

Greater Peoria Multimodal Freight Growth Study



Submitted to:
Tri-County Regional Planning Commission
April 5, 2017

Study Objective, Results, and Recommendations

Objective

The study has two simply stated objectives:

1. Answer the question: Can a new port facility, located in or near the City of Pekin, Illinois, provide a superior commercial, value proposition to businesses located in the region?
2. Offer a substantiated recommendation as to whether or not to proceed with a more detailed feasibility study.

Results

The answer to the study question is, “Not at this time.” The study found no evidence to indicate an obvious, unsatisfied freight transportation demand that could be satisfied by a new port facility. The answer is caveated for two reasons:

1. The Federal Maritime Administration (MARAD) is presently engaged in active promotion of high value freight transportation services on the Illinois Waterway system. This may ultimately result in expansion of barge services into new freight transportation market segments.
2. Current and former regional economic development officials believe that a terminal with a roll on/roll off and lift on/lift off capability would be a highly desirable tool for future economic development.

Primary Recommendation

Tri-County Regional Planning Commission should proceed with a feasibility study to test the concept of establishment of a public/private partnership to develop a low cost, roll on/roll off and/or lift on/lift off service capability at one of the private terminals in the region. The consulting work would include a site search to identify potential partners followed by a formal screening process. The screening process would consider commercial, operational, financial, and institutional factors. The rationale is as follows:

1. A capable Tri-County terminal would permit the region’s economic development organizations to legitimately promote the ability of the region to handle high value cargo on the Illinois Waterway.
2. Prompt action may be required in order to take advantage of emerging funding opportunities associated with current and future Federal Promotional Activity.
3. Existing private terminals are likely able to be configured for this work much more quickly and with much less cost than a purpose built terminal.

Approach

The work was accomplished by Frank Harder, Principal of The Tioga Group and by Emil Liszniansky, Principal of Envision Group.

The study was completed in three tasks.

1. Review Reports and Data. Tioga reviewed several documents and prior studies that documented previous efforts to address the issue of a multimodal terminal. The documents reviewed are listed in Appendix Appendix I.
2. Conduct Stakeholder Interviews. Fourteen interviews were conducted with regional stakeholders. Interviewees are listed in Appendix Appendix II.
3. Report Results in this document.

Findings

The Illinois Waterway handles input and output commodities associated with agriculture and heavy industry. Total traffic levels have been trending down over the past decade.

The Army Corps of Engineers maintains publicly available statistics documenting the cargos moving on the waterway and through individual locks. The table in Exhibit 1 presents the commodities and tonnages moving through the locks closest to the Tri-County Region. These commodity definitions are further defined in Appendix Appendix III. These commodities are characterized by a relatively low value per ton.

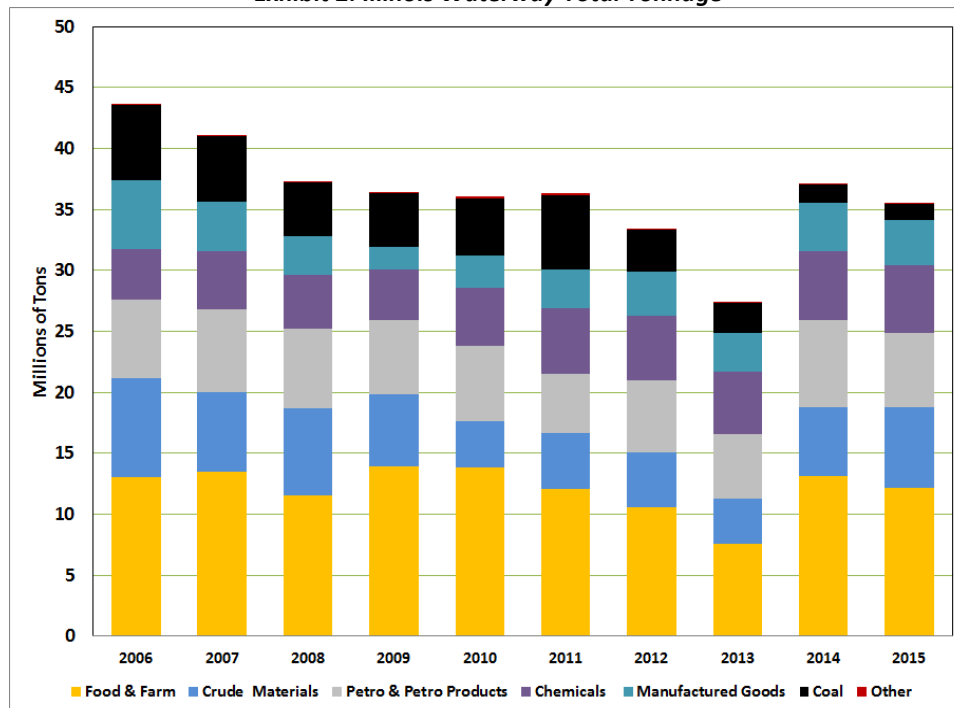
Exhibit 1: Illinois Waterway Tonnage at Three Nearby Locks

2015 Tonnage	Starved Rk	Peoria	La Grange
Coal	956,611	1,990,700	825,600
Petroleum	3,973,085	3,605,640	3,282,665
Chemicals	3,429,796	5,057,882	5,220,738
Crude Materials	4,399,331	2,951,768	2,742,113
Manufactured Goods	2,749,095	2,668,631	2,864,981
Food & Farm	2,611,205	7,056,664	9,157,172
Equip, Machinery	97,455	44,850	36,475
Waste	2,650	1,450	3,200
Unknown	20,900	23,600	13,900
Total	18,240,128	23,401,185	24,146,844



