



Wisconsin Commercial Ports Development Initiative

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WISCONSIN COASTAL MANAGEMENT PROGRAM



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WISCONSIN ECONOMIC DEVELOPMENT CORPORATION



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16. Abstract The CFIRE-led team assessed Wisconsin's commercial port infrastructure, the current and potential port markets, and related freight and maritime policies, planning and programs. This information was then combined with input and direction from the state's port leadership, industries, agencies and the logistics sector. Combined, the assessments and stakeholder input are then used to create a strategic action plan to attract sustainable markets, encourage community development, and direct policy and programs in support of the state's ports, communities and overall economy.			
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Sponsors and Partnerships

The Wisconsin Commercial Ports Development Initiative (WCPDI) was supported by a multiagency, county, association and university partnership. The project team developed a strategic plan and initiatives to drive development of Wisconsin commercial ports and to support local and statewide economic development. Wisconsin has a comparative advantage in freight and logistics through the entire multimodal transportation system and especially at the state's commercial ports. The WCPDI project team at the University of Wisconsin-Madison wishes to thank these forward-looking agencies and individuals for their leadership and support for the project.

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- Wisconsin Economic Development Corporation (WEDC)
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- Wisconsin Commercial Ports Association (WCPA)
- National Center for Freight and Infrastructure Research and Education (CFIRE)
- Great Lakes Maritime Research Institute (GLMRI)

Additional Project Partners

- Brown County, Wisconsin
- Wisconsin Department of Transportation
- Wisconsin Department of Natural Resources
- US Army Corps of Engineers
- Wisconsin Transportation Development Association

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Executive Summary

The Wisconsin Commercial Ports Development Initiative (WCPDI) aims to support increased freight movement and logistics development at Wisconsin commercial ports. As an outcome of this port development, communities and the state anticipate increased employment, increased economic development, an increased focus on logistics at Wisconsin ports, and a greater sense of a port community.

A multi-agency and university partnership team assessed and developed a baseline inventory of Wisconsin port infrastructure, completed a market and commodity assessment of Wisconsin ports, and examined institutions, programs, and policies and their role in port development. The WCPDI also integrated port, agency, business, and industry stakeholder input. This report details these activities and findings, as well as the resultant strategic master plan. To support implementation of the strategic plan, stakeholder-defined strategic initiatives to increase freight and economic development at Wisconsin commercial ports are defined and discussed.

How important are Wisconsin ports and their continued performance? Consider the average freight tonnage moved across the seven largest commercial ports in Wisconsin and the freight system required to support this economy. The Wisconsin DOT reports that more than 30 million tons of freight move through Wisconsin ports each year—an equivalent of 1.2 million truckloads of goods.¹ The Wisconsin marine freight system moved an average of 47 million tons (the equivalent of 1.9 million fully loaded trucks) on average per year during the period of 2006–2012. The state and the nation simply do not have the highway capacity, time, or even available truck drivers to manage that much additional freight. And with rail capacity now challenged by the increased volume of energy products, the additional 433,000 rail cars that would be needed to move this cargo would further overcrowd an already congested rail system.

The WCPDI focused on more than just sustaining current levels of freight activity; it also considered ways to increase freight activity at Wisconsin ports to leverage their economic potential. To support the port planning and development process, the WCPDI created a baseline inventory of Wisconsin ports (Appendix 1). This project also supports greater collaboration with the Council of Great Lakes Governors (CGLG) development initiatives. The project team conducted a baseline market inventory to better understand the commodities and potential commodities moved through Wisconsin ports. With less than 5 percent of the total freight moved in Wisconsin on the waterways, there is tremendous opportunity to increase the loads on the waterways while providing congestion mitigation, economic development opportunities, and decreased air quality impacts.

In August of 2014, a Wisconsin commercial port stakeholders working meeting was held in Green Bay to integrate stakeholder input with WCDPI research findings. The baseline infrastructure and market information, along with summaries of other state and regional port and marine freight development and program efforts were summarized for the working group participants. After an open discussion, stakeholders discussed and prioritized strategic initiatives to increase freight and economic development at Wisconsin ports.

As a result of this meeting and a follow-up electronic survey of WCPA members, strategic initiatives were defined and prioritized in the areas of:

- Awareness and advocacy for ports and port markets.
- Increased market development in traditional and new market areas.

¹ Wisconsin Department of Transportation (2014). Economic Impact of Wisconsin's Commercial Ports. <http://www.dot.wisconsin.gov/travel/water/docs/ports-econ-report.pdf>. Accessed 12/22/14.

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- Increased infrastructure investment.
- Increased planning and organizational development.

Specific strategic initiatives generated by the WCDPI research process are presented in Chapter 7. These initiatives focus on local and state level partnerships to drive port development. The study recognizes the importance of the Water Resources Development Act (WRDA) and the various program areas that support marine freight. As a general strategy, all available funding sources should be pursued.

In addition to findings presented throughout this report, it is also important to maintain a continued leadership agenda to champion port development. Now is the time to not only continue, but to increase the work of multi-agency partnerships to support port development. There is also a tremendous opportunity for greater collaboration between the Wisconsin DOT, Wisconsin Economic Development Corporation, the Wisconsin Coastal Management Program, the Wisconsin Commercial Ports Association, and the Harbor Assistance Program. These agencies and programs are a rallying point for Wisconsin port stakeholders. This recognition and collaboration can be leveraged to provide the organizing force for continued Wisconsin port development.

Similarly, given the regional and national attention to waterways, Wisconsin should continue to develop and leverage the regional partnerships on the Great Lakes and Mississippi River systems. As the ports continue to develop and integrate new partners and policies, a review of alternate port organizational and representation models should be conducted to ensure the organizational, funding, and advocacy needs of Wisconsin commercial ports are met. Finally, additional economic justification for increased investments in ports and waterways is needed to ensure policy- and decision-makers fully account for the return on investment possible through port development.

Wisconsin exists in a global economy where transportation—including marine freight and ports—is a comparative advantage for US business and industry. Informed and focused efforts to enhance Wisconsin ports are necessary to ensure that Wisconsin business and industry can compete and grow. These informed and focused efforts also support local community and economic development. The Wisconsin Commercial Ports Development Initiative is a first step in an ongoing effort to advance the Wisconsin ports as freight and logistics hubs.

Chapter 1: Introduction

Wisconsin relies on access to the Great Lakes and Mississippi River system for shipping, recreation, transportation and related industries, and fishing. Shipping the state's agricultural, forest, and mining products have driven the state's economy in the past and Wisconsin continues to rely on its water today. With an increasing amount of the freight capacity on railways and highways consumed by just-in-time truck traffic and unit trains of energy products, Wisconsin again sees the traditional water routes provided by the Great Lakes and Mississippi River as opportunities to grow the economy, develop its ports and harbor communities, and provide a more environmentally friendly way to move large, dense, and bulky commodities, project cargo, and finished goods. Increasing the freight activity at Wisconsin ports is expected to provide economic benefits in the forms of jobs and business development while also helping meet the burgeoning traffic demand on the region's highways and rail systems.

Wisconsin is bordered by and has access to more than 200 miles of Mississippi River shoreline and more than 800 miles of Great Lakes coastline. More than a third of Wisconsin's population lives in the eleven counties forming its Lake Michigan coast.² According to the Wisconsin DOT, the commercial ports of Wisconsin generate more than \$1.6 billion in economic activity and support almost 10,000 jobs. These benefits are derived from a range of activities including the movement of freight and project cargo—most often higher weight, lower value products such as coal, aggregates, and grains. Cement and energy and petroleum products are also shipped on Wisconsin waterways.

The possible opportunities and benefits of increased port activity, marine navigation, and freight movement in Wisconsin seem apparent. And yet, only a small portion of Wisconsin products is shipped by water and the state's ports and waterways are not operating at capacity. Less than 4 percent of the total freight in the surrounding ten-state administrative region (the region supported by the Mid-America Association of State Transportation Officials (MAASTO) and Mid-America Freight Coalition (MAFC)) moved on waterways according to USDOT data.³ And based on Wisconsin DOT Transearch data, slightly less than 5 percent of Wisconsin's total freight by tonnage, and less than .4 percent of freight by value moves on the state's waterways. There is clearly room for additional freight volume.⁴ Even with its tremendous marine assets, Wisconsin ranks 24th nationally in tonnage moved on waterways and eighth in the ten-state administrative MAASTO/MAFC region.⁵ The Wisconsin Commercial Ports Development Initiative (WCDPI) aims to address this freight development opportunity through the creation of a port development strategic plan that is formed from an understanding of Wisconsin port infrastructure and markets, and driven by the development of stakeholder-based, strategic development initiatives. This process also aims to increase the awareness, sense of community, and activities of the Wisconsin port community. All of these activities are geared towards the larger goal of increasing the amount of freight moving through Wisconsin ports, increasing jobs and economic development in these port communities, and creating a leadership role for Wisconsin in logistics and maritime freight movement.

² University of Wisconsin Sea Grant Institute (2014). Wisconsin Water Facts. <http://aqua.wisc.edu/waterlibrary/Default.aspx?tabid=74>. Accessed 9/29/14.

³ Mid-America Freight Coalition (2014). Commodity Movements. <http://midamericafreight.org/rfs/mafc-region/commodity-movements/>. Accessed 10/06/2014.

⁴ Mid-America Freight Coalition (2014). Appendix: Commodity Movements. <http://midamericafreight.org/rfs/mafc-region/commodity-movements/appendix-commodity-movements/>. Accessed 10/06/2014.

⁵ US Army Corps of Engineers (2014). U.S. Waterway Data: Waterborne Commerce in the United States. <http://www.navigationdatacenter.us/data/dataawcus.htm>. Accessed 12/22/14.

Freight and Marine Development Context

The current interest in Wisconsin's waterways is driven by three major factors.

- The economic and employment development opportunities related to increased freight and logistics activity.
- An understanding that the current and expected loads on the state's roads and railways are not sustainable and these systems will not meet future demand.
- Port and agency leadership with the foresight to understand and see the opportunities afforded to Wisconsin with investment in this vast marine system.

These highway and rail capacity issues and the importance of transportation-related jobs have both been major transportation topics and program agendas since the economic downturn of 2008 and have undoubtedly influenced the current interest in developing maritime navigation systems.

Marine freight related jobs tend pay more than the average job. In Wisconsin, the median pay for a position classified as a water transportation occupation was \$48,980 per year in 2012 while the median for all positions in the spring of 2013 was \$34,750, a 29 percent difference.⁶ Spatial analysis of jobs and business locations also reflects the importance of freight corridors for business, industry, and the state's economy. In the ten-state MAFC region that includes Wisconsin, 35 percent of all businesses and 42 percent of all employees are within three miles of each side of the region's five largest highway freight corridors.⁷ And in Wisconsin, 30 percent of the state's total businesses and 35 percent of the total employees are within three miles of each side of the state's top three highway freight corridors: Interstate 90, Interstate 94, and Interstate 43. According to the US Chamber of Commerce, more than 26,000 jobs in Wisconsin are supported by marine activity at ports and on waterways.⁸ Freight corridors and facilities concentrate jobs and economic activity, and increasing the utilization of Wisconsin ports supports employment development in port communities. This increased interest in maritime freight can also increase Wisconsin's overall status as a logistics and freight employment center. According to one of the leading peer-state freight advisory committees, ConexusIndiana's Vice President, David Holt states in his presentations that, "freight related jobs pay on the average 15 percent higher than the average job in the state."

Freight capacity issues on highways and rail corridors are also driving a renewed interest in Wisconsin ports. This issue has two sides: capacity-related impacts on speed and quality of service on roads and railways and available capacity in Wisconsin's marine freight system. The highway and railway freight systems are at a tipping point—in Wisconsin, in the Midwest, and across the entire nation. According to the Federal Highway Administration, freight tonnage is expected increase by 40 percent by 2040.⁹ Much of this growth is expected to occur in the trucking industry. It is unlikely that highway capacity can or will be expanded to meet these growing needs.

⁶ US Bureau of Labor Statistics (2014). Water Transportation Occupations. <http://www.bls.gov/ooh/Transportation-and-Material-Moving/Water-transportation-occupations.htm>. Accessed 10/06/2014.

⁷ Mid-America Freight Coalition (2013). Regional Freight Study. http://midamericafreight.org/wp-content/uploads/MAFC_RFS_Flyer1.pdf. Accessed 10/06/2014.

⁸ US Chamber of Commerce (2013). Waterways Work for Wisconsin. https://www.uschamber.com/sites/default/files/legacy/lra/docs/Wisconsin_USChamb_Waterway_StateFactSheet_071513.pdf. Accessed 10/06/2014.

⁹ Federal Highway Administration (2013). Freight Facts and Figures 2013. http://www.ops.fhwa.dot.gov/freight/freight_analysis/nat_freight_stats/docs/13factsfigures/pdfs/fff2013_highres.pdf. Accessed 10/06/2014.

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The nation's highways are not prepared for these increased loads. In Wisconsin, travel time and delay create unreliable travel times on 9 of 28 urban freeway corridors.¹⁰ The Wisconsin DOT estimates that these delays will cost Wisconsin drivers 7.4 million hours and \$226.5 million per year. The Wisconsin DOT also tracks the performance of freight vehicles on major corridors. For the section of I-90/94 from Madison to Eau Claire, there is annual cost of delay to commercial vehicles of more than \$7 million. The cost of delays for passenger vehicles in this corridor is estimated at more than \$10 million per year.

Wisconsin has witnessed a decline in service on its railways. As a result of the Staggers Act of 1980, more than 1,200 miles of rail line was abandoned in Wisconsin; this represents about 20 percent of the state's railways.¹¹ Currently there are approximately 3,600 miles of active rail lines in Wisconsin. These facilities serve 59 of Wisconsin's 72 counties and represent about 2 percent of the national rail network.

In addition to rail incentive and safety programs offered through the Wisconsin DOT, the state has taken an active and direct role in shoring up its rail system. Wisconsin now owns more than 500 miles of rail corridor. Eighty percent of this mileage is in service with the remaining 20 percent held as recreational trails.

The service and logistic impacts of declining rail service are accentuated at intermodal connectors such as ports. The natural alliance between rail and marine freight has historically provided a land-link to the hinterland for heavy and bulky commodities. Rail has remained the hauler of choice when heavy and bulky marine loads need to move away from the marine system. The decline in rail service has left the state with two rail intermodal facilities at Arcadia and Chippewa Falls, Wisconsin—both of which are landlocked. As a result, moving large project cargo by water and rail has become much more complicated. The Wisconsin Commercial Port Development Initiative, as well as efforts at individual ports across the state and across the Great Lakes region, has identified the lack of rail access at ports as a significant shortcoming of the Wisconsin port system.

The leadership provided by maritime freight and port leadership forms the third factor that drives the interest and work towards greater use of Wisconsin ports. The Wisconsin Commercial Port Association (WCPA), Wisconsin Economic Development Corporation (WEDC), the Wisconsin Coastal Management Program (WCMP), Wisconsin DOT, Wisconsin Department of Natural Resources, the University of Wisconsin-Madison, and University of Wisconsin-Superior formed the Wisconsin Commercial Ports Development Initiative project guidance team, funded the project, and provided personnel to work directly on the project. The project was conceived as a benefit to the triple bottom line for the state. Supporting ports helps current freight and logistics businesses and attracts new businesses. Increased freight and logistics activity means jobs and sustainable, healthy communities. And because maritime freight moves more cargo using less fuel, a greater share of freight on the waterways will provide both environmental benefits and increased efficiency.

The Wisconsin System

Figure 1 shows the Wisconsin commercial port system, as well as highway, rail, and marine highway systems. In addition to the state's own economy and linkages, Wisconsin's system moves a large amount of goods due to its proximity to several major metropolitan areas

¹⁰ Wisconsin Department of Transportation (2014). Travel Time Reliability and Delay Report: Spring 2014. <http://www.dot.state.wi.us/news/docs/081314traveltimereport.pdf>. Accessed 10/06/2014.

¹¹ Wisconsin Department of Transportation (2013). Wisconsin Northwoods Freight Rail Market Study. <http://www.dot.wisconsin.gov/projects/rail/docs/northwoods-freight-study.pdf>. Accessed 10/06/2014.

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including Minneapolis, Minnesota and Chicago, Illinois. Milwaukee and Madison also contribute dramatically to the urban goods demand.

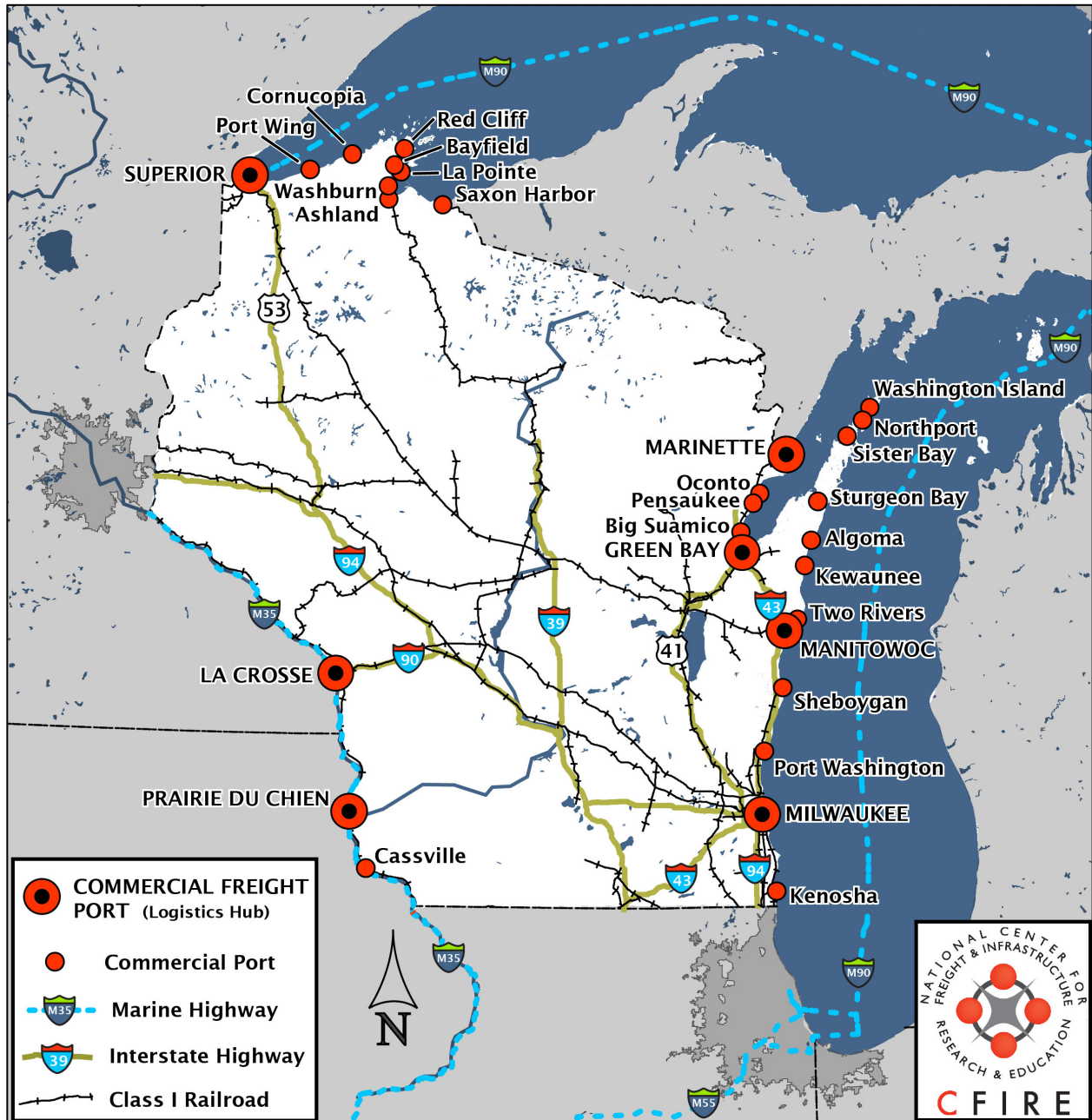


Figure 1. Wisconsin Commercial Ports and the Wisconsin Freight Transportation System

The Wisconsin port system plays a critical role in moving the state's economy. If service were to cease at Wisconsin's seven major marine freight ports, for an average year during the period of 2006 to 2012, there would have been an additional 1.9 million fully loaded tractor trailers on the state's highways or more than 433,000 additional rail cars. Table 1 shows the average tonnage by port and the equivalent conversions to truck and rail modes.

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Table 1. Average Tonnage by Mode for Wisconsin’s Seven Largest Freight Ports (2006-2012)

City	Tonnage	Truck Loads (25 ton)	Railcars (110 ton)
Superior	40,121	1,604,840	364,736
Milwaukee	3,330	133,200	30,273
Green Bay	2,317	92,680	21,064
La Crosse	702	28,080	6,382
Prairie du Chien	537	21,480	4,882
Marinette	325	13,000	2,955
Manitowoc	307	12,280	2,791
Total	47,639	1,905,560	433,082

Progression of the Report

The progression of this report supports the study objectives as defined in the scope of work to create a baseline understanding of the infrastructure and markets at Wisconsin ports, and to identify strategic initiatives that support growth at these ports. The project approach is based on the triangulation of several methods to provide a broader understanding of the context and potential opportunities for port development. The project examines the different dimensions of port operations and economics, stakeholder perceptions regarding port development, and port commodity and development trends to formulate a strategic development approach. This work culminates in a master plan that can then guide and drive immediate and longer-term development at Wisconsin commercial ports. Finally, this effort will help create momentum for the development of Wisconsin ports and waterways and support a greater sense of community among Wisconsin port stakeholders.

- Chapter 2 presents the overall research methodology, strategic development process, and stakeholder input process in more detail. This includes a discussion regarding the methodology and approach used to develop the infrastructure and market baselines, create outreach and working groups, identify best practices, and construct the stakeholder survey.
- Chapter 3 provides an overview of the markets and commodities that move through Wisconsin commercial ports. This analysis includes a review of the commodities moved, the amount of key products moved through the commercial ports, and a discussion of new markets. Stakeholders placed increasing importance on both securing sustainable traditional markets and in developing new markets for the marine sector.
- Chapter 4 examines the plans and planning activities of local communities and their integration with ports. Local planning is an important consideration as the state moves forward with port development. Prepared and willing communities will be more ready to adopt and innovate to support their ports. The Wisconsin DOT Harbor Assistance Program (HAP) is included in this analysis and has been identified as critical to the current as well as future success of marine freight development in Wisconsin.
- Chapter 5 reports on the strategic initiatives identified by port stakeholders and provides the results of prioritization process of these initiatives at the WCPA annual meeting. This

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chapter discusses the initiatives ranked as most critical by stakeholders. Finally, an additional survey of Wisconsin port stakeholders was conducted to verify trends found in the research and to further increase awareness of port development efforts in Wisconsin.

- Chapter 6 integrates the stakeholder-defined issues and strategies and the Wisconsin marine freight context as informed by other development efforts, and creates a more structured approach to a strategic master plan. The master plan cascades from these ultimate freight and economic development objectives, through strategic development interest areas, to planning and implementation of strategic initiatives to increase the freight moved through Wisconsin commercial ports.
- Chapter 7 provides steps for implementing initiatives for each of the identified strategic areas. This chapter links the strategic vision and mission of the approach to organizational development, market orientation, and further research and development that will directly support development at Wisconsin commercial ports.
- Chapter 8 provides conclusions and restates the rationale, process, findings, and recommendations of the Wisconsin Commercial Ports Development Initiative.

Appendices

- Appendix 1 provides a baseline infrastructure inventory for Wisconsin's active commercial ports.
- Appendix 2 provides a directory of Wisconsin port businesses.
- Appendix 3 provides a listing of the port planning documents used as a basis for the analysis in Chapter 4 of this report.
- Appendix 4 provides charts of the Harbor Assistance Program investments by function and port class.

Chapter 2: Methodology and Strategic Development Approach

Increasing the freight moved through Wisconsin ports is supported and enabled by port infrastructure and related investments. However, demand for port access is not driven solely by the provision of infrastructure. Demand for port services to move freight is related to historical changes in markets and mode dominance, cost of service, energy and transportation policies, as well as weather, climate, and catastrophes. Increasing freight traffic through Wisconsin ports begins with understanding the industry drivers and related players of the state's commercial port system. Incorporating a range of methods and system perspectives allows for a broader understanding of the context and opportunities available to Wisconsin ports. In order to develop the strategies and a master plan to support the growth of freight moving through the state's ports, the Wisconsin Commercial Ports Development Initiative engaged in nine overlapping activities:

1. Develop a baseline infrastructure inventory of Wisconsin commercial ports.
2. Develop a market baseline and understanding of potential markets for the ports.
3. Reach out to stakeholders, and review and incorporate other marine freight development initiatives.
4. Interview Wisconsin commercial port operators, and businesses and industries that use the commercial ports.
5. Conduct a review of best practices for Wisconsin marine programs.
6. Conduct a Wisconsin port stakeholder meeting to:
 - a. Identify stakeholder-defined strategic initiatives.
 - b. Prioritize stakeholder-defined strategic initiatives.
 - c. Increase the sense of momentum and sense of community at Wisconsin ports.
7. Conduct a survey to confirm stakeholder findings and increase momentum and interest in developing Wisconsin ports.
8. Conduct an analysis of stakeholder input, port and marine development trends, and pertinent freight data to create a strategic master plan. In coordination with stakeholders, develop strategic development areas to support the larger development objectives, and identify specific actions, organizational approaches, programs and policies, and research needs that support accelerated and sustainable development at Wisconsin commercial ports.
9. Promote the Wisconsin commercial ports development strategies and Wisconsin ports at state and regional meetings and conferences to promote the state's marine freight resources.

Wisconsin's Diverse Port Communities

As the focus of the Wisconsin Commercial Ports Development Initiative is rooted in increasing the freight and logistics activities at the state's commercial ports, this study predominately focuses on those ports with active terminals that move freight. In this study we focus on the seven most significant and active freight ports in Wisconsin on both the Great Lakes and Mississippi River, including ports at Superior, Milwaukee, Green Bay, Marinette, Manitowoc, La Crosse, and Prairie du Chien. While these seven ports are clearly the leading freight and logistics ports in Wisconsin, it is important to realize the broad economic and cultural role the ports play in the state and its communities. The Wisconsin DOT considers 29 communities with ports as eligible for the Harbor Assistance Program. Twenty-two communities have used this program. According to the WCPA, there are 14 commercial ports of varying levels of activity

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across the state. This effort focuses on the seven major ports based on their clear leadership in tons of freight moved. County, community, and harbor/port plans were also reviewed to gauge the interest of ports in freight development in contrast to recreational fishing or as a vacation location.

Infrastructure Baseline

As part of an effort to bring a greater level of planning to port development and foster economic development, the project team created a baseline inventory of Wisconsin ports. This inventory not only provides a complete index of the businesses, land uses, and layout at Wisconsin ports, it also aligns with a Council of Great Lakes Governors (CGLG) initiative to create similar inventories across all of the Great Lakes states. As this project is intended to align with other regional efforts, this inventory was modeled on work previously completed by the Minnesota DOT. The Minnesota approach has been adopted across the Great Lakes states as a first step towards a complete inventory of ports, land uses, and marine assets in this region.

This port inventory can help local and state planners understand the land use and planning factors important to community and port growth. Most importantly, this port inventory is a significant step towards linking freight and economic development. The inventory can be used as a site location tool for business and economic development that shows business-ready sites, existing businesses and services, and access to the transportation system.

To complete this effort, the team used existing mapping found in port and community plans, information from planning sections of state agencies, and site visits. Attempts were made to verify the information with all terminal operators and port offices. The information was then mapped and organized in a manner similar to the CGLG-recommended Minnesota model. Further implementation of port inventories is explored in the implementation section of this report (Chapter 7). Additional infrastructure analysis for the Mississippi River ports at La Crosse and Prairie Du Chien are available on the WCPDI project page.¹²

Developing the Wisconsin Commercial Ports Market Baseline

Chapter 3 of this study examines commodity flows through Wisconsin ports from a historical, current, and future perspective. Data sources include the USACE Waterborne Commerce Statistics, Transearch analysis results supplied by the Wisconsin DOT, other studies and planning documents for the ports, and port interviews.¹³ This information, along with the regional context of increasing interest in port development, is synthesized to provide a market-based understanding of the current as well as future economic and logistics climate at Wisconsin ports. This effort supports local- and state-level freight planning as well as advances the growing linkages between economic and transportation development in the state. It can also be used to understand state and regional shipping and commodity patterns to better align business development. Chapter 7 further defines the implementation of market development initiatives to support the overall freight and logistics development of Wisconsin ports.

¹² National Center for Freight and Infrastructure Research and Education (2013). Infrastructure and Market Assessment: Ports of La Crosse and Prairie du Chien. <http://www.wistrans.org/cfire/documents/Ports-Infrastructure-MarketAssessment.pdf>. Accessed 12/23/14.

¹³ US Army Corps of Engineers (2014). Waterborne Commerce Statistics Center. <http://www.iwr.usace.army.mil/About/TechnicalCenters/WCSCWaterborneCommerceStatisticsCenter.aspx>. Accessed 12/16/2014.

Outreach to Stakeholders, and Review and Incorporate Other Marine Freight Development Initiatives

There is a renaissance in the interest in marine freight development in the Great Lakes and Mississippi River systems. Each of these development efforts is adding information, strategies, and resources to the overall port and marine development agenda that can often be adopted in other marine systems. In order to learn from others as well as extend the Wisconsin port presence, the research team reviewed and participated in a variety of marine freight development efforts. The project investigator facilitated the 2014 Summer Upper Mississippi River Basin Association meeting. The meeting was focused on examining the opportunities and hurdles in further development of the Mississippi River and concluded with a five-state working session designed to identify strategies for increasing investment in Mississippi River infrastructure. The project team also assisted with the five-state application for Marine Highway 35 on the Mississippi River. The project team worked with the CGLG on the development of the Wisconsin port inventory and is exploring how to work together on a more comprehensive port inventory serving all of the Great Lakes states.

Other marine and port development efforts that were reviewed included efforts on the Missouri River, and other Great Lakes efforts in Indiana, Ohio, and Minnesota.

The project team also conducted site visits of the seven commercial ports that move the majority of the marine freight in Wisconsin. These visits included Duluth/Superior, Milwaukee, Green Bay, Marinette/Menominee, Manitowoc, La Crosse, and Prairie Du Chein. The project team also visited Sturgeon Bay to investigate the importance of ship and boat building at this port. The visit also provided insight as to the condition, serviceability, and outlook for the Great Lakes fleet and how the Great Lakes system handles seasonality. Port operators, terminal operators, economic developers, community planners, and business and industry leaders were interviewed at each of the ports. In addition, interviews were conducted with state and federal agency personnel with programs and policies related to port development. Interviews and participation was also sought from associations and groups such as Wisconsin Transportation Development Association, Wisconsin Manufacturers Association, and the Wisconsin Corn Growers Association.

The planning and institutions section of Chapter 7 further defines strategies for implementing and leveraging greater port participation and collaboration.

Identification of Port Best Practices

This project specifically explored planning activities at other ports to identify best practices that are innovative in the areas of organizational development and port and freight planning. Nine different ports, state programs, and initiatives are catalogued and their most innovative efforts are identified and showcased. Practices are gleaned from efforts in Pennsylvania, Texas, Florida, Ontario, North Carolina, Virginia, and the Great Lakes–St Lawrence Seaway. In addition to the review of the planning practices and documents, interviews with port and agency professionals were conducted to supplement and support the information. The best practices and recommendations identified in this project represent efforts in the areas of port and intermodal planning, stakeholder development, investment and funding strategies, and port

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governance. The Great Lakes Maritime Research Institute and Prime Focus LLC completed this portion of the study.¹⁴

WCPA Stakeholder Working Session

In order to verify the information collected throughout the project, and to gather information and preferences from port stakeholders, a port stakeholder working session was held in Green Bay in collaboration with the annual WCPA meeting. This meeting also provided an opportunity to increase the awareness of this project and the state's focus on port development. The nearly 80 attendees at the WCPA meeting represented a broad mix of port stakeholders, including port operators, terminal operators, businesses and industries that use the ports, logistics providers, state and federal agency personnel, and political representatives. Challenges to the attendees to accelerate their efforts to develop Wisconsin ports were made by Governor Scott Walker, Senator Tammy Baldwin, Wisconsin DOT Secretary Mark Gottlieb, WCPA representatives, and current WCPA President Dean Haen.

The WCPDI project team gave presentations at this meeting on the market and infrastructure baseline, port planning and governance best practices, and related marine freight development efforts. These presentations were intended to provide a starting point for attendees so that they could then identify and prioritize the strategies for increasing freight and economic development at the state's commercial ports. Three breakout groups were organized so that they could discuss and prioritize these issues. Nominal voting for the identified strategies was conducted to prioritize the initiatives. After the breakout groups prioritized and discussed the issues and strategies, the project team summarized and verified the findings of the meeting with the attendees.

In order to reinforce and expand stakeholder awareness and participation in developing Wisconsin ports, and to verify the findings of the research process and stakeholder working sessions, a web-based survey was sent to the entire WCPA membership list. The survey addressed the same initiatives and issues identified and prioritized at the WCPA meeting. Seventy-seven respondents confirmed and provided additional input regarding these strategic initiatives.

Chapter 7 discusses the prioritization process at the WCPA meeting that resulted in the strategic initiative categories and also identifies several distinct implementation plans.

A Systems Approach to Leveraging Our Comparative Advantage

In order to understand the context, the history, and possibilities of increasing the freight moved through Wisconsin ports, the project team relied upon the nine overlapping activities outlined above. This methodology integrates commodity and economic data, stakeholder interviews and workshops, site visits, an electronic stakeholder survey, port network development, a review of similar initiatives and best practices, and a literature review of recent port development research.

Chapters 3-8 document these efforts and place them in the context of developing a master plan for Wisconsin commercial ports. The plan aims to increase in the freight moved through

¹⁴ Great Lakes Maritime Research Center (GLMRI) and Prime Focus, LLC (2014). Wisconsin Commercial Ports Association Port Planning Benchmark Study. <http://www.glmri.org/downloads/GLMRI-WPCA%20Commercial%20Ports%20Association%20Benchmarking%20Study.pdf>. Accessed 12/16/14.

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Wisconsin ports, increase the freight and logistics business at these ports, and ultimately lead to economic and workforce development in these port communities and across the state.

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Chapter 3: Market and Commodity Analysis

Background

Wisconsin is currently home to seven major commercial freight ports. These ports represent centers for logistics activity and are situated on Lake Superior, Lake Michigan, and the Mississippi River, providing Wisconsin shippers coastal access on three sides. From these coasts, Wisconsin farmers, loggers, miners, and manufacturers are granted access to markets within the rest of the Great Lakes region, the Gulf Coast, the Saint Lawrence Seaway, and the east coast of North America. These commercial freight ports, combined with Wisconsin's rail connections to west coast ports in the United States and Canada, put Wisconsin in a unique position to thrive as a transportation hub in the upper Midwest.

This chapter provides an overview of the commodities that move through Wisconsin's major commercial ports and the markets they serve. The first section contains an analysis of publically available state marine employment data. This analysis shows a robust impact on the tourism and recreation industries in the state, a strong marine transportation industry, clusters of ship and boat building activity, and a rapidly growing marine construction and service industry. The second section contains an analysis of publically available commodity shipment data. This analysis, both aggregated to the system level (i.e., the ports within Great Lakes system and for those along the inland water system) and analyzed for the individual commercial freight ports, shows that bulk commodities such as coal, iron ore, limestone, cement and concrete, salt, and grains make up the majority of the overall freight tonnage. The final section of this chapter discusses the trends, opportunities, and challenges identified during market outreach efforts with the ports and terminal operators.

Marine Industrial Employment

The National Oceanic and Atmospheric Administration (NOAA) provides marine-related employment data at the state level, and reports the employment data for individual Great Lakes counties through the Economics: National Ocean Watch (ENOW) Digital Coast online data tool.¹⁵ The ENOW tool utilizes data from the Bureau of Labor Statistics Quarterly Census of Employment and Wages program, and provides the numbers of establishments, employment figures, and wage measures for marine-related industries. It also incorporates data from the Bureau of Economic Analysis to report the output as Gross State Product (GSP). Figure 2 and Figure 3 show 2011 data for the living resources, marine construction, ship and boat building, marine transportation, and offshore mineral extraction sectors.¹⁶ It should be noted that these employment numbers count those employed by business establishments, including part-time and seasonal employees, but does not include those who are self-employed.

Wisconsin currently has a higher ratio or number of marine-related establishments compared to workers, when this business–employee relationship is compared with other states. The only other state where this is the case is Ohio. On all four metrics, Wisconsin is in the middle, while Illinois, our immediate neighbor to the south, dominates all four categories.

¹⁵ NOAA Office for Coastal Management (2014). ENOW Explorer. <http://coast.noaa.gov/digitalcoast/tools/enow>. Accessed 12/18/2014.

