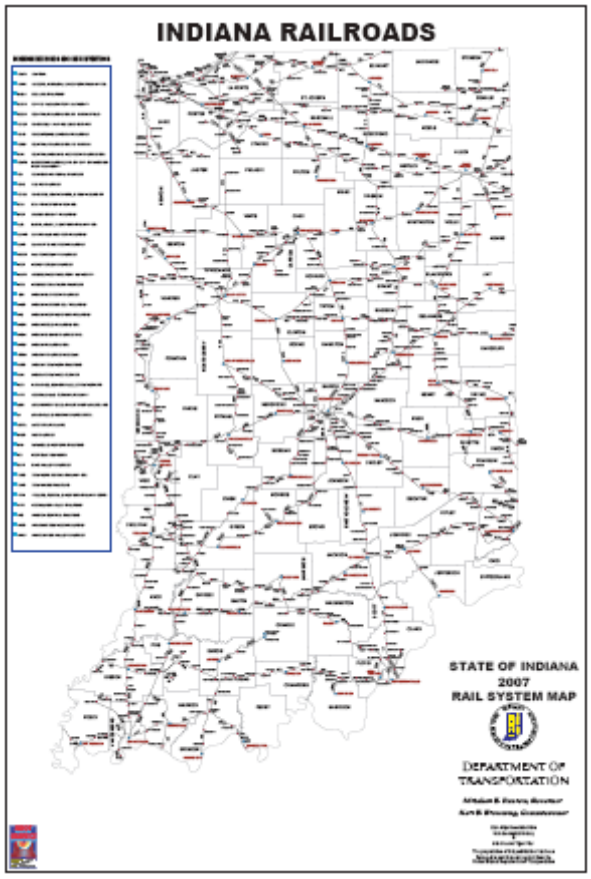
A Rail Strategy for Indiana

Prepared for Central Indiana Corporate Partnership



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Prime Focus LLC

Libby Ogard
Prime Focus LLC
918 Fox River Drive
DePere, WI 54115
920-217-7222
logard@new.rr.com

Forward

This paper was commissioned to help identify opportunities and strategies to improve intermodal rail service for Central Indiana. Indianapolis is strategically located at the crossroads of North America, 65% of the U.S. population within a day's drive. Fedex operates the world's second largest air freight hub in the world and brings in important time sensitive and high value cargo to Indiana. Indianapolis has abundant warehouse space and is the home for many distribution centers which support the Nation's top 20 importers. Indiana's highway infrastructure links important auto manufacturing suppliers in Michigan and Indiana to the new auto manufacturing facilities in Alabama for notable foreign auto makers.

The sale of Conrail left Indianapolis with an intermodal freight terminal in Avon, IN. This facility is connected to the Port of NYNJ but is outside of the CSX's primary intermodal network. Much of the import cargo from China and the Asia moves to Chicago and then comes in by truck to Central Indiana. This results in increased truck flows from I-80, I-90/94, I-294 to Northwest Indiana and I-65. Nearly 40% of the traffic on the interstate network in Northwest Indiana is truck traffic.

The goal of this report is to identify strategies to improve rail intermodal service to the West Coast and improve global trade connections.

Intermodal Economics

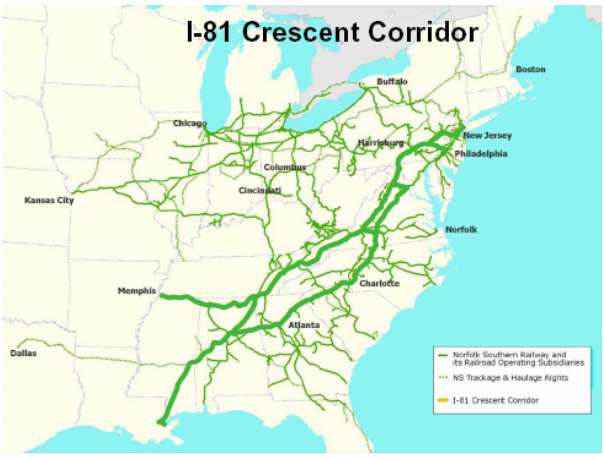
The intermodal freight business has been around since the mid fifties when Southern Pacific Railroad began experimenting with moving truck trailers on rail flat cars. This business was originally conceived to compete with long haul trucking companies. The railroads owned the trailers, developed the terminals and sold service through a group of intermediaries called Intermodal Marketing Companies or "IMC's". In the early years of service there were more than 300 terminals and nearly three times that many intermodal marketing sales agents. Intermodal service was originally integrated into carload service in areas where density was low. By the mid 80's with deregulation, intermodal service began to expand dramatically. Carriers had enough density to run dedicated trains between intermodal terminals and this allowed the railroads to scheduled service to meet "truck like" customer demands. Intermodal trains were lighter than traditional carload trains and began to run on different rail routes to avoid the longer, slower freight traffic.

In the mid 80's doublestack service began with the invention of doublestack well cars. This allowed the railroad to load two containers on one platform slot which effectively doubled the revenue for each train. These trains could now more efficiently handle import cargo in ocean containers, but it required many carriers to "clear" their tunnels and bridges to accommodate 20'6" train heights.

This was an expensive proposition and led to the further rationalization of intermodal rail routes. Double Stack train corridors are were established to accommodate this traffic.

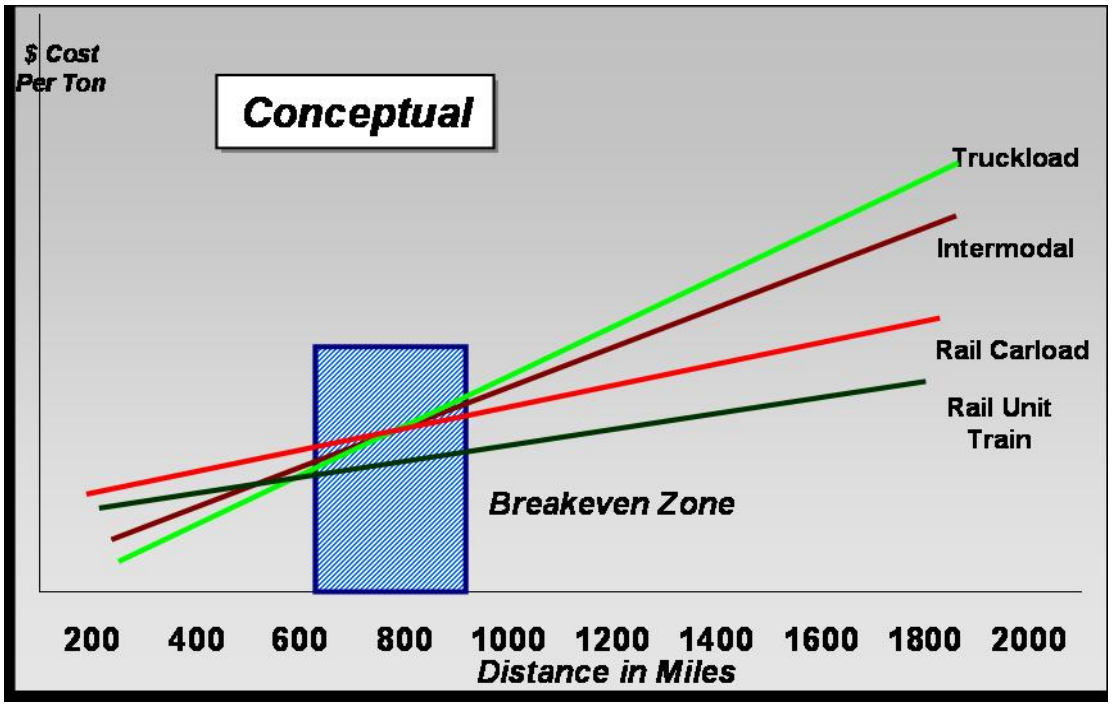
States like Pennsylvania and California realized that tunnel clearance was important to ensure international trade development and both states were involved in tunnel clearance programs to promote freight mobility. Today the concept has become more popular with entire corridor projects being crafted to accommodate fast, efficient international trade.

Four corridor programs which have been developed in the past few years have aggressively bundled highway, rail and marine projects, funded with public private partnership programs. These examples include: the Alameda Corridor from the Ports of San Pedro Bay to the inland empire of California; the Heartland Corridor from Norfolk, VA to Columbus, OH, the Trans Texas Corridor which bridges the international border with key economic centers in Texas and the Crescent Corridor which links New York/New Jersey with Mississippi.



Geography

The intermodal business model historically has been defined by length of haul. The eastern and western railroads have somewhat of a disagreement over an exact number, given the differences in their networks and populations served, so many consultants summarized the model as somewhere between 500-700 mile, as a minimum length of haul. This rule of thumb has not survived the rail renaissance of the post 9-11 global trade explosion. Because of increased traffic and density the average length of haul is more than 1100 miles per shipment and each unit will touch two railroads.