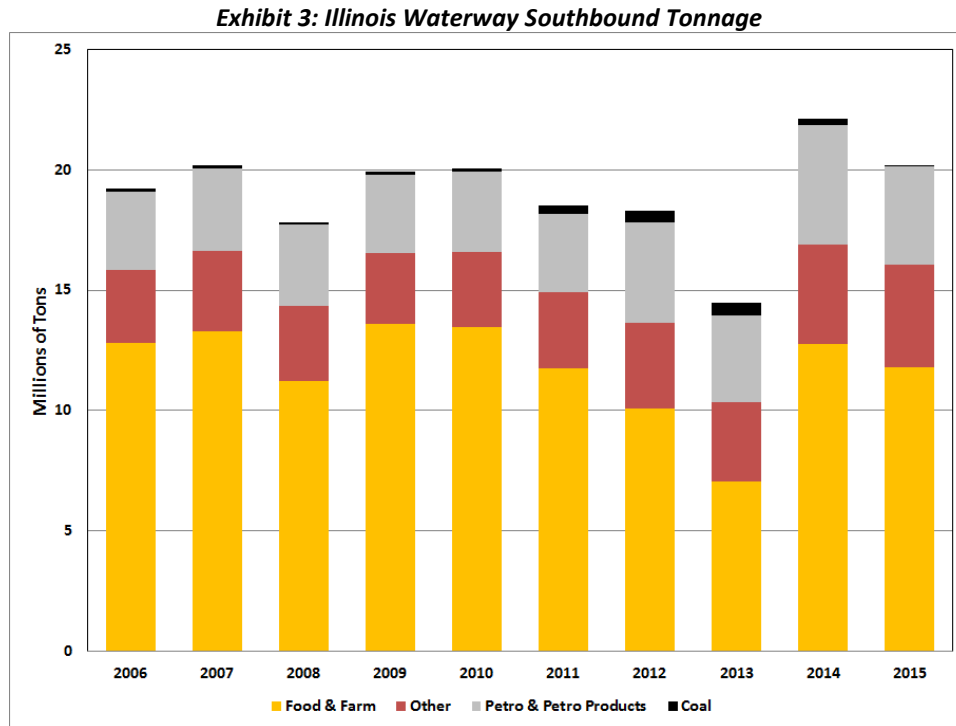
The volume moving on the Illinois Waterway is trending lower as illustrated in Exhibit 2.

Exhibit 2: Illinois Waterway Total Tonnage



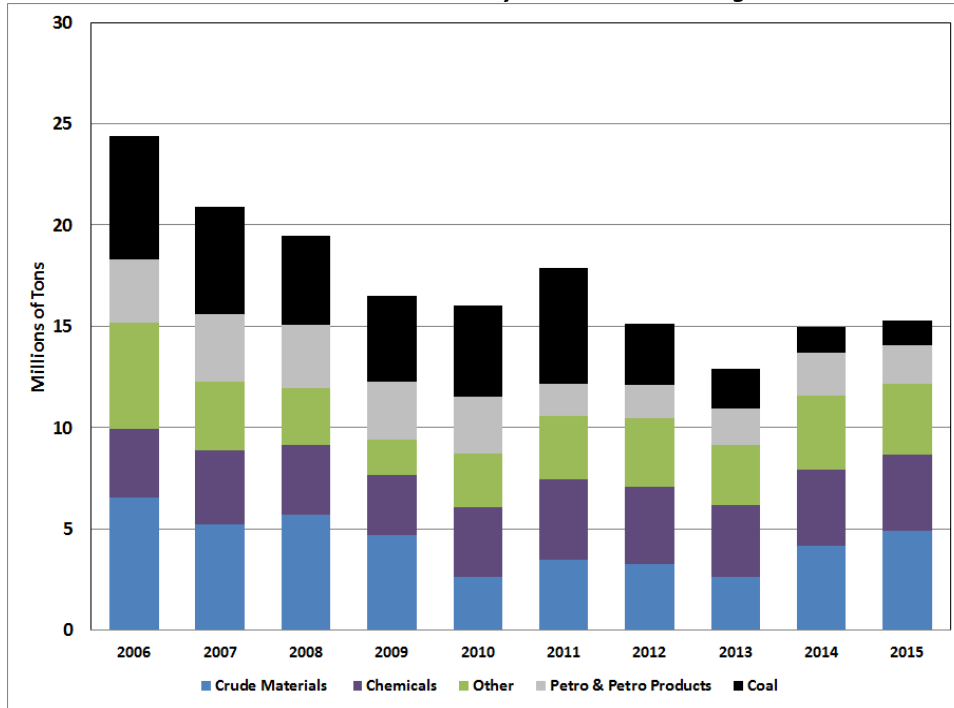
The trend is driven by declines in movements of coal, crude materials (sand & gravel) and manufactured goods (cement). Movements of chemicals (fertilizer and alcohol) have increased while other commodities, including farm products (corn and soybean products) have remained relatively unchanged.

Southbound movements are dominated by farm commodities as illustrated in Exhibit 3.