¹⁶ Bureau of Labor Statistics' Quarterly Census of Employment and Wages and the Bureau of Economic Analysis

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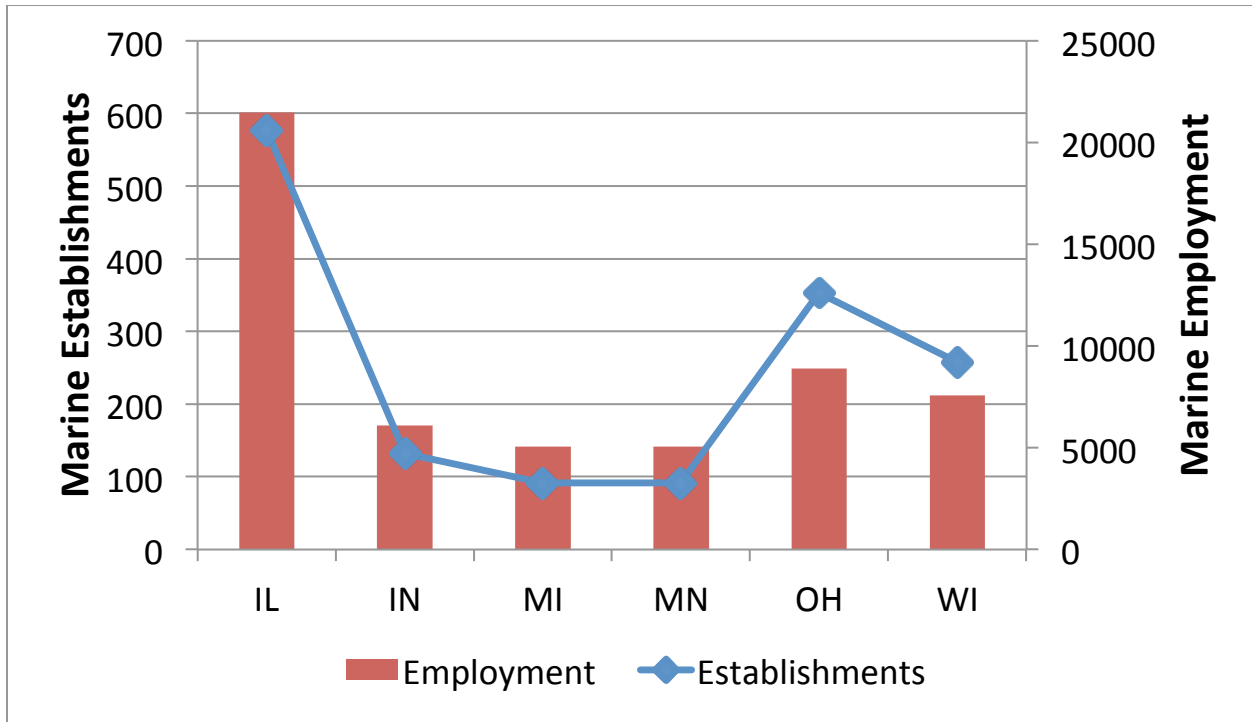


Figure 2. Marine Establishments and Employment

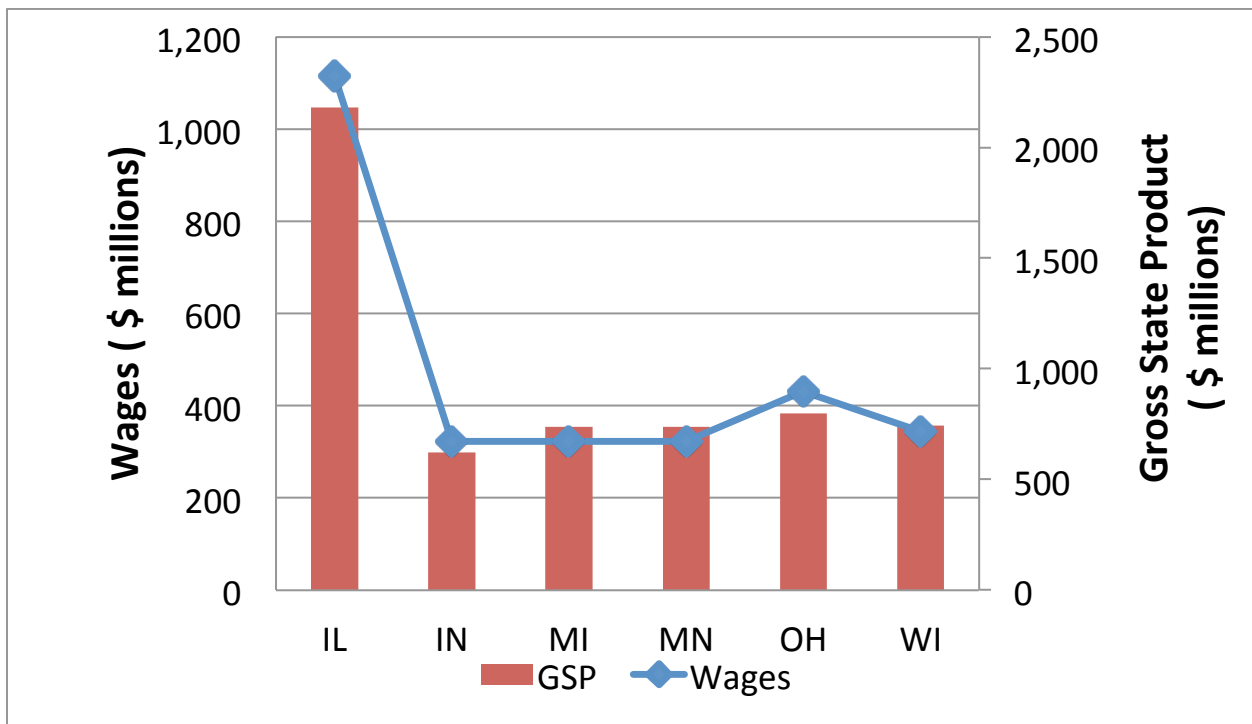


Figure 3. Wages and Gross State Product

Temporal analysis of data between 2005 and 2011 shows that Wisconsin weathered the recent recession better than many of its peer states (this includes data from the tourism sector as well as the sectors mentioned previously). Wisconsin was the only state to show a positive increase in all the economic metrics of establishments, employment, wages, and GSP (Figure 4). Much

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of the positive employment for the coastal United States is related to the increases in the offshore mineral resource sectors, as well as tourism.

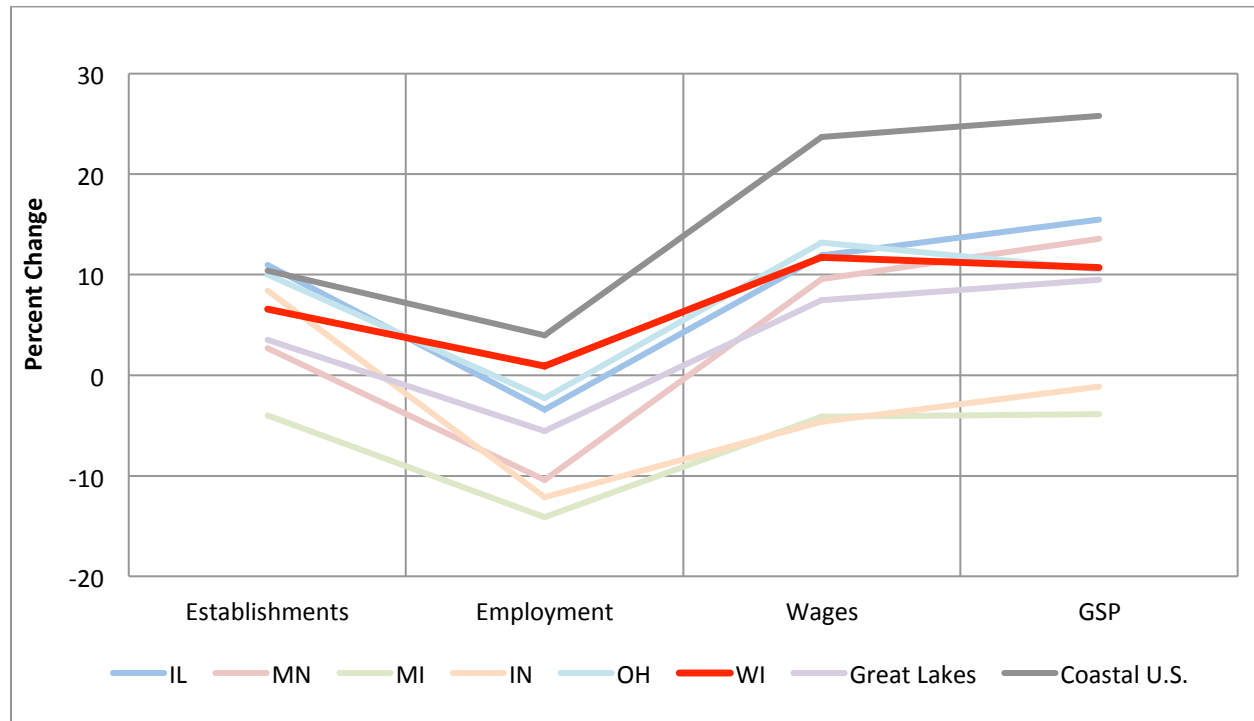


Figure 4. Marine Industry Changes (2005-2011)

Wisconsin's marine industry is broken down by sectors (Table 2). Tourism and recreation forms the largest marine sector in Wisconsin, hosting 1,770 establishments, 30,747 employees, \$422.5 million in wages, and producing output of \$965.2 million. Between 2005 and 2011, this sector witnessed positive changes for all measures including increases of 107 establishments, 1,086 employees, \$68.7 million in wages, and \$165.6 million to the GSP. NOAA defines the tourism and recreation sector as boat dealers, restaurants, hotels, marinas, RV parks and campsites, scenic tours, sporting goods, and other similar establishments.

Marine transportation, which consists of freight and passenger transportation, warehousing, the manufacturing of search and navigation equipment, and marine transportation services (port and harbor operations, cargo handling, navigational services, etc.) also saw increases in establishments (10), employment (587), wages (\$8.7 million), but a decrease in contribution to GSP by just under \$100 million between 2005 and 2011. This sector impacts shippers' ability to compete globally as well as impacts profit margins depending on how efficiently raw materials, intermediate goods, and finished products are transported throughout the supply chain and ultimately to the end consumers.

The data for marine construction, which falls under the other heavy and civil engineering construction industry, shows that although there was a loss of nine establishments in the state between 2005 and 2011, employment gained 363 jobs from 256 to 619, increased wages in the state by \$41.9 million from \$12.9 to \$54.8 million, and increased output by \$70.6 million from \$23 to \$93.6 million.

The two areas where Wisconsin saw the smallest increases (and in some cases decreases) were living resources (such as fisheries, hatcheries, processing, and markets) and offshore mineral extraction. Offshore mineral extraction was a key contributor to the boom for the coastal United States, but in Wisconsin this effect was much more muted due to the resources available

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in the Great Lakes such as limestone, sand, and gravel, versus oil and gas in other regions of the country such as the Gulf Coast.

Table 2. Wisconsin's Marine Sectors

	Establishments	Employment	Wages (millions)	GSP (millions)
Tourism & Recreation	1,770	30,747	\$422.5	\$965.2
Marine Transportation	142	4,156	\$168.5	\$311.8
Ship & Boat Building	28	2,346	\$107.9	\$290.1
Marine Construction	30	619	\$54.8	\$93.6
Living Resources	32	300	\$6.9	\$27.6
Offshore Mineral Extraction	26	138	\$6.6	\$20.4
Wisconsin Total	2,028	38,306	\$767.2	\$1,708.7

The ship and boat building sector, which also includes repairs, became much more efficient during this time; establishments and employment decreased by 3 and roughly 1,600 respectively while output increased by \$21 million. As shipbuilding represents not only the transportation sector but also the manufacturing sector, this increase in efficiency signifies good news for many other parts of the economy, as manufacturing represents the highest multiplier in the economy due to its forward and backward linkages to other sectors of the economy.

Wisconsin is the Great Lakes regional leader when it comes to ship and boat building. The boat-building sector in Wisconsin is a cluster economy; that is, a geographic concentration of interconnected businesses, suppliers, and associated institutions in a particular field.¹⁷ Clusters are considered to increase the productivity with which companies can compete, nationally and globally. They tend to be self-sustaining as they create their own economic development through innovation, and arise from cost reductions associated with linkages between suppliers and customers. The formation of clusters requires a specialized and qualified local workforce, and allows for spillover of knowledge amongst the associated firms. Clusters must be market driven—policy and programs alone will not create a cluster, though they can help. Wisconsin's ship and boat building clusters are located in the ports of Marinette, Sturgeon Bay, and Manitowoc, and can be highlighted by the joint public and private stakeholder efforts that led to the formation of the Maritime Center of Excellence in Marinette. Another cluster is forming in Milwaukee centered on water research and technology. This sector has the potential to become an important piece of the marine industry discussion in the near term.

Commodity Overview

As of 2012, Wisconsin ranked eighth of the ten MAASTO (Mid-America Association of Transportation Officials) states, and 24th in the nation with 31.6 million tons of freight shipped from or to ports on the Great Lakes (Table 3). This data however, does not include intrastate moves—for example, if the port of Milwaukee receives a vessel carrying coal from the port of Superior, that tonnage is only counted once. Table 3 shows Wisconsin as it relates to other

¹⁷ Michael Porter (1998). *The Competitive Advantage of Nations*. New York: Free Press.

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MAASTO states, as well as its nationwide ranking. Figure 5 shows the historical trend for Wisconsin and several Great Lakes states.

Table 3. 2012 Tonnage of MAASTO States

State	Total Tonnage ('000 tons)	US Rank
Illinois	106,399	6
Kentucky	94,688	7
Ohio	90,569	9
Indiana	68,322	13
Michigan	57,547	15
Minnesota	42,872	18
Missouri	34,066	23
Wisconsin	31,634	24
Iowa	10,327	34
Kansas	346	40

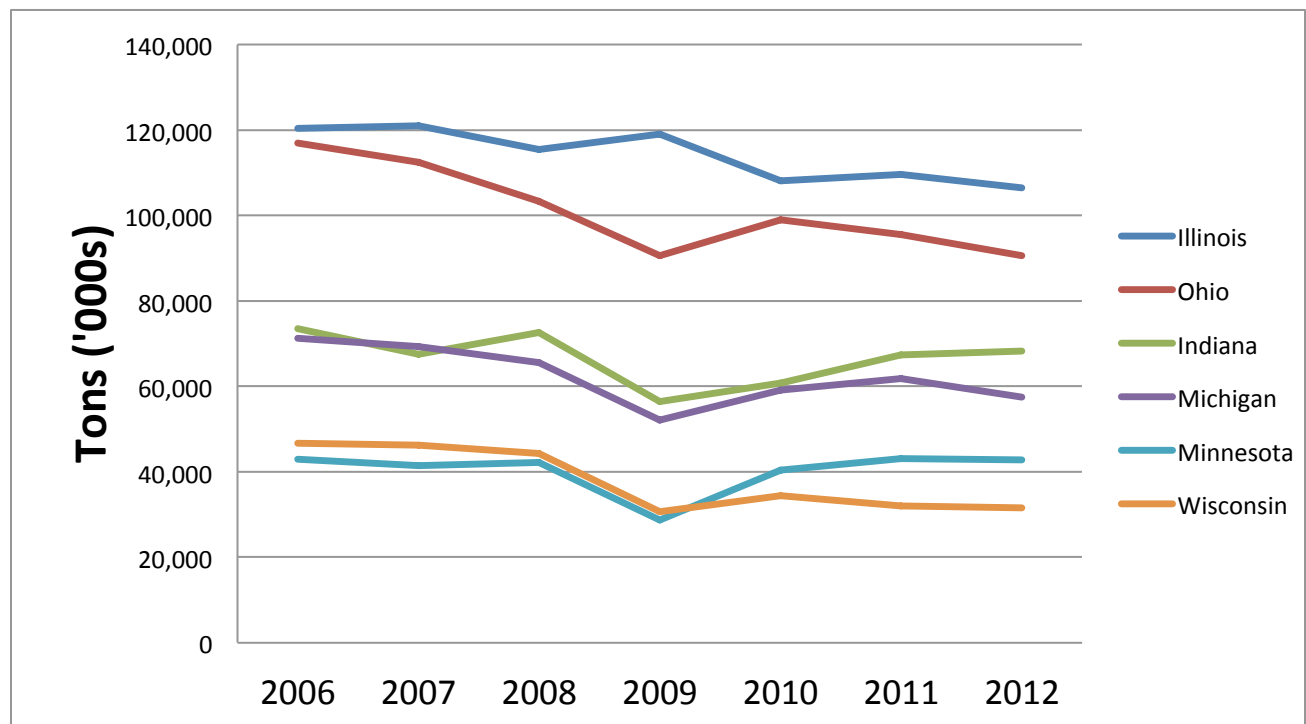


Figure 5. Historical Tonnage By State

Wisconsin ports—as did most of their regional neighbors—suffered losses in tonnage during the great recession (2007-2009). Wisconsin’s tonnage has remained relatively steady since, while

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Minnesota and Indiana have managed to climb back to pre-recession levels. Indiana and Minnesota might offer potential sources of best practices in business and market development as both states have increased the tonnage with a limited number of ports. Illinois, however, experienced a temporary spike in 2009 before its tonnage trended down.

Marine Transportation Systems

Great Lakes Ports

Each year, more 300 million tons of freight moves through Great Lakes ports. Wisconsin has captured less than 10 percent of that volume. Averaging tonnage data between 2006 and 2012 for the ports of Superior, Marinette, Green Bay, Manitowoc, and Milwaukee shows that 96 percent of the cumulative freight tonnage is represented by only six commodities: coal, iron ore, limestone, non-metallic minerals, cement and concrete, and wheat. Overall, roughly 80 percent of the tonnage moved is out-bound from Wisconsin ports.

Much of these raw materials come from the mines of northern Wisconsin, northern Minnesota, Montana, and Wyoming, and travel primarily to Michigan, Indiana, and Canada, but also as far away as Louisiana, New York, and some foreign markets (see Figure 6 and Table 4).¹⁸

The commodity classification used to report port specific tonnage (which was aggregated to figure Wisconsin Great Lakes ports tonnage levels) differs from the commodity classification used to report state origin-destination pair data. For example, the 1,792,546 tons of sand, gravel, shells, clay, salt, and slag originating from Michigan and destined for Wisconsin is most likely salt deliveries, and would be classified as non-metallic minerals within the port level data. Other states that showed up as part of the 49 reported origin-destination pairs by the USACE include Alabama, Kentucky, Tennessee, and Texas.

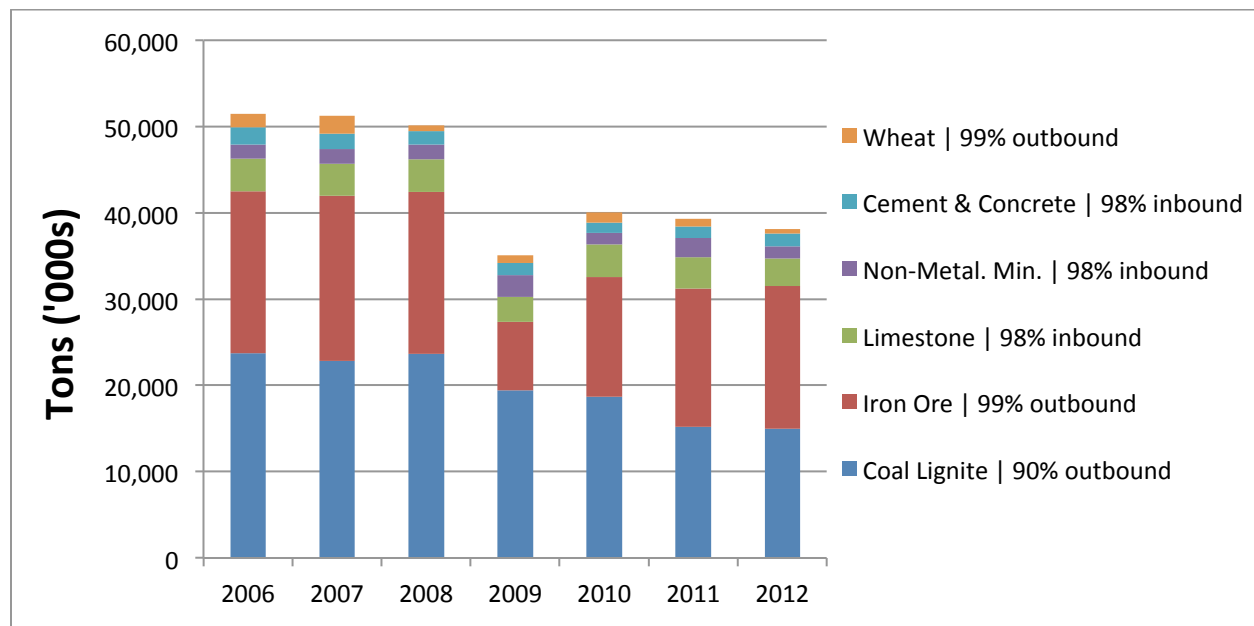


Figure 6. Top 6 Commodity Moves via Great Lakes Ports

¹⁸ US Army Corps of Engineers, Waterborne Commerce Statistics Center (2014). <http://www.iwr.usace.army.mil/About/TechnicalCenters/WCSCWaterborneCommerceStatisticsCenter.aspx>. Accessed 12/16/14.

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Table 4. Top Origin-Destination Pairs

Origin	Destination	Tons	Commodity
Wisconsin	Michigan	10,568,072	Coal, Lignite, and Coal Coke
Wisconsin	Indiana	5,891,778	Iron Ore, Iron, and Steel Waste and Scrap
Wisconsin	Canada	2,372,153	Iron Ore, Iron, and Steel Waste and Scrap
Michigan	Wisconsin	1,792,546	Sand, Gravel, Shells, Clay, Salt, and Slag
Wisconsin	Canada	1,724,931	Coal, Lignite, and Coal Coke
Illinois	Wisconsin	1,229,903	Coal, Lignite, and Coal Coke
Michigan	Wisconsin	1,128,373	Primary Non-Metal Products
Wisconsin	Minnesota	1,039,866	Unknown and Not Elsewhere Classified Products
Canada	Wisconsin	969,411	Sand, Gravel, Shells, Clay, Salt, and Slag
Iowa	Wisconsin	653,684	Unknown and Not Elsewhere Classified Products
Wisconsin	Louisiana	539,943	Food and Food Products
Ohio	Wisconsin	443,439	Coal, Lignite, and Coal Coke
Wisconsin	Foreign	404,429	Food and Food Products
Wisconsin	New York	332,548	Unknown and Not Elsewhere Classified Products
Wisconsin	Michigan	239,054	Unknown and Not Elsewhere Classified Products

The Twin Ports of Duluth and Superior dominate the tonnage moved by Wisconsin's commercial freight ports. The Twin Ports moved on average about 40 million tons of goods annually from 2006-2012—seven times the tonnages moved at the ports of Milwaukee, Green Bay, La Crosse, Prairie du Chien, Marinette/Menominee, and Manitowoc combined (Figure 7). About 4 million tons are received and about 36 million tons are shipped out each year. While outbound coal represents the largest market share at Duluth and Superior, the Twin Ports also move inbound limestone, outbound wheat, cement and concrete, non-metallic minerals like salt, sand and gravel, iron ore, and other grains such as oats, sorghum, and animal feed (Figures 8-10). The US Army Corps of Engineers Manuscript Cargo File reports does not separate twin ports such as those in Duluth and Superior, but rather reports combined data for the two.

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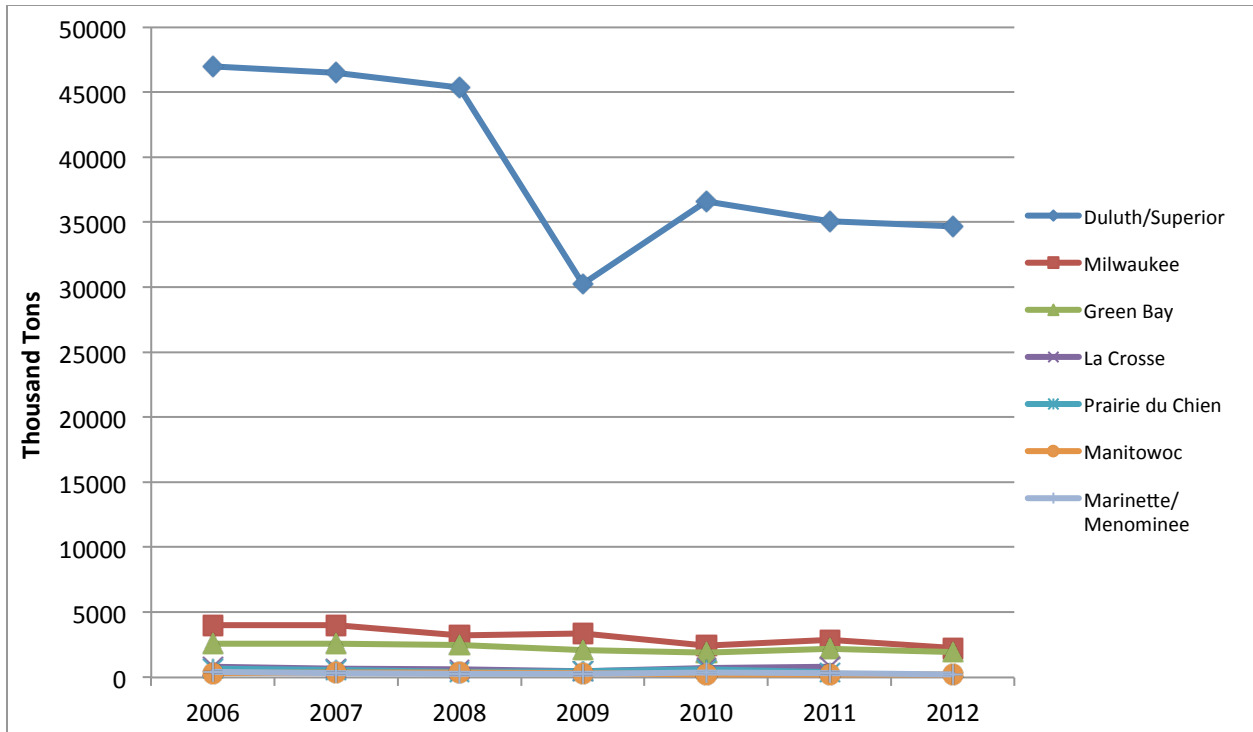


Figure 7. Historical Tonnage Data for Wisconsin Commercial Freight Ports (2006-2012)

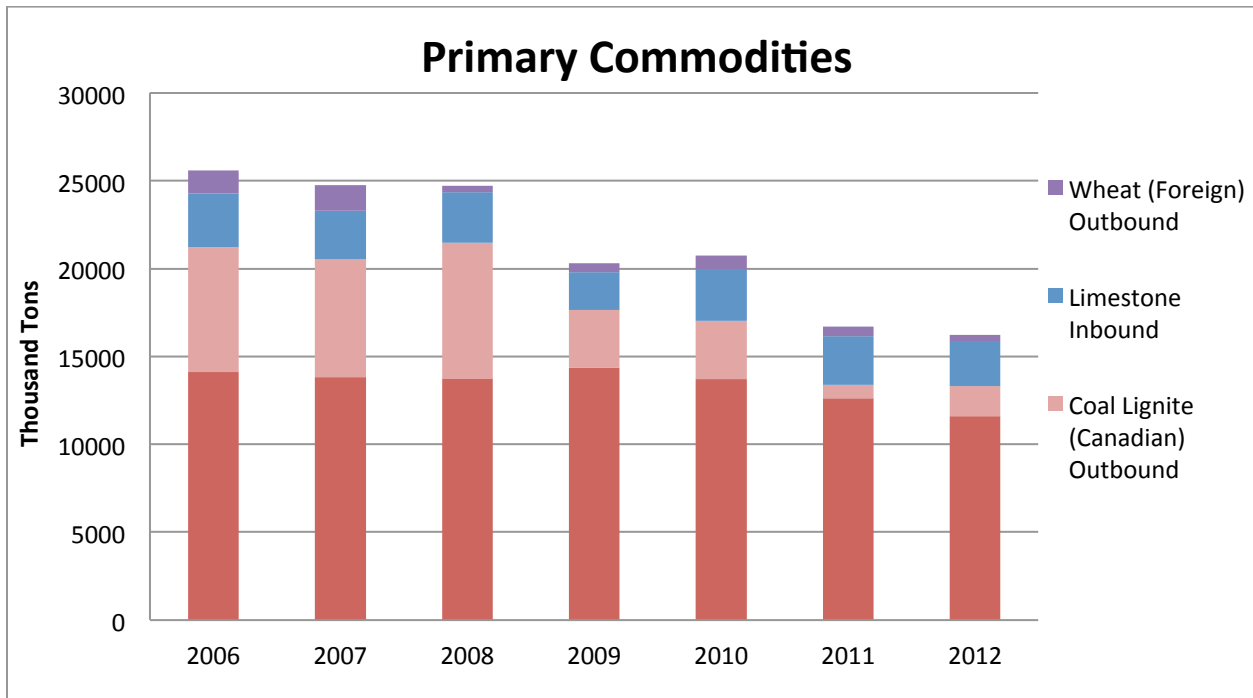


Figure 8. Primary Commodities: Twin Ports of Duluth and Superior

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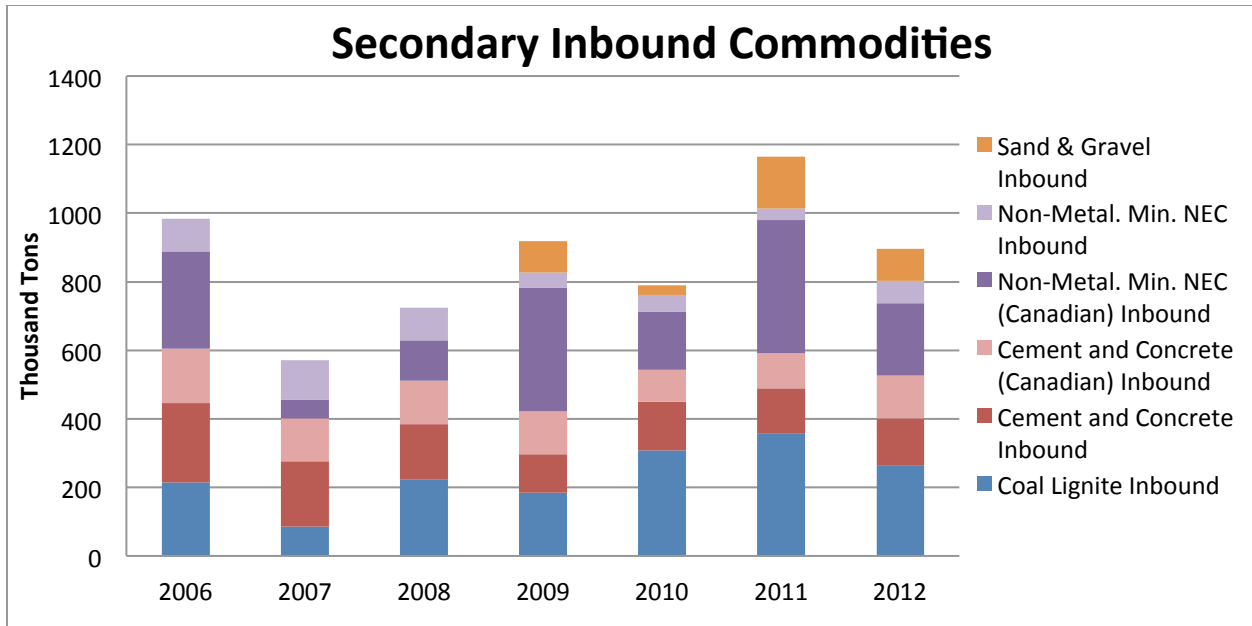


Figure 9. Secondary Inbound Commodities: Twin Ports of Duluth and Superior

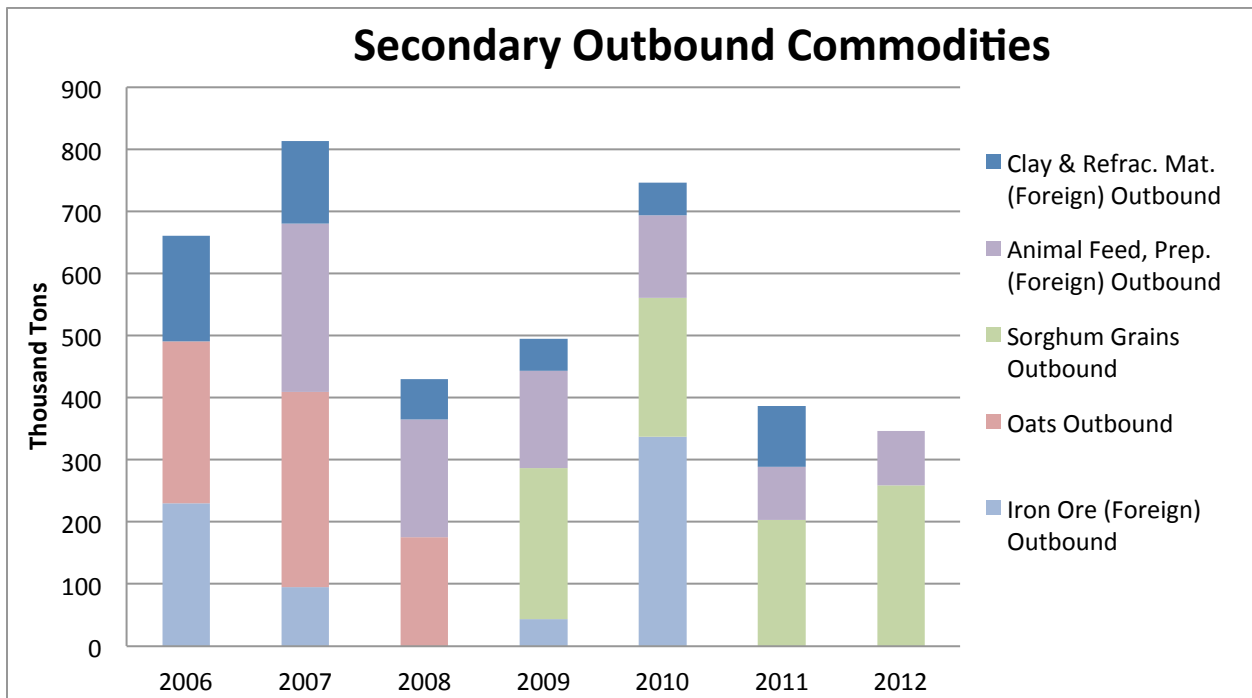


Figure 10. Secondary Outbound Commodities: Twin Ports of Duluth and Superior

After the Twin Ports of Duluth and Superior, the Ports of Milwaukee and Green Bay rank second and third amongst Wisconsin’s commercial freight ports (Figure 11). The Port of Milwaukee averaged about 3.1 million tons of goods moved annually between 2006 and 2012 with just under a 95/5 split between inbound and outbound tonnage while the Port of Green Bay averaged about 2.3 million tons annually between the same time period with close to a 99/1 inbound/outbound split. The ports of Milwaukee and Green Bay have seen a decreasing trend in total tonnage since the Great Recession with Milwaukee realizing decreases in both total

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inbound and outbound tonnage while Green Bay has experienced a decrease in inbound tonnage but an increase in outbound tonnage (Figure 12 and Figure 13).