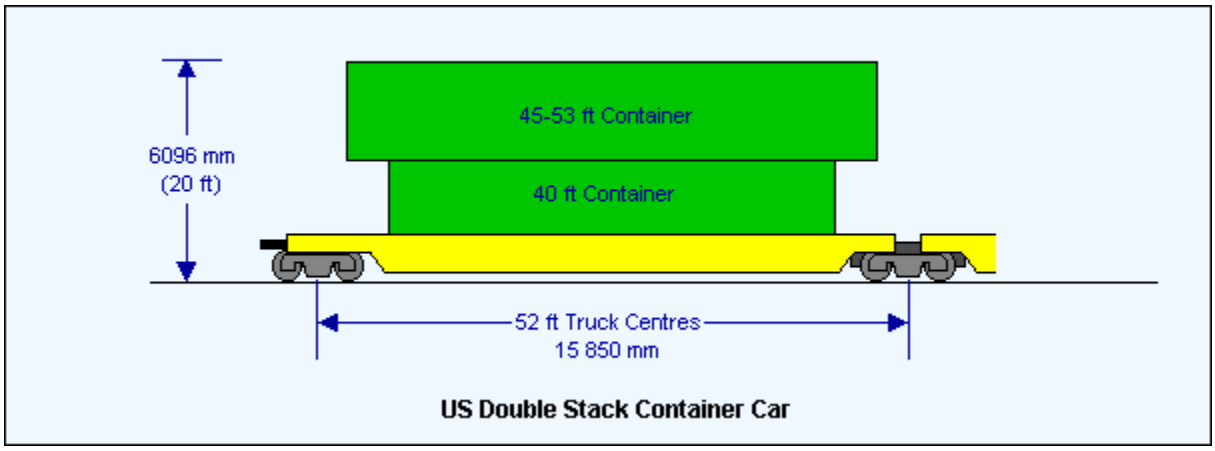
The new business model for many railroads today is to fill their network from end to end. This has resulted in a rationalization and a de-marketing of interior markets. This strategy has been realized primarily due to the large international trade volumes. A typical 12,000 TEU vessel discharges up to 65% of it's cargo at the first port of call. Roughly one third of this traffic will stay local to the port of call, with more than 60% moving inland by train. In the case of the on-dock rail system at the Port of Tacoma, this "average" vessel would generate 26 intermodal trains for inland points over a 2-3 day period of time. Given the train network most of this cargo is destined for the Chicago gateway and beyond.

Markets like Indianapolis are at a geographic disadvantage in this new model because Indianapolis is so close to the large railroad terminal end points in Chicago. With current railroad marketing strategies, end to end trains loaded at ports on the west or east coasts are full and make efficient use of railroad assets like infrastructure and crews. Carriers have multiple train starts to and from Chicago every day.

Density

Density matters and is the primary driver of railroad profitability. Trains need to be full; every platform needs to be loaded for maximum profitability and for train aerodynamics. Trains with empty slots or hitches are not as fuel efficient as fully loaded trains. Trains are often defined by siding length. Each carrier has somewhat different considerations by lane but an average rule of thumb is 9'000 feet. The Conrail network had sidings of 9,000 feet; some of the western roads are capped at 8,000'feet including the locomotive fleet.

Train economics for intermodal trains are often benchmarked at 250 (40' or 53') units. In the diagram below it shows and international 40' box on the bottom and a domestic 53' on the top. Some well cars for domestic lanes accommodate two 53' containers stacked one on top of the other. Some cars handle 10 – 40' boxes on a five well platform car.



US Double Stack Container Car

For a new market, or lane pair, a railroad will often want to validate that there are 200-250 boxes per day both inbound and outbound to justify a train start on a congested network.

Each train must be at least one signal block behind the train ahead of it. A block represents the distance a train would need to stop in order to not hit the train in front of it. The train flow along track is controlled by signals. A locomotive engineer moves a train from one block to the next when he received a green signal. If the train ahead of him is delayed or slowed, the block signal will not allow him to pass until the block ahead has been cleared. Train speeds vary based on tonnage and train type. Coal trains move slower than intermodal trains. Traffic mix and train types have a significant network impact on train operations. A train slot is a departure window across the network. Because of the growth in global trade, trains like trucks experience delays getting into and out of large cities and terminals due to network congestion. Train density matters and railroad profitability is based on how many trains the railroad can run across the network. Density is often referred to as the network's availability to handle more trains as well as how full each train is (i.e. 8,000 or 9,000 feet long).

Wholesale Business Model

Intermodal has been a wholesale product for the most part since it's inception in the 1950's. The Intermodal Marketing Company was responsible for finding the equipment, arranging a truck pick up and delivery and for the rail ramp to ramp rate. These costs would be bundled together for each customer often in one total door to door price. There were some exceptions, for example Gallo Wine had such a large volume of business they created their own IMC to handling their wine business in intermodal service. During the early 90's the railroads felt that there were too many IMC's and that there was too much effort spent managing all these sales agents. In an effort to streamline their administration efforts, new minimum sales volume rules were established. This reduced the industry to fewer and larger IMC's.

The next iteration in the wholesale model was to shift the IMC's efforts from being "Sales" or "Market" focused to one of operations management. In the 90's railroads supplied much of the container equipment for the domestic market. When markets were imbalanced (i.e. more loads in than out) the railroads would be forced to work around the empties and when a critical mass built up, would have to reposition them to markets were demand was greater. As rail volumes grew after 2004, the railroads made a strategic effort to push more of the "operations and load balancing efforts" to the IMC's. Some IMC's purchased equipment some did not. In the mid-late 90's the railroads began to market their services to truckload carriers. This business model was very attractive to the railroads because the trucking companies managed the customer service and the equipment balance. Trucking companies owned the boxes and paid for the empty repositioning when markets became imbalanced. Truckers were also faster to move equipment in and out of the terminals which resulted in better terminal fluidity for the railroads. Today many railroad carriers are trying to reduce their "pooled use" equipment fleets and are incenting truckers and IMC's to bring their own assets to the industry.

Asset Owners

Asset owners are generally referred to as the equipment owner. They might be the trucking company that loads a container for terminal to terminal movement. It might be an ocean carrier who provided an international container for inland transportation. Intermodal Marketing Companies are also considered asset owners if they bring privately owned or leased equipment to the railroad.

In market assessments it is increasingly important to know who the asset owners are and to survey their interest in allowing their equipment to move to certain rail terminals.

Asset owners typically have preferred carriers and rail rates. Because there are so few rail carrier left there are few asset owners who don't have rates with every railroad, but most have a dominate rail partner in the west and in the east.

The implications for Indiana are, depending on which rail partner is selected the asset providers will be different. For example Pacer Stack Train is a primary UP user, while J.B. Hunt is a dominate BNSF user.

How is Indiana Connected

Indiana ranks 9th in terms total railroad miles by state with a total of 4,165 miles, yet falls behind Ohio and Illinois in total miles. CSX and NS are the two dominate Class 1 railroads which traverse the state.

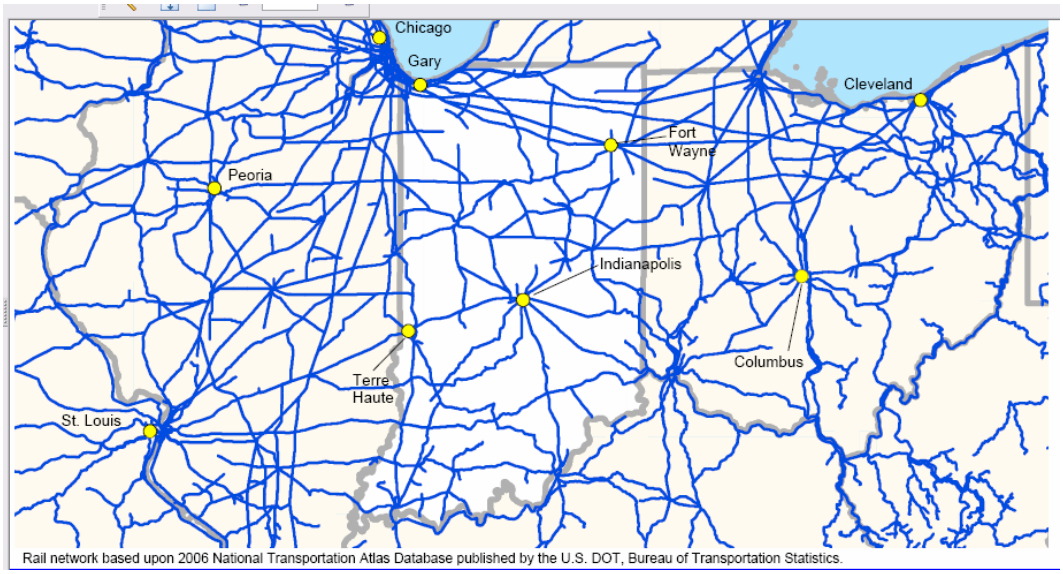
Number of Railroads by State: 2005

Rank	State	Number of Railroads*
1.	Pennsylvania	58
2.	Texas	44
3.	Illinois	41
4.	Indiana	40
5.	New York	36
6.	Ohio	34
7.	California	29
8.	Mississippi	26
9.	Alabama	25
9.	Arkansas	25

Total Rail Miles by State: 2005

Rank	State	Total Rail Miles**
1.	Texas	10,386
2.	Illinois	7,196
3.	California	5,791
4.	Ohio	5,354
5.	Pennsylvania	5,002
6.	Kansas	4,878
7.	Georgia	4,738
8.	Minnesota	4,599
9.	Indiana	4,165
10.	Missouri	4,096

CSX and NS both have dense east-west intermodal corridors which are the primary intermodal corridors which link eastern ports and Chicago. Chicago has been touted at the world's third largest container port based on the number of container lifts reported by each carrier. Intermodal terminals are typically at least 250 rail miles apart from one another, on the same rail network. Competing carriers may have multiple terminals in close proximity to each other.