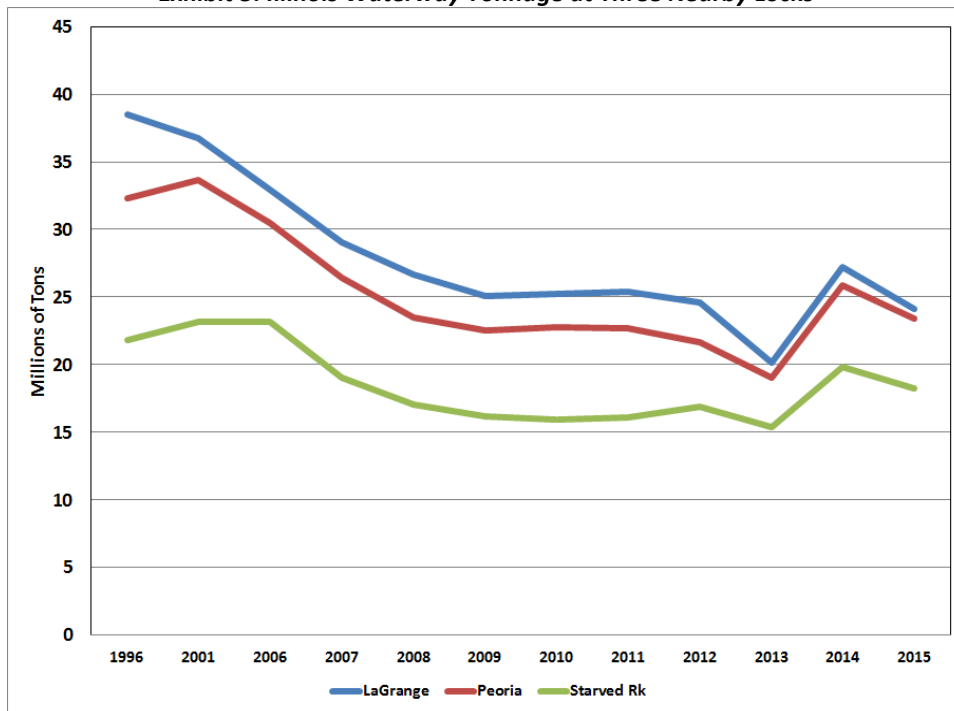
The overall decline in volume is primarily due to decline in northbound movements of coal and crude materials as illustrated in Exhibit 4.

Exhibit 4: Illinois Waterway Northbound Tonnage



The decline in volume is also exhibited in the tonnage moving through the locks closest to the Tri-County Region as illustrated in Exhibit 5.

Exhibit 5: Illinois Waterway Tonnage at Three Nearby Locks



Private terminals currently handle the existing business.

The Corps identifies 29 active private barge terminals in the Tri-County Region as listed in Appendix Appendix IV. Exhibit 6 is a table which presents a more detailed breakdown of the commodities handled

at terminals within the Tri-County Region. None of the stakeholder interviews expressed dissatisfaction with the services provided by these private facilities.

Exhibit 6: Commodities Handled at Tri-County Regional Terminals

Commodity Category	Specific commodities handled in regional terminals
Coal	Coal, Lignite & Coal Coke
Petroleum	Distillate, Residual & Other Fuel Oils; Lube Oil & Greases Petroleum Pitches, Coke, Asphalt, Naphtha and Solvents Petroleum Products NEC
Chemicals	Fertilizers
Chemicals	Other Chemicals and Related Products (alcohols)
Crude Products	Forest Products, Lumber, Logs, Woodchips
Crude Products	Sand, Gravel, Stone, Rock, Limestone, Soil, Dredged Material
Crude Products	Iron Ore and Iron & Steel Waste & Scrap Sulfur (Dry), Clay & Salt Slag
Primary Manufactures	Primary Iron and Steel Products (Ingots, Bars, Rods, etc.) Primary Non-Ferrous Metal Products; Fabricated Metal Prods.
Primary Manufactures	Building Cement & Concrete; Lime; Glass
Food & Farm	Wheat Corn Oilseeds (Soybean, Flaxseed and Others) Animal Feed, Grain Mill Products, Flour, Processed Grains Other Agricultural Products; Food and Kindred Products
Manufactured Equipment	Machinery and Products

The interviews produced no clear project “Champion” with a specific vision and willing to invest political and financial capital in a facility.

Tioga has found that individual leadership is a critical factor in the development of a multimodal terminal in small and medium sized cities. That is particularly important given the historical context in the Tri-County Region. None of the stakeholders is yet sufficiently committed to offer to fill that role.

The development of a public multimodal port has been an unrealized regional goal for more than a decade.

Many of the interviewees were familiar with a number of economic development opportunities requiring the development of a new multimodal terminal that have been pursued over the past decade without success. Those who were most familiar with the events described them as near misses and are convinced that an aggressive economic development effort would produce positive results for the community.

Regional economic development officials indicated that a terminal with a roll on/roll off and lift on/lift off capability would be a highly desirable economic development tool.

The economic development professionals from the Greater Peoria Economic Development Council were the stakeholders with the strongest opinions in favor of development of a multimodal port facility. They were both familiar with the history and consistent in their advocacy of the development of a multimodal port with the roll on/roll off and lift on/lift off capability.

Shippers offered very cautious encouragement.

The shippers that were interviewed indicated that they would be willing to use such a facility provided it could deliver a better value proposition than they currently experience.

Caterpillar indicated that they had studied the matter in the past and concluded that the cost of the multiple handlings; onto and truck to get the equipment to the terminal, off the truck at the terminal, onto the barge at origin, and off the barge at destination; made the idea infeasible for moving their products at this time.

They would not rule out the use of a multimodal terminal in the future. Caterpillar moves 90% of their cargo by truck at present. This level of dependence makes them concerned about the ability of motor carrier industry's ability to continue to provide service in the future, particularly given the increasing regulation of the industry and a predicted shortfall in the availability of truck drivers. As a result they are willing to consider new transportation options as they emerge.

Interviews with Illinois Corn Processing and Pacific Ethanol indicated that an arrangement has been made between them to share ICP's available liquid barge loading capacity. Pacific Ethanol is using another neighbor to load its other by-products.

Pacific Ethanol indicated it would be interested in using a private terminal provided the cost and service was more economical than their current situation. They also seek priority in barge loading.

A number of stakeholders offered the idea of including some kind of logistics center as part of the multimodal terminal. The firms that currently provide logistics services were not similarly optimistic about the prospect and no one offered a specific industry that a logistics center would serve.

The Illinois-Gulf Marine Highway Initiative identified challenging prerequisites for a successful river transportation system for high value cargo.

The M-55 Illinois-Gulf Marine Highway Initiative (2013) studied the matter of establishing a river transportation system which could provide service levels sufficient to move high value cargo, equipment and containers, on the Illinois River. It found that an entirely new kind of service requiring unique, dedicated equipment would be required to meet transit time requirements. It acknowledged this was a high risk commercial venture. The following is a quote from the executive summary of that report.