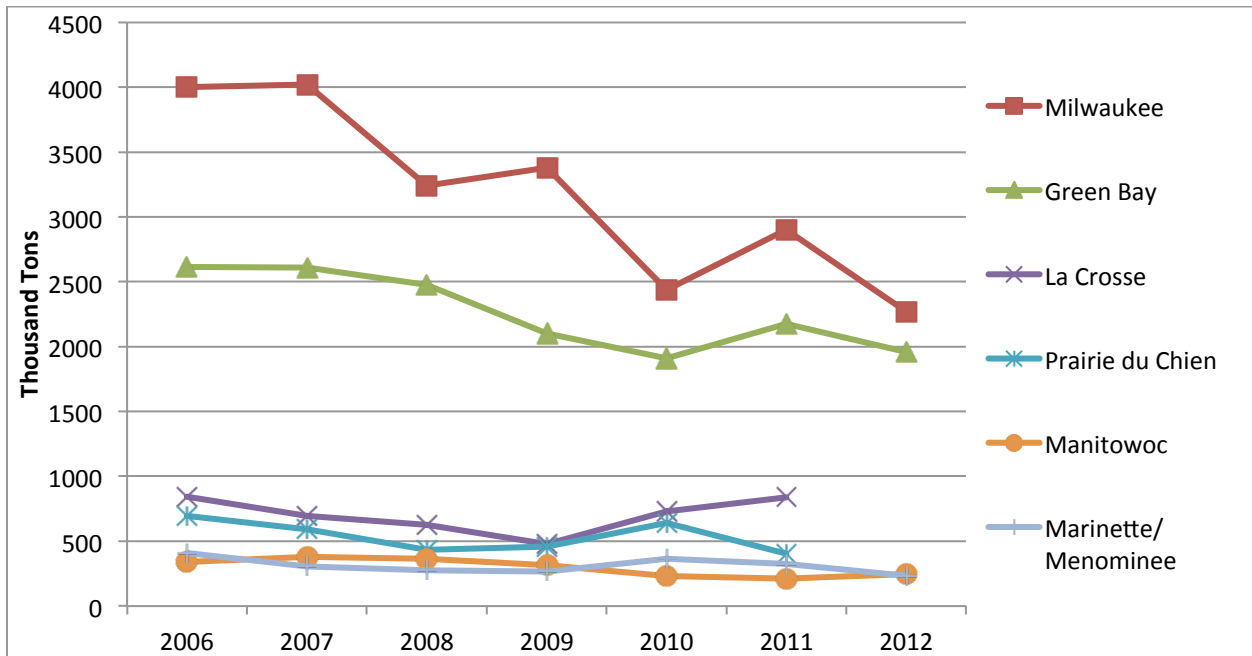


Figure 11. Total Tonnage for Wisconsin's Six Top Freight Ports (2006-2012), Excluding Superior

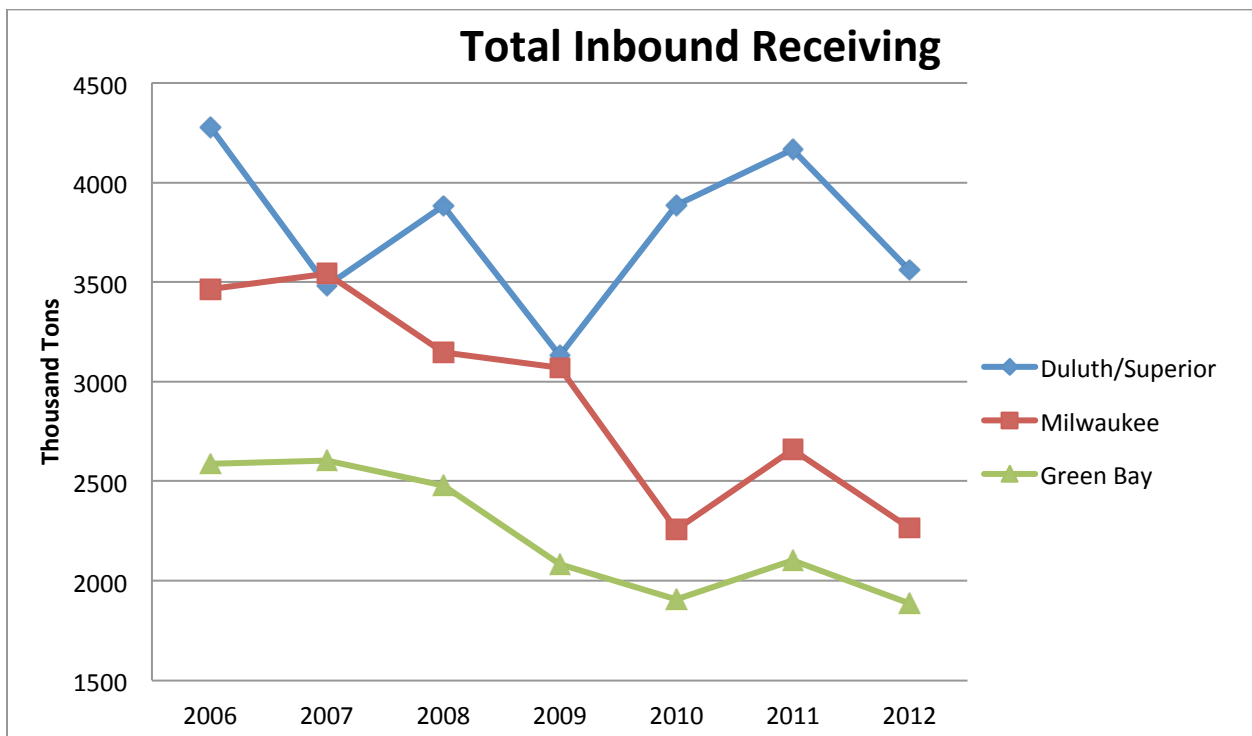


Figure 12. Total Inbound Tonnage: Duluth/Superior, Milwaukee, and Green Bay (2006-2012)

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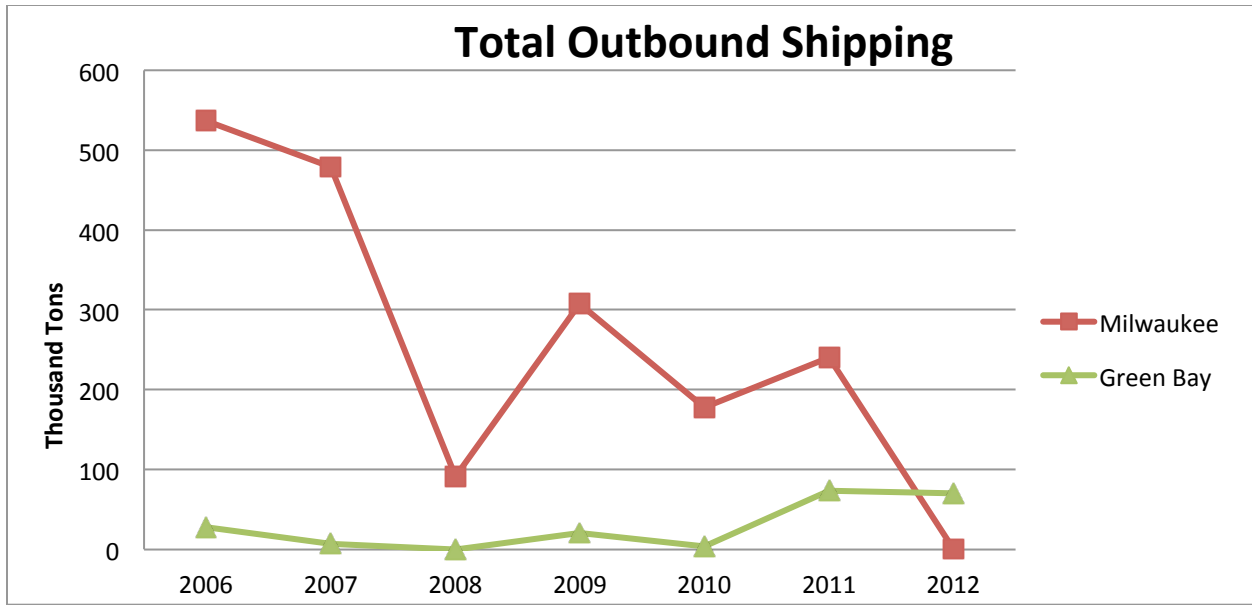


Figure 13. Total Outbound Tonnage: Milwaukee and Green Bay (2006-2012)

The top three commodities moving through the Port of Milwaukee include inbound non-metallic minerals (salt), coal, and cement and concrete. Other important commodities include inbound limestone, and asphalt/tar/pitch, and outbound cement and concrete, outbound limestone, and outbound agriculture products such as soybeans and corn (Figure 14 and Figure 15). The Port of Green Bay’s top commodities shipped include inbound coal, inbound limestone, inbound cement and concrete, inbound non-metallic minerals (salt), and recently outbound residual/distillate fuel oil and gasoline (Figure 16).

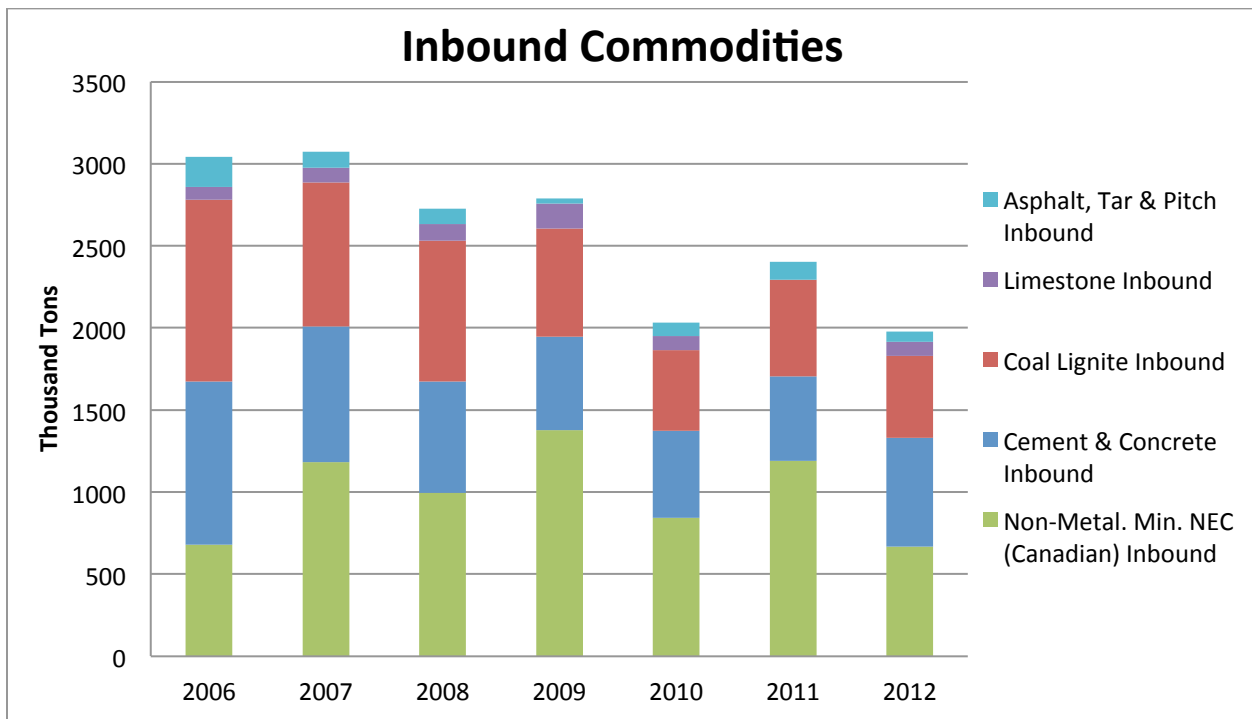


Figure 14. Top Inbound Commodities: Port of Milwaukee (2006-2012)

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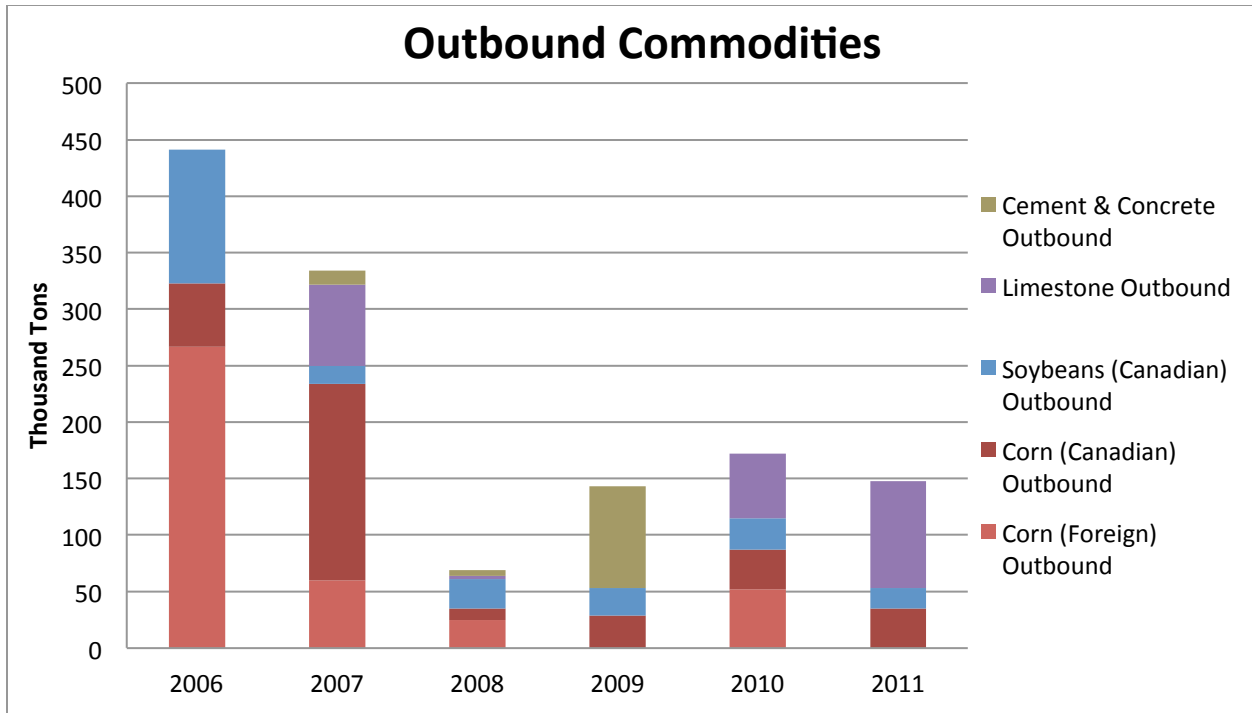


Figure 15. Top Outbound Commodities: Port of Milwaukee (2006-2012)

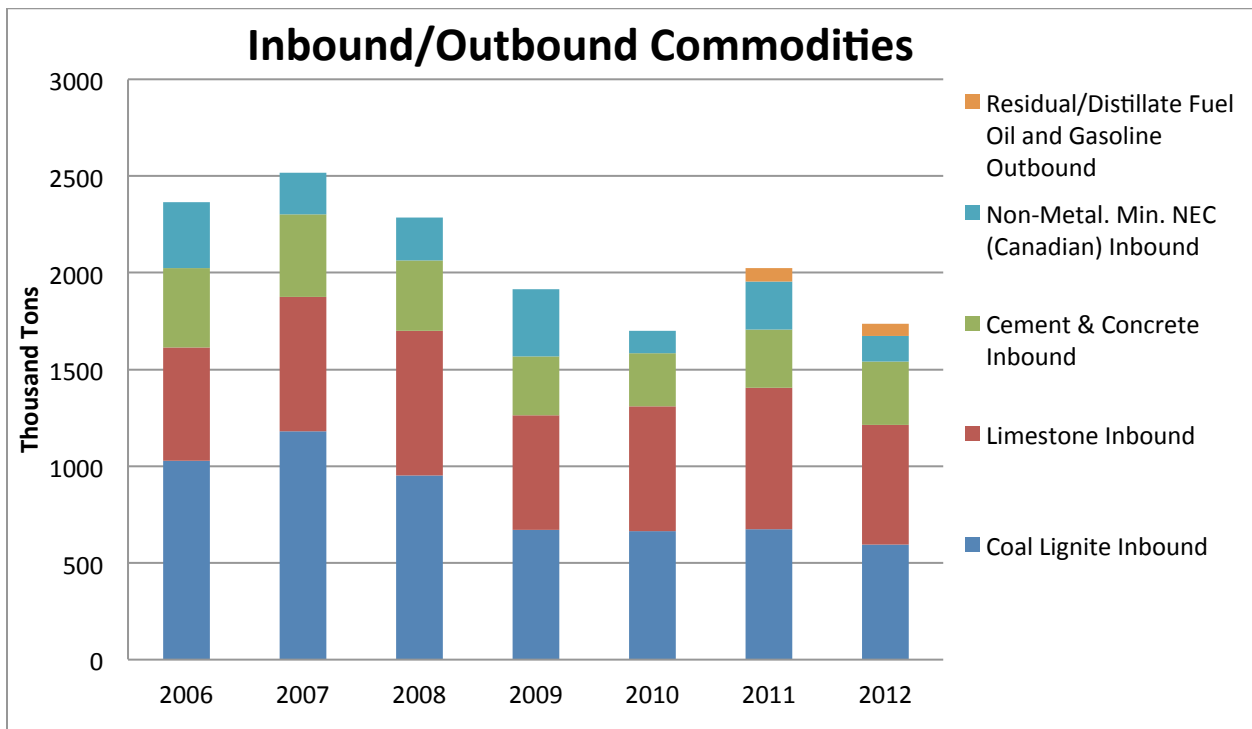


Figure 16. Top Commodities: Port of Green Bay (2006-2012)

The twin ports of Marinette and Menominee and the Port of Manitowoc averaged approximately 312,000 and 300,000 tons of goods (nearly all inbound) annually between 2006 and 2012 (Figure 18 and Figure 19). The top commodities for the twin ports of Marinette and Menominee were inbound pig iron, salt, and coal (Figure 20), as well as some outbound limestone, while the

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top commodities for the Port of Manitowoc included inbound cement, coal, and barley and rye (Figure 21).

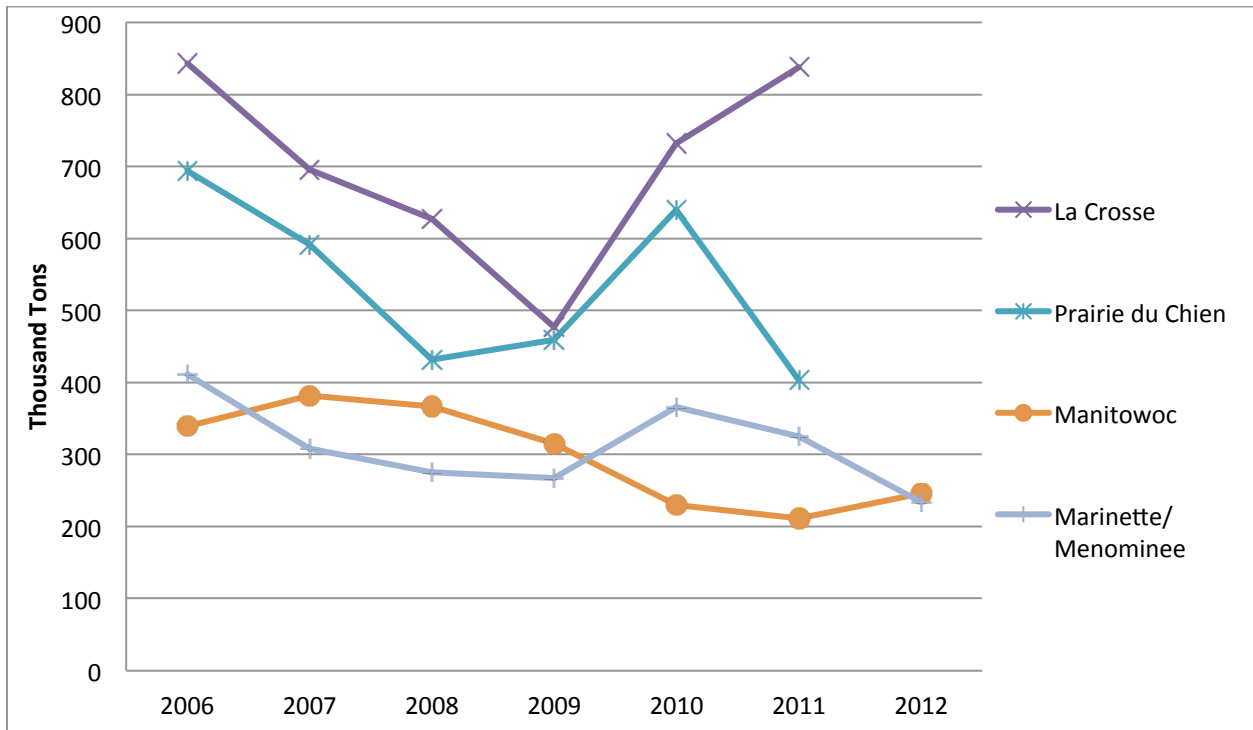


Figure 17. Top Ports by Tonnage: Marinette/Menominee, Manitowoc, La Crosse, and Prairie du Chien

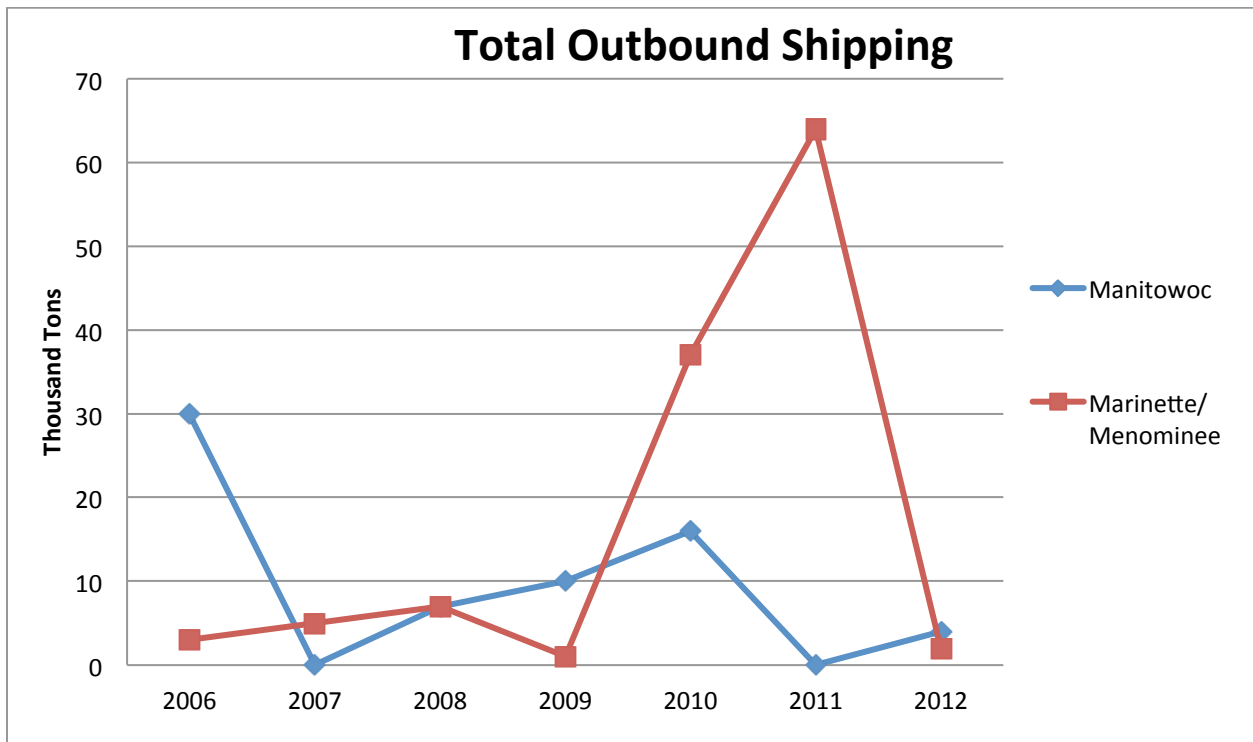


Figure 18. Total Outbound Tonnage: Marinette/Menominee and Manitowoc (2006-2012)

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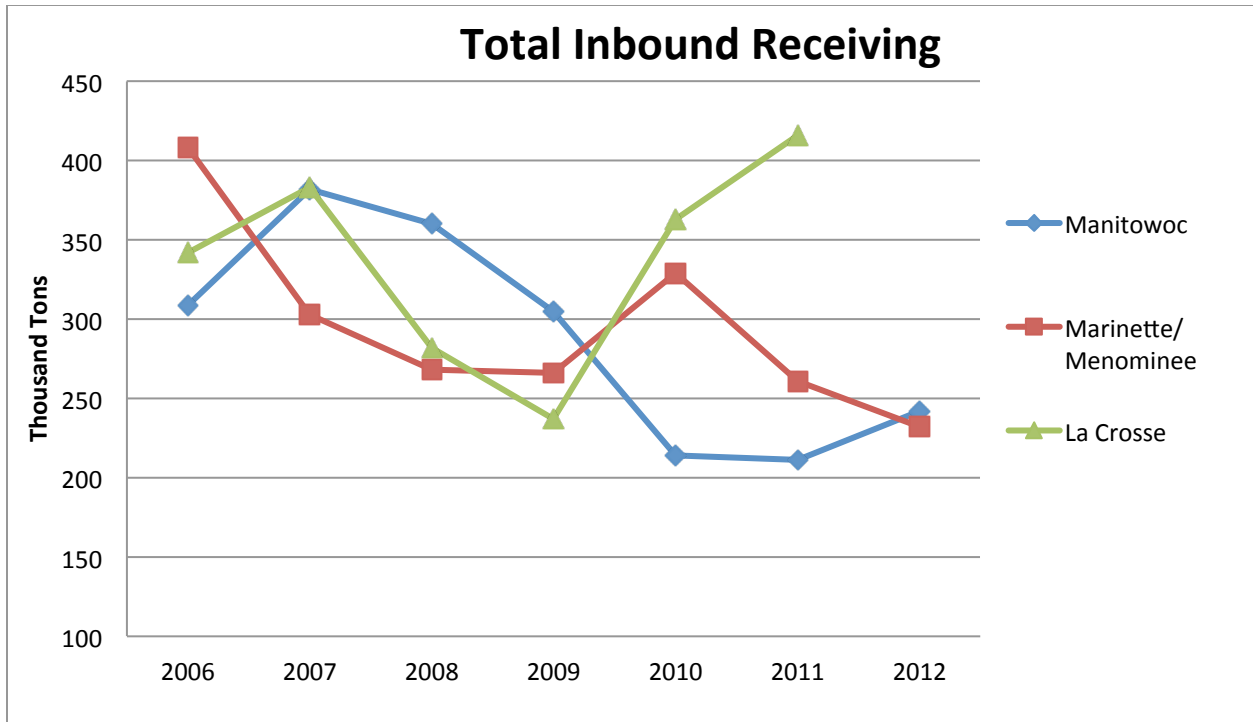


Figure 19. Total Inbound Tonnage: Marinette/Menominee and La Crosse (2006-2012)

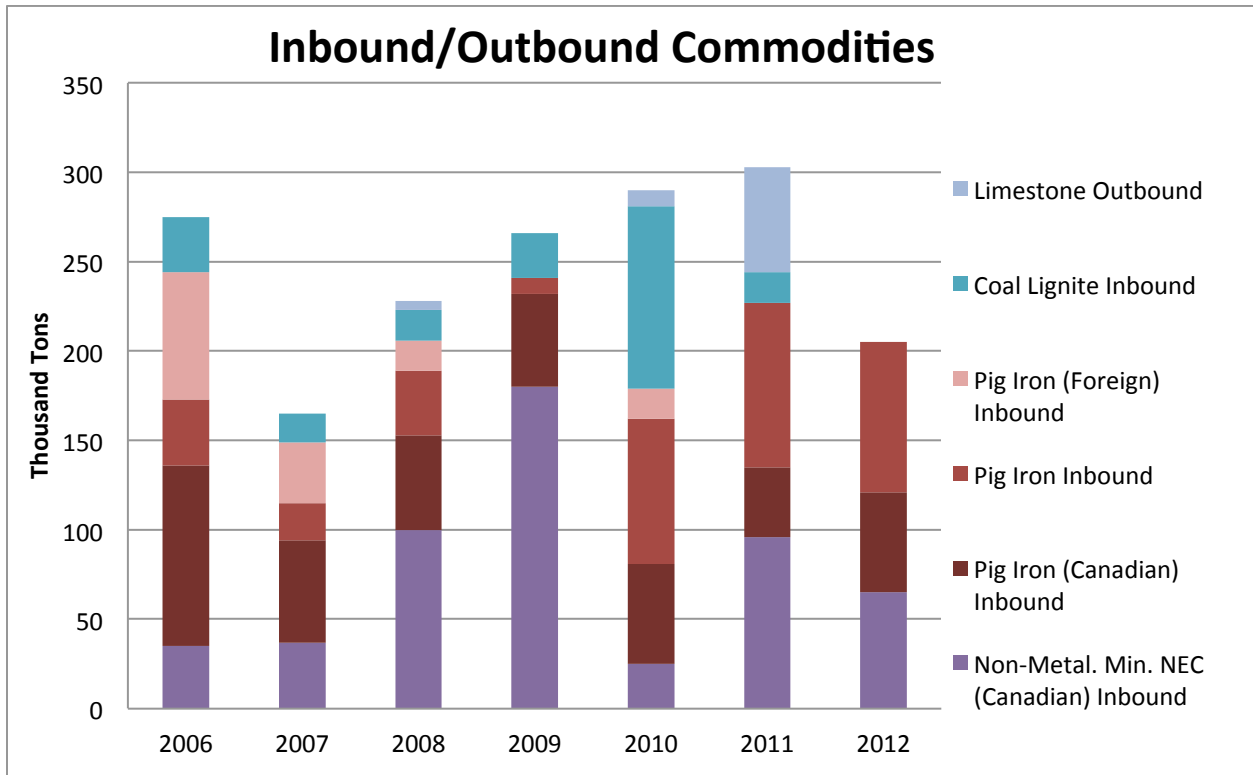


Figure 20. Top Commodities by Tonnage: Marinette/Menominee (2006-2012)

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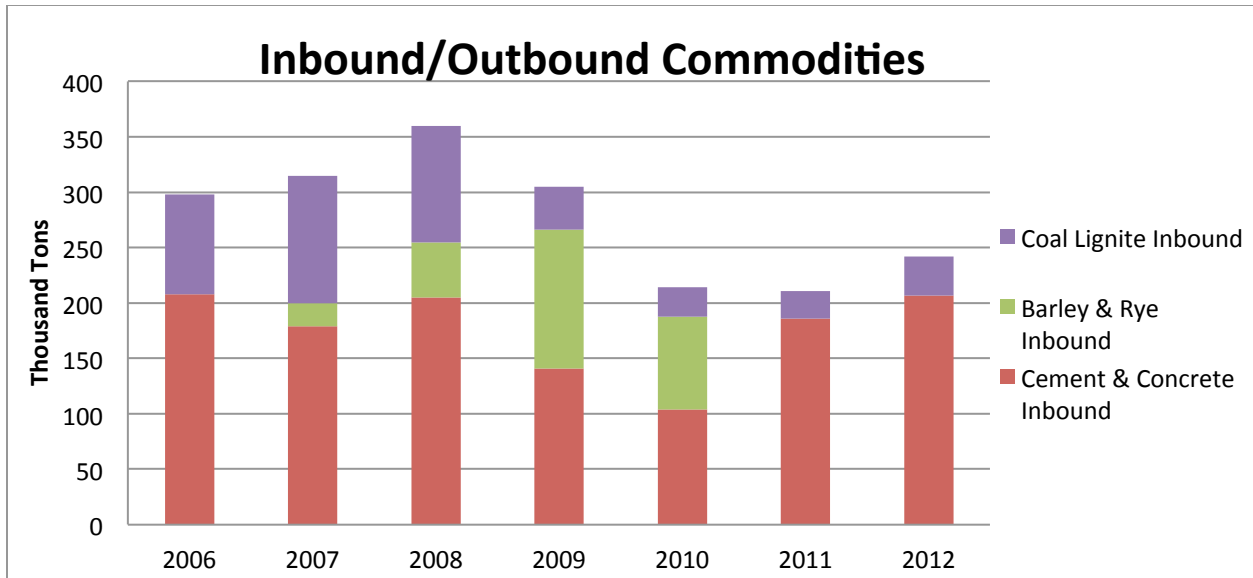


Figure 21. Top Commodities by Tonnage: Port of Manitowoc (2006-2012)

Mississippi River Ports

Wisconsin has two commercial ports located on the Mississippi River: La Crosse and Prairie du Chien. The primary commodities for the Mississippi River ports are more highly concentrated than the Great Lakes ports with the top four commodities representing 95 percent of the cumulative freight tonnage moved: grains (69 percent) cement (82 percent), salt (89 percent), and pig iron (95 percent). Overall, there is a 70/30 outbound-to-inbound split with grains accounting for the majority of outbound tonnage. Outbound grain shipments have ranged from 700,000-1,000,000 tons annually between 2006 and 2011 (Figure 23). The top three commodities for the Port of La Crosse include outbound grains, inbound cement, and inbound salt (Figure 24), while the top three commodities moving through the Port of Prairie du Chien include outbound corn, beans, and distilled grains.

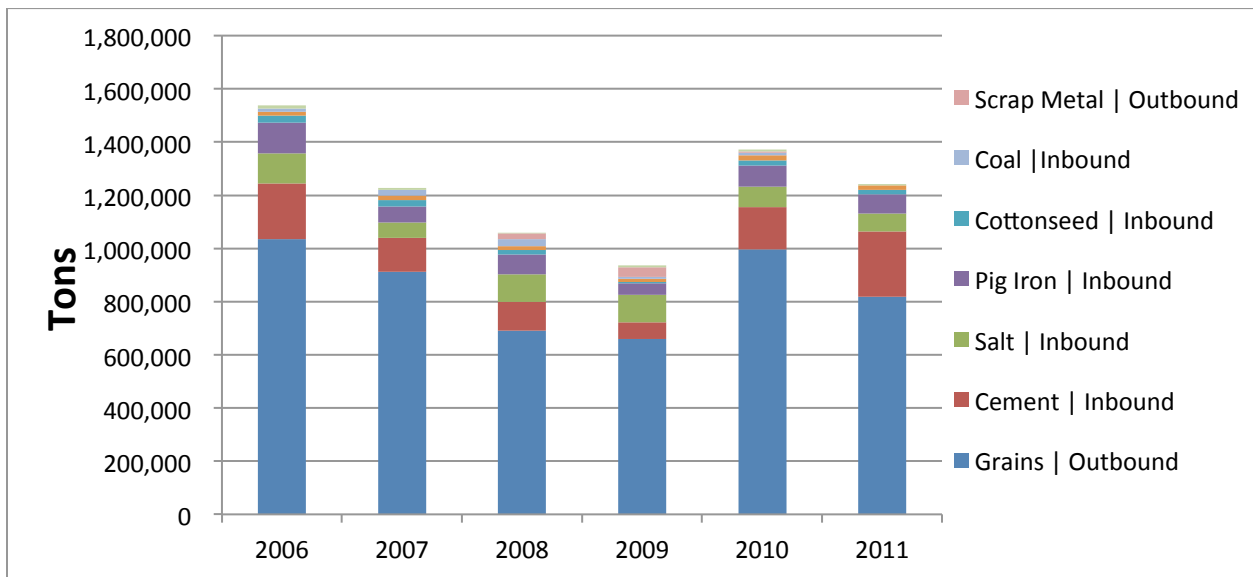


Figure 22. Commodity Movement on the Mississippi River (2006-2011)

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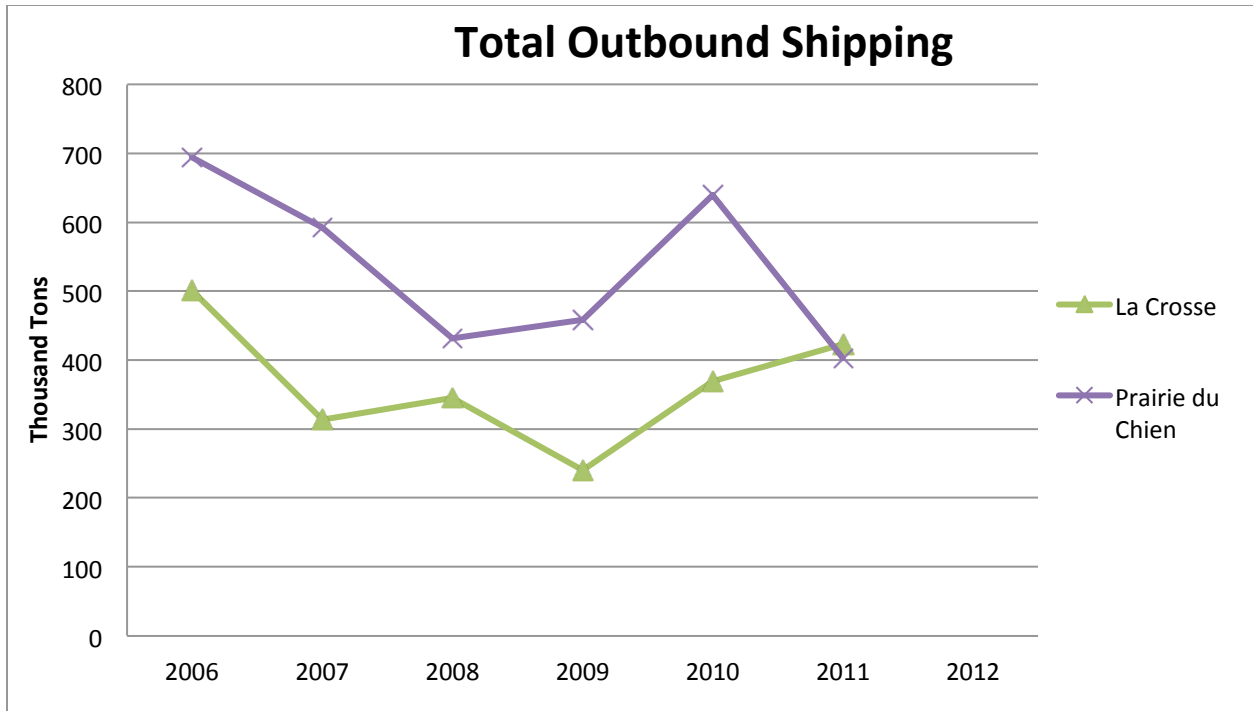


Figure 23. Total Outbound Tonnage: La Crosse and Prairie du Chien (2006-2011)

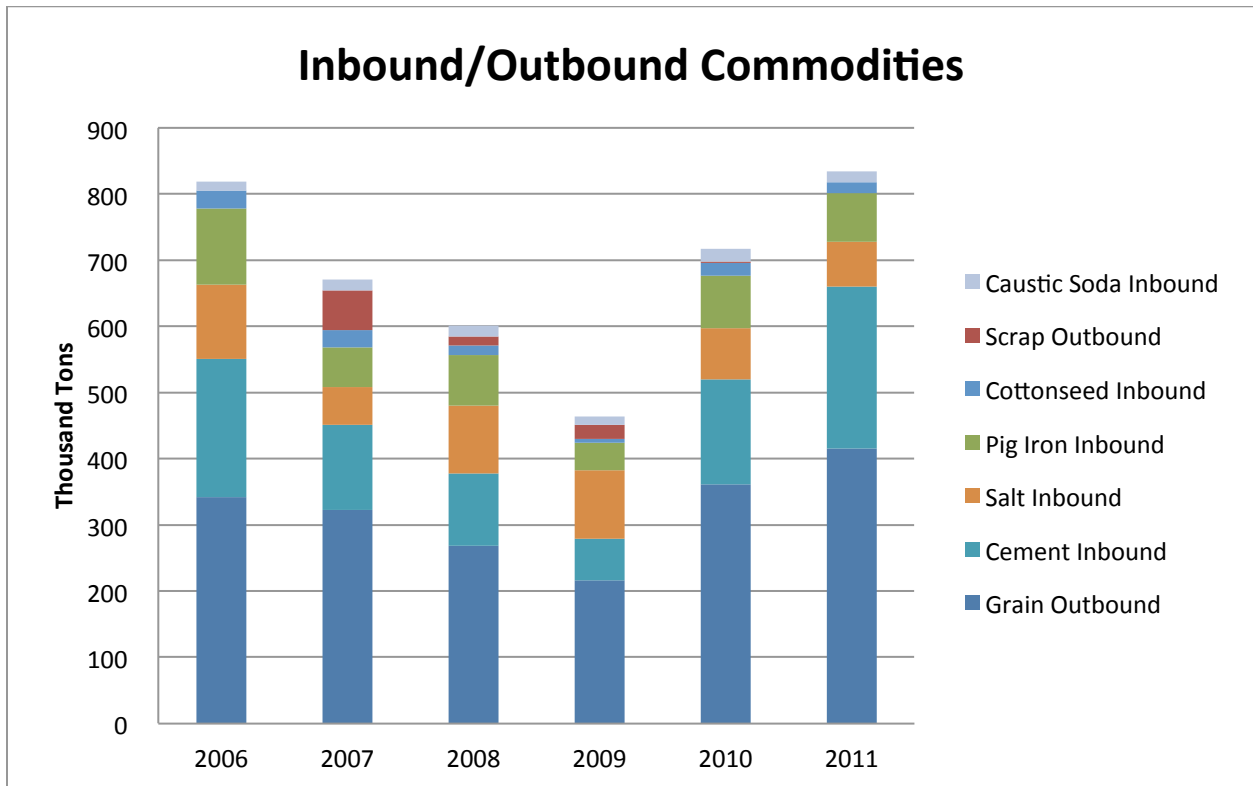


Figure 24. Top Commodities by Tonnage: Port of La Crosse (2006-2011)

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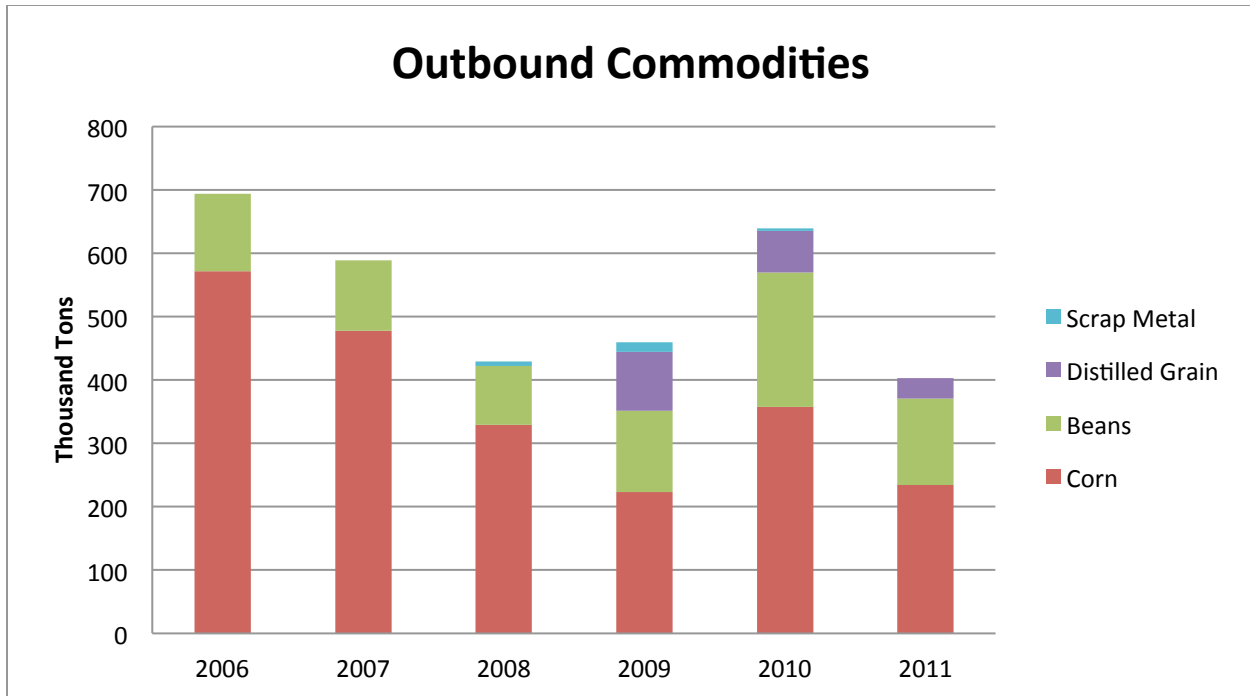


Figure 25. Outbound Commodities by Tonnage: Port of Prairie du Chien (2006-2011)

Other goods also move through Wisconsin ports. On the outbound side, the commercial ports ship out the finished products from the state’s boat-building companies, as well as high value project cargo destined for deep sea oil drilling, and on the inbound side is project cargo destined for wind farms throughout the nation. However, because USACE data focuses on tonnage, raw materials and agriculture goods are highlighted. Regardless, Wisconsin commercial freight ports have been historically focused on natural resources versus project cargo (Table 5). It has been estimated that maritime transportation costs represent 24 percent of the good’s value, and this is using the most efficient mode of transportation. This stresses the importance of an available, reliable, and efficient maritime transportation system to the producers of raw materials and agriculture products.¹⁹

Table 5. Maritime Transport Costs across Commodities

	Maritime Transport Costs as % of Import Value	Maritime Transport Costs (\$/tonne)
Raw Materials	24%	33
Agriculture	11%	81
Manufactured Goods	5%	174
Crude Oil	4%	18

¹⁹ OECD (2013). The Competitiveness of Global Port-Cities: Synthesis Report. <http://www.oecd.org/gov/regional-policy/Competitiveness-of-Global-Port-Cities-Synthesis-Report.pdf>. Accessed 12/22/14.