The American Association of Railroads

Intermodal

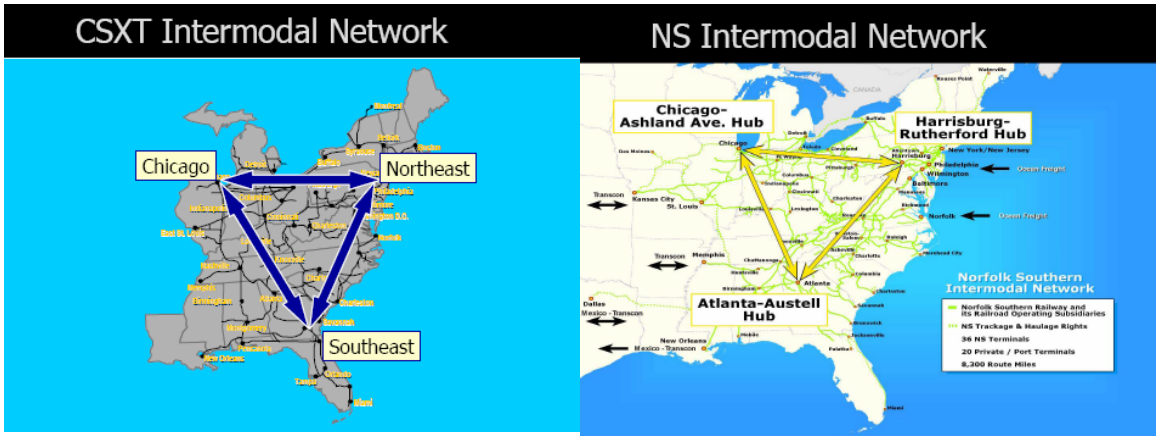
Intermodal terminals are predominantly located on Class 1 carriers. The maps below were taken from the two dominant Class 1 railroads in Indiana. These maps illustrate the dominant intermodal corridors for each company. Both carriers have terminals located

outside these triangles, but these locations are generally considered secondary markets. In carrier maps Indianapolis is shown as an interior market.

Markets located off the core network represents an operational problem for both carriers. Intermodal trains tend to run at a higher average speed and are typically the longest trains a railroad will run. Mixing intermodal and carload trains in a service lane typically ends up reducing intermodal train velocity, which often translates to slower ramp to ramp service which may not be truck competitive in short haul lanes. Typical intermediaries sell intermodal service as “truck transit time plus one day”.

The current intermodal business model favors full trains moving between dense markets from one end of the franchise to another. This strategy maximized railroad profit because rail assets (track, rolling stock and crews) get the highest utilization. In the eastern rail networks, full trains can be built from Chicago to/from Atlanta or Chicago to/from New York due to the large consumer populations and distribution centers in Atlanta and New York. Secondary markets are frequently passed by if trains are running full.

A number of carriers have eliminated terminals in secondary markets in recent years in an effort to denseify the remaining trains. In some cases incremental business was lost, but the carriers felt that the network and terminal efficiencies justified the action. In a recent interview with BNSF they mentioned that if they are running full trains between LA and Chicago three to four times per day, and if a new terminal came on line which would reduce volume in this lane by say 15-12% this could reduce rail linehaul and terminal efficiencies in Chicago.

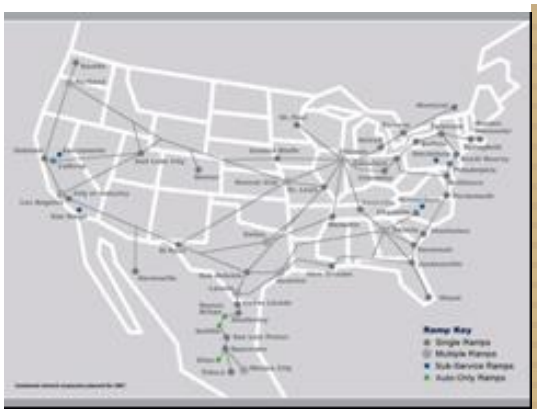


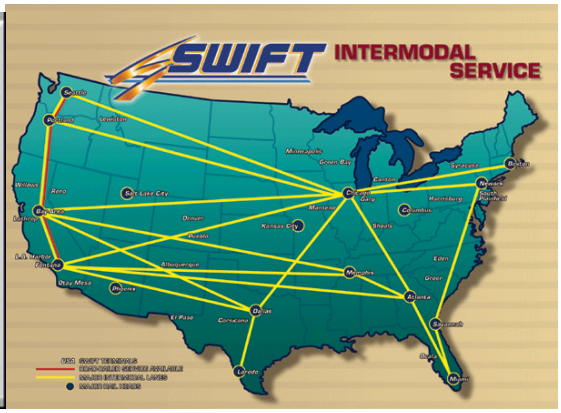
Intermodal Terminals

The map below is posted on the Intermodal Association of North America website. This illustrates all the intermodal terminals across the entire rail network. While these terminals all part of the National Intermodal network, not all users or asset owners route freight over all of these locations.

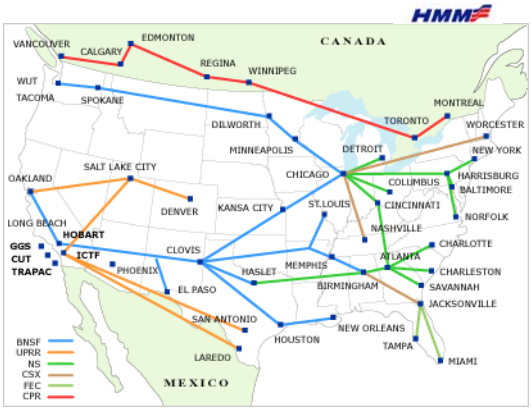
Truckers such as Swift, and container train operators such as Pacer Stacktrain do not use every terminal in the network. They tend to be selective, using only those terminals which result in the best mix of equipment balance (loads both in and out of a market) and price/service considerations. Neither of these intermodal equipment owners use Indianapolis. Drayage from Chicago to Indianapolis is approximately $300 each way.

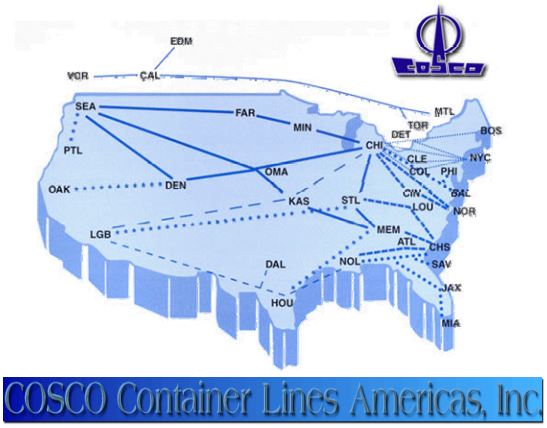
PACER STACKTRAIN
Celebrating Over 20 Years of Stacktrain Innovation





Ocean carriers such as Hyundai and Cosco make similar network choices.





Intermodal Industry Trends

Branded Rail Service

Several companies have purchased rail transportation from railroads and then bundled the service which they resell on a door-to-door or terminal-to-terminal basis. Pacer Stacktrain pioneer this branded service in the late 80's purchasing train load quantities from both eastern and western railroads, and in some high volume locations established dedicated steel wheel cross towns and/or private terminals such as the one in Kearny, NJ. These steel wheel cross towns in Chicago provided faster direct service passing through Chicago and allowed Pacer (formerly American President Lines) to provide 5 day transportation schedules from west coast port cities to New York and Boston. Pacer today owns domestic containers and sells domestic service via Intermodal Marketing Companies and also wholesales service to smaller ocean carriers for inland transportation.

Schneider National owns more than 40,000 trailers and has established a "proprietary" train service between Kansas City, KS and Marion, OH. The term "proprietary" means that only Schneider freight can move in this train service, other users and/or their competitors can not ride this same train. This is a high stakes move on behalf of the asset owner. The railroad company is paid for the train start whether or not there is a "trainload quantity" or not. Each train is priced at a fixed rate, the more containers which move on the train the lower Schneider's unit cost is. The railroad is paid the same price regardless of the number of containers. A maximum train length is also part of this agreement.