The report found that "Peoria shippers have specific service requirements that must be met before they will consider changing their transportation choice. The shipper requires a service that is scheduled to meet the vessel cut-off times in conjunction with ocean vessel sailings, with transit time of 5-7 days for containers and up to 14 days for Ro/Ro, while remaining the lowest cost alternative to truck and rail. Meeting these requirements is particularly difficult given the distance and the lack of a fast vessel designed to transport high-cube cargoes in the United States."

"A faster marine highway vessel should be designed for use on inland waterways. The hook-'n-haul approach using an unnecessarily high level of traditional bulk equipment unnecessarily penalizes the profitability and increases the working capital requirements of the service. The business plan analysis demonstrates that a service meeting Peoria's shippers' requirements can be financially viable and should be able to pay for a new-build vessel. Given that this is a new market area, with uncertainty around the opportunity for a mass production version of a new-build vessel, the U.S. government might need to play a role in the initial design and construction of the new-build vessel."

MARAD is engaged in promotion of high value cargo services on the Illinois Waterway system.

While experimentation with container on barge and other high value cargo services have been going on for some time and have not yet proven to be sustainable on the Mississippi/Illinois system in the long term, there is a strong Federal interest in promoting those services. In October 2016 MARAD

announced \$4.85 million in grants to six Marine Highway projects, two of which involved the Illinois Waterway. The following is an excerpt from the MARAD press release.

Illinois Container on Barge Shuttle Project (Awarded \$713,000)

Sponsored by America's Central Port in Granite City, Ill., the Illinois Container on Barge Shuttle is an 18-month demonstration project to provide shuttle service for agricultural customers moving containerized exports between southern and northern Illinois to access the Union Pacific and BNSF rail ramps.

M-55/M-35 Container on Barge Project (Awarded \$96,000)

The City of St. Louis Port Authority, along with three partners...are provided funding to support planning efforts focused on the development of containerized shipping along the Mississippi River, between New Orleans, La., and Minneapolis, Minn., and Chicago, Ill.

Peoria Barge Terminal has answered commercial inquiries regarding container on barge services.

Peoria Barge Terminal reported that the firm is active in the Inland River Ports and Terminals organization and is aware of efforts to establish container on barge services on the Illinois Waterway. They have a 100-ton crane which is capable of rudimentary lift on/lift off operations and have answered at least one commercial inquiry regarding container on barge services. To date the inquiry has not resulted new business for the Terminal.

There is no obvious highway related impediment to the development of a multimodal facility on either side of the river south of I-474.

Envision performed a high-level assessment of the existing highway network linking potential multimodal facilities along both sides of the Illinois River in Greater Peoria with the Interstate Freeway System. Using available data sources that included Illinois Department of Transportation GIS mapping and Envision HOI Long Range Transportation Plan, Envision examined four potential multimodal terminal sites' relative proximity to freeway access (I-474), the capacity of truck routes between the sites and the interstate system, and general roadway characteristics/impediments that may impact freight flow. Envision did not perform any detailed traffic analysis. Details are included in Appendix Appendix V, Highway Freight Assessment.

This finding is made with the understanding that reconstruction of Front Street in Pekin will begin in 2018. This work should be considered a necessary condition for the development of another major source of truck traffic at that location.

The poor condition of Front Street in Pekin was a common theme in the stakeholder interviews.

Front Street: Freight Operations

Front Street and Distillery Road in the City of Pekin provides access to several grain shipping and processing plants along the Illinois River. Three companies, CHS, Illinois Corn Processing (ICP), and Pacific Ethanol Pekin, Inc. (PEI), regularly purchase corn and other commodities from local farmers and co-ops which results in frequent truck deliveries. At busy times, the facilities cannot service the trucks as quickly as they arrive. Since storage is limited within the facilities, trucks regularly wait on the shoulders of Front Street. Two to three times a month, trucks waiting to drop off grains queue up over three-quarters of a mile long regularly block trucks from accessing other facilities. Currently, the middle section of the roadway is only open to one-way traffic because pulled over trucks reduce the effective width of the travel way.

Front Street: Existing Deficiencies

The narrow 21-foot pavement width does not permit two-way traffic, while the Distillery Road/Front Street 90-degree corner does not provide enough pavement to allow for two-way traffic to pass. The existing Front Street corridor pavement is deteriorating, and the drainage system is insufficient. The low profile of the roadway in relation to the adjacent Illinois River makes it susceptible to flooding. In 2013, water overtopped the road at this location and flooded the City of Pekin Wastewater Treatment Plant located at 606 South Front Street with resulting repairs costing an estimated \$1,000,000.

Exhibit 7: Front Street Existing Deficiencies



Recommendations

Tri-County Regional Planning Commission should proceed with a feasibility study to test the concept of establishment of a public/private partnership to develop a low cost, roll on/roll off and/or lift on/lift off service capability at one of the private terminals in the region.

The rationale is as follows:

1. A capable Tri-County terminal would permit the region's economic development organizations to legitimately promote the ability of the region to handle high value cargo on the Illinois Waterway.
2. Prompt action may be required in order to take advantage of emerging funding opportunities associated with current and future Federal Promotional Activity.
3. Existing private terminals are likely able to be re-configured for this work much more quickly and with much less cost than a purpose built terminal.

The consulting work would include a site search to identify potential partners followed by a formal screening process. The screening process would consider a number of commercial, operational, capital, and institutional factors. It would result in a feasibility recommendation as well as the identification of one or more potential partners. At least five terminals in the region have handled machinery in the past and several may be at least marginally capable of lift on/lift off operations at the present time.

The City of Pekin should proceed with the reconstruction of Front Street.