Future Trends, Opportunities, Challenges

As the WCPDI project team conducted outreach activities with the ports and terminal operators throughout Wisconsin, a number of current trends and present opportunities or challenges to increasing the amount of freight shipped through Wisconsin ports.

Energy

In just five years, the fracking boom in the United States has produced a reality that few, if any, energy experts would have predicted, and one with major global implications. This domestic energy renaissance, combined with increased public awareness of the negative externalities associated with the production of energy and public policies associated with all things energy, has created opportunities and challenges for the commercial freight ports in Wisconsin.

Increasing supplies of crude oil are creating bottlenecks within this and other supply chains—pipelines and rail lines may not be sufficient to meet the needs of refineries. Shipping crude oil by water can alleviate this congestion while also providing a safe transportation option. The products in the residual/distillate fuel oil and gasoline commodity classification have recently increased the Port of Green Bay's outbound tonnage, and the Port of Milwaukee plans to get into the market with planned pipeline investment. The Wisconsin commercial freight ports offer connections between rail, road, and water that biofuels such as ethanol and biodiesel can leverage to create efficiencies in their supply chains as well.

The boom in natural gas is acting as an exogenous shock to the economy requiring the need for new technology in terms of equipment and infrastructure, as well as new skills from the labor force. Shifting truck and vessel fleets to natural gas not only requires the truck or vessel; it also requires both the refueling infrastructure and properly trained labor to maintain it. These are not just opportunities for transportation investments.

The WCPDI project team identified two challenges regarding energy trends during outreach to port stakeholders. First, the introduction of policies in the Great Lakes Region states, and markets further away, that limit the use of coal to fire power and manufacturing plants will directly impact the volumes moving through Wisconsin ports. With outbound coal representing the number one commodity by tonnage in Wisconsin, port stakeholders must work to ensure a balanced debate occurs regarding energy as well as port sustainability. Second, recent government subsidies encouraging investments in large renewable energy projects increased the volume of project cargo moving through Wisconsin commercial freight ports destined for project sites. If the demand for the wind turbine parts decreases once the subsidy goes away, there will be an associated decrease in demand for the need to transport this type of project cargo.

Oversize/Overweight (OS/OW) Freight Movements

Oversize and overweight loads such as wind turbine towers and blades are big business opportunities for the commercial freight ports of Wisconsin. The integration of the marine transportation system with the road network when moving oversized and overweight shipments can provide many benefits including improved safety and fuel efficiency, and decreased congestion and pollution. This requires close coordination amongst shippers, carriers, port authorities, terminal operators, and transportation agencies at the local and state levels, as well as a streamlined permitting process and a properly connected and designed OS/OW route to move the load from the port into the hinterland. Wisconsin has the permit process in place, and is hard at work removing impediments such as low clearance bridges and tight turning radiuses on the road network that will allow port authorities to encourage those loads to continue to follow

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the path of least resistance through Wisconsin. Efforts are also underway at Wisconsin DOT to assess and then ensure that intermodal connections and the first and last miles at the state's ports can accommodate these loads.

Containers

The Port of Cleveland's *Cleveland-Europe Express* is the only direct and scheduled vessel service that moves containerized and non-containerized cargo between the Great Lakes and Europe, through the Port of Antwerp. Wisconsin has an opportunity to consolidate and containerize its manufactured and agricultural goods bound for Europe by providing a feeder-like service with a transload onto the ocean going vessel at the Port of Cleveland. Capital investments would be needed to provide the intermodal connections at one or more of the ports in Wisconsin. Interest among the ports and other transportation stakeholders throughout the state exists.

Inland marine container movement has been a challenging market. Still, the interest from agencies and stakeholders may provide a return. Programs such as MARAD's Marine Highways initiative continue to evolve and markets change. Container service is a real possibility as global trade and regional congestion continue.

Future Barge Moves

Barges are currently being used to ship Wisconsin-manufactured flexible oil pipeline used in deep sea oil drilling. However, while river barges are allowed to travel from Chicago, Illinois to Muskegon, Michigan, they are not allowed to go from Chicago to Manitowoc, Wisconsin because the route does not meet the minimum safe harbor distance set by the US Coast Guard. Instead, two separate fleets of barges must be used, connected by a transload in Chicago. This additional step in the supply chain adds significant transportation costs for the pipeline manufacturer. By either working with the US Coast Guard to gain allowance for river barges to operate between Chicago and Manitowoc or locating interested capital to invest in new vessels to traverse both the Great Lakes and inland river system, a Wisconsin shipper can realize improved profit margins and potentially induce other high-tech companies to locate in Wisconsin to take advantage of this transportation-related competitive advantage.

Commuter Transit

Metro areas like New York and Seattle have long used ferries to transport commuters. In Wisconsin, Lake Michigan offers an untapped opportunity for commuters to move between the Milwaukee metro region and Chicago, allowing riders to avoid roadway congestion. However, current subsidies for rail transit between the two regions tips the scales in favor of rail to the point where the water transit option is not an economically feasible. Extending subsidies to waterborne transit will create a competitive balance, and allow Wisconsin to fully capitalize on one of its current transportation resources.

Africa and the Suez Canal

Two recent global developments have presented Wisconsin's ports and shippers with opportunities to increase their reach of potential markets. First, Africa has become a new focal point for the US Department of Commerce. Second, increased shipping capacity through the Suez Canal brings Asian markets closer to Wisconsin. Both of these opportunities are possible because the Great Lakes—St Lawrence Seaway System grants Wisconsin shippers access to shipping lanes on the eastern seaboard of North America.

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In conclusion, Wisconsin port markets are affected by infrastructure conditions, modal competition, energy and maritime regulations, seasonality, local, regional and global market trends, fuel prices and a multitude of additional factors. Still, Wisconsin port markets continue to provide cost advantages for traditional markets and new markets are on the horizon. The logistics environment is extremely competitive so the ports will need to actively pursue and market their efficiencies in order to attract additional business.

Chapter 4: Planning and Institutions in Port Development

Freight and logistics development at Wisconsin commercial ports requires participation from a range of stakeholders. Port directors, terminal operators, economic development specialists, business and industry, and numerous state and federal agencies all have a hand in growing business at the state's ports. In order to address the needed integration across these entities, and the opportunities related to port planning objectives and goals, three distinct reviews were conducted. First, the local port perspective was assessed through reviews of community and port planning documents. These documents were reviewed for a focus, discussion, or actual policy or program related to the community's harbor and port. Additionally, interviews with port stakeholders and input received at project working meetings are included in this analysis to capture the potential alignment between community and port objectives with agency and state objectives. This area of alignment, where local goals and objectives to grow their port align with objectives and programs at the state and federal level, is where strategic initiatives can be implemented with the highest probability of institutionalization, support, and success.

Secondly, the history and direction of the WCPA is examined regarding the role this organization has had, and can have, in developing Wisconsin ports. The strategic planning and development efforts of the WCPA are reviewed to affirm the potential planning linkages and strategic direction developed by the WCPDI.

Lastly, Wisconsin DOT planning efforts and the Harbor Assistance Program (HAP) are reviewed to understand how the ports and harbor communities access and align with port programs. For the HAP, program investment is tracked over a 33-year period and analyzed by port size and location, type of investment, and the proportion of freight investments versus port investments that support fishing or recreation.

This analysis provides a look at the role of planning and institutions, and integration among the institutions, in supporting and developing commercial ports. The strategic planning linkages across these entities (local ports, WCPA, and state agencies) are examined and best practices related to planning and institutions are discussed in the conclusion and then further linked to the overall strategic initiative areas discussed in Chapter 7.

Community and Port Planning

Thirty-five planning documents were identified and reviewed for this effort (Appendix 3). The local planning documents describe and affirm each port's area of economic focus related to freight or non-freight development. This assessment supports the identification of the key freight and logistic ports across the state and their planning goals. It also identifies the potential opportunities where local freight marine goals are aligned with state and federal initiatives. Without the local interest and support for freight development at the port, development efforts face an upstream battle.

In order to identify the local port and freight planning efforts across the state, port and community websites, along with economic development websites, were searched for planning documents. Additionally, planning documents were requested during the interviews at the seven active freight ports and at meetings with local planning and economic development leadership. Comprehensive community planning documents as well as planning documents specific to local waterfronts were examined. Table 6 summarizes the port and freight planning documents from the 29 port and port communities identified in this review. In summary, eleven port communities mention commercial freight in their comprehensive plans; nine of the ports also explicitly

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mention the port in future development in waterfront specific planning documents. Six of the seven ports in this study (Green Bay, La Crosse, Milwaukee, Marinette, Manitowoc, and Superior) acknowledge both the role of freight and the port in both their comprehensive and waterfront planning. The ports/communities at Sturgeon Bay, Washburn, Ashland, and La Pointe acknowledge commercial freight in their waterfront plans but do not specifically mention these sectors in the community's comprehensive planning. In recognizing more advanced port and marine planning efforts, four of the 29 port communities have developed strategic development plans specific to their ports (Green Bay, La Crosse, Milwaukee, and Superior).

Twelve of the 29 communities include future plans for redevelopment of the port for non-freight uses. While non-freight development often conflicts with freight activity at ports, the activities are not mutually exclusive. Four of the seven freight ports are also planning for non-freight development at their ports. Green Bay, La Crosse, Manitowoc, and Prairie du Chein all identify economic sectors such as recreation, tourism, housing, and boat and marina services as areas for future development. Further development and sustaining ferry operations was mentioned in six cases out of the 29 community and port documents reviewed.

The range of port planning efforts and the variable focus related to freight development at the 29 port communities reflects the diversity of economic interests at Wisconsin ports. The seven ports identified as logistics hubs in this report have completed advanced freight planning efforts, including four cases with distinct port plans related to freight. Other ports recognize their comparative advantage in other areas such as recreation and tourism. This port diversity has a historical basis with shipbuilding, tourism, fishing, and freight solidly ingrained in the cultures of several of these communities. The economic focus areas in these communities can provide for increased specialization in community and economic development efforts in addition to port and freight development. This broad economic base also provides a buffer during economic downturns by spreading employment, investment, and activity across a range of economic sectors. Table 6 summarizes the planning documents developed by the ports and port communities across Wisconsin. Appendix 3 provides a complete listing of the documents reviewed for this analysis.

Table 6. Summary of Local Port Planning: Wisconsin Port Communities

Port	Use of Commercial Port for freight mentioned in Comprehensive Plan	Commercial Port mentioned in future Waterfront Plans	Commercial Port has its own Strategic Development Plan	Future plans include redevelopment for non-freight use of port	Ferry Services
1. Algoma					
2. Ashland	X	X		X	
3. Bayfield		X		X	X
4. Cassville					X
5. Cornucopia					
6. Green Bay	X	X	X		
7. Kenosha				X	

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Port	Use of Commercial Port for freight mentioned in <i>Comprehensive Plan</i>	Commercial Port mentioned in future <i>Waterfront Plans</i>	Commercial Port has its own <i>Strategic Development Plan</i>	Future plans include redevelopment for non-freight use of port	Ferry Services
8. Kewaunee				X	
9. La Crosse	X	X	X	X	
10. La Pointe	X	X			X
11. Manitowoc	X	X		X	
12. Marinette	X	X			
13. Milwaukee	X	X	X		X
14. North Port					X
15. Oconto				X	
16. Pensaukee					
17. Port Washington				X	
18. Port Wing					
19. Prairie du Chien	X			X	
20. Red Cliff					
21. Saxon Harbor					
22. Sheboygan				X	
23. Sister Bay				X	
24. Sturgeon Bay	X				
25. Suamico				X	
26. Superior	X	X	X		
27. Two Rivers				X	
28. Washburn	X				
29. Washington Island				X	X
Total	11	9	4	12	6

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A further examination of the planning documents for the seven major freight ports and communities reflects a continuum of sophistication in logistics, freight development, and logistics specialization. The major focus areas identified in the plans for the state's seven major freight ports include:

- Efforts to sustain and grow markets.
- Work to include additional stakeholders.
- Increased marketing and awareness of port capabilities and benefits to the community.
- Managing land use to accommodate multiple uses in the port area.
- Assessing organization and structural components of ports and port management.
- Increasing logistics and port professional capabilities.
- Developing a revenue mechanism to support port development.
- Coordinating planning and construction across agencies and modes.
- Pursuing grants and development opportunities.
- Mitigation of environmental impacts.
- Creation of employment.

While there are many other goals and activities listed in these plans, these eleven initiative areas are common and prominent themes across these planning documents.

Conversely, some of the ports and port communities are turning towards other economic venues either due to historical precedent or more recent waterfront development trends. In fourteen community and waterfront plans, recreation, fishing, tourism, and ferry operations are presented as the primary economic activity at the port in the future. Comments such as “transform the waterfront into a major tourist destination,” “the focus is on tourism and fishing and the ferry,” and “the community is actively redeveloping their existing recreational harbor” reflect common themes for these communities looking for non-freight development at their port. In this analysis, 14 of the 29 planning documents include a narrative focusing waterfront activities on areas other than freight. The following 14 communities and ports specify non-freight development plans at their port locations: Prairie du Chien, Ashland, Bayfield, Cornucopia, Kenosha, Kewaunee, La Pointe, Port Washington, Racine County, Sister Bay, Sheboygan, Two Rivers, Washburn, and Washington Island. While these plans should not be used to discount these various ports from pursuing freight activity, these communities are clearly pursuing non-freight development.

Two facets of this analysis module are important to consider. First, seven major ports of the 29 port communities serve as Wisconsin's marine logistics hubs. Importantly these port and port communities recognize their role and opportunity in freight movement and are actively planning. The alignment between the port planning and freight interest, along with the manageable number of ports, allows for a discrete focus on freight development and intermodal connections specific to these seven port areas. Secondly, there are differing levels of specialization across the seven major freight ports in terms of logistics and freight development capabilities. This means that port policy, programs, and educational programs need to address the different levels of capabilities at Wisconsin ports. For example, market development initiatives presume a network of logistics providers, shippers, and carriers. Without an existing market network, market development efforts are best geared towards network development rather than identifying and developing specific commodity movements. Similarly, it can be difficult to implement market or infrastructure development plans if the port does not have staff available. As the strategic initiatives are developed, the range of capabilities at the ports for implementation should be considered and integrated into the planning. Driving the ports forward and developing a greater port community in Wisconsin aligns with a cooperative approach to sharing across the ports for specialized services or processes. In this sense, cooperative

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programs could be developed to serve all of the ports rather than each port developing their own line of expertise.

Wisconsin Commercial Ports Association

The mission statement of the Wisconsin Commercial Ports Association (WCPA) is to “promote and grow Wisconsin’s waterborne transportation.” The WCPA has four main objectives.

- Provide a medium for exchange of ideas, methods, information, and experiences as they relate to port management.
- Promote and encourage legislation and regulation on all levels for the good of Wisconsin ports and shipping.
- Promote and encourage the public's understanding of the value of shipping and the port to the community.
- Cooperate with all governmental agencies and industry organizations having a primary goal of "Growing Waterborne Transportation in Wisconsin."

In addition to these four objectives, the WCPA supports several other key areas.

- Maintain Wisconsin’s ports as viable transportation and distribution centers.
- Work with terminal operators to provide modern, safe, and efficient facilities and navigable waterways.
- Maintain sufficient dredge material disposal capacity to ensure federal maintenance of Wisconsin ports and waterways.
- Develop and maintain effective communication with public and private constituents of the port industry.
- Provide maritime, logistics, and transportation expertise to the public, potential shippers, and existing users of Wisconsin’s ports.
- Market Wisconsin ports to attract new business while retaining existing users.
- Work with other modes of transportation, related services and customers to achieve a balanced transportation and distribution system.
- Monitor land use within the ports of Wisconsin to maximize commercial usage of existing and potential port properties.
- Educate the public, federal, state and local governments on the positive economic and environmental benefits of Wisconsin’s ports and the shipping industry.

Wisconsin municipal and commercial ports established the WCPA in 2001. Membership has grown to include private terminals, state and federal agencies, port services, universities and the research community, other transportation associations and mode interests, and other service providers such as engineering and construction firms.

The WCPA pursues these multiple goals and objectives with very limited funding and no staff. The WCPA is limited by funding, authority, and the level of institutionalization. However the WCPA and its relationships with state and federal agencies represents the current rallying point for commercial port development in Wisconsin. Given the appropriate alignment between WCPA objectives and the plans of the seven major freight ports in Wisconsin, a fruitful relationship is developing and a much larger role exists for the WCPA as these ports continue to garner interest in their capabilities in moving freight and creating jobs.

Wisconsin Department of Transportation

The Wisconsin DOT influences the opportunities and capabilities at Wisconsin ports in three ways. First, the level of intermodal integration at the agency impacts the ports through the

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investments made or not made in roads and railways and at the intermodal connectors. Secondly, the distinct maritime planning efforts at the Wisconsin DOT provide for a growing multimodal role for the ports and institutionalize the marine mode within the state's freight transportation system. Third, direct impacts from the Harbor Assistance Program (HAP) provide and maintain infrastructure at the ports, allowing them to continue to grow and operate. The Wisconsin DOT has a significant role in ensuring the ports are maintained as freight and logistics hubs that serve the Wisconsin economy.

The agency is well on its way to establishing a leading approach to freight development as compared to peer states. The agency has recently revamped its freight activities, introduced new staff and positions, and taken major steps to develop a freight outreach program. The Wisconsin DOT holds an annual Governor's Freight Summit, as well as a rail conference. At the 2014 Freight Summit, the agency was directed by Governor Scott Walker to establish a freight advisory committee to assist the state in enabling transportation to leverage the economy.

Maritime freight development is addressed in the larger planning sphere through the Wisconsin DOT's long-range transportation plan. *Connections 2030: Long Range Multimodal Transportation Plan* identifies freight and the service provided by ports and waterways as a key economic driver for the state. The policy statement in *Connections 2030* that leads the maritime efforts is stated as, "Maintain and improve waterways critical to Wisconsin's transportation system." Within this policy statement the agency states it will advocate for funding for the systems, continue state assistance programs, encourage comprehensive planning, and examine roadway issues at ports. *Connections 2030* also identifies five short-term and four planning period actions to implement in support of the marine freight policy.

Short-term Actions

- Continue to help communities and businesses make land and water-side harbor improvements through the Harbor Assistance Program.
- Advocate for continued federal funding to implement the recommendations resulting for the USACE Upper Mississippi/Illinois Waterway Study.
- Continue to work with other Great Lakes states in promoting the construction of a new lock in the SOO system.
- Work with local governments and ports to identify solutions to address roadway issues for port areas.
- Cooperate with private and public entities to study and identify ways of improving the infrastructure of Wisconsin's waterway system.

Planning Period Actions

- Analyze waterborne freight, review and develop forecasts, and identify opportunities to strengthen this mode as part of Wisconsin's transportation system.
- Continue to advocate that Congress fully fund the Water Resources Development Act (WRDA).
- Work with Wisconsin DNR and others to identify solutions to the problem of non-native invasive species introduced to the Great Lakes and Mississippi River waterways.
- Encourage communities to include comprehensive waterfront development plans as part of their planned growth, and provide technical assistance as needed.

Implementation of a marine freight policy at the Wisconsin DOT can occur through the highway program via improved connections to ports and local business. It occurs with the Railroad Infrastructure Improvement Program (FRIIP) when investments are made to rail connections

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and facilities at ports. Additionally, the Transportation Economic Assistance Program and the State Infrastructure Bank both support the financing of multimodal freight projects.

It is also important to note that state transportation agencies, the Wisconsin DOT included, are still developing in their role as fully multimodal transportation agencies. Funding silos, federal policy, historical precedent, and political pressure have made the transition to a fully multimodal agency slow for many states. It is a common issue as these agencies take on new roles and new modes.

Wisconsin DOT Harbor Assistance Program

The Harbor Assistance Program (HAP) is a well-known and well-used program in Wisconsin. Throughout the study process, comments from port stakeholders recognized the important role HAP funding plays in supporting and improving maritime infrastructure. A detailed analysis of the HAP is presented below. The assessment provides a look at the ports that use the program, and how the program dollars are allocated across ports and port functions.

The Harbor Assistance Program is intended to help Wisconsin harbor communities along the Great Lakes and Mississippi River maintain and improve waterborne commerce. For this analysis, each grant awarded is categorized by the primary industry that the funded project serves. Industry categories include freight, shipbuilding, ferry, and commercial fishing. HAP grants are also examined by WCPA port classification that includes the categories of gateway, diversified cargo, and limited cargo ports. The Bureau of Transit, Local Roads, Railroads, and Harbors provided HAP project history. Table 7 describes the categories used to assess the program.²⁰

Table 7. Industry and Port Categories used in HAP Analysis

Industry Categories	WCPA Members
<i>Freight:</i> Dredging and infrastructure maintenance or new construction at port facilities supporting the movement of freight.	<i>Gateway Ports:</i> Milwaukee, Green Bay, Superior, La Crosse, and Prairie du Chien.
<i>Shipbuilding:</i> Dredging and infrastructure maintenance or new construction at shipbuilding and ship repair facilities at various ports. Shipbuilding port recipients: Sturgeon Bay, Manitowoc, and Oconto.	<i>Diversified Cargo Ports:</i> Manitowoc, Marinette, and Sheboygan.
<i>Ferry:</i> Dredging and infrastructure maintenance or new construction at car or passenger ferry facilities. Ferry port facility recipients: La Pointe, Cassville, Washington Island, and Milwaukee.	<i>Limited Cargo Ports:</i> Sturgeon Bay, Washington Island (Northport), Port Washington, Bayfield (La Pointe), Washburn, and Ashland.
<i>Commercial Fishing:</i> Dredging and infrastructure maintenance or new construction supporting commercial fishing unloading facilities.	HAP Eligible Ports
	<i>Mississippi River:</i> La Crosse, Prairie du Chien, and Cassville.
	<i>Lake Michigan:</i> Algoma, Kewaunee, Two Rivers, Manitowoc, Sheboygan, Port Washington, Milwaukee, and Kenosha.
	<i>Green Bay:</i> Detroit Harbor, Northport, Sister Bay, Sturgeon Bay, Green Bay, Big Suamico, Pensaukee, Oconto, and Marinette
	<i>Lake Superior:</i> Saxon Harbor, Ashland, Washburn, La Pointe, Bayfield, Red Cliff, Cornucopia, Port Wing, Superior

²⁰ All awards are converted to 2013 dollars using the US Bureau of Labor Statistics CPI Inflation Calculator found at <http://data.bls.gov/cgi-bin/cpicalc.pl>.

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The HAP was passed into law in 1979 with an objective to assist harbor communities to provide necessary water access along the Great Lakes and Mississippi River with a focus on issuing grants for maintaining and improving waterborne commerce. The Bureau of Transit, Local Roads, Railroads, and Harbors administers this program. Projects typically funded include dock reconstruction, mooring structure replacement, dredging, and the construction of facilities to hold dredged material. Also included are projects related to the physical needs of a port that maintain or increase commodity or passenger movement capabilities. The maximum grant amount of any project is limited to 80 percent of the total project cost; if USACE financing is involved, up to 50 percent of the local share of eligible project costs.

Eligibility

The criteria for eligibility reflects the program's intent to recognize and invest in the multi-attribute economic factors that drive commercial activity at the state's public and private ports while committing to the future development and preservation of the public's access to them. Eligibility is based on four core requirements.

- The project must benefit facilities that are used for cargo transfer (more than 1,000 tons of commercial cargo per year), shipbuilding, commercial fishing, or regular ferry service.
- The applicant must be a local unit of government or a private owner of a harbor facility. If a project is funded for a private commercial harbor, the owners must agree to keep their facilities open for public use for at least ten years following the completion of the project.
- The proposed project must pass a cost-benefit analysis.
- The project must be identified in a current Three-Year Harbor Development Plan.

When funding is available, applications are accepted semi-annually and submitted by the project manager for the eligible applicant agency. Project urgency and economic, environmental, and engineering feasibility is indicated on the application with a supporting narrative. Estimates quantified with supporting documentation include total project cost, annual revenues and operating cost, county job gains, county jobs lost without the project, and expected future tonnage. The project must be part of a three-year description of harbor improvement projects that will seek state assistance, federal aid, or both. The three-year plan must be submitted to the DOT prior to the fiscal year that the applicant is seeking a grant.

An advisory council including one representative from the Wisconsin Economic Development Corporation and the Wisconsin Coastal Management Program, plus two or three other persons familiar with water transportation assist the DOT in prioritization and selection of proposed projects. Additional members on the council usually include representatives from USACE, Wisconsin Department of Natural Resources, University of Wisconsin Sea Grant, and one private citizen. This multiagency approach ensures that all of the stakeholders, public and private, are involved in the project selection process.

Projects are prioritized based on three criteria: economic impact, type and urgency of the project, and amount of tonnage and waterborne transportation. Economic impact is given the highest importance, followed by urgency and type of project, and then freight volumes and waterborne transportation activities.

Economic Analysis

The economic impact of the project is measured by a benefit-cost analysis. Benefits must exceed costs for the project to be considered for funding. Additionally, jobs created or retained by completing the project are considered. A project is considered urgent if harbor navigation depth is less than that needed to access the harbor, dockwall deterioration renders a terminal

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unusable, or passenger or commodity movement through a harbor would decrease by 25 percent or more if the associated project goes unfunded. Urgency aside, projects are prioritized by type:

- Maintenance dredging and disposal that falls outside of the responsibility of the USACE.
- Dockwall repair or maintenance.
- Maintenance dredging and disposal of USACE maintained harbors and waterways.
- Dredging, disposal, and dockwall construction associated with new development of a commercial transportation facility.
- Other maintenance of a commercial transportation facility.
- Other new development of commercial transportation facility.

Finally, waterborne transportation and freight movement levels are considered. Larger marine freight ports are favored over smaller and projects that benefit marine freight vessels are favored over projects that benefit cruise vessels.

Funding

Based on an analysis of the HAP program over its 33-year history, 86 total projects have been funded with more than \$107 million in grants. The program has been regularly funded each year since 1980; only one year, 2000, had no record of grants awarded. Adjusted for inflation, the state's harbors have been boosted by a total investment of nearly \$140 million. The program's geographical reach is quite extensive. Of the 29 port communities that are eligible for HAP grants, only seven have not benefited directly or indirectly from a HAP grant. Adjusted to 2013 dollars, individual project grants have ranged from \$37,000 to \$7.6 million with mean grant amount of \$1.6 million. The annual total distribution of HAP grants, adjusted for inflation, ranges from \$200,000 to \$14.8 million, averaging \$4.1 million. The relative success of the program is represented by its expansion; spending on the HAP increased 80 percent from the first decade of the program to the second and by 20 percent from the second decade to the third. If current spending levels from 2010 to 2013 are maintained through the rest of the decade, spending levels will have increased 127 percent from the last decade.

While the HAP recognizes and serves the economic diversity at Wisconsin ports, the focus of the program has been on projects that support freight at larger commercial ports that predominantly move freight. In looking at the entire program life, 67 percent or 58 of 86 projects have supported freight at these ports. Projects supporting shipbuilding (12 percent of all projects) and ferries (13 percent of all projects) and projects supporting commercial fishing (8 percent) round out the projects. Further, 73.2 percent of the funds associated with these projects were invested in freight-supporting projects.

Based on the 2013 corrected dollars of \$140 million, approximately 60 percent of the HAP funding has been to gateway ports, 18 percent has been invested in diversified cargo ports, 15 percent to limited cargo ports and approximately 6 percent of the funding has gone to non-WCPA classified ports. It is no surprise the HAP program is so popular with the ports and communities. The HAP supports and enables their port as an economic development resource, as well as a local and state transportation resource.

Appendix 4 provides further details regarding the breakdown of the HAP investments geographically, by port classification, and by the focus of the investment.

HAP is clearly a significant program for supporting marine freight in Wisconsin. In port interviews and the stakeholder working session, numerous participants championed the HAP. Further, the strategic planning objectives of local port leadership, the WCPA, and the Wisconsin

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DOT are well aligned. HAP program funding supports the strategic objectives of port stakeholders across the board regardless of their position in the industry.

Summary of Planning and Institutions

The planning efforts and institutions supporting marine freight in Wisconsin are well aligned. Local planning efforts, the ports association, and state agency goals and objectives are uniformly geared towards greater outreach, greater awareness, sustaining and increasing markets, ensuring a systems approach to freight, more collaborative planning, and making intermodal connections to the ports. In addition to the maritime freight interest in Wisconsin, maritime freight is gaining steam nationally as well. In the MAFC region, nine of the ten states are actively working with waterways development for freight transportation. Notable projects include the five-state effort to have the stretch of the Mississippi River from St. Louis to Minneapolis designed as Marine Highway 35. There are also tremendous efforts by the Council of Great Lakes Governors to drive further development of the Great Lakes system. Wisconsin is involved through a variety of agencies in each of these regional efforts.

Based on the strategic planning alignment across local ports, the port association, and the state agencies, several areas are ripe for implementation of strategic initiatives in support of the local and state larger development goals. The strategies identified below are more fully described in Chapter 7 and include:

- Greater collaborative planning that includes integration of the efforts of local groups, the port association, and state efforts. This could include ensuring broad maritime representation on any freight advisory committees, providing for more port input in general planning, and integrating local port planning with statewide and MPO and RPC efforts.
- A cooperative planning approach for the major freight ports that encourages shared resources and cooperative development efforts.
- Increased HAP program funding and a continued freight focus.
- A greater role for port leadership and advocacy, possibly through the WCPA.

Based on this analysis of planning efforts and institutions, it reflects well that similar strategic goals, objectives, and actions are defined at the various port and industry locations. Local ports, the state association and the state agencies are very much aligned to leverage transportation for economic development, and to better balance freight movements across the state. Chapter 5 continues with the analysis and verification of the strategic goals, objectives, and actions relevant for Wisconsin commercial port development.

Chapter 5: Stakeholder Involvement

This chapter discusses how the project team incorporated port and industry stakeholder involvement and perceptions with a baseline understanding of the infrastructure and markets to identify preferred strategic port and waterway development initiatives. The stakeholder participation for the project provides an opportunity to confirm and prioritize the findings and themes identified so far in the Wisconsin Commercial Ports Development Initiative. It is also the next step in formulating an overall strategic master plan that includes implementable strategic initiatives and stakeholder participation to usher in greater use and development at Wisconsin commercial ports.

Prior project efforts identified a range of common goals, objectives, and initiatives through the review of planning documents and related waterway development efforts. These themes were verified through site visits to the seven major freight ports in Wisconsin and discussions with port stakeholders. To increase stakeholder awareness, participation, and input, a half-day working session was scheduled in coordination with the annual WCPA meeting to reach out to port stakeholders regarding the project findings and development themes. The event was entitled the Wisconsin Commercial Ports Strategic Development Working Session: Unleashing our Comparative Advantage. The purpose of the stakeholder event was fivefold:

1. Describe the goals and reasons for the effort.
2. Review infrastructure and markets baseline research findings with the stakeholders.
3. Present a list of port and marine strategic initiatives that were identified and developed through the research process.
4. Complete the prioritization of the strategies by stakeholders.
5. Develop a common awareness and group momentum to advance Wisconsin ports in freight movement and as economic development engines for the state.

More than 80 marine and port stakeholders attended this meeting. Governor Scott Walker, Senator Tammy Baldwin, Wisconsin DOT Secretary Mark Gottlieb, and other dignitaries kicked off the event.

Progression of the Stakeholder Meeting

The agenda for the workshop included a charge for action at the ports from state dignitaries, presentations on the baseline infrastructure inventory and port markets, and presentations about marine freight development activities and innovative planning practices in the region. Following the presentations outlining the context of the project, the attendees were directed into three prearranged groups of near equal size to facilitate discussions on the identification and prioritization of potential strategic initiatives. The meeting agenda and presentations can be found at the WCPDI project website.²¹

The introduction and background for the meeting framed the project as important to economic development and jobs, as imperative to sustaining a viable freight transportation system in the state, and as important for both industrial and community development. The introduction period of the meeting also provided the opportunity for state agencies to demonstrate their commitment to port stakeholders through their support of the project and participation in the process.

In order to facilitate the review and prioritization of a broad range of strategic initiatives by port stakeholders, efforts were made to increase stakeholder awareness and participation at the meeting. To advance inclusion and participation, the project team reviewed and updated the

²¹ Wisconsin Commercial Ports Development Initiative: <http://www.wistrans.org/cfire/research/projects/09-02/>.

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WCPA membership and contact list to include the new contacts identified during the current research. This update to the list includes the new state agency representatives that have recently adopted a role in support of Wisconsin ports. The list also includes newer contacts from the additional business outreach and federal agency contacts identified during the research process. The project team also worked with Brown County and WCPA on advanced save-the-date mailers and reminder postcards along with a mailed agenda and meeting invitations to promote the project, the meeting, and the opportunities to grow the ports and the economy. The project team and WCPA also followed up with key stakeholders with phone calls to encourage attendance at the working meeting.

Following the presentations on the state's ports and port resources, and baseline summaries of port infrastructure, markets, and best practices, the breakout sessions began. Each of the three groups was assigned a facilitator and note keeper from the agency project oversight team to assist with managing the process.

In a facilitated discussion, the attendees in each of the groups were directed to discuss and then prioritize the strategic initiatives they felt would most advance Wisconsin ports. A comprehensive list of strategic initiatives and goals collected throughout the research process was presented to the groups. Each attendee received a handout with the list of strategic initiatives categorized by strategic area. Also, large sheets of paper with the initiatives were posted on the walls in each group's area for the participants to read and then prioritize.

This prioritization process encouraged interaction within the breakout groups and also provided feedback concerning the project team's accuracy in capturing the discussions and conclusions.

A collection of strategic initiatives for the marine system in Wisconsin was identified throughout the research process. Sources for the initiatives included literature reviews of other recent work on the Mississippi River and Great Lakes systems, stakeholder interviews at ports, business and agency interviews, and the project team's observations during field visits and interviews. A list of the 22 strategic initiatives identified and referenced through the research process can be found in Table 8.