Interviews with railroads and trucking companies feel that the concept is sound, but the ability to move a steady stream of traffic five days per week is a significant task. Several truckers speculate that Schneider is using Marion, OH as a load center simply to keep minimum train volumes constant. Some railroads feel that while it is a bold move, there may be other ways to achieve a similar outcome. CSX seems to like the idea. Some operational issues between the three carriers handing the business have had to be worked out. The train is still operating and Schneider has plans to replicate this service in several other corridors, although the launch dates have been delayed due to softening global trade volumes.

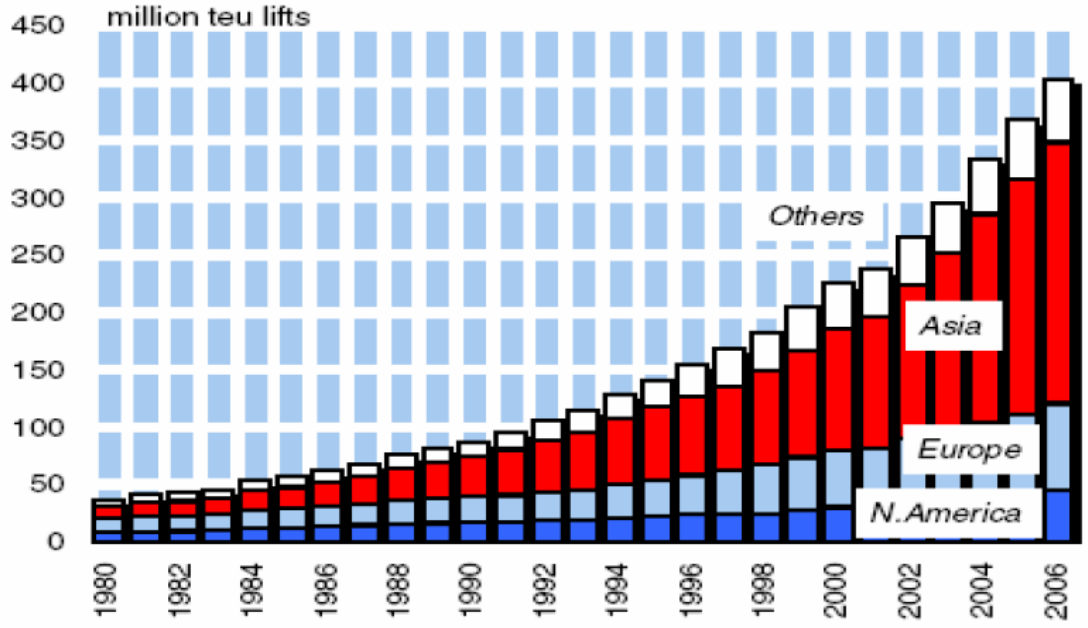
Container Ports and Mega ships

The chart below shows the top twenty container gateways and the absolute and percentage change in containers between 2005-2006. Los Angeles/Long Beach are the largest volume ports in North America in sheer volume, but due to port diversification strategies, east coast ports are showing higher growth percentages.

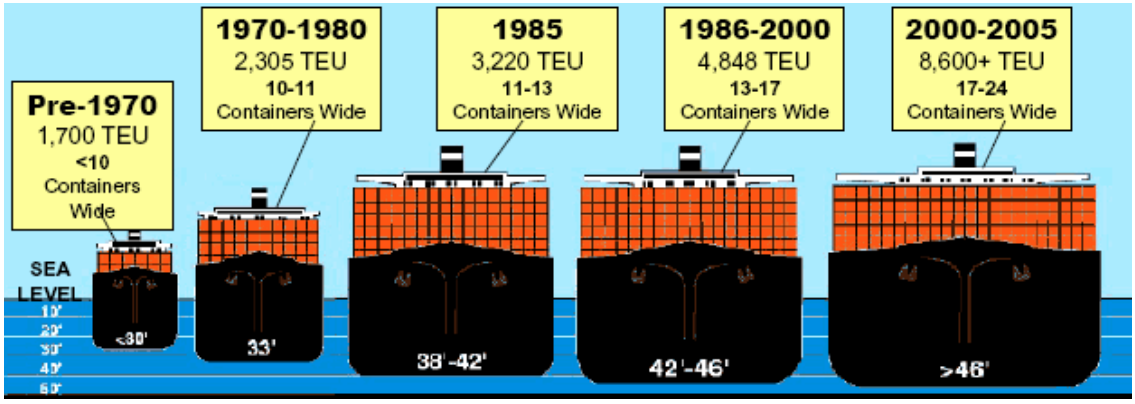
This trend is significance to Indianapolis. Indianapolis has a direct rail route for container service between Central Indiana and New York. NYNJ is the third largest container port in the U.S. and is growing at nearly 7%. Savannah, GA is the other east coast port posting impressive growth statistics. Large big box retail companies have moved significant operations to Savannah. Evansville and Terre Haute would have good access to trains which would connect Savannah, GA.

Southern California will remain as an important gateway given the trade volume with Asia. When the Panama Canal expansion is complete around 2011 or 2012, there will still be more freight than Southern California can comfortably handle given population and trade growth projections.

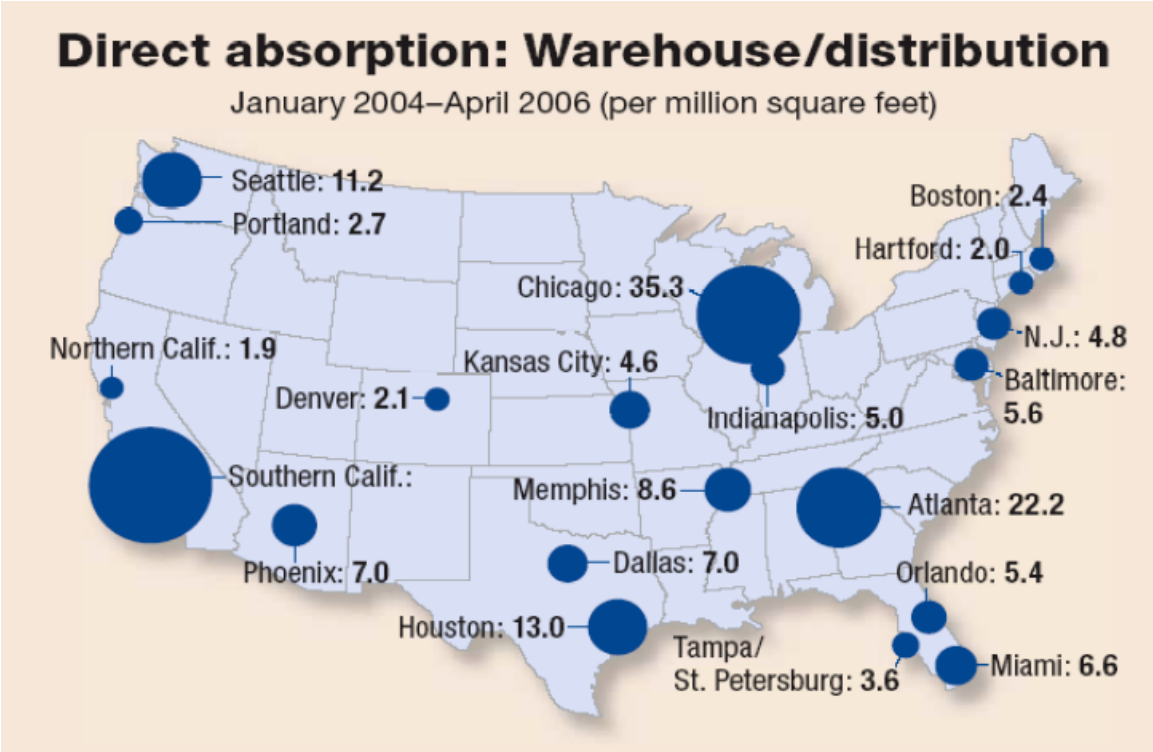
2006 Rank	Port (State/Province)	Country	2006	2005	Absolute Change	Percent Change	2005 Rank
1	Los Angeles (CA)	United States	8,469,980	7,484,624	985,356	13.2%	1
2	Long Beach (CA)	United States	7,289,365	6,709,818	579,547	8.6%	2
3	New York/New Jersey	United States	5,092,806	4,792,922	299,884	6.3%	3
4	Oakland (CA)	United States	2,391,598	2,272,525	119,073	5.2%	4
5	Vancouver (BC)	Canada	2,207,720	1,767,379	440,351	24.9%	10
6	Savannah (GA)	United States	2,160,113	1,901,520	258,593	13.6%	9
7	Tacoma (WA)	United States	2,067,186	2,066,447	739	0.0%	6
8	Hampton Roads (VA)	United States	2,046,285	1,981,955	64,330	3.2%	8
9	Seattle (WA)	United States	1,987,360	2,087,929	-100,569	-4.8%	5
10	Charleston (SC)	United States	1,968,474	1,986,586	-18,112	-0.9%	7
11	San Juan (PR) (fy)	United States	1,729,294	1,727,389	1,905	0.1%	11
12	Houston (TX)	United States	1,606,360	1,594,368	11,994	0.8%	12
13	Montreal (QU)	Canada	1,288,910	1,254,560	34,350	2.7%	13
14	Manzanillo (COL)	Mexico	1,252,215	872,569	379,646	43.5%	16
15	Honolulu (HI) (fy)	United States	1,113,789	1,077,468	36,321	3.4%	14
16	Miami (FL) (fy)	United States	976,514	1,054,462	-77,948	-7.4%	15
17	Port Everglades (FL) (fy)	United States	864,030	797,238	66,792	8.4%	17
18	Jacksonville (FL) (fy)	United States	768,239	777,318	-9,079	-1.2%	18
19	Veracruz (VER)	Mexico	671,281	620,858	50,423	8.1%	19
20	Baltimore (MD) [1]	United States	627,947	602,475	25,472	4.2%	20



New Mega-ships are becoming increasingly popular due to the fact that their unit cost per shipment can be dramatically lower than current vessel operating costs. They will require greater depth than many ports today can handle which will result in a further segmentation of ports and port services. Large ships need large population centers and inland support centers.