Distillery Road, Front Street, and Fayette Street should be reconstructed as a two-way facility with concrete pavement with a minimum of two 13-foot lanes, a 2-foot buffer between opposing traffic lanes, curb and gutter, and storm sewer. To address truck queueing, which frequently can block the roadway to through traffic, three dedicated southbound turn lanes should be installed at the following locations:

- Right Turn Lane to CHS (barge offloading facility) across from the Pekin Wastewater Treatment Plant. In addition to the right turn lane for CHS there is a 520 feet long truck queuing lane to help reduce the frequency of waiting trucks blocking the southbound through lane;
- Left Turn Lane to Buddy Turner Grain Testing south of Pekin Wastewater Treatment Plant; and

- Right Turn Lane at Front/Distillery curve serving Illinois Corn Processing, LLC. (ICP).

The City of Pekin is in phase 2 of engineering for a major repair project for Front Street and been given a go-ahead for state IDP funding through IDOT for \$2M. The City expects to be awarded another \$2M from EDA funding. The project is expected to begin by mid-2018.

Stakeholders were strongly in favor of the project. The project team reviewed planning documents and concurs wholeheartedly. The repairs are needed regardless of the prospects for a port facility and should be considered a prerequisite for any additional industrial development in the area.

Appendix I. Review of previous studies and data

- (1) Review of several documents provided by project stakeholders including the Tri-County Regional Planning Commission and the City of Pekin.
 - a. Supply Chain Logistics and Transportation Indicator Study, December 2005
 - b. Pekin Tiger Grant Application
 - c. M-55 Illinois-Gulf Marine Highway Initiative
 - d. Heart of Illinois Regional Port District
 - e. 032912 Pekin Port Study TCRPC-1
 - f. New Pekin Port Press Release FINAL 3 1 12-1
 - g. Heart of Illinois Long Range Transportation Plan, March 2015
- (2) Review of several Army Corps of Engineers data bases including:
 - a. List of terminals on the Illinois waterway
 - b. Illinois Waterway Locks & Dams
 - c. Data sets from the Waterborne Commerce Statistics Center
- (3) Review of stakeholder websites.

Appendix II. Interviews with stakeholders

Former Pekin Mayor Laurie Barra

Paul Sebesta, USDA

Rick Kriegsman, Logistics and Motor Carrier

Leigh Ann Brown

Dan Silverthorne, Chairman, Heart of Illinois Regional Port District

Denny Kief, Former Pekin City Manager

Don Oldham, President/GM, Illinois Corn Processing

Tony Rolando, IL Department of Commerce & Economic Opportunity

Bill Fleming, Pekin Area Chamber of Commerce

Jeff Stear, Caterpillar

Sally Hanley, Kim Uhlig, Greater Peoria EDC

Hunter McCormack, Site Manager, Pacific Ethanol

Tom Stagg, Federal Companies

Tom Meischner, Peoria Barge

Appendix III. Commodity List

00 Units		3285 Perfumes & Cleansers
	0200 Vehicles	3286 Plastics
	0300 Passengers	3291 Pesticides
10 Coal		3292 Starches,Gluten,Glue
	1100 Coal	3293 Explosives
	1200 Coal Coke	3297 Chemical Additives
20 Petroleum & Petroleum Products		3298 Wood & Resin Chem.
	21 Crude Petroleum	3299 Chem. Products NEC
	2100 Crude Petroleum	40 Crude Materials, Inedible Except Fuels
	22-29 Petroleum Products	41 Forest Products, Wood and Chips
	2211 Gasoline	4110 Rubber & Gums
	2221 Kerosene	4150 Fuel Wood
	2330 Distillate Fuel Oil	4161 Wood Chips
	2340 Residual Fuel Oil	4170 Wood in the Rough
	2350 Lube Oil & Greases	4189 Lumber
	2410 Petro. Jelly & Waxes	4190 Forest Products NEC
	2429 Naphtha & Solvents	42 Pulp and Waste Paper
	2430 Asphalt, Tar & Pitch	4225 Pulp & Waste Paper
	2540 Petroleum Coke	43 Soil, Sand, Gravel, Rock and Stone
	2640 Liquid Natural Gas	4310 Building Stone
	2990 Petro. Products NEC	4322 Limestone
30 Chemicals and Related Products		4323 Gypsum
	31 Fertilizers	4327 Phosphate Rock
	3110 Nitrogenous Fert.	4331 Sand & Gravel
	3120 Phosphatic Fert.	4333 Dredged Material
	3130 Potassic Fert.	4335 Waterway Improv. Mat
	3190 Fert. & Mixes NEC	4338 Soil & Fill Dirt
	32 Other Chemicals & Related Products	44 Iron Ore and Scrap
	3211 Acyclic Hydrocarbons	4410 Iron Ore
	3212 Benzene & Toluene	4420 Iron & Steel Scrap
	3219 Other Hydrocarbons	45 Marine Shells
	3220 Alcohols	4515 Marine Shells
	3230 Carboxylic Acids	46 Non-Ferrous Ores and Scrap
	3240 Nitrogen Func. Comp.	4630 Copper Ore
	3250 Organo-Inorganic Comp.	4650 Aluminum Ore
	3260 Organic Comp. NEC	4670 Manganese Ore
	3271 Sulphur (Liquid)	4680 Non-Ferrous Scrap
	3272 Sulphuric Acid	4690 Non-Ferrous Ores NEC
	3273 Ammonia	47 Sulphur, Clay and Salt
	3274 Sodium Hydroxide	4741 Sulphur, (Dry)
	3275 Inorg. Elem.,Oxides, & Halogen Salts	4782 Clay & Refrac. Mat.
	3276 Metallic Salts	4783 Salt
	3279 Inorganic Chem. NEC	48 Slag
	3281 Radioactive Material	4860 Slag
	3282 Pigments & Paints	49 Other Non-Metal. Min.
	3283 Coloring Mat. NEC	4900 Non-Metal. Min. NEC
	3284 Medicines	50 Primary Manufactured Goods
		51 Paper Products