Small group discussions regarding each strategic initiative were followed by multi-voting that facilitated the prioritization of strategic port initiatives. Stakeholders were divided into three working groups of 15-20 people each. A compilation of 22 initiatives was introduced and discussed. The initiatives were divided into four distinct categories to help the prioritization process: awareness and advocacy, planning, markets, and infrastructure and access. Each group was then asked for any additional initiatives that should be included and they were recorded for subsequent voting. Finally, seven circular stickers were distributed to each person and they were instructed to place any number of their own stickers under any of the initiatives that they considered of highest importance to them.

Results

A total of 330 votes were cast by 47 stakeholders, with about one third of the votes cast for initiatives within the infrastructure and access category. The working session generated eleven additional initiatives or issues that were also voted on and can be found in Table 8. The top ten initiatives receiving votes are listed below with their vote count noted in parentheses:

1. (37) Increase funding for the Harbor Assistance Program (HAP).
2. (30) Assess container operations for feasibility on the Great Lakes and Mississippi River and visit container operations to develop this network.
3. (23) Identify ways to decrease sedimentation and continue efforts to find beneficial uses of dredged materials.

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4. (22) Identify ports messaging and resources to increase the marketing of ports to business and communities.
5. (17) Conduct impact assessments of first- and last-mile connections of intermodal facilities and ports.
6. (16) Advocate for increased focus on the lock and dam system and its importance to upstream states.
7. (15) Develop regular communication with the state legislature and Congress by, for example, hiring lobbyists.
8. (14) Identify potential OSOW, energy, and project cargo and develop a business plan to attract and service these areas.
9. (12) Formalize regular communication between ports, industry, USACE, and USCG on marine navigation issues.
10. (12) Ports and marine industry should advocate for participation on freight advisory councils (FACs) in order to include marine transportation issues in freight and general transportation and economic planning.

Of the top ten initiatives, four fall within the awareness and advocacy category (4, 7, 9, and 10), three are considered infrastructure and access initiatives (1, 3, and 6), two are defined as market development activities (2, 8) and one initiative was characterized as a planning activity (5).

Discussion and Comments Following the Working Session

Following the multi-voting process, votes were tabulated and presented to the participants. The top ten initiatives were presented to the group to form the basis of additional facilitated open discussions. Comments from the workshop's participants included:

- Representation from USACE recommended that the Rock Island, St. Paul, and Detroit Districts should be represented on the State Freight Advisory Committee, as it is done in other states.
- It is important to continue to advocate for appropriations for the implementation of WRRDA authorizations.
- A stakeholder database for water transportation issues in Wisconsin would help with issue outreach.
- The Harbor Technical Advisory Committee (HTAC) is a good model for increasing port outreach in communities.
- The 18 federal and state funding sources available to ports should be compiled for easy access.
- Ports should consider highway funds for first- and last-mile projects.
- Any port and infrastructure inventory should incorporate GIS technology.
- Educational opportunities should be explored to increase marine experience and expertise for port-related staff at the Wisconsin DOT and other agencies.
- It is important to demonstrate how other modes cannot absorb traffic that flows through the river locks (Mississippi or SOO) if there is an emergency closure.
- It was noted that increasing funding for HAP would help to achieve other initiatives; for example, reducing sedimentation and beneficial reuse of dredged material.
- Increasing beneficial reuse of dredged materials would free up HAP funds used for sediment placement and storage.

Table 8 contains complete enumeration of the marine initiatives along with their vote count.

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Table 8. WCPDI Strategic Initiatives

Awareness and Advocacy	Total
Identify ports messaging and resources to increase the marketing of ports to business and communities.	22
All agencies and stakeholders should advocate for ports and all modes as a <i>Wisconsin Comparative Advantage</i> .	3
Formalize regular communication between ports, industry, USACE, and USCG on marine navigation issues.	12
Develop regular communication with the state legislature and Congress by, for example, hiring lobbyists.	15
Participate in and attend Inland Rivers, Ports and Terminals, American Waterways Operators, and Waterways Council conferences and meetings— <i>Get Wisconsin on the Map</i> .	8
Category Total	60
Planning	
Assess and address workforce supply issues as well as professional capacity in logistics and marine navigation and supporting industries.	11
Identify organizational structures, roles, and resources to advance marketing, collaboration, and advocacy at all levels.	8
Investigate benefits of advanced linkages between transportation and economic development through a local or state port authority structure.	11
Ports and marine industry should advocate for participation on freight advisory councils (FACs) in order to include marine transportation issues in freight and general transportation and economic planning.	12
Develop and share a port resource kit for communities with navigation interests in order to help them better integrate community and port planning and economic interests.	7
Category Total	49
Markets	
Identify sustainable marine markets and ensure service and infrastructure—use media to promote these activities.	4
Identify potential OSOW, energy, and project cargo and develop a business plan to attract and service these areas.	14

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Assess container operations for feasibility on the Great Lakes and the Mississippi River and visit container operations to develop this network.	30
Exempt new, non-bulk Great Lakes cargo from the Harbor Maintenance Tax (HMT).	7
Assess pilotage, funding, and regulatory schemes across the Great Lakes and work towards greater efficiencies and alignment across this system.	11
Category Total	66
Infrastructure and Access	
Increase funding for the Harbor Assistance Program (HAP).	37
Complete a system inventory in cooperation with other states— <i>from connections to dredging</i> .	6
Identify mechanisms to modernize the Great Lakes and river system fleets and leverage clean fuel technology.	6
Conduct impact assessments of first- and last-mile connections of intermodal facilities and ports.	17
Identify ways to decrease sedimentation and continue efforts to find beneficial uses of dredged materials.	23
Advocate for increased focus on the lock and dam system and its importance to upstream states.	16
Address invasive species.	2
Category Total	107
Other	
Identify ways to adapt to change in lake levels and climate change.	3
Establish a statewide coordinator to manage port funding - from a federal liaison to a single point of contact at the DOT for ports.	2
Ensure projects that consider all modes are prioritized for funding.	2
Develop a local WEDC to connect ports to funding sources.	3
Conduct a commodity flow supply chain analysis.	5
Sell capacity on waterways to other modes based on ton efficiency.	1
Develop a way to express tonnages of people and freight on ferries.	6

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Develop other metrics on economic impact or value.	4
Develop a web resource with a general port or marine inventory.	6
Increase the visibility of the marine component of the supply chain - capacity going out.	8
Advocate for harbor and port land use preservation incentives or tax benefits similar to the Farmland Preservation Act.	8
Category Total	48
Grand Total	330

To increase the stakeholder input regarding the key initiatives identified and prioritized in the working session, an electronic survey was developed and delivered to the 500-plus addresses on the WCPA membership and marine stakeholder list. The purpose of the survey was threefold:

1. Confirm or expand upon the prioritization process findings from the workshop to the broader marine stakeholder group in Wisconsin.
2. Correlate characteristics of respondents with prioritization to assess and develop the needed networks to support advances in the area.
3. Continue to develop awareness and participation among the broad range of Wisconsin port stakeholders.

The survey was distributed to the WCPA membership list that contains more than 500 Wisconsin port stakeholders. Three email invitations with survey links were emailed between September 25 and October 8, 2014. The first section of the survey asked respondents to rank development initiatives in four different categories: awareness and advocacy, planning activities, markets, and infrastructure access. Next, the respondents were asked to rank eight port development issues in order of importance. The survey also collected stakeholder identification information.

Results

In total, 77 unique survey responses were submitted. Three stakeholder groups were distinguished in the respondents:

- Primary stakeholders.
- Federal and state agency officials.
- Secondary stakeholders.

Primary stakeholders include those directly involved in the day-to-day operations and commercial port activities while secondary stakeholders include higher-level community stakeholders involved with port planning and economic development related to commercial ports.

The respondents were asked to rank the development initiatives within each of the focus areas to confirm the strategic focus areas and refine the strategies. While there is some variability in ranking across the stakeholders groups, the survey results support the findings in the earlier WCPDI working session. The following summations of the priority rankings are based on the total mean ranking for each of the strategies as prioritized by the respondents.

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In the area of awareness and advocacy, the initiatives were ranked in order as:

1. Identify messaging and resources to increase the marketing of ports to businesses and communities.
2. Formalize regular communication between ports, industry, USACE, and USCG on marine navigation issues.
3. All agencies and stakeholders should increase advocacy for ports and all modes.
4. Increase port and stakeholder participation in marine industry networks across the region.
5. Develop regular communication with the state legislature and Congress by, for example, hiring lobbyist.

In terms of prioritizing the identified planning activities to increase freight activity at the ports, the respondents ranked the statements in order of importance as follows:

1. Assess and address logistics, marine navigation, and professional development workforce issues at ports.
2. Investigate appropriate local or state port authority structure to support navigation, port, and economic development.
3. Investigate and expand on the marketing and collaborative opportunities between ports, communities, and agencies.
4. Advocate for participation on the Wisconsin DOT Freight Advisory Council, at all planning levels.
5. Develop and share a port resource kit for communities with navigation interests.

In terms of increasing the markets at Wisconsin ports, the email respondents ranked, "Identify and support traditional sustainable marine markets" as the primary strategy. The strategies characterized under market development were ranked as follows:

1. Identify and support traditional sustainable marine markets.
2. Identify new sustainable markets such as oversize and overweight, energy, and project cargo.
3. Assess feasibility of container operations on the Great Lakes and Mississippi River.
4. Exempt new, non-bulk Great Lakes cargo from the Harbor Maintenance Tax.
5. Assess pilotage, funding, and regulatory schemes across the Great Lakes.

In the area of port infrastructure and access, the HAP program garnered the most support. The strategic initiatives in this category were ranked in order as:

1. Increase funding for the Harbor Assistance Program.
2. Complete a full marine system inventory.
3. Conduct impact assessment of first- and last-mile connections and intermodal facilities at ports.
4. Identify mechanisms to modernize the Great Lakes and Inland River system fleets and leverage clean fuel technology.
5. Identify ways to prevent sedimentation and use dredged materials.
6. Increase awareness of the lock and dam system condition and importance to all states.
7. Address invasive species.

The respondents were also asked to rank eight strategic areas in terms of their impact on advancing Wisconsin ports. The eight areas are ranked in the following order of impact:

1. Lack of funding for infrastructure.
2. Infrastructure condition.
3. Marketing.

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4. Competition with other modes.
5. Awareness and advocacy.
6. Modal access.
7. Port planning.
8. Port management.

The electronic survey results support the earlier efforts to capture the port and marine development agendas across the state and verify the strategic focus of the development project. Further, the working meeting and electronic survey have also played a pivotal role in raising awareness, interest, and momentum at the ports for increased freight activity and economic development. With more than 80 attendees at the WCPA annual meeting and 47 participating in the prioritization process, the meeting was by all measures a success in increasing momentum for Wisconsin ports. Further, an additional 77 port stakeholders were able to participate in the effort through the electronic survey.

Respondents to the electronic survey, just as in the working session, and in other marine developments efforts across the region, identified a range of strategic efforts across a spectrum of areas including infrastructure, organization, markets, policy and programs, awareness and advocacy.

A Systems Approach to Marine Freight Development

Across the breadth of port and marine freight navigation efforts in the Mid-America region, the goals and initiatives uniformly reflect a systems approach to development of these transportation and economic resources. With a freight systems approach, the integrated systems of markets, infrastructure, local, state, and federal policy and programs, and the networks and awareness in the marine freight industry across the region must all be considered as factors affecting port development. All of these areas offer opportunities to fine-tune the attractiveness and opportunity of moving freight through Wisconsin ports and on its waterways.

When Wisconsin commercial port stakeholders were asked to identify strategic initiatives to support the state goal of logistics and freight development and increased employment at the port communities, a range of strategies were identified. Strategies supporting greater infrastructure investment, greater awareness and advocacy, more collaborative planning, and increased market development efforts were all identified as key activity areas. These focus areas, and even the distinct strategies identified across the different stakeholder groups such as the Wisconsin port stakeholders, the Great Lakes efforts and the Mississippi River efforts, all reflect similar development goals and strategic initiatives.

Looking at the marine freight development efforts across the region, a range of strategic initiatives are expressed at a variety of levels from general to specific, and with different emphasis on various system components given the context of the marine system.

For example, Iowa is mainly concerned with the Mississippi River and ensuring that infrastructure does not fail and is therefore focused on increasing investment in an aging lock and dam system. Iowa DOT's strategic approach to national and Iowa-specific recommendations is shown in Figure 26.²²

²² Iowa Department of Transportation (2013). A River Run Dry: Transforming our Aging Mississippi waterway system into a vital trade corridor. http://www.iowadot.gov/systems_planning/pdf/WaterwayBrochure.pdf. Accessed 12/16/14.

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The State of Iowa recommends the following congressional actions to support the future viability of the Mississippi inland waterway system:

National Recommendations for Congress

1. Ensure passage of the Water Development Act of 2012/13.
2. Ensure opportunities for pilot programs that allow non-federal sponsors to rehabilitate, improve, maintain and operate federal projects.
3. Ensure opportunities for alternative project delivery and funding mechanisms (see table to right).
4. Ensure adequate funding for ongoing and pilot USACE Civil Works and Navigation programs.
5. Authorize USACE to study additional funding mechanisms to provide more adequate funding for the Inland Waterways Trust Fund (IWTF).

Specific Recommendations for Iowa

1. Iowa should explore a coalition of Upper Mississippi River States and inland waterway interest groups to drive legislative agenda in D.C. to address operational improvements, funding and legislative changes needed to modernize the Inland Waterway System.
2. Iowa should express interest to the Secretary of the Army and seek non-federal sponsorship for implementation of a pilot project (outlined in Title II, Section 2019 of the WRDA 2012 bill).

Figure 26. Iowa DOT Marine Freight Recommendations

Iowa DOT, along with the Wisconsin, Minnesota, Illinois, and Missouri DOTs, continues to advocate for increased attention and investment to the Mississippi River system through marine highway efforts, the Upper Mississippi River Basin Association, and collaboration through the Mid-America Freight Coalition.

The Council of Great Lakes Governors (CGLG) has been the leading force for Great Lakes marine freight advancement. The CGLG Maritime Task Force makes recommendations at three levels.²³

At the state level:

- Immediately identify one or more persons in each state who will coordinate Marine Transportation System (MTS) issues within and across jurisdictions.
- Develop the MTS inventory using common framework that can be consolidated into a system-wide inventory.
- Create a list of regional maritime priorities to inform policy and programs and engage stakeholders.

²³ Council of Great Lakes Governors (2014). Marine Task Force Recommendations. <http://www.cglg.org/media/1187/maritimerecommendations4-25-14.pdf>. Accessed 12/16/14.

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- Develop a marine planning model to foster investment, efficiency, connectivity, trade, priorities, and partnerships.
- Recognize the important role of maritime freight in a multimodal system.
- Promote ongoing and planned activities to build support for state leadership.

At the federal level:

- Call on federal governments to recognize the MTS as a unique system.
- Call on federal governments to invest in the MTS.
- Advocate for full expenditure of Harbor Maintenance Trust Fund (HMTF).
- Encourage MTS fleet investments and efficiency improvements.
- Exempt, new, incremental non-bulk cargo from the HMTF.

And at the regional level:

- Coordinate with existing regional trade promotion efforts and expand the MTS brand.
- Improve return on MTS investment by taking a holistic approach.
- Encourage regulatory harmonization.

Within one year, the task force committed to:

- Complete a maritime asset inventory for each state and province. This will be the first such inventory to be conducted on a regional basis and will inform future management decisions.
- Develop regional maritime priorities. These priorities will help establish regional consensus and guide future management and funding.
- Create a regional maritime entity model in order to better coordinate maritime planning and management according to regional priorities.

Similarly, development efforts on the Missouri River advocate for system infrastructure and flow management to support downstream navigation, traditional and new market development, and port infrastructure development in an effort to sustain and grow the Missouri River as a freight corridor.²⁴

Across the region, marine and freight development efforts share common development missions, strategic areas, and even specific strategic initiatives. The commonality of the systems understanding and approach to port and marine development, and the similar strategies across regional efforts bodes well for a combined, systemic marine freight development effort. The opportunities with the Great Lakes and Mississippi River freight corridors have captured the attention of a range of stakeholders that are now realizing their common missions. As Wisconsin moves forward with implementation of selected strategic initiatives, further collaboration across the region should be pursued immediately to identify areas of like interest that could be jointly pursued. As an example, in support of the CGLG charge to inventory marine assets across the Great Lakes, this effort provides a first significant step towards a complete marine asset inventory. As a region, these state inventories and planning efforts will be aggregated to form a comprehensive Great Lakes planning approach to freight, waterway, and community planning.

Chapter 7 further discusses the implementation opportunities related to these strategic initiatives.

²⁴ Missouri Department of Transportation (2014). Freight Development: Missouri's Economy in Motion. <http://www.modot.org/othertransportation/freight/index.htm>. Accessed 12/16/14.

Chapter 6: Strategic Approach to Port Development

The Wisconsin Commercial Ports Development Initiative has four major components.

- An infrastructure inventory of Wisconsin's public and private port operations and public port needs.
- Baseline commodity flow data for Wisconsin waterways.
- An exploration of regional, national, and global trends that the state can adapt or adopt to accelerate freight and logistics development.
- A Wisconsin commercial ports master plan that combines market and infrastructure trends with stakeholder input to help the state make justifiable investment decisions that meet the needs of Wisconsin ports and the state as a whole.

The project team used a broad system approach to understanding the context and environment of Wisconsin commercial ports and then developed a strategic approach that supports port and marine freight development.

Using this systems approach, the Wisconsin Commercial Ports Development Initiative considered four systems that make up the context and environment in which ports operate.

- **Infrastructure.** A port infrastructure inventory of channels, roads, rails, docks, businesses, equipment and material handlers was created, which will serve as a key planning tool and baseline for the longer-term planning efforts.
- **Markets and the economy.** A marine freight market assessment was conducted to better understand how marine freight markets affect the economics and development prospects at Wisconsin ports.
- **Stakeholders.** Stakeholder participation is critical to any efforts to advance market activity at Wisconsin ports.
- **Trends and opportunities.** Other significant marine freight development initiatives across the region were examined to identify trends, opportunities, and strategic initiatives that could prove useful in Wisconsin.

Each of these areas can be seen as a contributing area or system that can impact the ability of Wisconsin ports to increase freight activity and economic development.

The project leadership—consisting of multiple state and local agencies, Brown County, WCPA, and university partners—reflects the state's interest in developing Wisconsin ports and their marine freight-related economies. The diversity and breadth of these agencies reflects the broad economic and development dynamics possible with an increased freight and logistics presence at Wisconsin ports. This project leadership and stakeholder involvement, taken together with this systems approach to freight development at the ports, help define the mission statement for the strategic development of Wisconsin ports.

Mission Statement

The Wisconsin commercial ports master planning mission statement can be stated as:

The Wisconsin commercial ports and supporting agencies will work to increase and create freight and logistics development at the state's ports. The increased freight development will result in quality jobs, sustainable communities, and sustainable economic development. The

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state of Wisconsin as a whole will benefit from the increased freight and logistics development at the ports.

Strategic Focus Areas

The project leadership team used the results of this project's analyses to identify a range of strategic focus areas with potential to increase freight activity at Wisconsin ports.

- **Awareness and Advocacy.** Increase awareness and advocacy for port and waterways development.
- **Markets.** Increase market share of marine-capable commodities.
- **Infrastructure.** Increase funding for port and waterway infrastructure.
- **Planning and Organizational.** Increase organization and cooperation, planning, and action. Further develop Wisconsin's marine presence and network.
- **Environmental.** Avoid and mitigate invasive species, protect the environment, and ensure quality communities.
- **Other port functions.** Recognize the importance of shipbuilding, recreation, tourism, and other commercial and public uses.

This process resulted in a cascading strategic planning approach that was driven by three main planning components.

- The process identifies the high-level mission and goals of Wisconsin ports and enabling entities (e.g., state and local agencies).
- The effort includes an assessment and inventory of the resources available to support and develop the port systems.
- This effort incorporates port stakeholder input.

Figure 27 depicts the strategic development process incorporated in the Wisconsin Commercial Ports Development Initiative.

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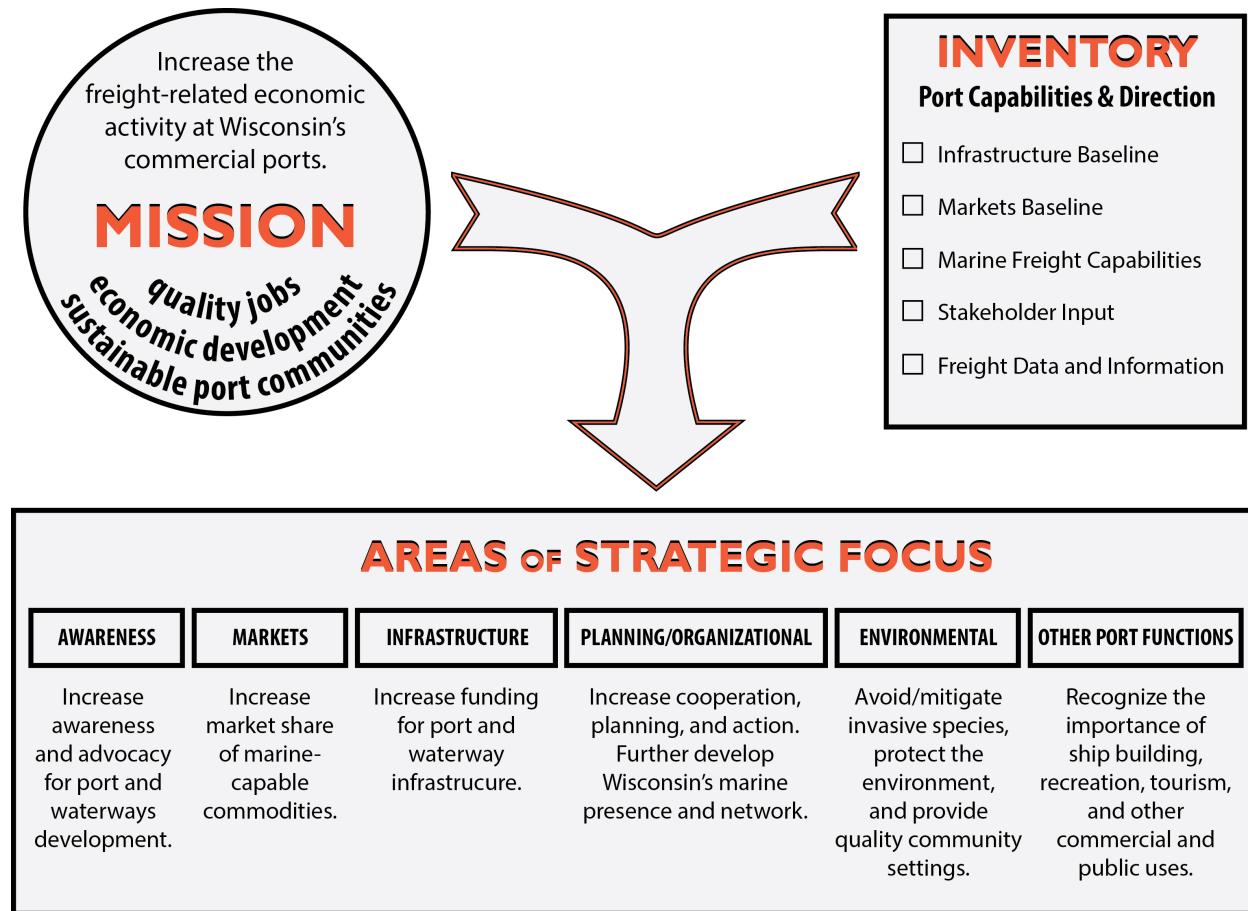


Figure 27. Wisconsin Commercial Ports Development Initiative Strategic Process

Implementation

Based on this planning approach, strategic initiatives were identified throughout the research process that would support, enhance, or increase the desirability and capabilities for Wisconsin commercial ports to attract and service freight and logistics development.

As part of the larger planning and development approach, the more these systems of markets, infrastructure, planning, and awareness can be tuned and aligned to support freight development at the ports, the more desirable and effective the ports will be for markets and logistics planners. The big picture frames the port and economic development chain in this manner: better-developed and more efficient ports provide a comparative advantage to business and the state in the form of a lower cost, more fully integrated multimodal freight system. This in turn increases the desirability of the ports (and Wisconsin) to businesses and leads to continued development at the ports.

Chapter 7 identifies and describes the strategic initiatives that support these strategic focus areas.

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Chapter 7: Implementing the Strategic Plan

The Wisconsin Commercial Ports Development Initiative (WCDPI) produced results and deliverables that will support freight and economic development at Wisconsin ports, including a port infrastructure inventory (Appendix 1), a Wisconsin marine commodity market analysis (Chapter 3), an analysis of port planning and the Wisconsin DOT Harbor Assistance Program (Chapter 4), and the development of a Wisconsin commercial ports master plan with strategic initiatives (Chapters 6 and 7).

The WCPDI generated results that support port development objectives at local and statewide levels. These deliverables were generated through the contacts, working sessions, and stakeholder interaction throughout the research process. Effects of this project include a greater awareness of port benefits and opportunities of Wisconsin ports for users and potential users, an awareness on the part of stakeholders of the broad support and economic development emphasis that state agencies bring, and a greater sense of organization and community through the WCPA. These are subjective but important effects in the context of increasing the freight and economic development of Wisconsin ports. As one port stakeholder commented following the first WCPDI working session, “this has been the best port meeting we’ve had.”

The implementation of a Wisconsin commercial ports strategic development effort follows a systems approach by defining strategic focus areas or systems that impact port development, by identifying the specific disincentives that are hindering development, and then identifying the means to remove those barriers. While the development effort identifies six system areas in which to work to increase freight across our ports, four of these areas (awareness, markets, infrastructure, and planning) are specifically focused on developing the ports as freight and logistics hubs and are the focus of the implementation plan in this chapter. The study acknowledges that the environmental and other port functions focus areas are critical to the Wisconsin economy and its communities while focusing on the freight and economic development areas.

For these four freight- and logistics-specific initiative areas, implementation strategies have been identified and developed from the wide range of activities included in the research process. The strategic implementation initiatives frame and support the master development plans for Wisconsin commercial ports and are considered as part of a Phase II implementation plan for port development in Wisconsin. The Phase I portion that is based on this effort consists of plan development. Phase II, plan implementation, was defined as part of the project in the original Phase I Wisconsin Coastal Management Program grant, realizing the development of planning tools and a master plan approach is just the beginning of port development. These initiatives, along with continued efforts to develop the greater organizational presence of ports across the region and in the freight industry, must be ongoing activities to ensure fulfillment of the promise that the ports have for the state’s economy and communities.

The research and project leadership team also recognizes the importance and relevance of the Water Resources Development Act (WRDA), USDOT, and MARAD programs and policies. Wisconsin ports should strategically pursue and support legislation and national policies that provide for investment in the ports and waterways. The implementation approach here takes on more of an economic gardening stance that looks to foster current development at the ports and identifies and lays the groundwork for promising development initiatives that can be undertaken in Wisconsin.

This chapter defines the strategic focus areas of awareness and advocacy, markets, infrastructure, and planning and organization and presents initiatives for their development. This systems approach allows for implementation of any of these strategic initiatives with benefits

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accruing to the entire system. Implementation of multiple initiatives increases the overall likelihood of successful port development. Based on this project and the initiatives identified so far, a market development proposal has been submitted to the Wisconsin Coastal Management Program to examine water-capable commodities that are not currently using the system and the opportunities to move these commodities through Wisconsin ports.

The following descriptions define each of the four strategic focus areas as expressed by stakeholders and explore strategic initiatives to enhance these systems. These initiatives vary in scope, level of sophistication, and the entities responsible for implementation.

Awareness and Advocacy

Any effort to increase awareness and advocacy for marine freight for Wisconsin ports includes several audiences and several themes that express the benefits, opportunities, and challenges of freight development at these ports.

Port stakeholders expressed a need for increased awareness of the ports and their benefits and opportunities to several constituent sectors. Stakeholders identified the state's transportation industry sector including the numerous agencies and divisions that can impact freight movement, the general public and the media, and planning and economic development professionals across the state as candidates for increased awareness and advocacy. Stakeholders indicated that advocacy for ports and marine freight has been underrepresented in nearly all discussions involving transportation, the economy, or freight. State agencies, ports, terminal operators, and all involved in the industry should be charged to advocate for the port and marine freight industries. In order to increase awareness and advocacy, two initiatives have been identified as feasible and beneficial.

Conduct Statewide Business and Industry Transportation Survey

Background: There is little information available that addresses the experiences and preferences of Wisconsin businesses and logistics professionals in moving their products and product inputs in Wisconsin. This effort would survey the state's business by sector and geography to understand how these stakeholders access and use Wisconsin's freight system. The analysis would include an assessment of the disincentives for using each mode, and conversely the needed incentives to move freight to available modes.

Anticipated Results: This project would assess current business and transportation patterns across the states, identify opportunities to enhance the desirability of various modes, and increase business awareness of the entire freight system in Wisconsin. From the agency point of view, this study would provide information to guide programs and policies supporting transportation and its link to business efficiency and business attraction across the state.

Feasibility: High.

Cost: Moderate. Estimated costs of \$75,000 to \$120,000 to establish and complete the initial statewide business, industry, and logistics survey. Updated surveys are recommended on a biennial basis at costs estimated at \$25,000 to \$40,000 per round.

Increase Port Awareness using Waypoint and Tourism Signage

Background: Stakeholders noticed that trail signage and waypoint markers along waterways included interesting history about the area. These signs could also include information regarding the importance of the Great Lakes ships they see from the beach or a tow of barges moving

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down the Mississippi River. Information about the average yearly need for 1.9 million truck movements to replace the tonnage moved through Wisconsin commercial ports or that a six-barge tow on the Mississippi River is equivalent to nearly 360 truckloads could also be provided.

Anticipated Results: Ports and marine freight are often called the invisible industry. As such, nearly any and all increases in awareness of the benefits and opportunities associated with ports and marine freight is beneficial. A grassroots approach to raise awareness at the waterfront can begin the process. Broad support in marine freight advocacy is then possible from citizens and leaders as more people see what freight on the water means to their communities.

Feasibility: High.

Cost: Low.

Market Development

There is capacity available at Wisconsin ports to move a nearly unlimited amount of freight across the state. Port stakeholders expressed a desire to increase freight market activity for traditional markets and commodities as well as expand markets to new areas such as containers and increased export initiatives. While some commodities and markets naturally lend themselves to marine movement, other such as containers and project cargo are just as likely or more likely to move by road or rail.

Identification and Development of Wisconsin Port Market Scenarios

Background: Wisconsin ports and waterways play an important role in the economic growth of the state and provide significant support in transporting waterborne freight. A recent multi-agency research partnership identified six priority areas and 22 initiative areas to support the strategic development of Wisconsin commercial ports. Market development initiatives along with increased awareness for marine freight logistics opportunities were identified as critical to increasing the freight and economic activity at Wisconsin ports.

The purpose and objectives of the *Identification and Development of Wisconsin Port Market Scenarios* project are to identify the commodities, project cargo, and new markets with the greatest potential for maritime movement that are not currently serviced by a maritime route, and then evaluate the routing, feasibility, costs, time, and consequences of current routes and a comparable marine delivery.

Anticipated Results: This business case approach to marine markets will compare variables such as time to delivery, costs, routing, intermodal connections, fuel and greenhouse gas (GHG) implications, as well as subjective areas such as permitting complications, delays, and infrastructure concerns of each alternative route. This information will provide the basis for a business case for multimodal freight shipments incorporating Wisconsin Great Lakes ports including:

1. Development of a business case approach to commodities, project cargo, and new markets that demonstrate total landed costs for moving goods by available modes.
2. Planning information, program and policy justification for agencies to support multimodal development.
3. Educational information to increase awareness of alternate transportation considerations and their costs and benefits, especially to business, industry, and logistics professionals.

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4. Anticipated increased market interest in ports based on awareness of the availability and costs of marine modes.
5. Increased coordination and a professional community among Wisconsin's marine industry and enabling agencies.

Feasibility: High.

Cost: Moderate. Estimated project budget of \$140,000.

Increase Marine Highway Visibility and Market Attraction

Background: Wisconsin is a participant in or aligned with several Marine Highway initiatives including M35, M90, and M94. Greater awareness of these corridors and their potential role in freight movement could lead to greater interest in using Wisconsin ports and waterways. An integrated awareness and market development program can be initiated based on commodities that currently move on overland routes. The Marine Highway corridor could be branded as a uniquely Wisconsin freight corridor and as a green logistics effort.

Anticipated Results: Development of a branded freight service in Wisconsin based on the historic use of waterways and ports to move freight. Increase the identification of ports and marine freight as part of the state's culture.

Feasibility: High.

Cost: Low.

Infrastructure Development

Port infrastructure was defined as a key development issue by port stakeholders and at the WCPDI workshop. The discussions of public and private infrastructure identified infrastructure broadly. The category includes road and rail access, general port and dock infrastructure, dredging and spoils management, and equipment such as cranes and loaders.

Planning for infrastructure also was a major topic of interest. As part of this effort, a port inventory and HAP assessment were conducted. Both of these analyses provide valuable information for today and directions for future program and policy considerations.

Assess Expansion of State Programs and Funding for Port and Waterway Infrastructure

Background: According to the port stakeholders attending the WCPDI working session held in conjunction with the 2014 WCPA annual meeting, increased funding through the Wisconsin DOT Harbor Assistance Program (HAP) was the highest priority to support port development. Funding is a common theme in transportation development and it is unlikely support will increase from the federal level.

A call for increasing HAP has been made before and the program has had a favorable rate of funding growth across the years. In the 2013 Transportation Finance & Policy Commission report, an additional \$2.6M annually was recommended for the program.²⁵ And based on the earlier analysis, the Wisconsin DOT estimates that:

²⁵ Wisconsin Department of Transportation (2013). Keeping Wisconsin Moving: Smart Investments Measurable Results. <http://www.dot.wisconsin.gov/about/TFP/docs/keep-wi-moving-report.pdf>. Accessed 12/16/2014.

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Since 1995, HAP has made possible the completion of projects that will provide an estimated \$250.3 million of transportation benefits to their users over the next twenty-five years. These benefits represent decreased production costs to the Wisconsin businesses that use harbor facilities, making them better able to compete in the world marketplace, to increase employment, and to generate more income.

Anticipated Results: Information and documentation is needed regarding the positive economic and environmental benefits of increasing marine freight movement and port usage. Results and information provided by this research are needed to advocate for additional investment in port and marine infrastructure.

Table 9, based on HAP applications, provides a first step toward documenting investment needs at Wisconsin's ports, and assumes a scenario in which 10 percent of the unfunded expressed need for projects with an A probability of receiving funding for a given year is allocated by the HAP. This was calculated by taking ten percent of the difference between the unfunded projects' expressed need and the funded projects' expressed need for a given year. Next, the largest unfunded project expressing a need of less than the calculated HAP increase is listed. Finally, all projects expressing a need of less than the calculated HAP increase are listed. This tabulation shows the amount and scale of projects that could be funded with a 10 percent increase in HAP spending for unfunded projects rated with an A probability of receiving funding for the 2012 application cycle year.

Table 9. Investment Needs of Wisconsin Ports

2012	
Total expressed need for 2011 projects from 2010-2012:	\$34,752,275
Total expressed need less expressed need of funded projects (2010-2012):	\$29,952,275
10 percent of unfunded expressed need in 2012:	\$2,995,228
Largest unfunded project expressing need under \$3.0 million:	\$2,618,400
MARINETTE	
DOCK WALL INSTALLATION (Dock New Construction)	\$2,618,400
23 projects expressing need < \$3.0 million	
<i>19 Freight Projects expressing need < \$3.0 million</i>	
BROWN COUNTY	
DOCK REHAB AND DREDGING (Dock Improvement)	\$1,440,000
CITY OF LA CROSSE	
NORTHSIDE DOCK REPAIRS (Dock Improvement)	\$65,000
MANITOWOC/CITY CENTER	
CONSTRUCT DOCK WALL (Dockwall New Construction)	\$448,000
CONSTRUCT LOADOUT FACILITY (Terminal New Construction)	\$464,000
MARINETTE	
DOCK WALL INSTALLATION (Dockwall New Construction)	\$2,618,400
DREDGING IN HARBOR (Dredging)	\$1,760,000
MARINETTE/MARINETTE FUEL & DOCK	

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DREDGING (Dredging)	\$241,875
MILWAUKEE/EDWARD GILLEN CO.	
CONSTRUCT BARGE REPAIR FACILITY (Terminal New Construction)	\$760,000
DOCK REHAB AND DREDGING (Dock Improvement and Dredging)	\$680,000
DOCK REHAB AND SITE IMPROVEMENT (Dock Improvement)	\$300,000
PORT OF MILWAUKEE	
FENDER IMPROVEMENTS (Dock Improvement)	\$80,000
PIER AND CHANNEL DREDGING (Dock Improvement and Dredging)	\$80,000
TERMINAL PAVING (Terminal Improvement)	\$160,000
BERTH AND CHANNEL DREDGING (Dredging)	\$800,000
HEAVY LIFT DOCK IMPROVEMENTS (Dock Improvements)	\$2,080,000
TRANS LOAD TERMINAL (Terminal New Construction)	\$1,400,000
IMPROVE CONTAINER YARD (Terminal Improvement)	\$960,000
SUPERIOR	
FRASER SHIPYARDS PHASE 3 (Terminal Improvement)	\$1,600,000
HALLET DOCK #8 REHAB (Dock Improvement)	\$2,000,000
<i>1 Commercial Fishing Project expressing need < \$3.0 million</i>	
TWO RIVERS	
DREDGING (Dredging)	\$1,040,000
<i>1 Shipbuilding Projects expressing need < \$3.0 million</i>	
MANITOWOC/BURGER	
DREDGING (Dredging)	\$160,000
<i>2 Carferry Projects expressing need < \$3.0 million</i>	
ALGOMA	
DREDGING (Dredging)	\$200,000
TOWN OF LA POINTE	
DEVELOP HARBOR PLAN (R & D)	\$15,000

Additional refinement of these analyses combined with information on the economic benefits and increases in employment based on past project examples, and then projected forward based on actual projects, will form a solid factual basis to advocate for increased program support or innovative approaches to funding marine applications.