Large ships mean more containers headed to warehouses. The map below shows where the newest warehouses are sprouting up. As one might assume, the coastal areas of North America is already densely populated, finding land parcels large enough to accommodate 750,000 – 1,000,000 square feet of warehouse is difficult to find. Because of rail access, many inland locations are growing and incenting these types of developments in hopes that freight transportation and distribution jobs will follow.



Integrated Intermodal Logistics Centers

CSX has undertaken two large intermodal centers in the past two years. Chambersburg PA is located along the I-81 corridor. It is due to open in September 2007 this site is anticipated to handle more than 100,000 lifts per year. It has 20,700 feet of track which occupies 114 acres close to Interstate Highway 81.

A second CSX project is located in Florida. Winter Park, FL is located in a high growth area outside of Orlando FL; this site is approximately 1,250 acres and will create more than 8,500 jobs with an anticipated payroll of $282.2 million annually. Local officials estimate a $10 billion impact over a 10 year time frame. The project should be completed in 2008/2009. No volume estimates were identified although comparisons were drawn to Alliance, Texas in terms of an operation which handles approximately 600,000 lifts per year.

Construction at Joliet, IL has not stopped since it opened in 2001. Union Pacific will be building at this site in the near future. Crete, IL is in negotiations with two railroads to develop a large site. Reportedly CSX and UP have been contacted about this site which is being developed by CounterPoint Properties. Rochelle has been discussing expansion plans with another carrier although no plans have been made public.

Potential Intermodal Sites

For the past five to seven years there has been discussion on an intermodal multipurpose facility in Indiana. In the past sixty days there has been an announcement in nearly every corner of the state, about some form of intermodal development.

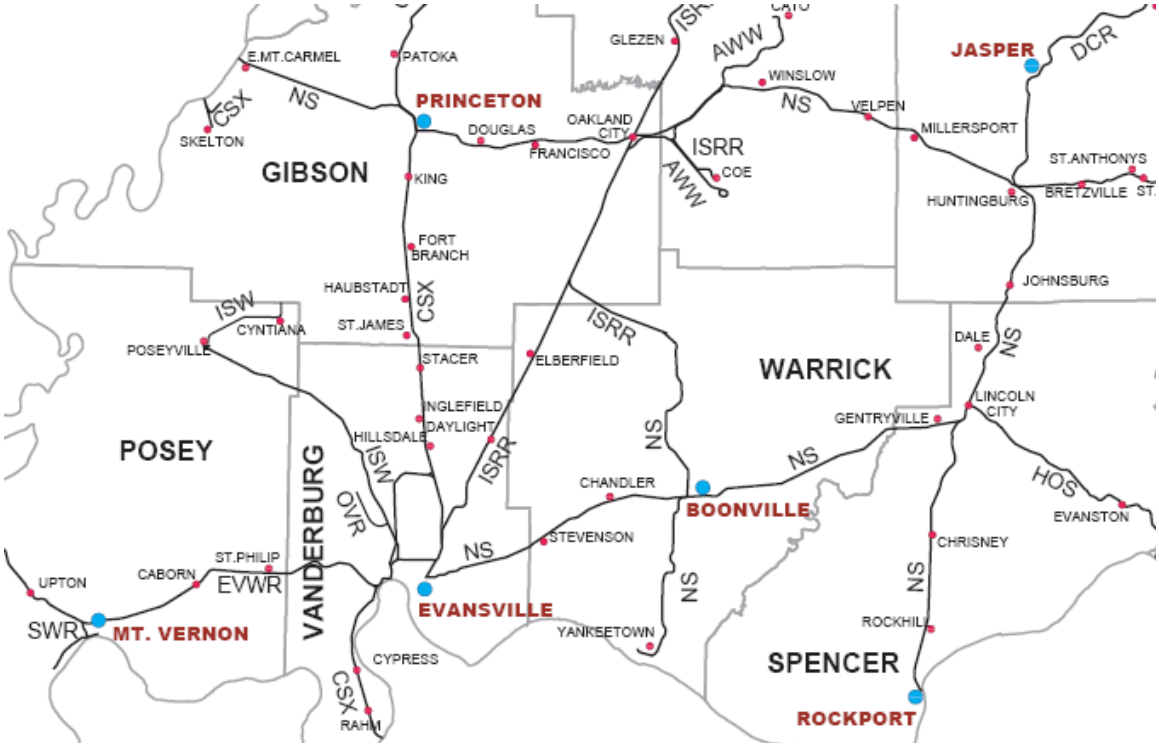
Several years ago the Ports of Indiana expanded the definition of “Port” to include any point were freight is transferred from one mode to another. This action opened the way for a funding program which may be used for intermodal terminal development financing. Shortly after the BNSF and UP each announced their plans for new terminals in Joliet and Rochelle, IL the planning wheels began to turn in Indiana. The Ports of Indiana designed a set of site criteria to help identify suitable locations. This criteria listing was requested but never provided. Several attributes such as access, land topography and facility size were mentioned when the Port was contacted, but no documents were distributed.

There have been at least seven initial investigations which include Evansville, Elkhart, Terre Haute, Kingsbury, Fort Wayne, Connersville, IN and the potential expansion of the Indianapolis facility.

Evansville, IN

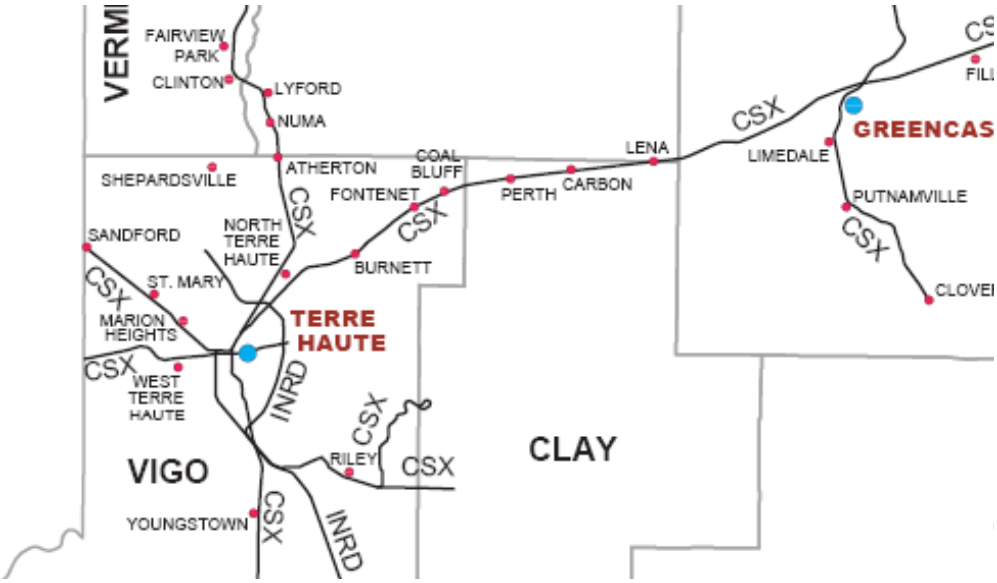
Evansville Indiana completed a study in 2006 which looked at a new center in one of three locations in Southwest Indiana. The primary purpose of the study was to identify demand to support a new terminal which might have access to both CSX and NS. It was noted that CSX service to and from Evansville had been dramatically changed, when

trailer service and lanes to the Southeastern U.S. points were discontinued. Of the three sites identified, today only one site remains viable due to other developments which have taken place. The last remaining site is approximately 24 miles North of Evansville and was designated at the most advantageous location. It is served jointly by NS and CSX and is adjacent to the Toyota facility in Princeton, IN. This facility was projected to handle 75,000 – 150,000 lifts per year.