5110 Newsprint	6747 Grain Mill Products
5120 Paper & Paperboard	6781 Hay & Fodder
5190 Paper Products NEC	6782 Animal Feed, Prep.
52 Lime, Cement and Glass	68 Other Agricultural Products
5210 Lime	6811 Meat, Fresh, Frozen
5220 Cement & Concrete	6817 Meat, Prepared
5240 Glass & Glass Prod.	6822 Dairy Products
5290 Misc. Mineral Prod.	6835 Fish, Prepared
53 Primary Iron and Steel Products	6838 Tallow, Animal Oils
5312 Pig Iron	6839 Animals & Prod. NEC
5315 Ferro Alloys	6856 Bananas & Plantains
5320 I&S Primary Forms	6857 Fruit & Nuts NEC
5330 I&S Plates & Sheets	6858 Fruit Juices
5360 I&S Bars & Shapes	6861 Sugar
5370 I&S Pipe & Tube	6865 Molasses
5390 Primary I&S NEC	6871 Coffee
54 Primary Non-Ferrous Metal Products	6872 Cocoa Beans
5421 Copper	6885 Alcoholic Beverages
5422 Aluminum	6887 Groceries
5429 Smelted Prod. NEC	6888 Water & Ice
5480 Fab. Metal Products	6889 Food Products NEC
55 Primary Wood Products; Veneer	6891 Tobacco & Products
5540 Primary Wood Prod.	6893 Cotton
60 Food and Farm Products	6894 Natural Fibers NEC
61 Fish	6899 Farm Products NEC
6134 Fish (Not Shellfish)	70 All Manufactured Equipment, Machinery & Products
6136 Shellfish	7110 Machinery (Not Elec)
62-64 Grain	7120 Electrical Machinery
6241 Wheat	7210 Vehicles & Parts
6344 Corn	7220 Aircraft & Parts
6442 Rice	7230 Ships & Boats
6443 Barley & Rye	7300 Ordnance & Access.
6445 Oats	7400 Manufac. Wood Prod.
6447 Sorghum Grains	7500 Textile Products
65 Oilseeds	7600 Rubber & Plastic Pr.
6521 Peanuts	7800 Empty Containers
6522 Soybeans	7900 Manufac. Prod. NEC
6534 Flaxseed	80 Waste and Scrap NEC
6590 Oilseeds NEC	8900 Waste and Scrap NEC
66 Vegetable Products	90 Unknown or Not Elsewhere Classified
6653 Vegetable Oils	99 Unknown or Not Elsewhere Clsfd
6654 Vegetables & Prod.	9900 Unknown or NEC
67 Processed Grain & Animal Feed	
6746 Wheat Flour	

Appendix IV. Terminal List

NAV_UNIT_NAME	CITY_OR_TOWN	COMMODITIES
CF INDUSTRIES, KINGSTON MINES TERMINAL DOCK	Kingston Mines	Fertilizers Other Chemicals and Related Products All Manufactured Equipment, Machinery and Products
CF INDUSTRIES, PEORIA WAREHOUSE DOCKS	Kingston Mines	Coal, Lignite & Coal Coke Fertilizers Food and Farm Products
CF INDUSTRIES, PEORIA WAREHOUSE NO. 2 DOCK	Mapleton	Coal, Lignite & Coal Coke Fertilizers
CF INDUSTRIES, PEORIA WAREHOUSE NO. 1 DOCK	Mapleton	Fertilizers Food and Farm Products
CF INDUSTRIES, PEORIA WAREHOUSE COAL DOCK	Mapleton	Coal, Lignite & Coal Coke
CF INDUSTRIES, PEORIA WAREHOUSE COAL DOCK	Manito	Fertilizers
AMERICAN MILLING CO., PEKIN GRAIN ELEVATOR DOCK	Pekin	Fertilizers Other Chemicals and Related Products Food and Farm Products Wheat Corn Oilseeds (Soybean, Flaxseed and Others) Animal Feed, Grain Mill Products, Flour, Processed Grains
ILLINOIS CORN PROCESSING	Pekin	Other Chemicals and Related Products Corn Oilseeds (Soybean, Flaxseed and Others) Animal Feed, Grain Mill Products, Flour, Processed Grains
AVENTINE RENEWABLE ENERGY HOLDINGS, INC.	Pekin	Other Chemicals and Related Products Animal Feed, Grain Mill Products, Flour, Processed Grains
GARVEY MARINE, PEKIN FLEET MOORINGS	Pekin	Petroleum Pitches, Coke, Asphalt, Naphtha and Solvents Fertilizers Other Chemicals and Related Products Sulfur (Dry), Clay & Salt Corn Oilseeds (Soybean, Flaxseed and Others) Animal Feed, Grain Mill Products, Flour, Processed Grains All Manufactured Equipment, Machinery and Products
TOMEN GRAIN CO., PEKIN GRAIN ELEVATOR DOCK	Pekin	Fertilizers Other Chemicals and Related Products Slag Food and Farm Products Wheat Corn Oilseeds (Soybean, Flaxseed and Others) Animal Feed, Grain Mill Products, Flour, Processed Grains
SEMMATERIALS, PEKIN ASPHALT PLANT DOCK	Pekin	Petroleum Pitches, Coke, Asphalt, Naphtha and Solvents Slag Wheat
CARGILL CROP NUTRITION, PEKIN TERMINAL DOCK	Bartonville	Coal, Lignite & Coal Coke Fertilizers Other Chemicals and Related Products Sulphur (Dry), Clay & Salt Building Cement & Concrete; Lime; Glass Wheat Corn Oilseeds (Soybean, Flaxseed and Others) Animal Feed, Grain Mill Products, Flour, Processed Grains Unknown or Not Elsewhere Classified
SHELL OIL PRODUCTS - U.S., BARTONVILLE, TERMINAL DOCK	Bartonville	Other Chemicals and Related Products
TERRA INDUSTRIES, NORTH PEKIN TERMINAL DOCK	Pekin	Fertilizers
KEYSTONE STEEL & WIRE CO., DOCK	Peoria	Coal, Lignite & Coal Coke Fertilizers Iron Ore and Iron & Steel Waste & Scrap Sulfur (Dry), Clay & Salt Slag Primary Iron and Steel Products (Ingots, Bars, Rods, etc.) Primary Non-Ferrous Metal Products; Fabricated Metal Prods. Corn