Feasibility: High.

Cost: Low.

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Advanced Port Inventories and Mapping for Regional and Global Applications

Background: The Council of Great Lakes Governors (CGLG) advocates for a cooperative approach to developing a full inventory and mapping of the ports, channels, and marine appurtenances across the Great Lakes region. The Great Lakes states, starting with Minnesota and Wisconsin, have developed a first pass at port inventories for their waterways. However the CGLG model calls for the cooperative development of a full inventory that encompasses the channel to the exit gate. A comprehensive inventory is specified, but the inventory components are not listed and have not been previously inventoried or mapped to the expected degree.

Anticipated Results: Develop a Wisconsin-focused team of port, logistics, sea grant, and business leaders to identify the spectrum of characteristics and features to be inventoried and mapped. Create a model interactive port and marine resource mapping and inventory tool that can be used or integrated with resource, economic, and infrastructure planning. Incorporate logistics telematics to create a visible port and proprietary, traceable commodity and cargo flows.

Feasibility: High.

Cost: Low. Estimated development costs of Phase I at \$120,000 for development of a professional advisory group and specifications, followed by data assessment and acquisition, then development of a prototype map and inventory tool. Comments on the Phase I prototype will then be collected from agencies and stakeholders and incorporated into the inventory and mapping. Phase II develops the full mapping and inventory for Wisconsin and shares the process and results with other states.

Planning and Organizational Systems

Port stakeholders in both field interviews and at the WCPDI working session expressed that Wisconsin ports lacked a sense of community or ability to act as a group for mutual benefit. Additionally, with the range of changes at the port and harbors from gentrification, changing economic focus, increasing tourist and freight loads, the communities and ports identified a need for proactive and cooperative planning to help the ports as a whole grow marine freight capacity and throughput.

Development of Port Cooperative Framework and Support

Background: Wisconsin has 22 commercial ports that are served by different local authorities with varying degrees of commercial port planning, knowledge, and staffing. The major ports of Superior, Milwaukee, and Green Bay often have county or municipal staff dedicated to port operations and development. However, many of the smaller but economically significant ports have limited resources and staff dedicated to operations and to a lesser extent maintenance and development. Recent port and navigation stakeholder surveys and interviews have indicated a greater desire for professional maritime expertise and resources, particularly at smaller ports. And with rapidly developing interest in ports for servicing a wide range of loads and logistics roles, all varieties of ports will need to stay current on shipping and logistic practices and expectations, and metrics that are becoming standard in freight shipping.

Anticipated Results: The purpose and objectives of this project are to develop a Wisconsin commercial port cooperative framework and resource center that provides for a network of marine freight professionals, shared services, expertise, planning tools, and support functions that can provide the foundation for Wisconsin port development. This proposal calls for a proof of concept approach using web applications and University of Wisconsin-Madison freight

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planning resources to develop and implement a cooperative, service-based approach to an expanded framework for port and marine freight planning activities.

Wisconsin ports will benefit from the availability and presence of day-in and day-out collaborative services and information. This ramp up in organizational structure to support ports keeps ports in the forefront, and would work with the WCPA to become service-oriented, market-driven, and progressive in order to increase the awareness of port possibilities. The project would include three major deliverables:

1. Assessment and prioritization of capabilities and needs at active ports.
2. Creation of a clearinghouse and web-presence to collect and disseminate best practices, common and unique business practices, joint development efforts, and port development strategies, as well as to foster greater collaboration across the ports.
3. Provide personnel to support the momentum in port development and provide for greater role of the WCPA to house this resource. Further project staff would to a large degree be contract employees for WCPA and the ports of Wisconsin. The project and personnel would support greater levels of collaboration, port visits and information sharing, and warehousing as well as support for WCPA meetings and communication needs.

Feasibility: High.

Cost: Low. Estimated at \$125,000 to develop and test concept of operations.

Integrative Port and Community Planning

Background: Port and harbor communities face a range of planning options for their economic and cultural future and identity. Recreation, tourism, beautiful views, Great Lakes ships, and an industrial setting are all part of a port and harbor area—often at the same time. The active ports and harbors, including the seven largest freight ports in Wisconsin, would benefit from integrated economic, freight and transportation, environmental, waterfront, and community planning. All of these distinct activities and areas have overlapping impacts on each other, and on the community and economy as a whole.

Anticipated Results: Convene the relevant agencies and personnel related to these planning activities to develop a planning model, a holistic planning approach for waterfront communities with active economies and integrated transportation systems.

Feasibility: High.

Cost: Low. Estimated concept of operations and active prototype in one-year at an estimated cost of \$75,000.

Conclusion

The eight strategic development initiatives described here include work across four system areas: increased awareness and advocacy, increased market development, greater infrastructure investment, and enhanced planning and organizational strategies. These ideas represent just a handful of possible approaches to increasing, enhancing, and creating more freight activity at Wisconsin ports. These strategic approaches were identified through interviews with port personnel, the WCPDI working session, and a review of related port efforts.

Chapter 8 provides a summation of the development and research processes incorporated in this project. The information found in the Harbor Assistance Program summary, the port inventory, and the strategic initiatives are intended for planning, organization, and infrastructure efforts to expand the freight moved through Wisconsin commercial ports. The development has

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already started with the efforts and investments being made by Wisconsin state agencies including the Wisconsin Economic Development Corporation, the Wisconsin Coastal Management Program, Wisconsin DOT, Wisconsin DNR, Brown County, Wisconsin Commercial Ports Association, and UW-Madison and UW-Superior.

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Chapter 8: Conclusions

The opportunities afforded Wisconsin communities and its economy through its commercial ports and access to the Great Lakes and Mississippi River are broad but to a large degree are not accessed. The Wisconsin Commercial Ports Development Initiative has developed an overarching strategic master plan to support planning and decision-making for Wisconsin ports. Within this process, the project identified strategic initiatives that will support and accelerate freight and logistics development at Wisconsin ports and result in greater economic activity. In short, this development effort looks at how the state, its communities, businesses, and industries can make better and more use of Wisconsin ports and marine assets to support and create economic development, enhance the transportation system, and ensure Wisconsin port communities remain quality places to live.

To address this broad charge four major activities were undertaken to support the strategic planning process. An inventory of Wisconsin port infrastructure provides a first pass at developing a comprehensive asset and land use inventory in collaboration with the other Great Lakes states. A market assessment was conducted along with a review of the institutions and state programs intended to support port planning and development. The WCPDI integrated this baseline information with port stakeholder input to identify strategic initiatives that support or accelerate freight and logistics development at Wisconsin ports.

The design of the study reflects a systems approach to port and marine freight development. As such, each of the report chapters reflects a modular approach to understanding one component of the system that makes up marine freight development at Wisconsin ports.

In addition to the project deliverables, several overarching development practices, principles, and consistencies within the freight and logistics systems were identified in the process that provide the port operating and development context. Developing ports and marine freight means developing a multimodal, multistate economic network that considers a number of factors.

- The Wisconsin economy and its businesses and industries rely on an efficient transportation system. The current bi-modal reliance on rail and roads is not sustainable given traffic loads, investment trends, and anticipated growth in freight loads.
- The ports and marine system have ample capacity to support increased freight moves, can relieve capacity issues on highway and rail corridors, provide local and statewide economic development, and provide for enhanced management of air quality, congestion, and transportation proximity issues.
- There are several systems that provide the context for port and marine navigation operations. The areas or systems explored in this project include: infrastructure, markets, and agency policy, planning, and programs. Stakeholders identified initiatives to move the ports forward in all of these areas.
- Stakeholders prioritized strategic initiatives. In order of importance, infrastructure and markets were ranked most important, with increased awareness, and enhanced planning, and organization ranked as less important.
- The Wisconsin DOT Harbor Assistance Program (HAP) is one of the main rallying points for Wisconsin commercial ports. The HAP has and continues to be a successful, popular, and growing program. In addition to providing funding, the program encourages planning. The program and the ports' participation provide identity to Wisconsin's ports and affiliation with peers. In effect, HAP provides an institutional context for Wisconsin ports.
- In Wisconsin, the responsible state agencies including Wisconsin Economic Development Corporation, Wisconsin Coastal Management Program, Wisconsin DOT,

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and Wisconsin DNR are all in support of greater development at the ports and see the economic, transportation system, and environmental benefits of a fully multimodal freight system. As proposed by the CGLG, Sheri Walz (Wisconsin DOT) and Mike Friis (Wisconsin Coastal Management Program) have been identified as the lead marine contacts for the state.

- A review of strategic initiatives across the region for both the Mississippi and Great Lakes systems found a very high degree of alignment among the defined constraints, opportunities, and strategic initiatives to develop marine freight systems.

These seven major considerations are supported by the specific strategic initiatives proposed in Chapter 7. In addition to these specific program, policy, and research endeavors, the following high-level strategies provide the institutional foundation for continued development efforts at Wisconsin ports.

- Continue and encourage the multi-agency partnerships to support freight transportation such as the multi-agency leadership group for this project. The state support and executive level champions for this project have demonstrated the state's commitment to port stakeholders. The diversity of agency support also ensures that a range of issues can be addressed in support of the ports.
- Leverage the regional interest in the Great Lakes and the Mississippi River. Continue participation in these regional efforts to grow the representation and voice of Wisconsin marine freight navigation.
- Develop an increased planning and interaction role for the Wisconsin DOT and the Harbor Assistance Program. Consider including more HAP reporting, strategy development, and increased activity at WCPA meetings. These efforts should be designed to support and grow the program and should also be seen as an institutionalizing force for ports in the state.
- Similarly, an increase in the activity and role of the WCPA throughout the year and especially at the annual WCPA meeting is warranted. The annual meeting should be ramped up to include additional port and logistics development sessions, more collaborative work to advance the ports, and greater sense of a port community across the state. WCPA is uniquely situated to adopt this important role for Wisconsin ports.
- As state and local agencies and the WCPA continue to work towards development, alternative port organizational and representation structures should be considered as the needs of the ports change.
- Additional economic justification for investments in port systems is needed. In order to continue the focus on investing in marine freight networks, the returns on those investments must be identified and marketed to agencies, the legislature, and state businesses and industry.

Logistics and freight movement are competitive. States and even corridors are competitive in their work to secure markets and the resultant economic development. Given this pace in logistics and freight, the ability of Wisconsin ports to compete locally, regionally, and on a global scale requires informed and focused development efforts. The Wisconsin Commercial Ports Development Initiative is a first step in an ongoing effort to advance Wisconsin ports as freight and logistics hubs.

Appendix 1: Port Infrastructure Inventory



As Wisconsin works to leverage port and marine assets across the state, port advocates need information regarding these assets, as well as the business dynamics and land use patterns at the ports. These port advocates include agency and community planners, economic developers, businesses, and communities. They represent marine navigation proponents such as the Wisconsin DOT, Wisconsin Coastal Management Program, Wisconsin Economic Development Corporation (WEDC), and the Council of Great Lakes Governors (CGLG). This inventory of

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ports and terminals provides critical port information and serves a variety of planning applications. Additionally, with the CGLG focusing on development at the Great Lakes region as a whole, the port and marine asset inventory has been identified by the participating states as a premier deliverable. Such an inventory will support economic planning and development, community planning and development, infrastructure planning, and policy and program development.

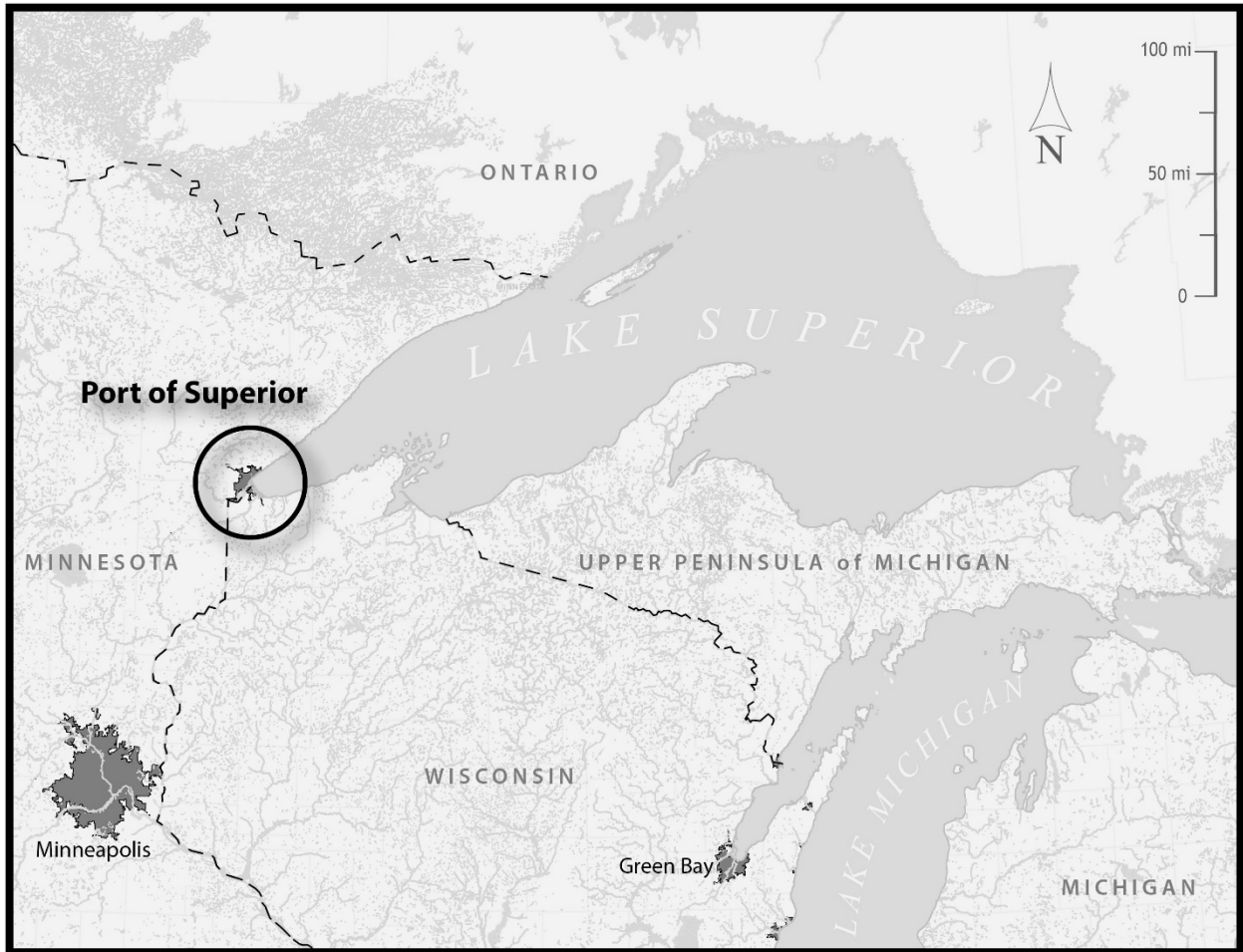
Participating state agency representatives have identified the port inventory work completed by the Minnesota DOT as a model for building a state-by-state inventory, which will in turn culminate in a complete regional port inventory that includes all Great Lake states and provinces. The Minnesota Department of Transportation (MnDOT) Ports and Waterways Section prepared *Minnesota's Lake Superior Terminals* directory in March of 2014.²⁶ The Wisconsin Commercial Ports Development Initiative uses this terminal directory as a model, and attempted to duplicate the same information: cargo handled, dock/pier length, depth along dock/pier, storage, equipment, truck and rail access, and contact information.

This inventory includes information about 52 terminals, including those located within the Great Lakes from the ports of Superior, Marinette/Menominee, Green Bay, Sturgeon Bay, Manitowoc, and Milwaukee, as well as terminals located on the Mississippi River from the ports of La Crosse and Prairie du Chien. Information in this directory was collected from the terminal operators, the associated port authorities, previous work by CFIRE, and from *Minnesota's Lake Superior Terminals* directory.

Chapter 7 discusses additional implementation strategies related to the Wisconsin port inventory.

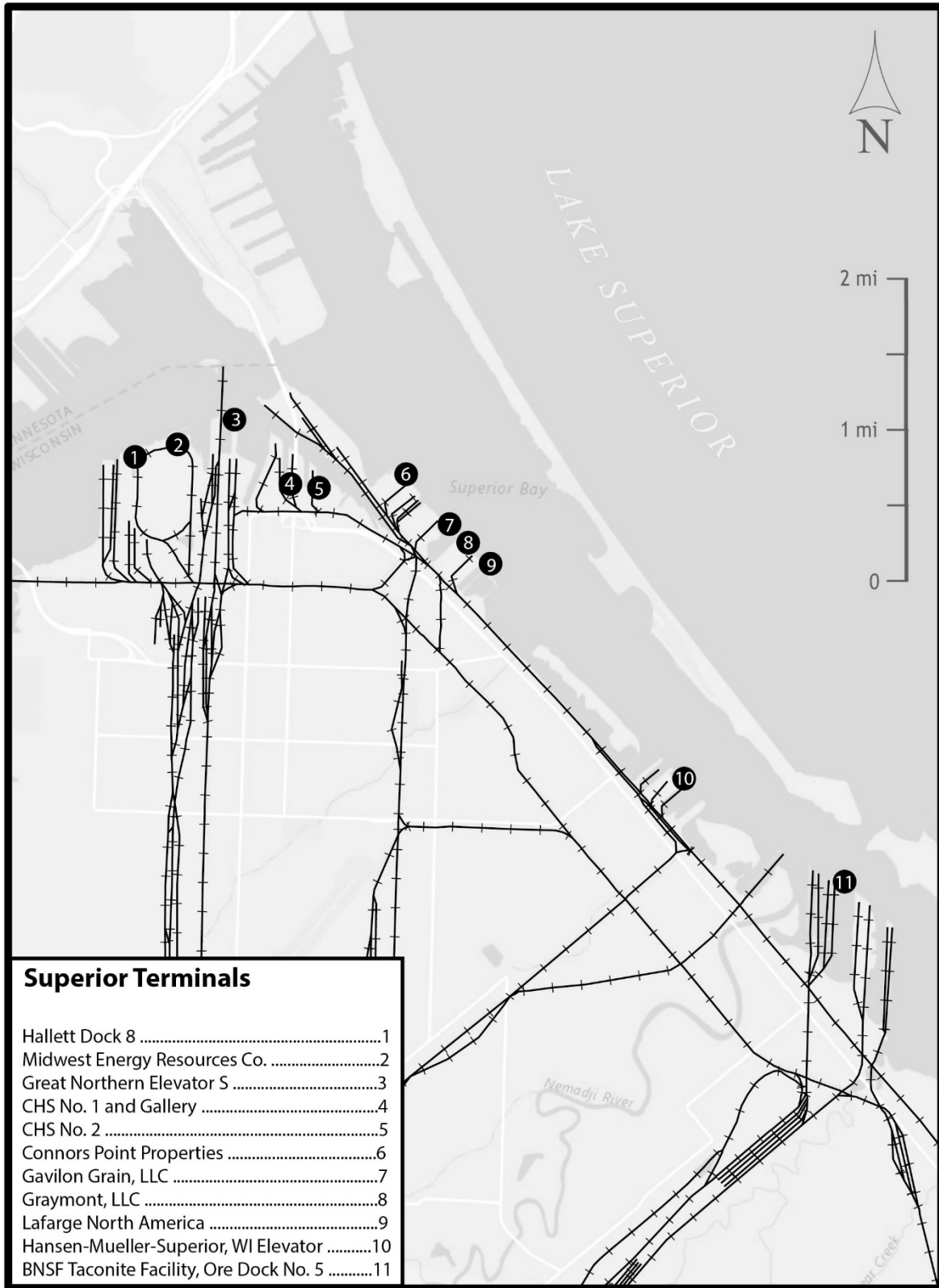
²⁶ Minnesota Department of Transportation (2013). *Minnesota's Lake Superior Terminals*. <http://www.dot.state.mn.us/ofrw/PDF/2014LakeSuperiorTerminalDir.PDF>. Accessed 12/19/2014.

Lake Superior Terminals



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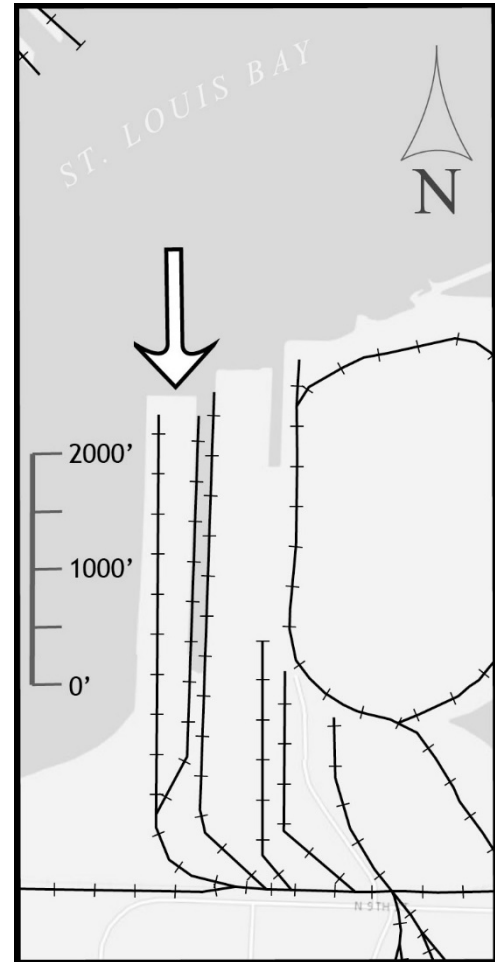
Port of Superior



Wisconsin Commercial Ports Development Initiative (WCPDI)

Hallet Dock 8

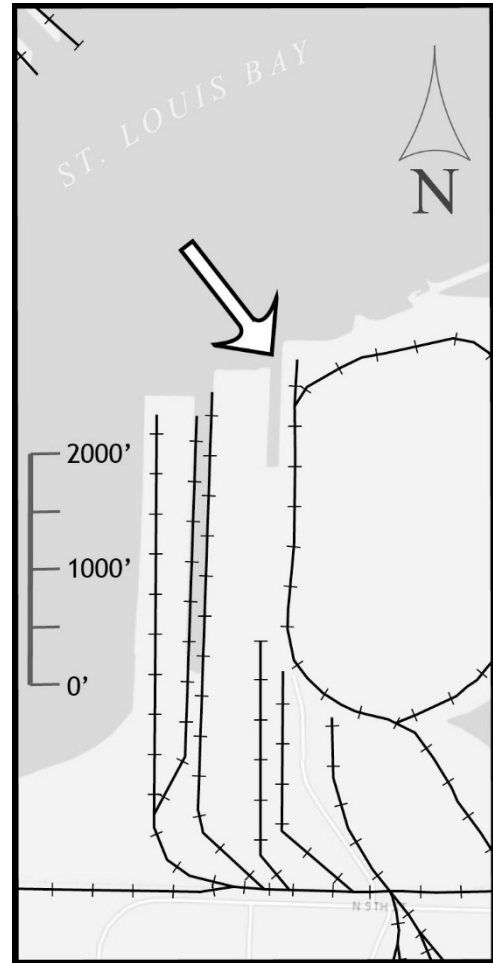
Cargo Handled	Bulk materials
Dock/Pier Length	2,300 feet
Depth Along Dock/Pier	25–28 feet
Truck Access	Winter St. to US Hwy 53
Rail Access	BNSF (reciprocal with CP, CN & UP)
Storage Inside	2.1 million gallon liquid tank
Storage Outside	Paved 800,000 ton area
Equipment	8 yard front-end loaders, conveyors, screening plants
Contact	Mike McCoshen jmmccoshen@hallettdock.com 3200 Winter Street Superior, WI 54880 Tel: (218) 628–2281 Tel: (800) 637-4497 Fax: (218) 628–2284
Website	www.hallettdock.com



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Midwest Energy Resources Co.

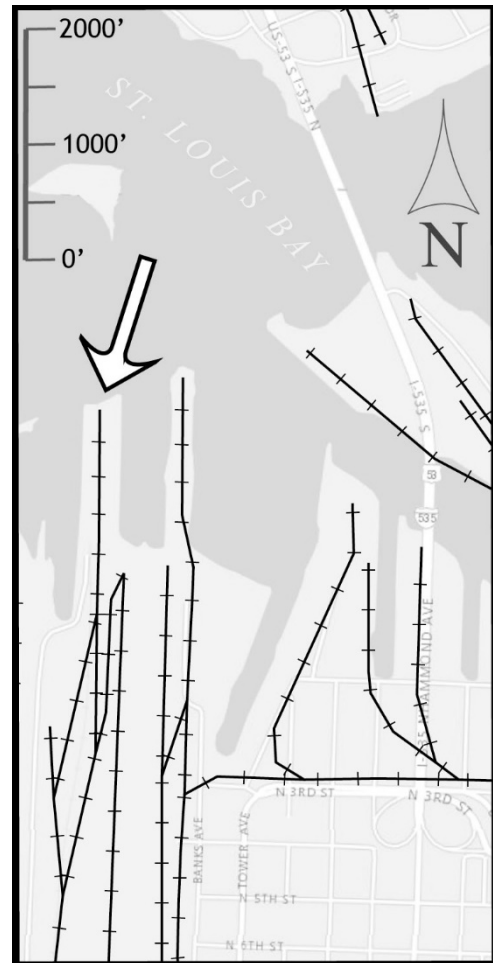
Cargo Handled	Western coal
Dock/Pier Length	1,200 feet
Depth Along Dock/Pier	28 feet
Truck Access	Winter St. to US Hwy 53
Rail Access	BNSF & UP
Storage Inside	None noted
Storage Outside	5,000,000 tons
Equipment	Railroad car positioner and dumper 60 inch conveyor belt, 96 inch conveyor belt traveling shiploader, 9 rotary plow feeder reclaimers
Contact	Fred Shusterich fshusterich@midwestenergy.com 2400 W. Winter St. Superior, WI 54880 Tel: (715) 392-9807 Fax: (715) 392-9137
Website	www.midwestenergy.com



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**Great Northern Elevator S (leased by General Mills)
Superior Elevators S & X**

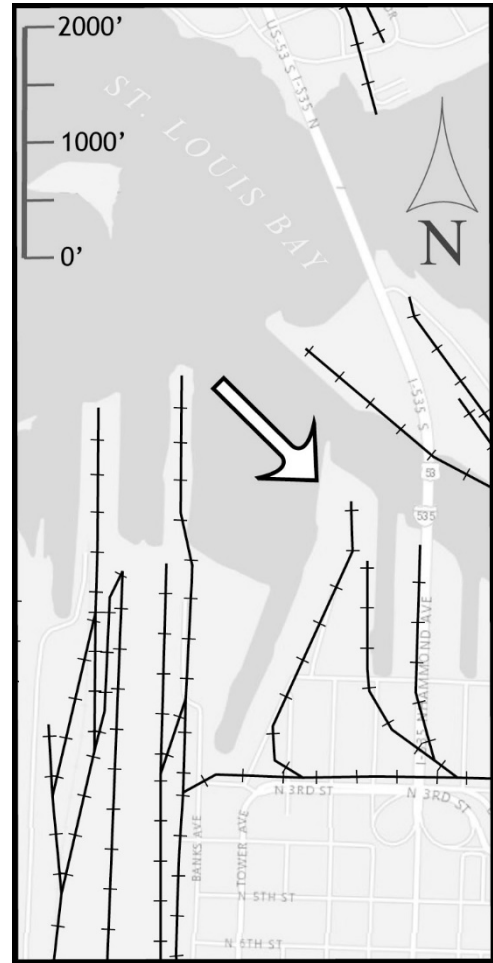
Cargo Handled	Grain
Dock/Pier Length	1800 feet
Depth Along Dock/Pier	28 feet
Truck Access	Winter Street to US Hwy 53
Rail Access	BNSF
Storage Inside	12.7 million bushels
Storage Outside	None noted
Equipment	3 vessel loading spouts, 4 rail car loading spouts, 2 truck dumps, 6 railcar dumps
Contact	Kevin La Favor kevin.lafavor@genmills.com Winter Street Superior, WI 54880 Tel: Superior (715) 392-4462 Tel: Duluth (218) 722-7759 Fax: Superior: (715) 392-6999 Fax: Duluth (218) 727-7956
Website	None listed



Wisconsin Commercial Ports Development Initiative (WCPDI)

CHS No. 1 and Gallery

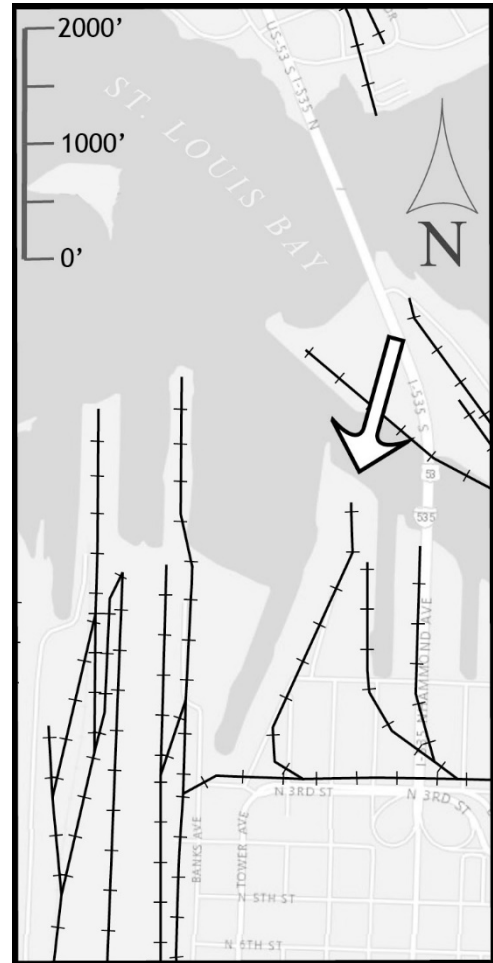
Cargo Handled	Grain
Dock/Pier Length	1,250 feet
Depth Along Dock/Pier	27 feet
Truck Access	Dock St. to N. 1st St. to Tower Ave. to N. 3rd St. to US Hwy 53
Rail Access	BNSF
Storage Inside	8,000,000 bushels
Storage Outside	None noted
Equipment	3 - 75 foot loading spouts, 5 - 100 foot loading spouts
Contact	Dick Carlson richard.carlson@chsinc.com 41 Dock St. Superior, WI 54880 Tel: (715) 392-4734 Fax: (715) 394-6926
Website	www.chsinc.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

CHS No. 2

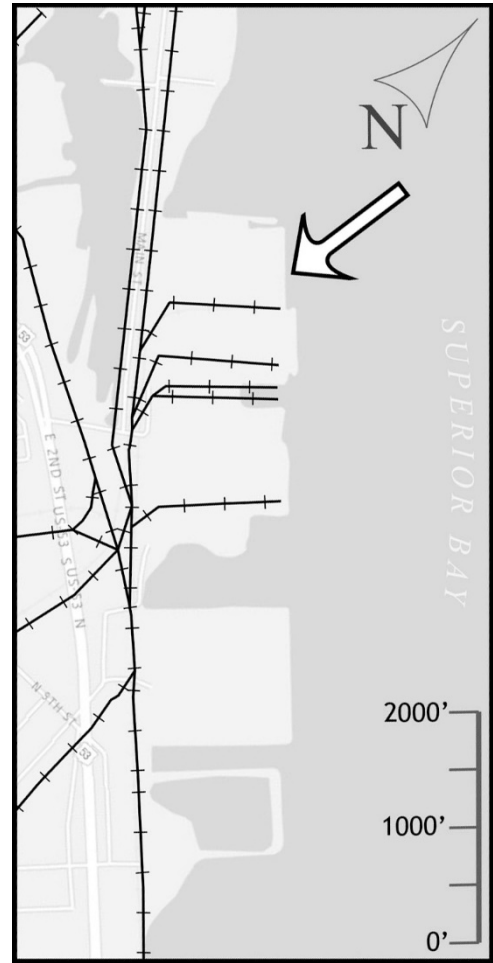
Cargo Handled	Grain
Dock/Pier Length	700 feet
Depth Along Dock/Pier	27 feet
Truck Access	Dock St. to N. 1st St. to Tower Ave. to N. 3rd St. to US Hwy 53
Rail Access	BNSF
Storage Inside	10,000,000 bushels
Storage Outside	None noted
Equipment	5 - 74 foot loading spouts
Contact	Dick Carlson richard.carlson@chsinc.com 41 Dock St. Superior, WI 54880 Tel: (715) 392-4734 Fax: (715) 394-6926
Website	www.chsinc.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

Connors Point Properties (Connors Point Pier)*

Cargo Handled	Cold storage
Dock/Pier Length	1,500 feet
Depth Along Dock/Pier	28 feet
Truck Access	Main St. to N. 5th St. to US Hwy 53
Rail Access	BNSF, UP, CP
Storage Inside	110,000 ft ² , shed 9 acres
Storage Outside	None noted
Equipment	Forklifts, front-end loaders
Contact	DJ Bergholm DJ@ConnorsPointStorage.com 259 Main Street Superior, WI 54880 Tel: (715) 392-6595
Website	None listed



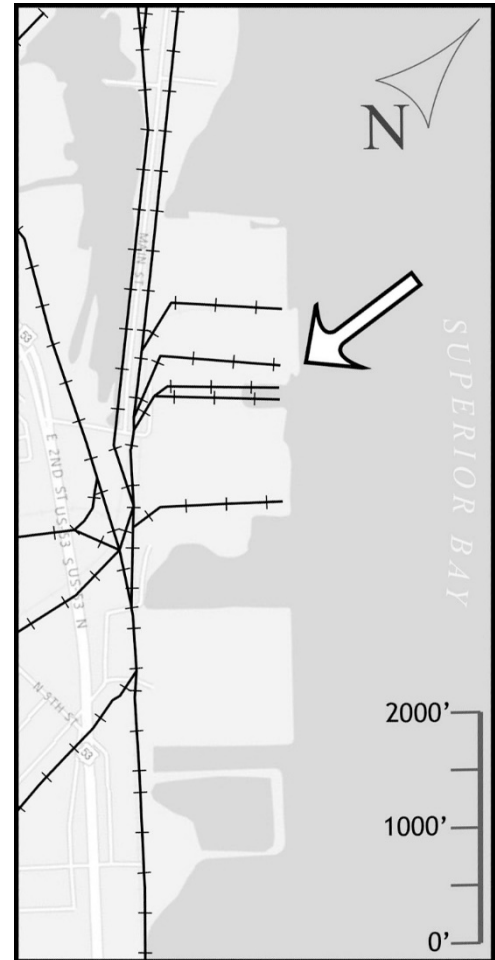
*Not an active terminal in 2013 (E. M. Ford tied up at the dock/pier)

Wisconsin Commercial Ports Development Initiative (WCPDI)

Gavilon Grain, LLC

(Formerly Peavey Company - Connors Point)

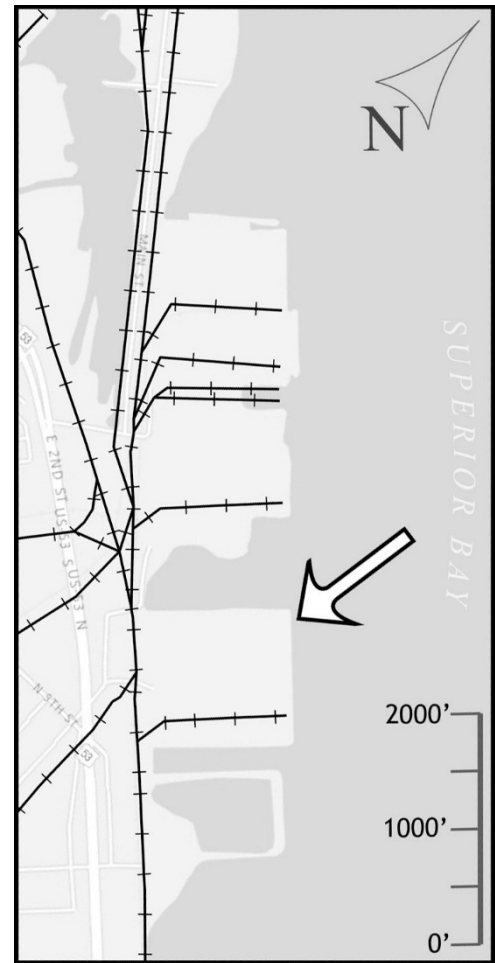
Cargo Handled	Grain
Dock/Pier Length	790 feet
Depth Along Dock/Pier	28 feet
Truck Access	Main St. to N. 5th St. to US Hwy 53
Rail Access	BNSF
Storage Inside	8,000,000 bushels
Storage Outside	None noted
Equipment	42 inch conveyor belt between the tanks and silos, also between storage and the gallery, gallery equipped with 6 - 20 inch spouts
Contact	Mick Sertich mick.sertich@gavilon.com 400 Main Street Superior, WI 54880 Tel: (715) 392-9853 Fax: (715) 392-9874
Website	www.gavilon.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