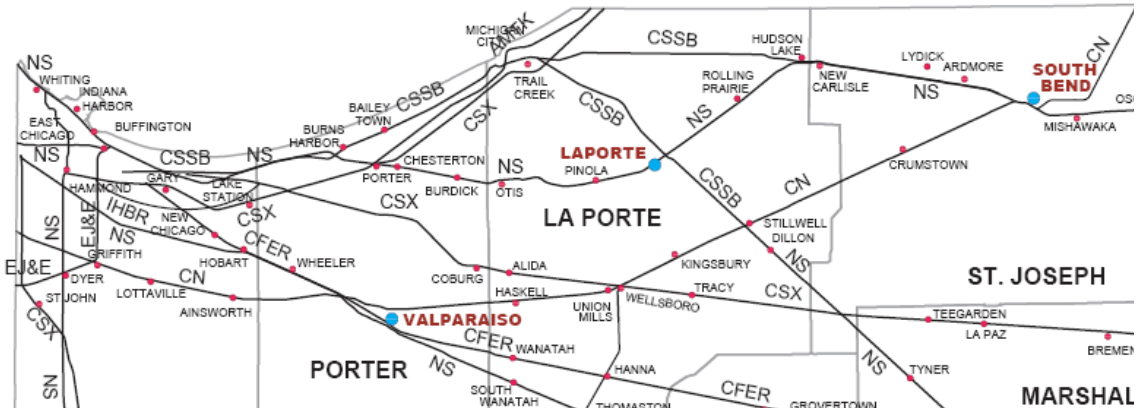
Terre Haute, IN

The Hoosier Lift concept was initiated in the Terre Haute area because of the number of grade crossings which were creating congestion and safety issues around the college and in the downtown area. Discussions were undertaken to look at rerouting the CSX to by pass some of these problem chokepoints and bottlenecks. The first planning effort ultimately failed due to neighborhood objections. The second attempt to reroute the main rail corridor will require substantial new track investment which CSX seems reluctant to support. The design for the potential terminal has many positives attributes in terms of access to I-70 and available land. The project was identified as a topic for the Indiana General Assembly Summer Transportation Study. The initial master plan was completed by the Corradino Group. A report is expected this month.



Union Mills, IN

Union Mills, IN is a project which has been championed by developer's Cressy and Everett. This facility would provide a terminal served by multiple carriers, located on Canadian National in close proximity to CSX this option might have interline access via a haulage rights with CSX/ BNSF. At this time BNSF officials seem somewhat reluctant to invest in this site as they feel it is not far enough away from their site in Joliet and ultimately does not give them market access to the Lehigh Valley which is a current target for them. Former Governor Joe Kernan was recently announced as a consultant for the project.



Elkhart, IN

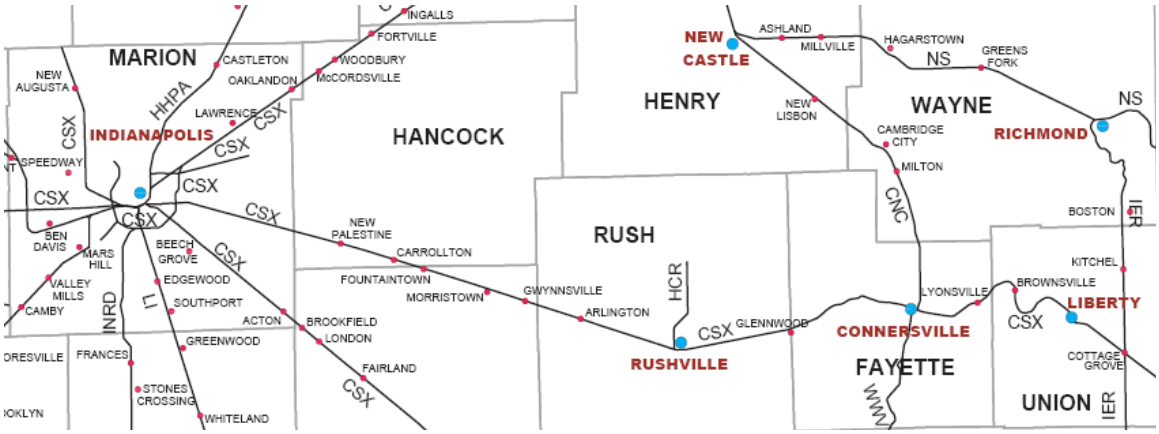
Elkhart, IN explored a concept to expand the NS classification yard area to support an intermodal terminal but dropped the initiative at a relatively early stage of the investigation. Initial concerns were about extra truck traffic and environmental issues.

Fort Wayne, IN

Fort Wayne has announced a 300 acre facility to be served by a short-line RailAmerica (shown as CFER). This initiative has been led by an NVOCC (Non-vessel operating common carrier) primarily for the development of international business. An NVOCC consolidates many small international shipments into one container. A small group of shippers has been formed with an emphasis on teamwork and technology. No lift counts have been specified, an analysis is due out shortly. Norfolk Southern already serves this area with Triple Crown Services. Triple Crown is focused on domestic traffic. RailAmerica also operated a terminal in Remington, IN which is no longer in operation.

Connersville, IN

Connersville, IN located in Fayette County is seeking $500,000 to fund a study to establish a facility jointly served by NS (via CNC short line) and CSX. The site is close to a 75 acre parcel which falls between the rail line and airport property. It is a rural location which is in close proximity to Indianapolis and Cincinnati.



In summary, intermodal economics and market volume will ultimately determine if any one or more of these centers is viable

Highway Miles	Kansas City, KS	St Louis, MO	Chicago, IL	Louisville, KY	Columbus, OH	Savannah, GA
Union Mills, IN	581	337	68	288	258	919
Fort Wayne, IN	615	372	162	238	161	894
Indianapolis, IN	**486**	**243**	**183**	**114**	**176**	**775**
Terre Haute, IN	412	168	199	185	253	753
Connersville, IN	547	304	252	128	134	734
Evansville, (Princeton) IN	422	170	282	117	322	671

In this collection of choices, two sites are on the CSX North-South core intermodal lane (Evansville and Terre Haute). Two sites are along the Northern tier preferred intermodal rail corridor, which is one of the busiest in the nation (Union Mills and Fort Wayne). Two sites will be served by short lines (Connersville and Fort Wayne). Indianapolis is in the largest population center, although you could argue that Union Mills is part of the Chicago catchment area. Neither Indianapolis nor Connersville are located on NS's or CSX's primary intermodal network. Union Mills will be located on the CN which is working diligently on a new deep water port in Prince Rupert. CN has one of the lowest operating costs of any North American railroad. CN recently worked with CSX on a terminal expansion project in Memphis. Two locations in Indiana already host intermodal terminals (Indianapolis and Evansville). Evansville already has a terminal but is facing growing pains at this site. Four of the proposed sites feature multiple carrier access, which while positive for shippers due to rail rate competition, always represents sensitive positioning strategies depending upon how the business will be divided. When two

carriers share a traffic base, it generally means the market must be larger to support two commercial efforts. Matching up two eastern railroad competitors is hard; matching a short line and a Class 1 may be difficult based on division of revenue. Matching up an eastern and a western carrier and/or the introduction of haulage rights is generally a positive development given the additional network reach.

Data to Support the Development

Transearch data from 2004 was used to identify traffic moving from Los Angeles to and from Indianapolis. This analysis looked at the mode of transportation for commodities listed with by a four digit standard transportation commodity code. The city areas were defined by BEA codes listed and generally represent the greater urban region.

Los Angeles to Indianapolis

		O-bea
D-bea	Data	160
67	Sum of Rail Carload	74,748
	Sum of Rail Intermodal	0
	Sum of Truckload Loads	89,528
Total Sum of Rail Carload		74,748
Total Sum of Rail Intermodal		0
Total Sum of Truckload Loads		89,528

Indianapolis to Los Angeles

		D-bea
O-bea	Data	160
067	Sum of Rail Carload	208,851
	Sum of Rail Intermodal	0
	Sum of Truckload Loads	39,477
Total Sum of Rail Carload		208,851
Total Sum of Rail Intermodal		0
Total Sum of Truckload Loads		39,477

Eastbound

In the tables above no intermodal traffic is reported. This is most likely due to the fact that most intermodal containers would be moved over the Chicago gateway to serve users in this lane. More than 25% of the inbound carload products are fertilizers followed by canned foods and miscellaneous products. Roughly half of the inbound truck traffic is plastic products, followed by electronics, and manufactured parts. These truckload products are probably time sensitive. Truck as a share of the total traffic in this lane is low which would indicate that there is probably a significant share of freight which has

already converted to intermodal service and is moving to terminals in states other than Indiana.

Westbound

The number of rail cars is substantial and would indicate that this is primarily domestic traffic moving westbound. To the extent that this freight could be containerized, this could be an opportunity for back haul freight. Typically low value raw materials move in carload quantities. The top three carload products are wet corn milling, steel and flour. More than 53% of the total westbound is agricultural in nature. Of the westbound truck products moving, more than half of the shipments include electronics, plastics, valves and fittings, equipment and warehouse supplies. These products are all types of products which could move in containers.

State to State Movement Analysis

To evaluate how much freight might move to a broader catchment area a larger geographic zone was selected. California was broken down into two regions to separate Ports of Northern California from Southern California.