NAV_UNIT_NAME	CITY_OR_TOWN	COMMODITIES
HICKS OIL & HICKS GAS DOCK	Peoria	Petroleum products.
ADM/GROWMARK, CREVE COEUR GRAIN DOCK	Creve Coeur	Fertilizers Other Chemicals and Related Products Iron Ore and Iron & Steel Waste & Scrap Sulfur (Dry), Clay & Salt Primary Iron and Steel Products (Ingots, Bars, Rods, etc.) Primary Non-Ferrous Metal Products; Fabricated Metal Prods. Food and Farm Products Wheat Corn Oilseeds (Soybean, Flaxseed and Others) Animal Feed, Grain Mill Products, Flour, Processed Grains All Manufactured Equipment, Machinery and Products
KOCH NITROGEN CO., NORTH PEKIN TERMINAL BARGE DOCK	Pekin	Petroleum Pitches, Coke, Asphalt, Naphtha and Solvents Fertilizers Other Chemicals and Related Products
CENTRAL ILLINOIS FREIGHT HANDLING CORP. DOCK	Creve Coeur	Primary Iron and Steel Products (Ingots, Bars, Rods, etc.) Unknown or Not Elsewhere Classified
PEORIA RIVER TERMINAL WHARF	Peoria	Distillate, Residual & Other Fuel Oils; Lube Oil & Greases Petroleum Pitches, Coke, Asphalt, Naphtha and Solvents
PEORIA BARGE TERMINAL WHARF	Peoria	Coal, Lignite & Coal Coke Distillate, Residual & Other Fuel Oils; Lube Oil & Greases Petroleum Pitches, Coke, Asphalt, Naphtha and Solvents Petroleum Products NEC Fertilizers Other Chemicals and Related Products Forest Products, Lumber, Logs, Woodchips Sand, Gravel, Stone, Rock, Limestone, Soil, Dredged Material Iron Ore and Iron & Steel Waste & Scrap Sulfur (Dry), Clay & Salt Slag Primary Iron and Steel Products (Ingots, Bars, Rods, etc.) Primary Non-Ferrous Metal Products; Fabricated Metal Prods. Corn Oilseeds (Soybean, Flaxseed and Others) Animal Feed, Grain Mill Products, Flour, Processed Grains All Manufactured Equipment, Machinery and Products Unknown or Not Elsewhere Classified
ARTCO FLEETING SERVICES, PEORIA DOCK AND FLEET MOORINGS	Peoria	Coal, Lignite & Coal Coke
J & L DOCK FACILITIES WHARF	Peoria	Coal, Lignite & Coal Coke Fertilizers Sand, Gravel, Stone, Rock, Limestone, Soil, Dredged Material Iron Ore and Iron & Steel Waste & Scrap Sulfur (Dry), Clay & Salt Building Cement & Concrete; Lime; Glass Primary Iron and Steel Products (Ingots, Bars, Rods, etc.) Corn All Manufactured Equipment, Machinery and Products
ADM/GROWMARK RIVER SYSTEM, PEORIA TERMINAL WHARF	Peoria	Coal, Lignite & Coal Coke Fertilizers Other Chemicals and Related Products Forest Products, Lumber, Logs, Woodchips Iron Ore and Iron & Steel Waste & Scrap Sulfur (Dry), Clay & Salt Primary Iron and Steel Products (Ingots, Bars, Rods, etc.) Food and Farm Products Wheat Corn Oilseeds (Soybean, Flaxseed and Others) Animal Feed, Grain Mill Products, Flour, Processed Grains Other Agricultural Products; Food and Kindred Products
PEORIA CITY DOCK	Peoria	Coal, Lignite & Coal Coke Forest Products, Lumber, Logs, Woodchips Sand, Gravel, Stone, Rock, Limestone, Soil, Dredged Material Iron Ore and Iron & Steel Waste & Scrap Primary Iron and Steel Products (Ingots, Bars, Rods, etc.)
POWLEY SAND AND GRAVEL CO DOCK	Spring Bay	Sand, Gravel, Stone, Rock, Limestone, Soil, Dredged Material
LOUIS DREYFUS CORP., CHILLICOTHE GRAIN ELEV	Chillicothe	Corn
GALENA ROAD GRAVEL, CHILLICOTHE DOCK	Chillicothe	Sand, Gravel, Stone, Rock, Limestone, Soil, Dredged Material