Graymont, LLC

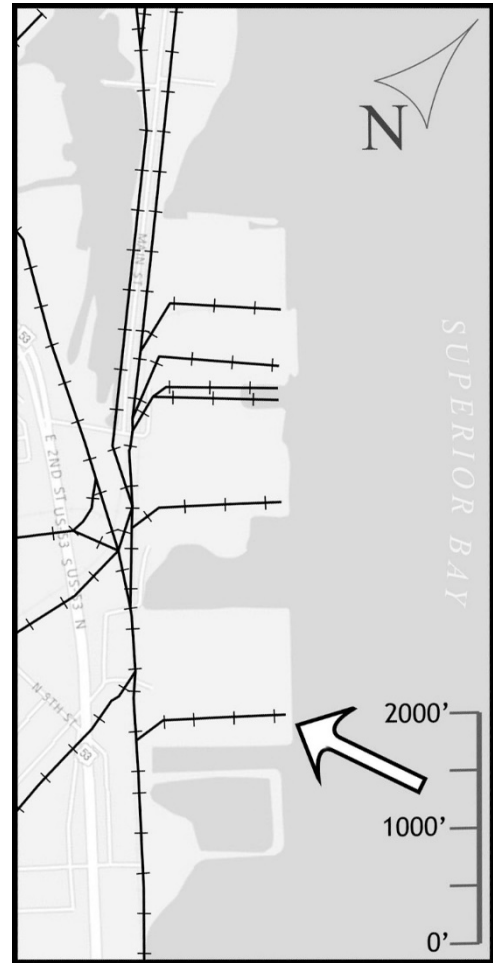
Cargo Handled	Limestone, coal
Dock/Pier Length	1,250 feet
Depth Along Dock/Pier	26 feet
Truck Access	Hill Ave. to E. 1st St. to East Ave. to US Hwy 53
Rail Access	BNSF
Storage Inside	10,000 tons
Storage Outside	500,000 ton open area
Equipment	1 electric traveling bridge crane with 75 foot hinged boom, 15 ton capacity clamshell bucket, 3- 4 cubic yard front-end loaders
Contact	Phil Marquis pmarguis@graymont.com 800 Hill Avenue Superior, WI 54880 Tel: (715) 392-5146 Fax: (715) 392-5148
Website	www.graymont.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

LaFarge North America

Cargo Handled	Cement
Dock/Pier Length	400 and 900 feet
Depth Along Dock/Pier	23 feet
Truck Access	Hill Ave. to E. 1st St. to East Ave. to US Hwy 53
Rail Access	BNSF
Storage Inside	8,500 tons
Storage Outside	None noted
Equipment	None noted
Contact	Rob Prusak robert.prusak@lafarge-na.com 3 Hill Avenue Superior, WI 54880 Tel: (715) 392-6284 Fax: (715) 392-4760
Website	www.lafarge-na.com

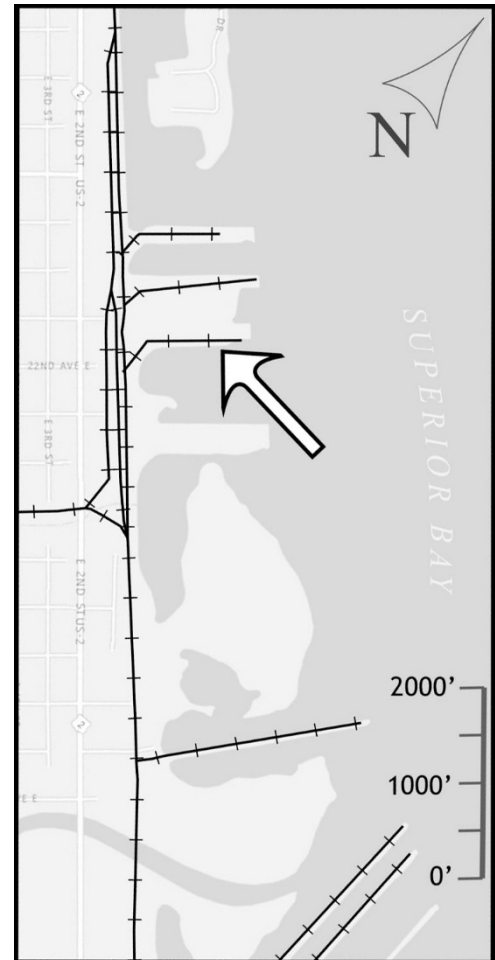


Wisconsin Commercial Ports Development Initiative (WCPDI)

Hansen – Mueller

(Formerly ConAgra)

Cargo Handled	Grain
Dock/Pier Length	800 feet
Depth Along Dock/Pier	28 feet
Truck Access	21st Ave. E. to US Hwy 53
Rail Access	BNSF, CN, CP, UP
Storage Inside	1,500,000 bushels (Daisy) 2,250,000 bushels (Elevator M)
Storage Outside	None noted
Equipment	None noted
Contact	Scott Crayne scottc@hansen mueller.com 21 21st Avenue East Superior, WI 54880 Tel: (715) 398–3541 Fax: (715) 398–6480
Website	www.hmgrain.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

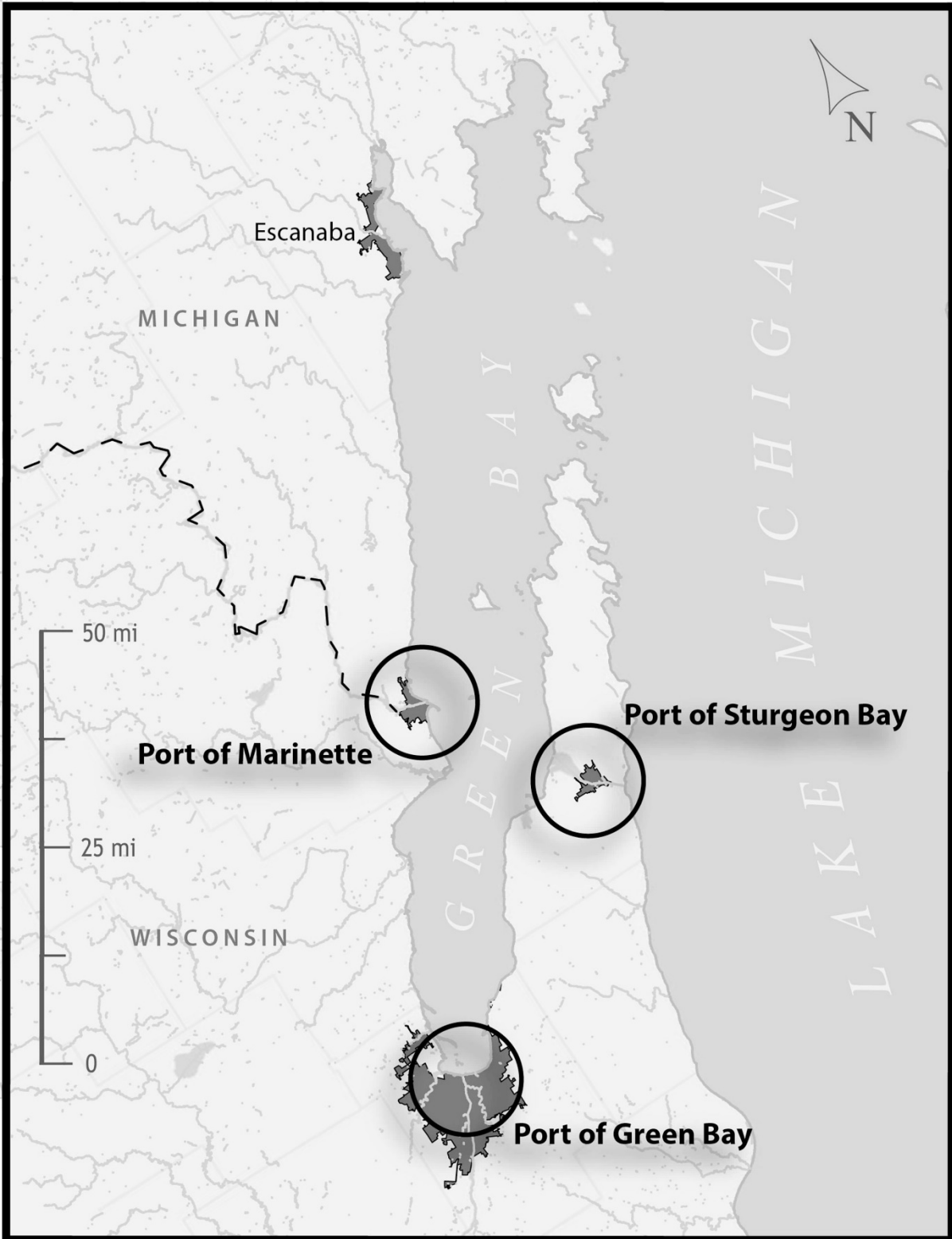
BNSF Railway Ore Dock No. 5

Cargo Handled	Taconite
Dock/Pier Length	1,470 feet
Depth Along Dock/Pier	27 feet
Truck Access	E Itasca St. to 37th Ave. E. to US Hwy 53
Rail Access	BNSF
Storage Inside	73,156 ton capacity
Storage Outside	5.2million top storage yard
Equipment	60 inch conveyor feeds to covered dock from storage area 3.5 miles inland, 18 - 36 inch conveyors from silos, 3 reclaimers
Contact	Elmer Sadlowsky elmer.sadlowsky@bnsf.com 3701 E. Itasca St. Superior, WI 54880 Tel: (715) 394-1333 Fax: (715) 394-1359
Website	www.bnsf.com



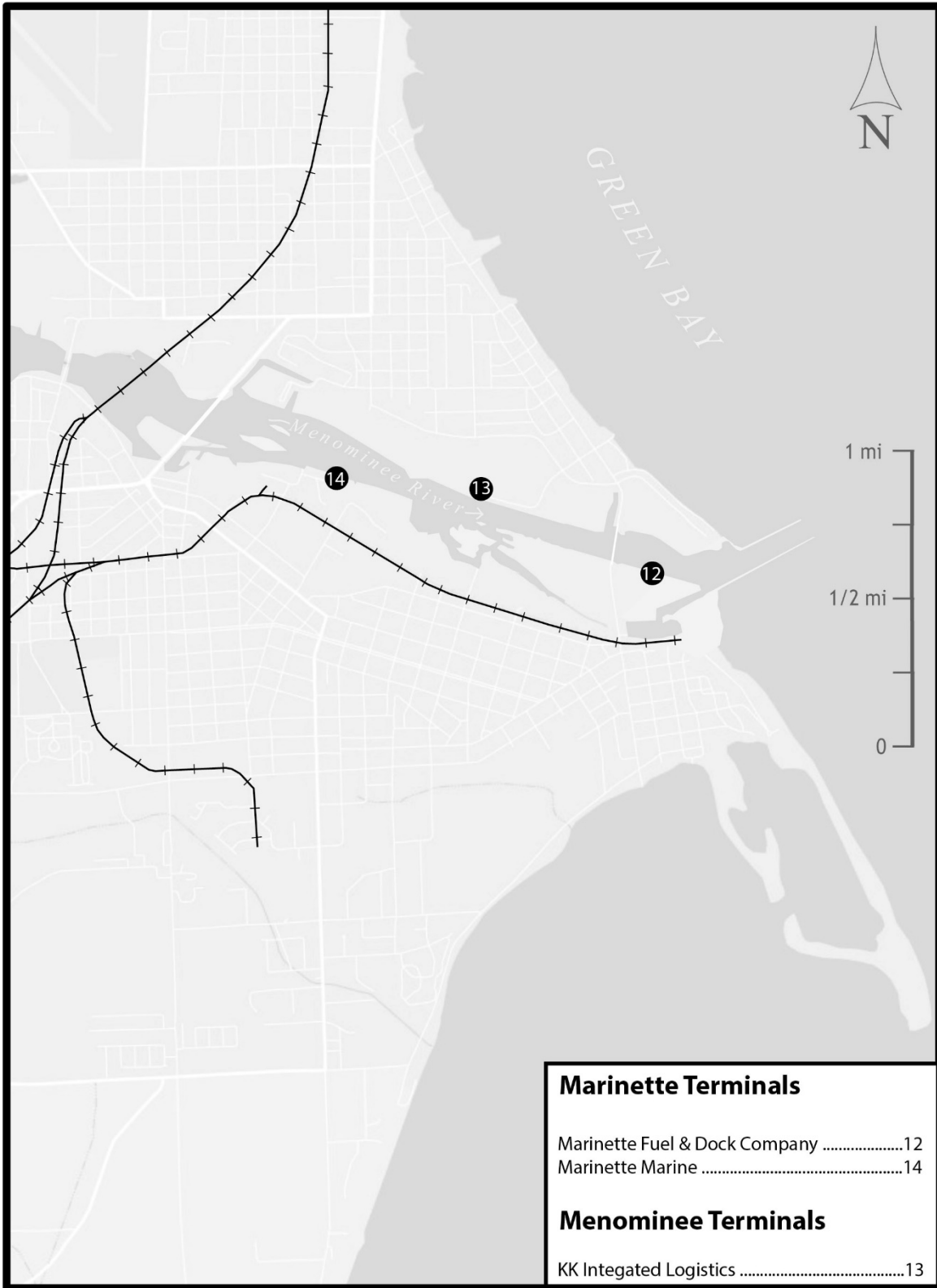
Wisconsin Commercial Ports Development Initiative (WCPDI)

Green Bay Terminals



Wisconsin Commercial Ports Development Initiative (WCPDI)

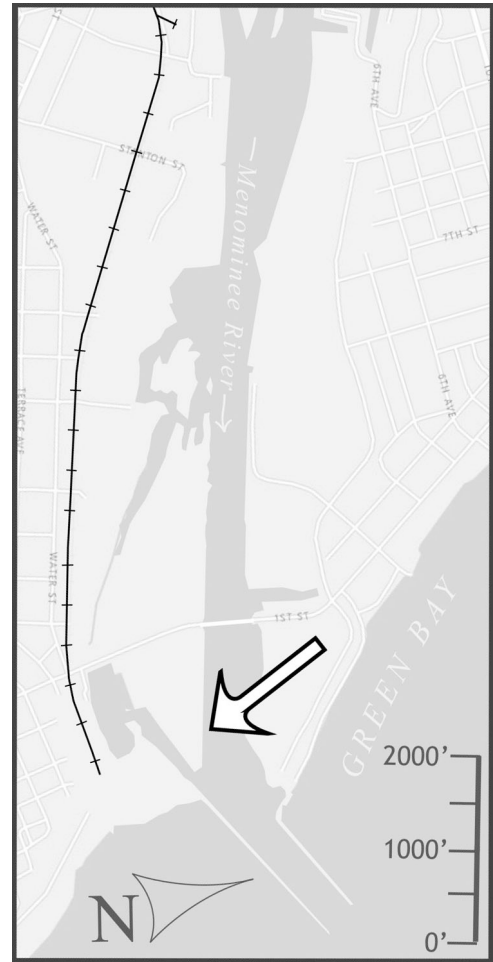
Marinette and Menominee Terminals



Wisconsin Commercial Ports Development Initiative (WCPDI)

Marinette Fuel and Dock Company

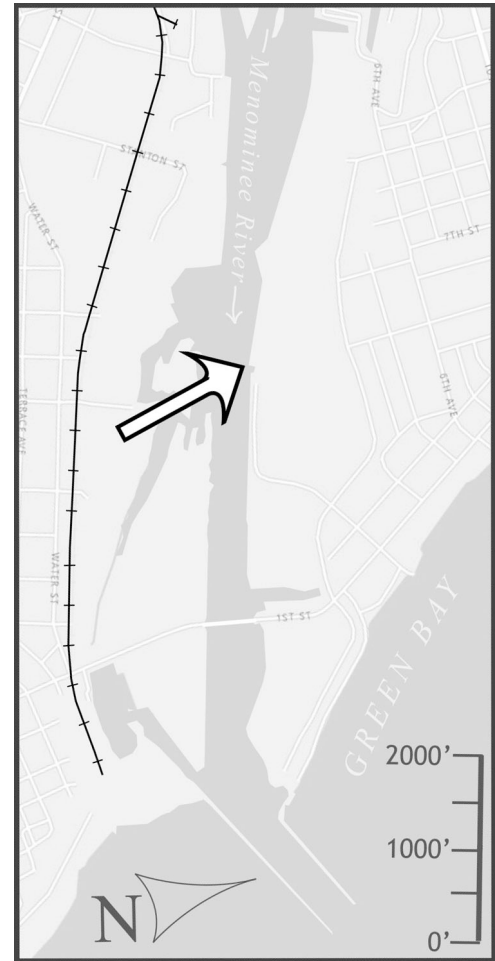
Cargo Handled	Limestone, pig iron, salt, landscape boulders
Dock/Pier Length	1,600 feet
Depth Along Dock/Pier	23.5 feet
Truck Access	Ogden St. to Russell St. to Cleveland St. to US Hwy 41
Rail Access	None
Storage Inside	None noted
Storage Outside	15 acres
Equipment	2 magnet cranes, excavators, loaders
Contact	Eric Campbell mardock@centurytel.net 808 Ogden Street Marinette, WI 54143 Tel: 715-735-6694 Fax: 715-735-9654
Website	None listed



Wisconsin Commercial Ports Development Initiative (WCPDI)

KK Integrated Logistics

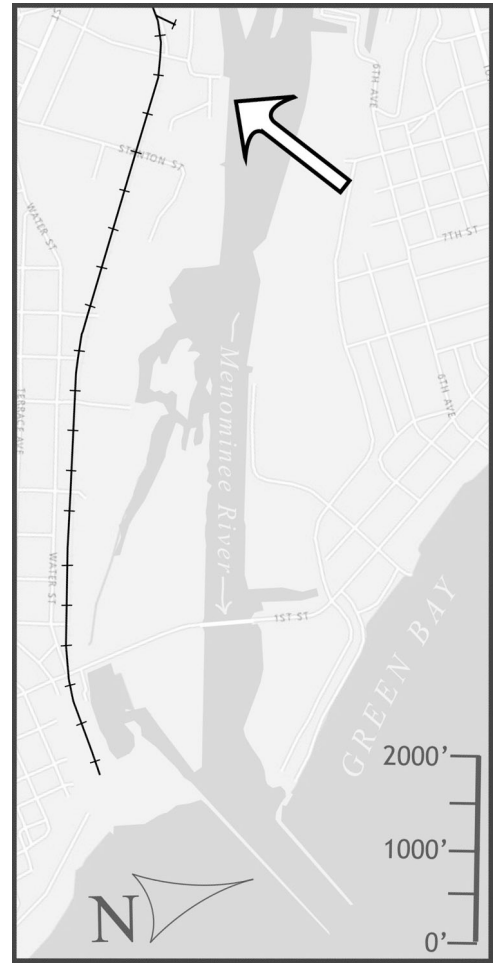
Cargo Handled	Project and break bulk cargo
Dock/Pier Length	3,000 feet
Depth Along Dock/Pier	28 feet
Truck Access	4th Ave. to 3rd St. to 2nd Ave. to Ogden St. to Russell St. to Cleveland St. to US Hwy 41
Rail Access	Canadian National, Escanaba & Lake Superior
Storage Inside	420,000 ft ² heated (374,000 ft ² in Marinette Industrial Park, 360,000 ft ² in Menominee Industrial Park with 100,000 ft ² of cold storage)
Storage Outside	50 acres
Equipment	300 ton crane, three 140 ton cranes, two 100 ton cranes, specialized Mantsinen material handler with 60-second cycle time, heavy lift forklifts up to 55k lbs., on-site service trucks
Contact	Cynthia Kuber, Vice President ckuber@kkil.net 501 Fourth Avenue Menominee, MI 49858 Tel: 906-864-5512 Fax: 906-863-7302
Website	www.kkil.net



Wisconsin Commercial Ports Development Initiative (WCPDI)

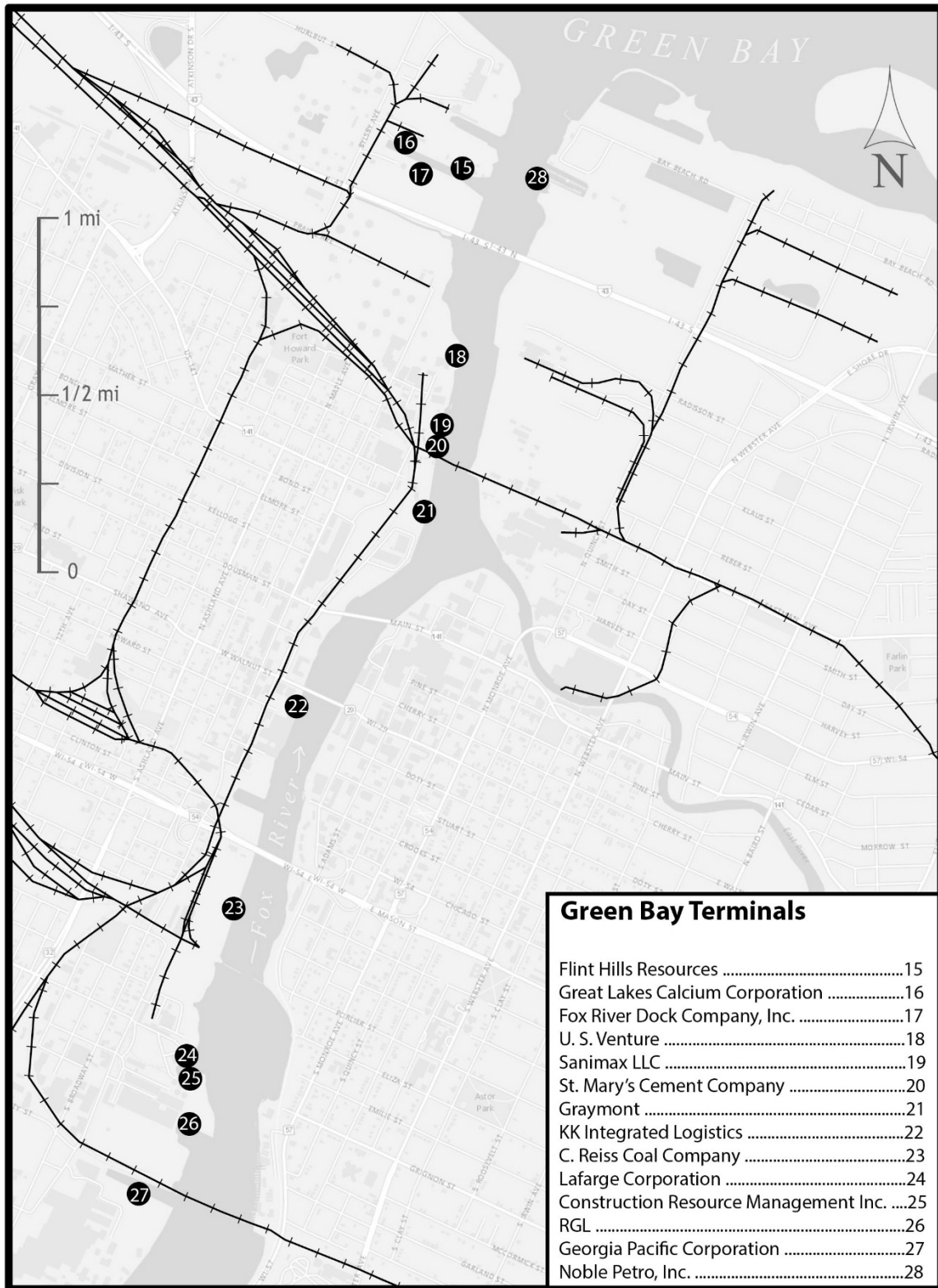
Marinette Marine Corporation

Cargo Handled	Ship builder
Dock/Pier Length	1,970 feet
Depth Along Dock/Pier	Navigation channel in front of MMC maintained to 19'5"
Truck Access	Ely St. to Main St. to Shore Drive to Cleveland Ave. to US Hwy 41
Rail Access	Escanaba & Lake Superior
Storage Inside	None noted
Storage Outside	None noted
Equipment	None noted
Contact	Todd Christian todd.christian@us.fincantieri.com 1600 Ely Street Marinette, WI 54143 Tel: 715-735-9341 *6059 Fax: 715-735-9715
Website	www.fincantierimarinegroup.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

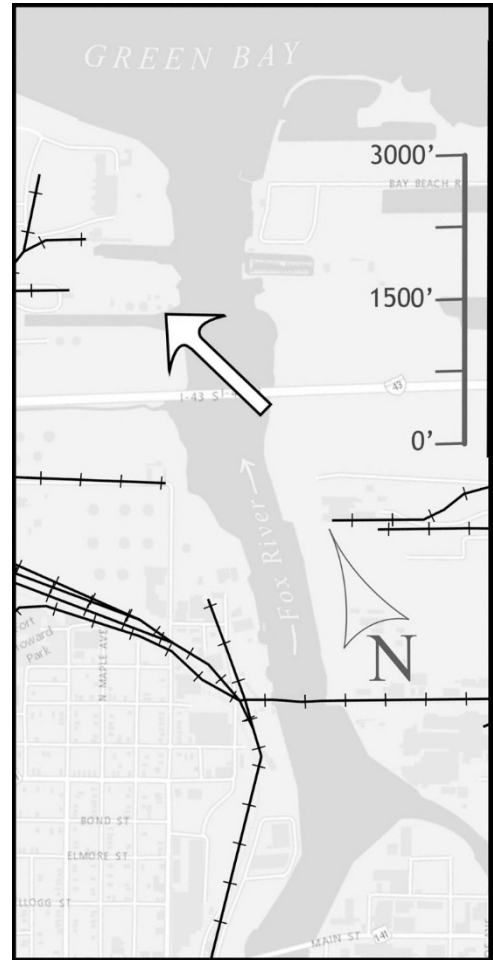
Port of Green Bay



Wisconsin Commercial Ports Development Initiative (WCPDI)

Flint Hills Resources

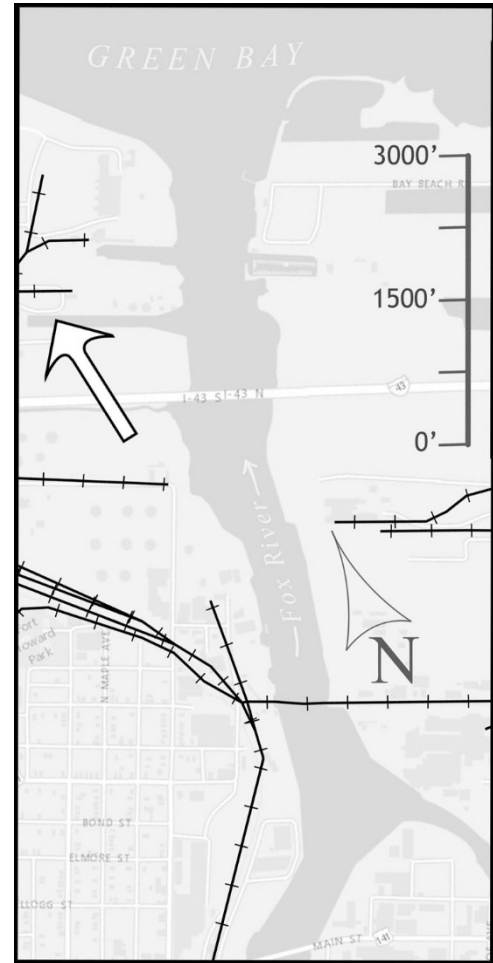
Cargo Handled	Liquid asphalt
Dock/Pier Length	1,000 feet
Depth Along Dock/Pier	26 feet
Truck Access	Bylsby Ave. to Hurlbut St. to Atkinson Dr. to I-43
Rail Access	Canadian National
Storage Inside	None noted
Storage Outside	None noted
Equipment	None noted
Contact	Jeffrey Humphrey Jeffrey.Humphrey@fhr.com 1496 Bylsby Avenue Green Bay, WI 54303 Tel: 920-436-7720
Website	www.fhrasphalt.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

Great Lakes Calcium Corporation

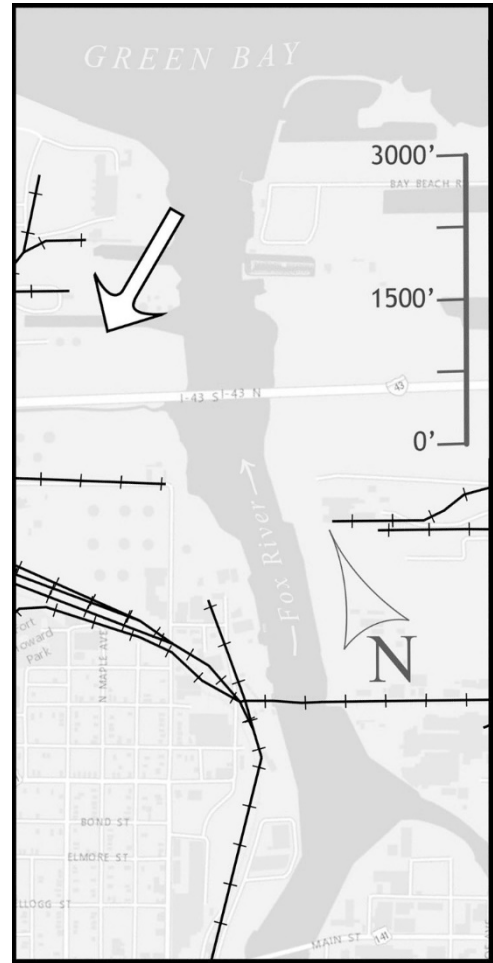
Cargo Handled	Limestone
Dock/Pier Length	1,800 feet
Depth Along Dock/Pier	26 feet
Truck Access	Bylsby Ave. to Hurlbut St. to Atkinson Dr. to I-43
Rail Access	Canadian National
Storage Inside	None noted
Storage Outside	None noted
Equipment	None noted
Contact	Dave Nelson dnelson@glcalcium.com 1450 Bylsby Avenue P.O. Box 2236 Green Bay, WI 54306-2236 Tel: 920-432-7731 Tel: 800-236-7737 Fax: 920-432-2782
Website	www.glcalcium.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

Fox River Dock Company, Inc.

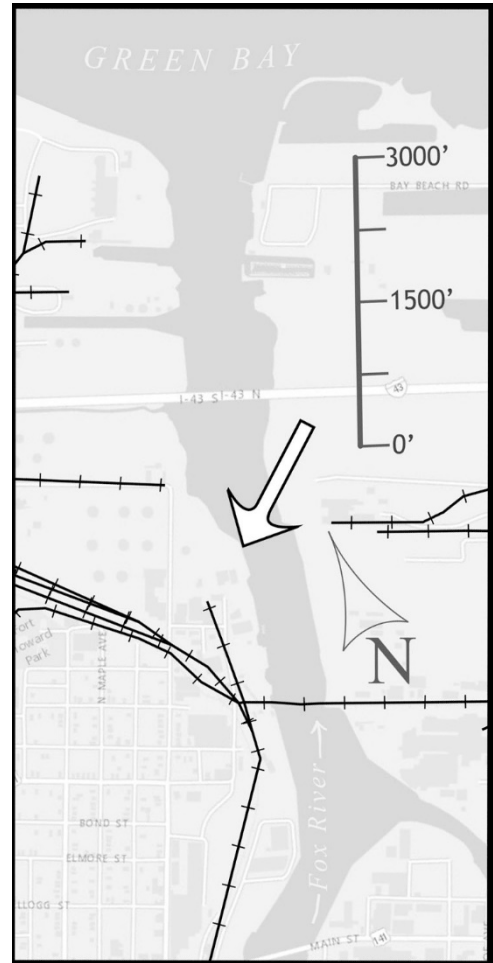
Cargo Handled	Coal, pig iron, salt
Dock/Pier Length	1,600 and 550 feet
Depth Along Dock/Pier	26 feet
Truck Access	Bylsby Ave. to Hurlbut St. to Atkinson Dr. to I-43
Rail Access	Canadian National
Storage Inside	None noted
Storage Outside	None noted
Equipment	None noted
Contact	Craig Hoppe choppe@frdock.com 1400 Bylsby Avenue P.O. Box 10593 Green Bay, WI 54307-0593 Tel: 920-432-0833
Website	www.foxriverdockgreenbay.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

U. S. Venture

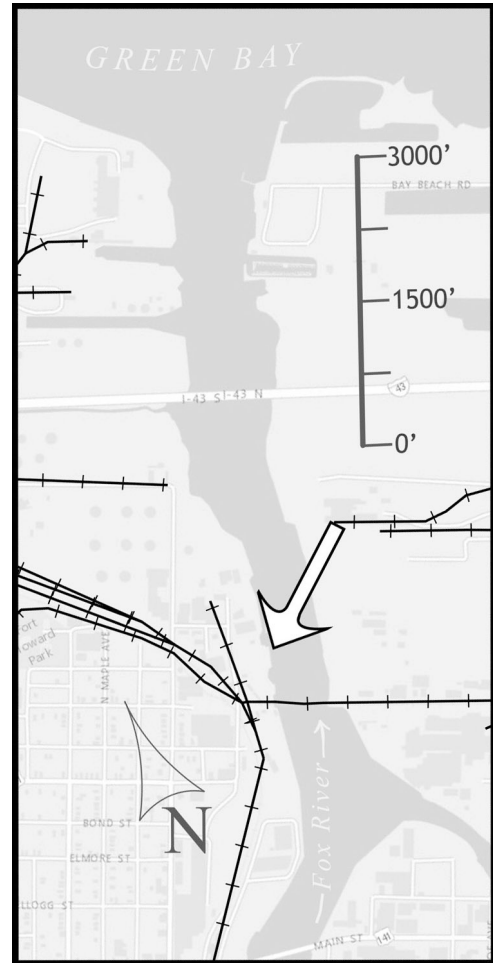
Cargo Handled	Petroleum products
Dock/Pier Length	350 feet
Depth Along Dock/Pier	24 feet
Truck Access	N. Broadway to US Highway 141 to Atkinson Dr. to I-43
Rail Access	Canadian National
Storage Inside	675,000 BBLS (28,350,000)
Storage Outside	None noted
Equipment	None noted
Contact	Paul Berken pberken@usoil.com 1124 North Broadway Green Bay, WI 54303 Tel: 920-437-9684
Website	www.usventure.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

Sanimax LLC

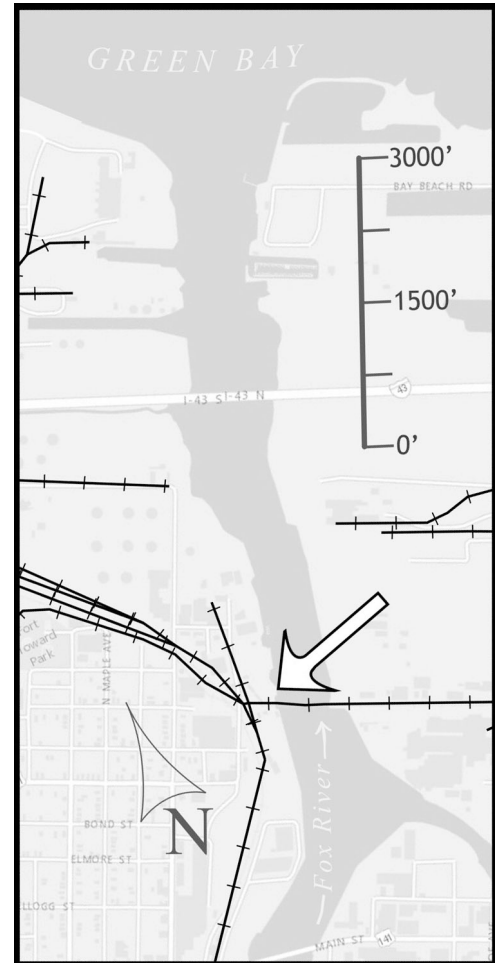
Cargo Handled	Animal fats/oils, restaurant grease, corn oil
Dock/Pier Length	300 feet
Depth Along Dock/Pier	24 feet
Truck Access	McDonald St. to Mather St. to US Hwy 141 to Atkinson Dr. to I-43
Rail Access	None noted
Storage Inside	Five liquid storage tanks
Storage Outside	None noted
Equipment	One main pump house
Contact	Beth Carpiaux beth.carpiaux@sanimax.com 1000 McDonald Street P.O. Box 10067 Green Bay, WI 54307-0067 Tel: 920-494-5233
Website	www.sanimax.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

St. Mary's Cement Company

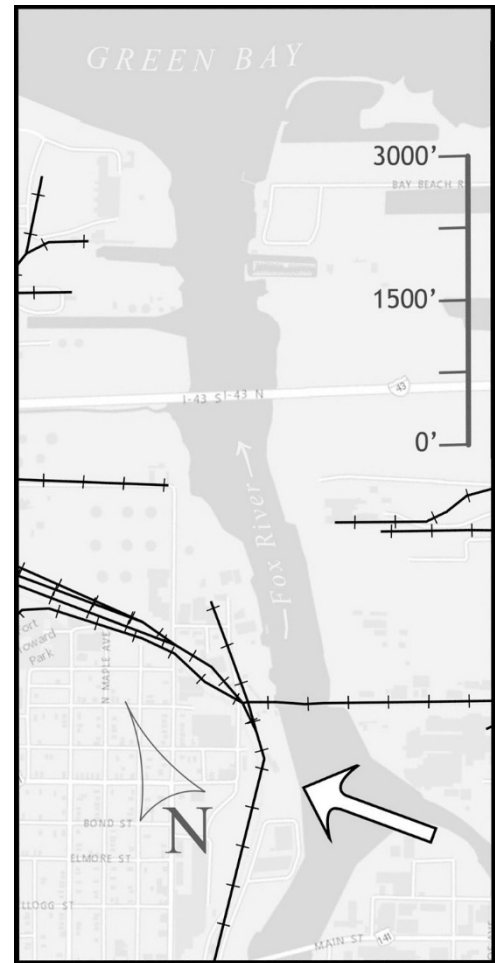
Cargo Handled	Cement
Dock/Pier Length	140 feet
Depth Along Dock/Pier	24 feet
Truck Access	McDonald St. to Mather St. to US Hwy 141 to Atkinson Dr. to I-43
Rail Access	None noted
Storage Inside	Five attached silos
Storage Outside	None noted.
Equipment	None noted.
Contact	Greg Leiteritz gmleiteritz@vcsmc.com 924 McDonald St. Green Bay, WI 54303 Tel: 920-435-8590 Fax: 920-435-8504
Website	www.stmaryscement.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

