outsourced more parts and finished products from trading partners around the world. Together, those trends led the United States to rely more significantly on imports of consumer goods to meet growing domestic demand for manufactured products. A resumption of growth in U.S. demand for foreign consumer goods would spur an increase in international freight handled by U.S. gateways.

As the world's largest developing economy, China has emerged as a significant force in global trade. Since China opened its markets, its economic impact in the world has expanded rapidly. During the past two decades, China increased its industrial output and became the world's top manufacturer (CRS 2007). In 2008,

China was the United States' second leading trading partner. China was also a top trading partner for the world's other developed economies, including Japan and the European Union. Continued growth in China's economic position, coupled with its continuing demand for raw materials and parts from around the world, will significantly fuel growth in global merchandise trade and freight movements.

In 2007 and 2008, concerns about increased fuel prices and transportation costs emerged as oil price fluctuations seriously impacted freight carriers. When fuel prices rise, transportation costs become more important relative to the cost of inventory or shipping (Hummels 2009). If wide fluctuations in fuel prices continue in coming years, they could have the effect of reconfiguring global production, distribution, and freight transportation services. Significant fluctuations in world fuel prices could seriously affect the financial performance of freight carriers engaged in international trade, and could also change industry alliances and recent patterns of carrier cooperation.

While freight transportation is essential to continued economic growth, like other industrial activities it can have an unintended and negative impact on environmental quality (USDOT RITA BTS 2008). Some of the most prominent environmental concerns surrounding freight transportation include the following:

- *Climate change.* Transportation is the second-largest source of greenhouse gases, accounting for a significant proportion of the world's carbon dioxide emissions.
- *Pollution, water, and air quality.* Pollutants produced through the operation of trucks—such as carbon monoxide, ozone, nitrogen oxide, and sulfur dioxide—contribute to climate change and harm human health. The use of larger maritime vessels increases the need for harbor dredging and increases the amount of ballast water produced, a factor that can help introduce non-indigenous aquatic species into waterways.
- *Land-use compatibility around maritime ports.* Increased port traffic exacerbates congestion on landside transportation systems, increasing vehicle delays and emissions. Global and national actions aimed at mitigating these environmental impacts could potentially affect the worldwide freight industry in terms of future technology adoption, performance, and growth.

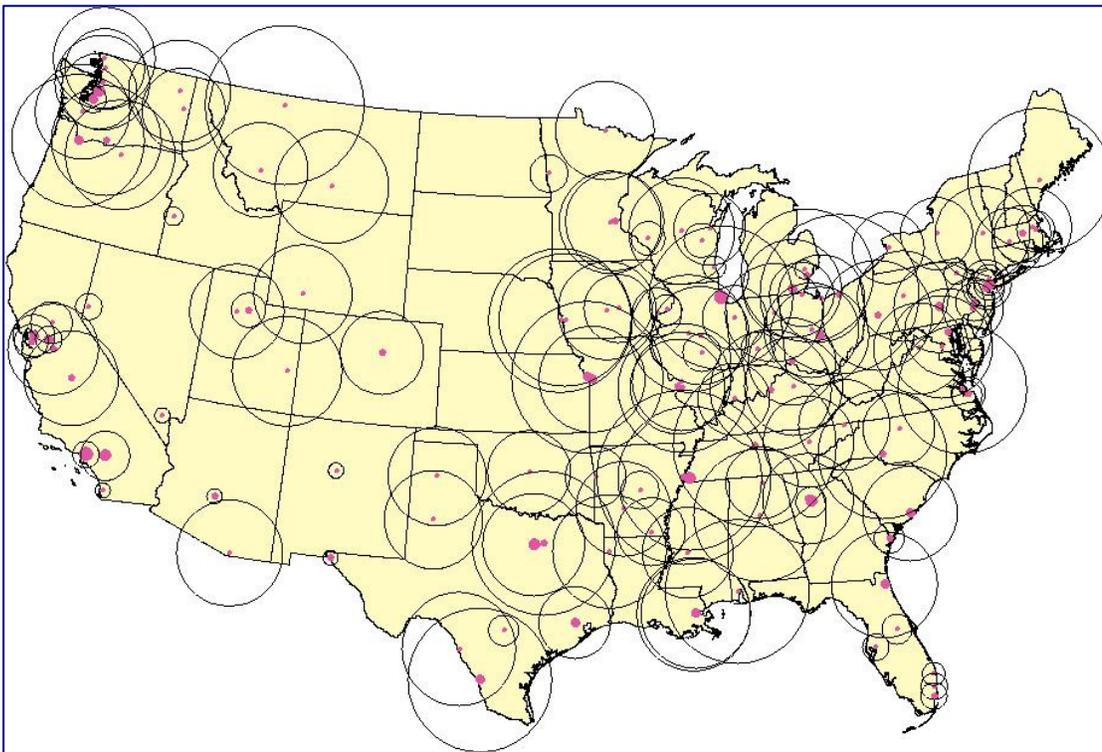
The continued popularity and acceptance of Internet shopping, coupled with increased adoption of just-in-time inventory management by shippers globally, has had an impact on how freight moves. Internet shopping requires carriers to deliver goods to end users rather than to intermediaries, resulting in overall growth in direct shipments to customers. Together, these trends have increased the number of shipments, particularly

small shipments, that carriers handle, and expanded the number of links in the freight supply chain that are needed to deliver goods to their final destination.

In short, expect to see leading import retailers and freight consolidators continue to seek more cost effective solutions that will drive competitive advantage. Likely trends will include smaller distribution centers located near to rail intermodal terminals. In terms of size, the trend will be away from serving the nation with two or three center and toward centers with 2-300,000 square feet. The consolidating third party logistics (3PL) provider can however, utilize an efficient location to serve multiple receivers of cargo in a larger facility. This allows the 3PL to reduce cost through scale while still sizing appropriately for the markets served within shorter drays.

Figure 44 Dray Range of IMX Terminals indicates the optimal distribution radii for distribution centers based on population served. It is used by rail intermodal companies to indicate an appropriate array and penetration of terminals to maximize overall market penetration.

Figure 44 Dray Range of IMX Terminals



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