Appendix V. Highway Freight Assessment

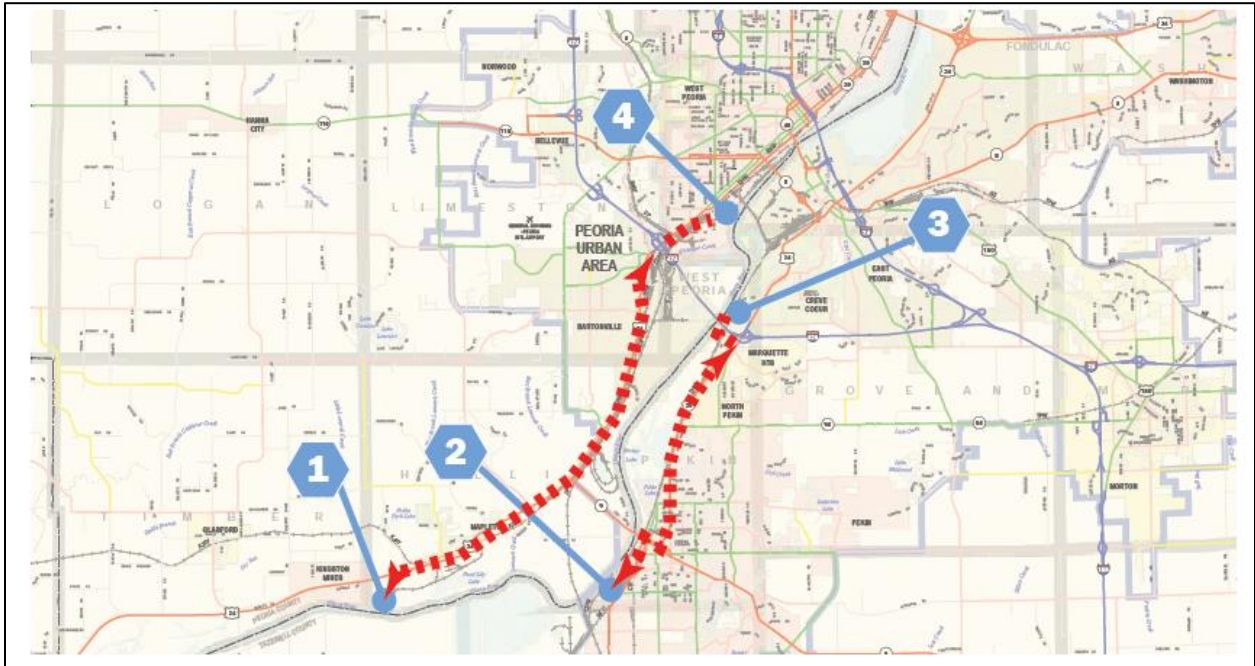
Overview

Envision was tasked with performing a high-level assessment of the existing highway network linking potential Port Facilities along the Illinois River in Greater Peoria with the Interstate Freeway System.

The four representative locations, illustrated in Exhibit 8, for potential port facilities were examined in this assessment as follows.

1. Caterpillar, 8826 US-24, Mapleton, IL 61547
2. Illinois Corn Processing, 1301 S Front St, Pekin, IL 61554
3. Creve Coeur, 1000 Wesley Rd
4. Peoria, 11 Sanger St

Exhibit 8: Potential Port Facilities examined



Using available data sources that included Illinois Department of Transportation GIS mapping and Envision HOI Long Range Transportation Plan, Envision examined each potential facility's relative proximity to freeway access (I-474), the capacity of truck routes between the facility and the interstate system, and general roadway characteristics/impediments that may impact freight flow without performing any detailed traffic analysis.

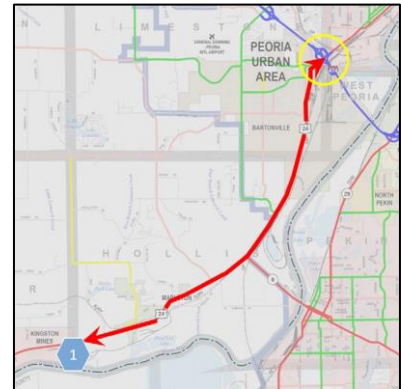
Caterpillar, 8826 US-24, Mapleton, IL 61547

Summary

Access to I-474 is provided to the site via US 24 which is a 4-lane arterial for the entire 11-mile segment between Caterpillar and the interstate. US 24 is a semi-limited access facility south of SR 9 with limited impediments. In the urbanized segment of US 24 in Bartonville there are 4 traffic signals spread over a one-mile segment.

Highlights

- 11 miles to I-474 via US 24
- South of SR 9: v/c ratio < 0.25 (underutilized)
- North of SR 9: v/c ratio is 0.25 to 0.50 (less than half capacity)



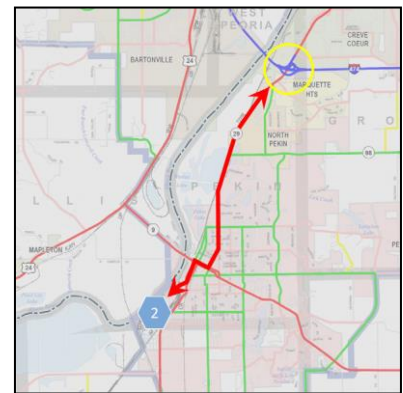
Illinois Corn Processing, 1301 S Front St, Pekin, IL 61554

Summary

Access to I-474 is provided via Front St (1-mile) and SR 29 (6-miles) through the City of Pekin and the Village of North Pekin. Front St is a 2-lane local street with narrow 10-ft wide lanes, and an unsignalized rail grade crossing. SR 29 traverses Pekin's business district with freight traffic being impeded by numerous stop signs and traffic signals, as well as tight turn radii at the SR 9 jog.

Highlights

- 7 miles to I-474 via Front St & SR 29
- v/c ratio varies but < 0.50 (less than half capacity)
- Front St has pavement issues & narrow lane widths



Creve Coeur, 1000 Wesley Rd

Summary

Access to I-474 only 1.5 miles away is provided via Wesley Rd and a short segment of SR 29. Wesley Rd is a 2-lane local street with narrow 11-ft lanes with visible pavement deterioration. An at-grade rail crossing of the TPZR tracks is located just south of the I-474 bridges over Wesley Rd and the Illinois River.

Highlights

- 1.5 miles to I-474 via Wesley Rd & SR 29
- v/c ratio varies (underutilized)
- Wesley St has pavement issues & narrow lane widths



Peoria, 11 Sanger St

Summary

Access to I-474 only 2 miles away is provided via Sanger St, Washington St and Adams St. Sanger St is a local street with an unsignalized at-grade rail crossing of the IAIS tracks. Washington St and Adams St are both 4/5-lane principal arterials with a total of 3 traffic signals between the site and the interchange at I-474.

Highlights

- 2 miles to I-474 via Sanger St, Washington St & Adams St
- v/c ratio < 0.25 (underutilized)
- additional freight traffic on Sanger St may warrant traffic signal at Washington St intersection