Southern California to Indiana

		O-bea		
D-bea	Data	160	161	Grand Total
65	Sum of Rail Carload	451		451
	Sum of Rail Intermodal	0		0
	Sum of Truckload Loads	1,998		1,998
66	Sum of Rail Carload		0	0
	Sum of Rail Intermodal		0	0
	Sum of Truckload Loads		32	32
67	Sum of Rail Carload	74,748	0	74,748
	Sum of Rail Intermodal	0	0	0
	Sum of Truckload Loads	89,528	1,429	90,957
69	Sum of Rail Carload	10,784	0	10,784
	Sum of Rail Intermodal	25,563	0	25,563
	Sum of Truckload Loads	4,551	83	4,634
(blank)	Sum of Rail Carload			
	Sum of Rail Intermodal			
	Sum of Truckload Loads			
Total Sum of Rail Carload		85,984	0	85,984
Total Sum of Rail Intermodal		25,563	0	25,563
Total Sum of Truckload Loads		96,076	1,544	97,621

Origin BEA 160 (LA) and 161 (San Diego)
Destination BEA 65(Elkhart) 66 (Fort Wayne) 67 (Indianapolis) 69 (Evansville)

The table above shows that the majority of the freight moving between these two regions moves to Central Indiana. 25,563 intermodal loads were reported moving to the Evansville intermodal terminal. The freight mix was consistent with the city to city analysis.

Indiana to Southern California

O-bea	Data	160	161	Grand Total
65	Sum of Rail Carload	29,089		29,089
	Sum of Rail Intermodal	0		0
	Sum of Truckload Loads	3,534		3,534
66	Sum of Rail Carload		0	0
	Sum of Rail Intermodal		0	0
	Sum of Truckload Loads		97	97
67	Sum of Rail Carload	208,851	65	208,916
	Sum of Rail Intermodal	0	0	0
	Sum of Truckload Loads	39,477	455	39,943
69	Sum of Rail Carload	75,907	0	75,907
	Sum of Rail Intermodal	4,078	0	4,078
	Sum of Truckload Loads	6,783	173	6,955
Total Sum of Rail Carload		313,847	65	313,912
Total Sum of Rail Intermodal		4,078	0	4,078
Total Sum of Truckload Loads		49,793	725	50,529

OBEA 65(Elkhart) 66 (Fort Wayne) 67 (Indy) 69 (Evansville)
DBEA 160 (LA) 161 (SD)

The westbound state to state movement analysis indicates that Indianapolis or Central Indiana is responsible for the majority of the westbound traffic. Evansville, IN shows modest backhaul numbers in this lane.

In conclusion the data from 2004 does not confirm that there is sufficient volume to sustain a terminal of more than approximately 50,000 loads. This number was arrived at by looking at the “reported” intermodal volume and assumed approximately 12% of the truckload may convert to intermodal. The railroad industry talks about productivity in terms of lifts per terminal. A lift is typically associated with a revenue move.

The database seems to be under reporting intermodal for two reasons. In 2004 we know that CSX did approximately 24,000 lifts in Evansville, IN and another 25,000 – 30,000 lifts in Indianapolis. This combined volume should be in the neighborhood of 49,000 – 59,000 lifts per year. This report is capturing about half of the actual count. There are potentially two reasons for this. Empties may not be reported in the Transearch data base and any loads which move to intermodal terminals in Illinois (Chicago or St. Louis) are reported as Illinois intermodal loads. Counts may be off given that all intermodal loads begin with a highway pick up using a motor carrier.

To supplement the data a survey was designed to capture information about users and areas of potential interest.

Survey of Interest

To validate our anticipated volume hypothesis of 150,000 loads per year as a potential lift count, two surveys were completed. The first was targeted at Central Indiana Corporate Partnership members. The second survey was sent to 240 active logistics professionals in the state. 210 surveys were sent to logistics firms which advertised in the Ports of Indiana TDL Directory. A third survey was conducted via telephone and targeted asset owners and Intermodal Marketing Companies in the Upper Midwest.

Central Indiana Corporate Partnership Members

Twenty six members of the Central Indiana Corporate Partnership were surveyed. Many of the members were supportive of the concept and felt that access to intermodal rail was vital for the region. One member felt that the region had substantial untapped opportunity but they did not have any freight data to help validate this assumption.

Indiana Distribution Professionals

An electronic survey was designed to collect information about user's transportation needs and interests. The survey began with a letter of introduction describing the study. Twenty six questions were posed which covered four categories of inquiry:

Background – intended to profile the responder
Intermodal Service – intended to identify equipment and location preference
Rail Transload Service – intended to identify other rail access options
Future Direction – intended to capture input on development options

Two hundred and eight were sent to companies listed in the 2007 Indiana Logistics Directory. Two respondents opted out, eight responded. Two hundred and ten did not reply. Another two hundred and forty surveys were sent out to Council of Supply Chain Management Professional's who listed an office in the State of Indiana. Eleven responded to this survey. A total of 21 responses were collected.

The survey contained a letter of introduction stating the goals of the survey. Of the responses, 40% were involved in retail, manufacturing or agriculture and could be considered "users", 45% were involved in transportation services or warehousing and would be considered "service providers". Since intermodal is sold via a wholesale network both response types are important.

Of the companies who responded, 45% pay less than 5% of their cost of goods sold amount in transportation. This would indicate that most of the respondents were involved in transportation activities which may be considered regional or local. Roughly 89% of

the respondents spent less than $5 million on transportation services annually. Truck was the dominant mode used, although 42% of the responders had some intermodal transportation experience. When asked about what would cause a shift in mode used 46.7% would change mode of service if costs were lower. Other reasons for mode shift included change in suppliers or customer preference, and service improvement.

Most companies who responded to the survey control or specify the mode of transportation. Only 14% of the companies surveyed outsource the transportation decisions. When asked about average length of haul most users reported that their inbound length of haul was less than 700 miles, outbound shipments averaged slightly higher lengths of haul. Over 60% of the companies reported that they had good supply chain visibility for inbound and outbound shipments.

Respondents were asked to report all the intermodal terminals they used to route freight to or from their facility. 53% reported using Chicago as a hub; Indianapolis was the second most reported terminal. Fort Wayne and Cincinnati both ranked third and St. Louis terminal came in last place. 56.3% responders indicated that if a five day per week international service was available between the West Coast and Indianapolis they would use the service. 23.1% would consider using the service, mostly depending upon rates and service parameters. Only 6.3% indicated they would not use this service if offered.

The primary barriers to using intermodal service included:

- lack of service offered for important shipping lanes
- rail service to Indiana is not cost competitive
- lack of equipment in the market
- transit time was too slow
- service is not reliable

Users responding to the survey were primarily interested in 40’ international containers and 53’ domestic container equipment. BNSF was the carrier most users preferred from the West, CSX and NS were roughly tied for eastern carrier preference.

Carriers and Asset Owners

Carriers and Asset owners were interviewed. Most offer service to users in Indiana. Some have trucking terminals and/or equipment depots in the Indianapolis area. Most saw value in service that would by pass the Chicago congestion and provide faster service to Central Indiana, yet they were cautious to say that they could not commit to a dedicated “branded” train such as Schneider National did. Several carriers commented that they did not have enough equipment to support a significant share of a daily train, but would certainly use the service if it was available at competitive rates and service.

The problem with using Chicago as a load center is that many users felt that they could not schedule early morning deliveries due to the distance from the terminal. There was also concern that if the freight is not balanced it costs them more than $300 per unit to deadhead it back to Chicago empty. This is a significant barrier to entering a new market.

The consensus of the group was that Chicago rail terminals, while crowded, provide regular, frequent service to many destinations. There are synergies by having access to both Eastern and Western carriers in one location. And finally a perception that when railroads compete users get lower rates.

A Strategy for Central Indiana

Central Indiana is faced with a difficult set of circumstances. As a logistics hub for the Midwest, Indianapolis is home to nearly 30 million square feet of warehouse space with approximately another 30 million under development. Demographically Indianapolis is the twelfth largest population area in the United States. Based on the new Megatrends book, is on the fringe of the Great Lakes Horsehoe, which is one of the largest manufacturing areas in North America. Automotive companies have recognized Indiana's competitive advantages and have placed showcase facilities in the state which have become models for development. Toyota, Honda and Subaru are three examples of state of the art auto manufactures with significant facilities in the state.

Indianapolis is rated in a mid range for a Location Quotient (LQ) in the transportation industry. Yet surrounding counties have dramatic ratings. The LQ for a target industry employment measures the concentration of the industry in a local market. A high concentration would have an index greater than 5, with the United States as a total, being rated at 1.0. There is a greater risk in a local market for labor competition, as well as an unbalanced economy if the index is high. A concentration that is very low indicates that a market does not generally support the target industry and results in a higher risk of recruiting appropriately skilled workers.

GEOGRAPHY (all counties are in Indiana)	2007 EMPLOYMENT IN WAREHOUSE & STORAGE OCCUPATIONS1	2007 TOTAL NONFARM EMPLOYEES	LOCATION QUOTIENT
Boone County	**1,232**	**19,808**	**13.08**
Hendricks County	**2,793**	**45,364**	**12.95**
Johnson County	**719**	**45,936**	**3.29**
Marion County	**7,088**	**620,267**	**2.40**
Shelby County	**146**	**18,374**	**1.67**
Madison County	**298**	**42,049**	**1.49**
Hancock County	**91**	**20,861**	**0.92**
Hamilton County	**166**	**110,064**	**0.32**
Morgan County	**12**	**16,345**	**0.15**
United States	**656,306**	**138,035,200**	**1.00**

From a railroad perspective Indianapolis' primary partner is CSX. CSX intermodal rail service connects Central Indiana to the Port of New York/New Jersey. To the west, Indianapolis is too close to the Class 1 mega-rail hub of Chicago to justify rail service. At 183 miles to most terminals it is faster and cheaper for freight from western carriers to be driven to Indianapolis.

If a connection to Indianapolis could be created from a Western railroad, it is possible that Indianapolis could pull freight from intermodal terminals in Cincinnati, Louisville, Chicago and Columbus.

Indianapolis has two options. First to develop stronger east coast port relationships with growing ports of Savannah or Charleston (although the rail network between these points is not direct this would imply development potentially in Terre Haute along the CSX North/South corridor.) While there is sufficient length of haul to be attractive to the railroads, the highway miles are shorter than the rail miles between those points.

The second option is to create a connection to a Western Railroad. Both BNSF and UP were contacted about establishing a service. The BNSF was specific in their interest to access freight east of their franchise. They have been invited to participate in a potential Union Mills development but felt that was possibly too close to their existing terminal in Joliet, IL. They felt an ideal location would be somewhere around Akron, Ohio. This would give the rail economics to Eastern Ohio and that could be coupled with a truck reach into the Lehigh Valley distribution area of Pennsylvania. They felt that the watershed mark between Eastern Ports of call and Western Ports of Call in terms of price and service would fall somewhere in the Ohio area. They were sensitive to not want to pass over too many intermediate markets between Chicago and Akron. They were very intrigued by the automotive freight which might be available to them in Indiana (Honda/Toyota/Subaru). Their interest was to create a run through service from Southern California, connecting with CSX in a haulage agreement to "somewhere in Indiana/Ohio". They were not happy with the operational arrangement with the Schneider train because of the amount of handling which was required.

Union Pacific was contacted about a run through service from Southern California to Indianapolis. Initially they were interested in trying to identify the longest single line service they could provide to the area. A location of Danville, IL was initially suggested as their furthest point East in their network, but this branch line was considered deficient to handle this service. They settled on a St. Louis connection with CSX as their best route to serve Indianapolis. Again they mentioned a dedicated route with a haulage agreement so that freight didn't have to be handled at the St. Louis.

Take or Pay (Freight Cooperatives)

This concept is often used to define user commitment to new transportation services. Basically this shifts the risk from the carrier to the user via a contractual commitment where the carrier receives payment for a fixed quantity of units whether or not the actual freight is shipped. Prior to deregulation in the 80's many transportation purchasing managers used to join Shipper Cooperatives, which were protected with anti-trust immunity. These groups bundled their total freight into quantities and lanes where they would receive lower rates or discounts for meeting certain volume thresholds.

This concept faded in the era of transportation deregulation because of the carrier's ability to negotiate confidential contract rates. When demand begins to exceed capacity, in escalating rate environments, some users have gone back to "Take or Pay" agreements. The Lake States Shippers Association is a Shipper Cooperative where wood products shippers have banded together to address freight transportation issues. Minnesota Shippers Association was originally organized as a shipper's cooperative and successfully represents shipper interests.

The Schneider National train which moves from Kansas City, KS to Marion, OH is another example of a user committing to a minimum number of shipments in a given lane.

Warehouse and transportation officials feel that Indianapolis is a strong market. In doing an inventory of stakeholders in the region approximately 20 shippers could provide 1,000 to 1,500 loads per year. Other users were identified in the market who might take as many as 10 loads per day if this service was available.

Strategic Choices

To connect to Asian markets Indianapolis could be served from the Pacific Northwest (PNW) or via Southern California (SCAL) ports. Today traffic from the PNW primarily moves over Chicago. The larger import/export market is Southern California. For a demonstration project it is best to focus on a single market to test the concept. For this study SCAL is the preferred gateway.

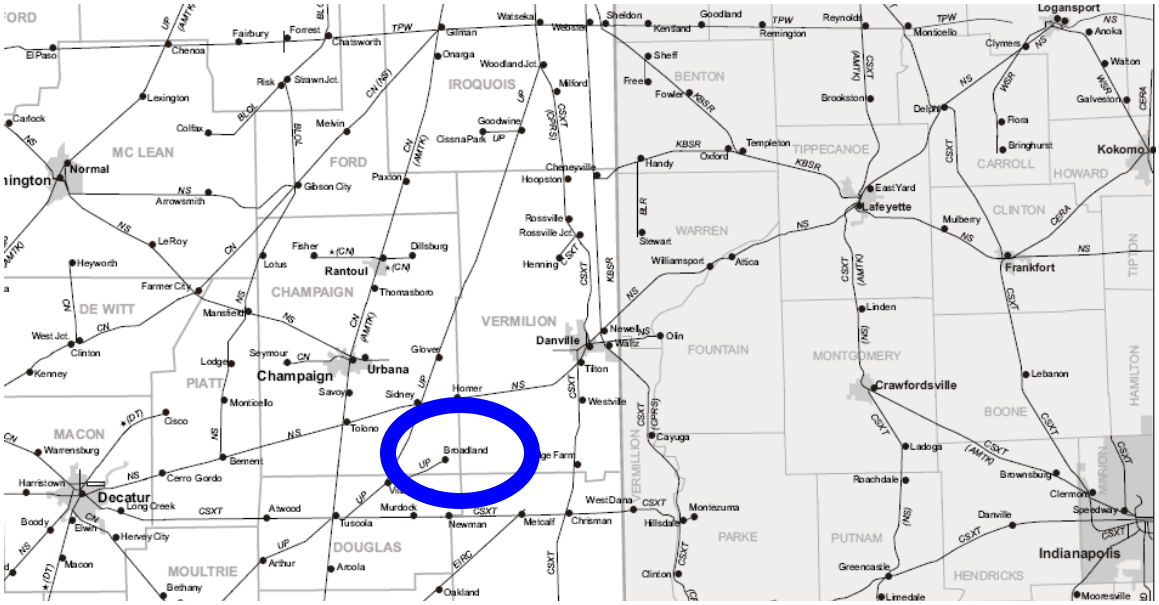
The BNSF Strategy

The initial survey noted BNSF as the preferred Western Carrier. This demonstration project would likely involve a train from SCAL to St. Louis where BNSF would interchange with CSX in a haulage arrangement to access Indianapolis. BNSF would require 200 units per train in each direction on a five day a week schedule. This number could vary based on whether the train is 40' or 53' containers. The goal is to build a 7,000' train to maximize the train start. The Schneider train as reported by an Area Development Journal in Ohio, carries 150 53' containers per day between Kansas City, MO and Marion, OH.

Assuming a 52 week year with 252 working days this would equal 100,800 units per year. This volume is approximately equivalent to the Chambersburg, PA facility which CSX is planning. To guarantee this volume a Shippers Cooperative could be established in Indianapolis where users would be required to commit to certain traffic volumes in order to use the intermodal terminal. The users could include domestic or international equipment owners.

The UP Single Route Strategy

The Union Pacific has been a strong and dominant railroad over the past 20 years. They have traditionally taken a strong private position on terminal investments and control. UP built and financed the Rochelle Intermodal terminal by them selves. Their initial interest was to find a "single line" corridor which might provide them access as close to Indianapolis as possible without having to share the revenue with a second carrier. While not immediately available, there are a number of rail locations which might be able to accommodate this wish. This option should be further explored.



Conclusion

It is important to begin a dialogue with each Class 1 carrier in the state. As a starting point it would be good to inform each carrier of the financing tools and the interest the State has in transportation. Today each location in Indiana has retained their own consultant and has contacted the railroads. The carriers are receiving many similar requests from many other states. A centralized voice and a prioritized plan may help Indiana achieve their goal of establishing a West Coast connection.

Documenting the freight which would ride this proposed train service is going to be the attribute that differentiates this proposal from the many others that have been proposed across the Nation. The next effort needs to identify potential volumes each user would

commit to this service. In order to bring these users together to discuss rates and service, a Shippers or Transportation Association needs to be created with anti trust immunity for the members.

A trip to the Western Railroads should be set up with a group of Indiana stakeholders and decision makers. The BNSF has invited Central Indiana Corporate Partnership to come to Fort Worth. Ideally a developer such as Duke Realty, a trucking company/terminal operator (Craig Newlin), a State DOT official (Keith Bucklew) and a Ports of Indiana representative should attend. If at all possible a CSX representative was also requested to attend.