Graymont

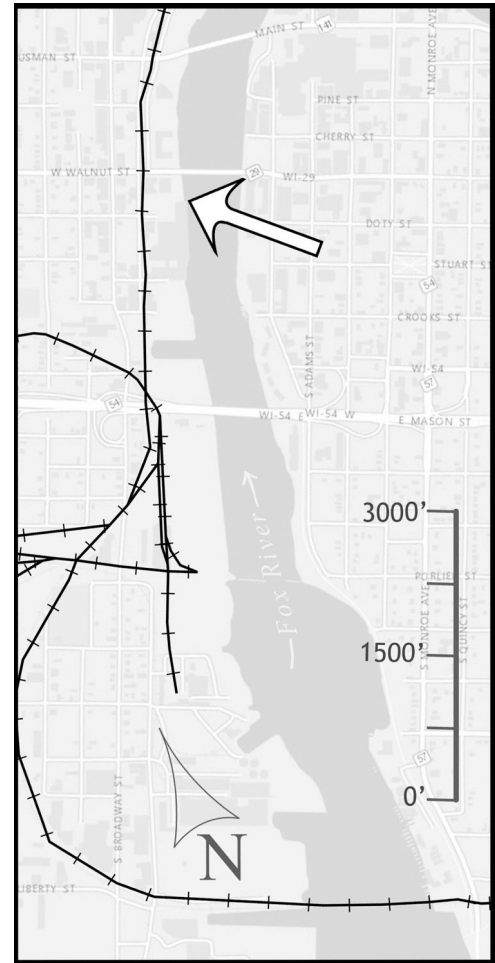
Cargo Handled	Limestone
Dock/Pier Length	2,200 feet
Depth Along Dock/Pier	24 feet
Truck Access	McDonald St. to Mather St. to US Hwy 141 to Atkinson Dr. to I-43
Rail Access	Canadian National
Storage Inside	None noted
Storage Outside	None noted
Equipment	None noted
Contact	Richard Fenush rfenush@graymont.com 137 James Street Green Bay, WI 54303 Tel: 920-437-4054 ext. 1472
Website	www.graymont.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

KK Integrated Logistics

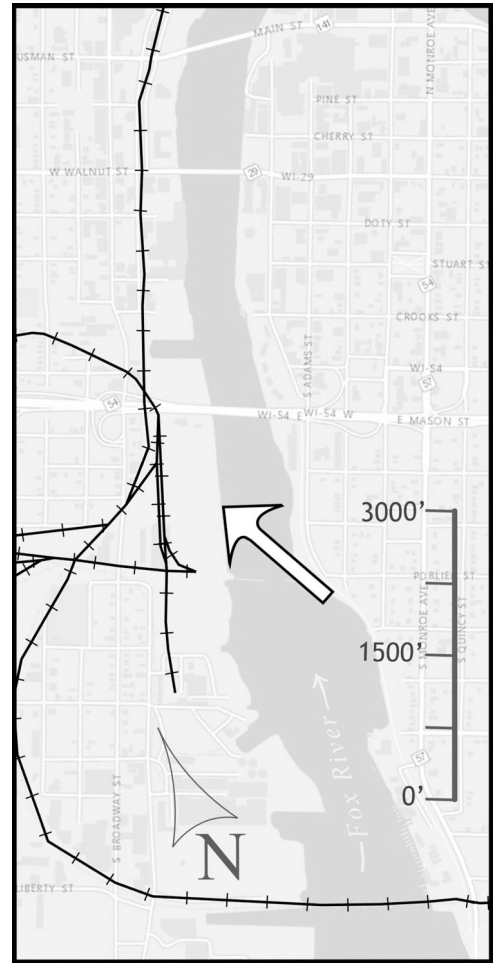
Cargo Handled	Forest products, iron, steel, project cargo
Dock/Pier Length	620 feet
Depth Along Dock/Pier	24 feet
Truck Access	Howard St. to Broadway to US 141 to Atkinson Dr. to I-43
Rail Access	Canadian National
Storage Inside	292,000 ft ² (south of Walnut St. Bridge) 94,000 ft ² (north of Dousman St. Bridge) 132,000 ft ² FDA approved heated space (N. Broadway) 200,000 ft ² heated warehouse and manufacturing space (S. Broadway) 70,000 ft ² (S. Broadway)
Storage Outside	None noted.
Equipment	Heavy lift overhead cranes (lift capacity from 7-40 ton)
Contact	Cynthia Kuber ckuber@kkil.net 501 Fourth Avenue Menominee, MI 49858 Tel: 906-864-5512 Fax: 906-863-7302
Website	www.kkil.net



Wisconsin Commercial Ports Development Initiative (WCPDI)

C. Reiss Coal Company

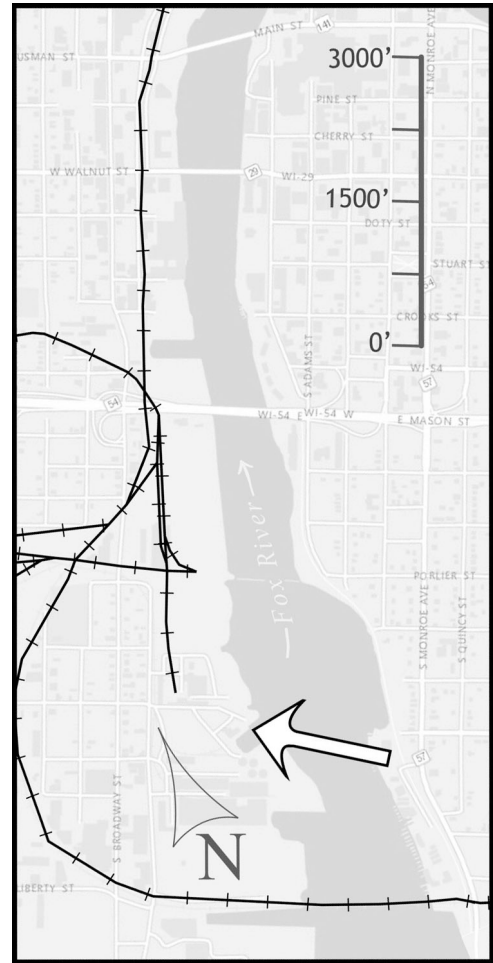
Cargo Handled	Thermal and metallurgical coal, salt, pig iron
Dock/Pier Length	2,000 feet
Depth Along Dock/Pier	22 feet
Truck Access	S. Broadway to Wisconsin Hwy 54 to US Hwy 41
Rail Access	Canadian National
Storage Inside	None noted
Storage Outside	580,000 tons of coal and additional 14 acres for 400,000 tons
Equipment	None noted
Contact	Mark Cummings CummingM@kochind.com 111 W. Mason St. P.O. Box 188 Green Bay, WI 54305-0188 Tel: 920-436-7600
Website	www.kochind.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

Lafarge Corporation

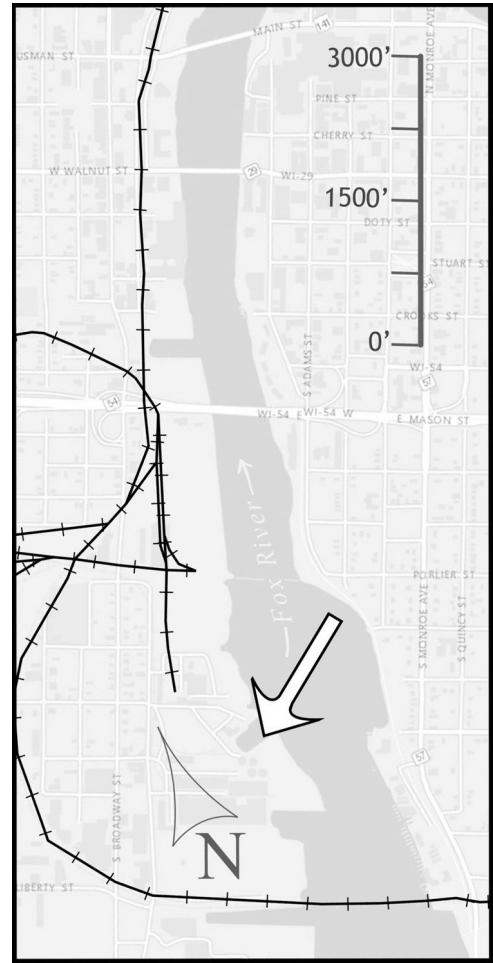
Cargo Handled	Cement
Dock/Pier Length	260 feet
Depth Along Dock/Pier	22 feet
Truck Access	S. Broadway to Wisconsin Hwy 54 to US Hwy 41
Rail Access	Canadian National
Storage Inside	16,000 tons
Storage Outside	8,000 tons
Equipment	Conveyor belts, air slides
Contact	Jim Haese james.haese@lafarge.com 125 9th St. West Green Bay, WI 54304 Tel: 920-435-7581 Fax: 920-435-0944
Website	www.lafargenorthamerica.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

Construction Resource Management Inc.

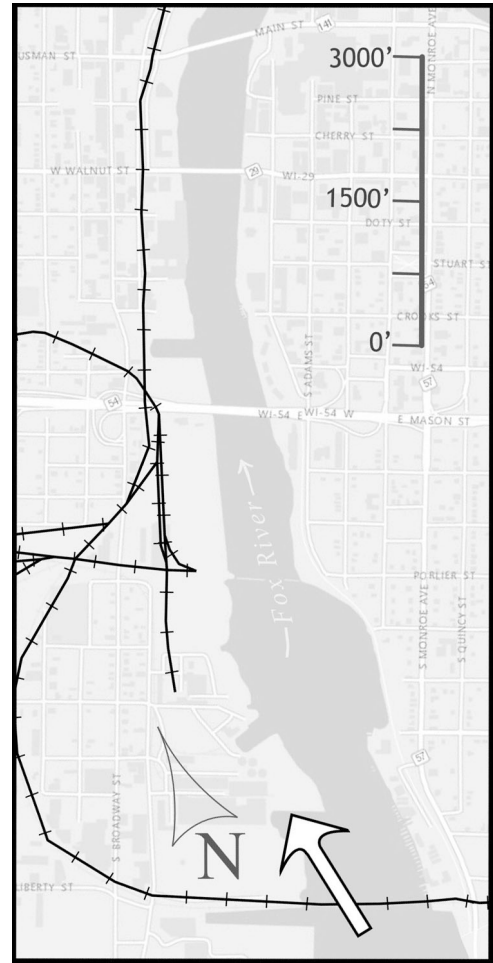
Cargo Handled	Liquid asphalt
Dock/Pier Length	425 feet
Depth Along Dock/Pier	22 feet
Truck Access	S. Broadway to Wisconsin Hwy 54 to US Hwy 41
Rail Access	Canadian National
Storage Inside	None noted
Storage Outside	Bulk liquid storage tanks
Equipment	None noted
Contact	Robert Carlson bcarlson@crmanagement.com 123 9th Street Green Bay, WI 54304-3569 Tel: 920-309-0622
Website	www.jobscrm.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

RGL

Cargo Handled	Forest products, paper products, building materials, bulk commodities
Dock/Pier Length	750 feet
Depth Along Dock/Pier	22 feet (2015 shipping season)
Truck Access	S. Broadway to Wisconsin Hwy 54 to US Hwy 41
Rail Access	Canadian National
Storage Inside	50,000 square feet
Storage Outside	3 acres
Equipment	None noted
Contact	Scott Selby sselby@rgllogistics.com 1401 State Street Green Bay, WI 54304 Tel: 920-371-4222
Website	www.rgllogistics.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

Georgia Pacific Corporation

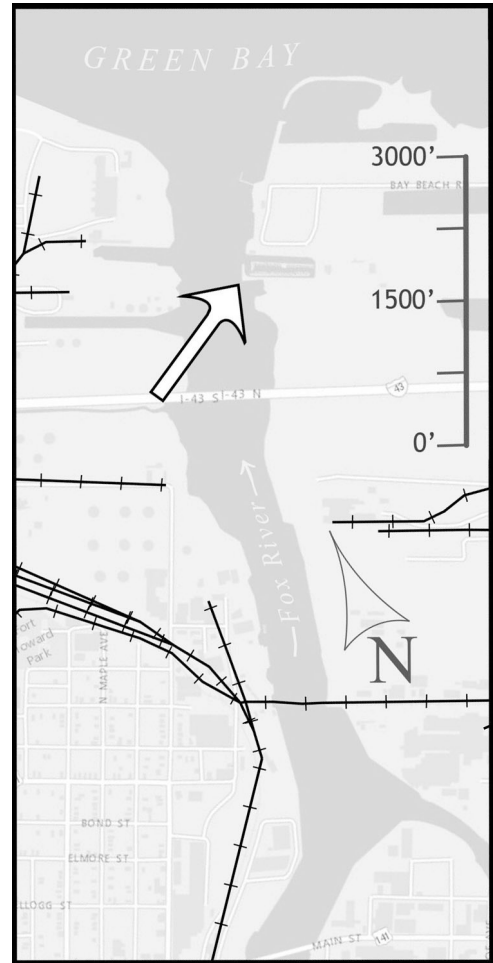
Cargo Handled	Salt, forest products
Dock/Pier Length	1,500 feet
Depth Along Dock/Pier	22 feet
Truck Access	S. Broadway to Wisconsin Hwy 172 to US Hwy 41 or I-43
Rail Access	Canadian National
Storage Inside	None noted
Storage Outside	None noted
Equipment	Crane pad
Contact	Ron Wagner ron.wagner@kbslp.com 1919 South Broadway Green Bay, WI 54304 Tel: 920-438-2400
Website	www.gp.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

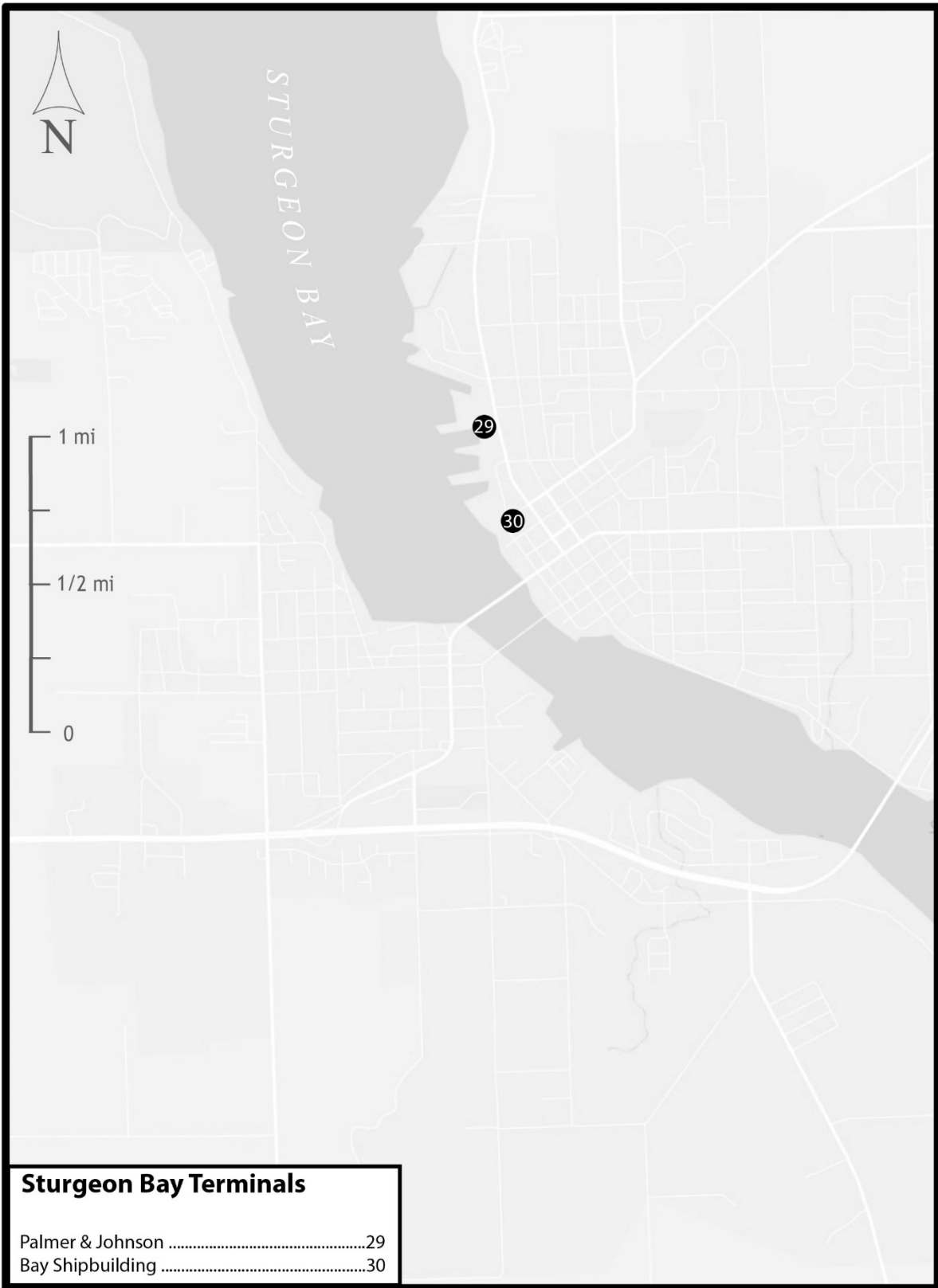
Noble Petro, Inc.

Cargo Handled	Petroleum products
Dock/Pier Length	400 feet
Depth Along Dock/Pier	Nominal 22 feet
Truck Access	N. Quincy St. to Bay Beach Rd. to N. Irwin Ave. to Radisson St. to N. Webster Ave. to I-43
Rail Access	Canadian National
Storage Inside	562,967 barrels (10 tanks)
Storage Outside	None noted
Equipment	Corrosion control tanks- five with internal floating roofs and five with cone roofs
Contact	Chuck Donlevy crd@noblepetro.com 2206 North Quincy Street Green Bay, WI 54302 Tel: 920-965-0584
Website	www.noblepetro.com/terminals/greenbay/



Wisconsin Commercial Ports Development Initiative (WCPDI)

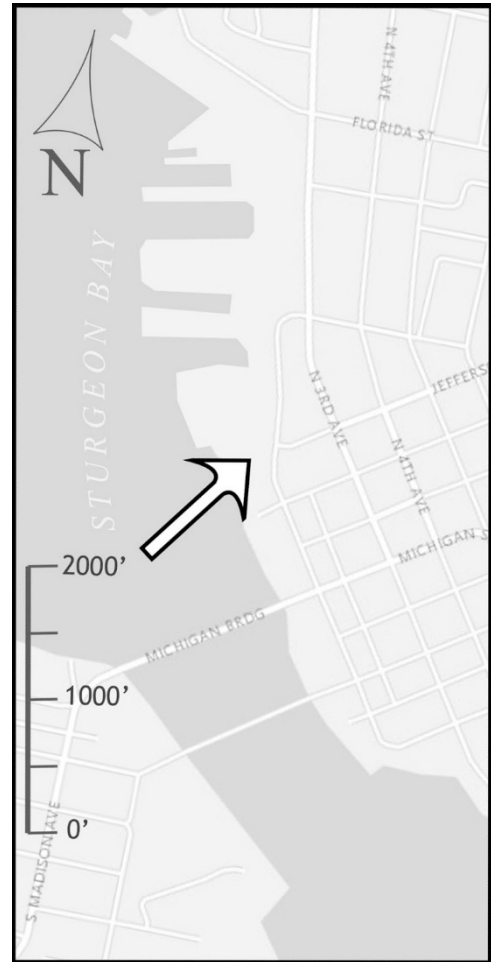
Port of Sturgeon Bay



Wisconsin Commercial Ports Development Initiative (WCPDI)

Palmer Johnson Yachts

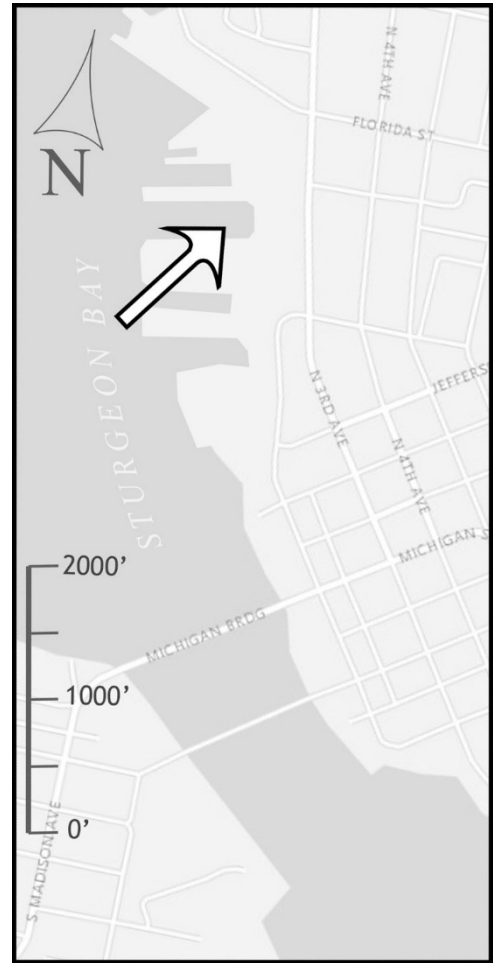
Cargo Handled	High-end yachts
Dock/Pier Length	None noted
Depth Along Dock/Pier	None noted
Truck Access	Kentucky St. to North 3rd Ave. to Michigan St. to N. Madison Ave. to Green Bay Rd. to WI Hwy 42/57
Rail Access	None noted
Storage Inside	None noted
Storage Outside	None noted
Equipment	None noted
Contact	Mike Kelsey mkelsey@itol.com 128 Kentucky Street Sturgeon Bay, WI 54235 Tel: 754-581-3238
Website	www.palmerjohnson.com



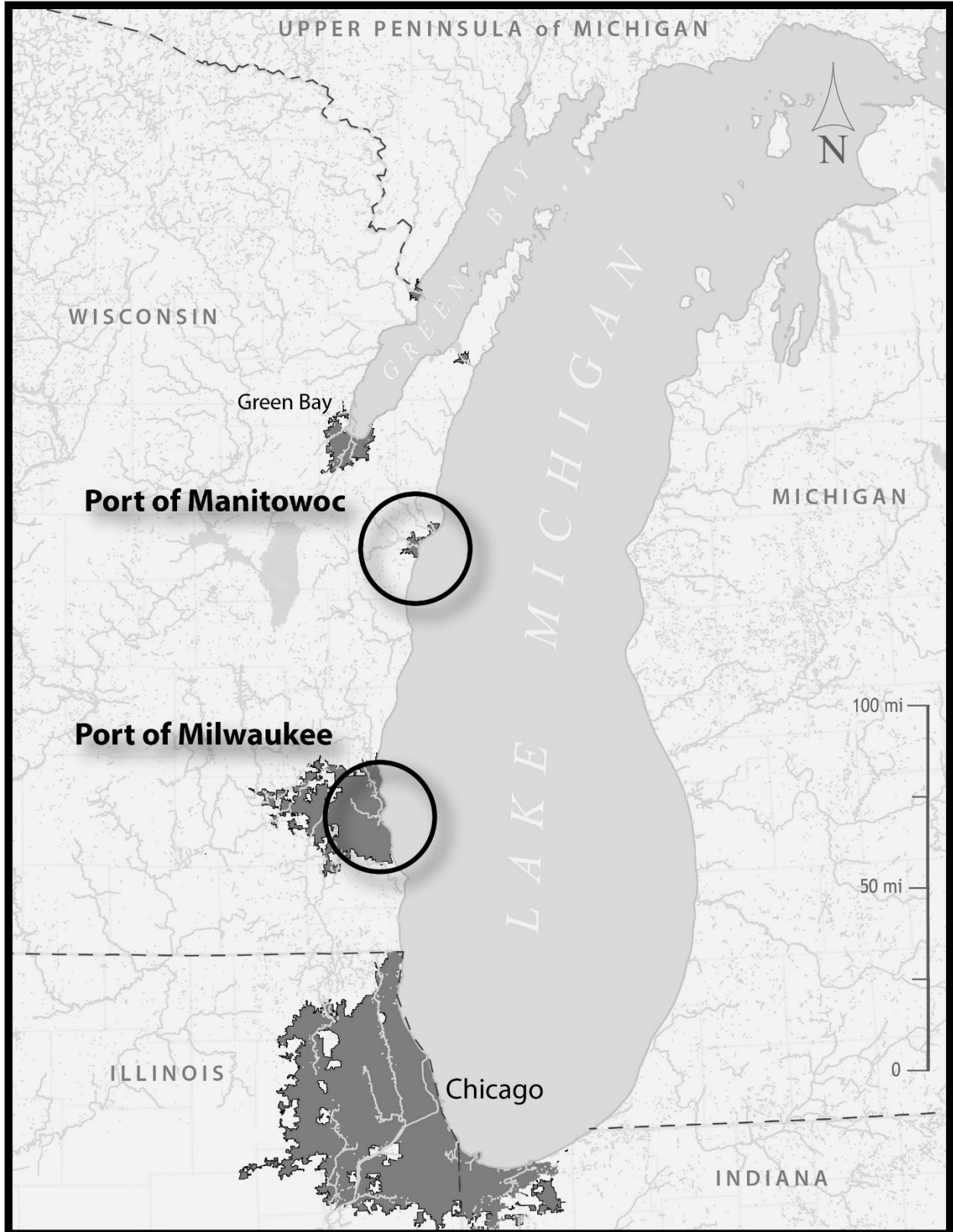
Wisconsin Commercial Ports Development Initiative (WCPDI)

Bay Shipbuilding Company

Cargo Handled	Dredging and bulk cargo self-unloading equipment, large commercial double-hull vessels
Dock/Pier Length	1,154 feet, 654 feet, 225 feet (1,000 foot pier)
Depth Along Dock/Pier	15 feet (dry dock) 15-22 feet (pier)
Truck Access	North 3rd Ave. to Michigan St. to N. Madison Ave. to Green Bay Rd. to WI Hwy 42/57
Rail Access	None
Storage Inside	117,000 ft ² fabrication shop, 32,000 ft ² warehouse
Storage Outside	20 acres
Equipment	170-ton overhead crane
Contact	Todd Thayse Todd.Thayse@us.fincantieri.com 605 North 3rd Avenue Sturgeon Bay, WI 54235 Tel: 920-746-3403
Website	bayshipbuildingcompany.com



Lake Michigan Terminals



Wisconsin Commercial Ports Development Initiative (WCPDI)

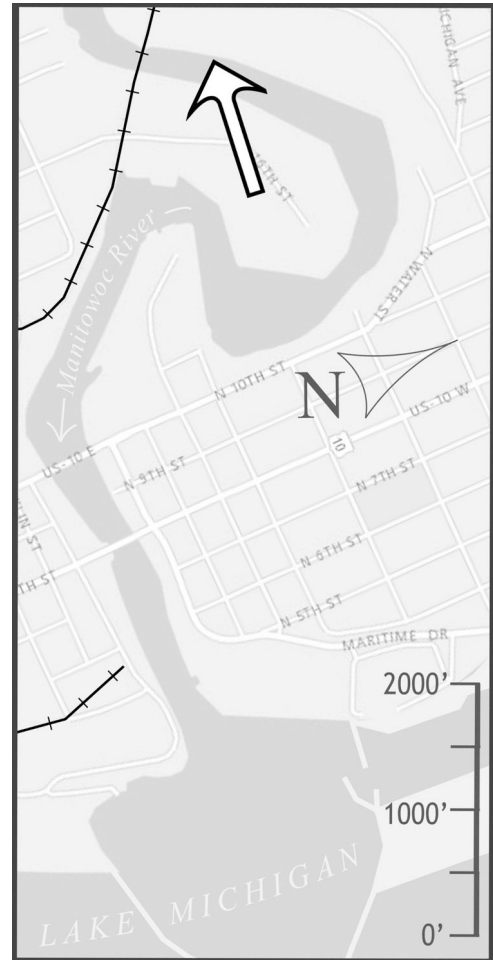
Port of Manitowoc



Wisconsin Commercial Ports Development Initiative (WCPDI)

Burger Boat Company

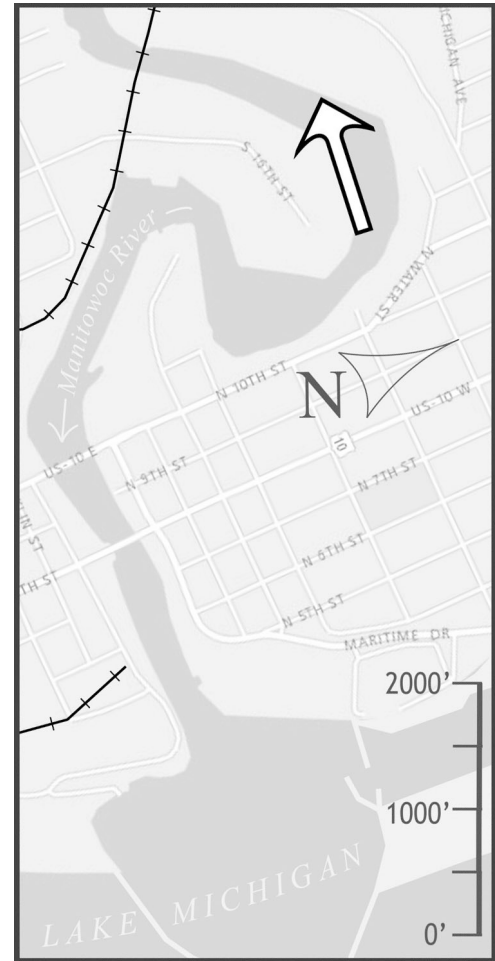
Cargo Handled	Ship builder
Dock/Pier Length	465 feet
Depth Along Dock/Pier	8 feet (21 feet navigation channel, and 12 feet at launch well)
Truck Access	Spring St. to Revere Dr. to S. 21st St. to US Hwy 151 to I-43
Rail Access	Canadian National
Storage Inside	Eight heated construction bays for vessels up to 260 feet
Storage Outside	32,700 ft ²
Equipment	500 metric ton TRAVELIFT; overhead cranes, forklifts; and is currently developing a facilities expansion plan that will increase the TRAVELIFT capacity to 1200 metric ton- call for updates
Contact	Ron Cleveringa rcleveringa@burgerboat.com 1811 Spring Street Manitowoc, WI 54220 Tel: 920-686-5117 Fax: 920-686-5144
Website	www.burgerboat.com/commercial



Wisconsin Commercial Ports Development Initiative (WCPDI)

St. Mary's Cement

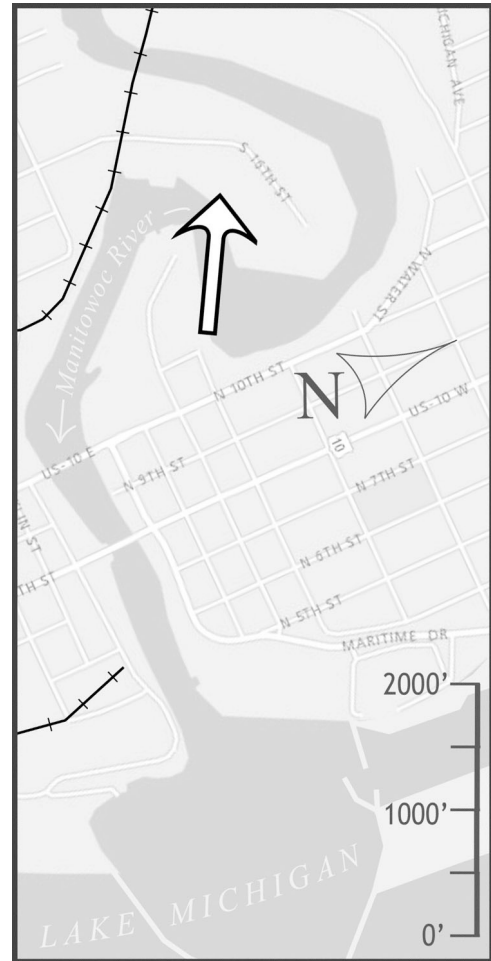
Cargo Handled	Cement
Dock/Pier Length	625 feet
Depth Along Dock/Pier	21 feet
Truck Access	S. 16th St. to US Hwy 151 to I-43
Rail Access	No direct rail access
Storage Inside	None noted
Storage Outside	12 silos
Equipment	None noted
Contact	Allen (Scott) Marsh ASMarsh@vcsmc.com 1801 Spring Street Manitowoc, WI 54220 Tel: 920-682-6552 Fax: 920-682-6554
Website	www.stmaryscement.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

City Centre LLC

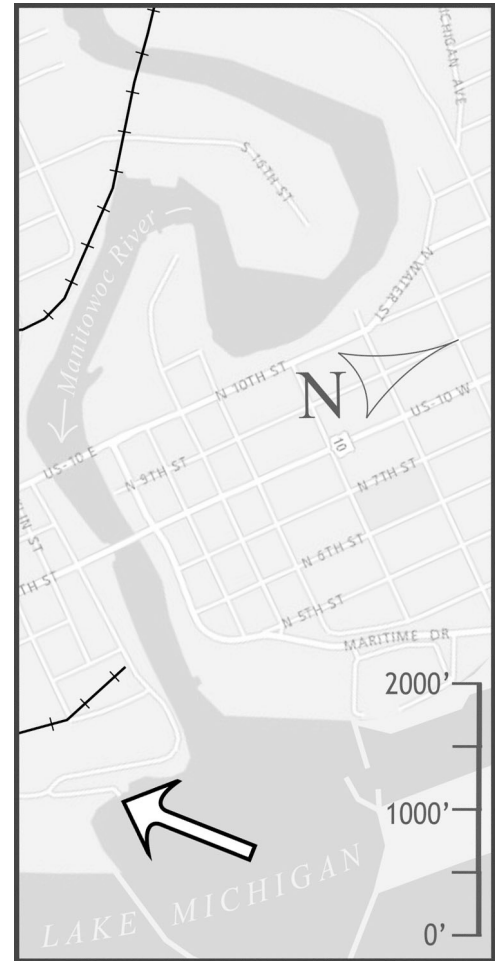
Cargo Handled	Plate steel, granite, aggregate, limestone, cement, project cargo
Dock/Pier Length	4,300 feet (1,000 feet of unimproved dock)
Depth Along Dock/Pier	Varies amongst docks (12 to 23 feet)
Truck Access	S. 16th St. to US Hwy 151 to I-43
Rail Access	Canadian National
Storage Inside	150,000 ft ²
Storage Outside	14 acres, MARSEC Level 1 Security
Equipment	4 cranes (60 – 150 ton capacity), pay loaders
Contact	Peter and Alex Allie pcallie@comcast.net acallie@comcast.net 100 Maritime Dr. Manitowoc, WI 54220 Tel: 920-684-1545
Website	None listed



Wisconsin Commercial Ports Development Initiative (WCPDI)

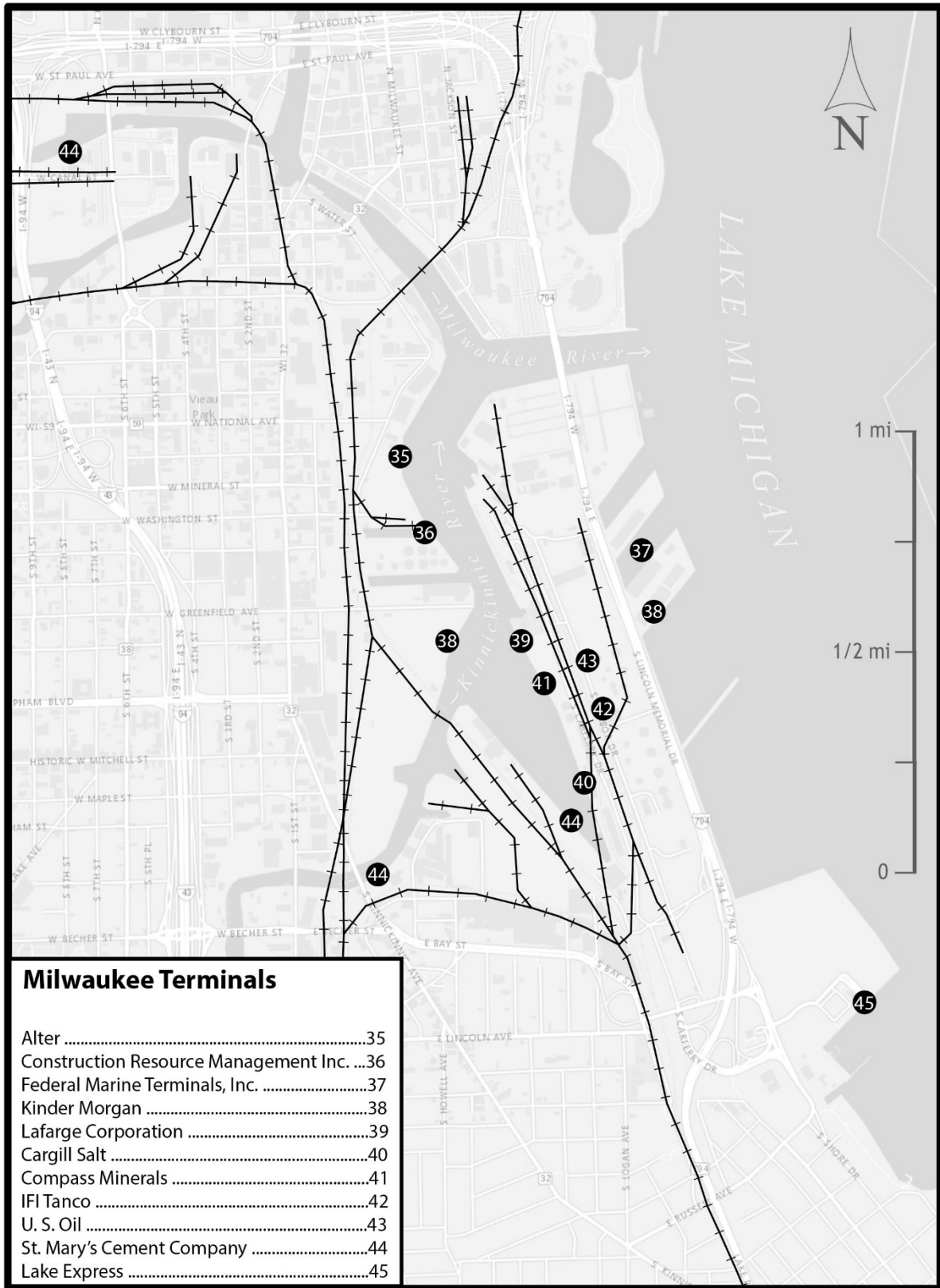
Lake Michigan Car Ferry, Inc.

Cargo Handled	Passenger and commercial truck vehicles
Dock/Pier Length	45 feet
Depth Along Dock/Pier	21 feet
Truck Access	US Hwy 10 to I-43 or US Hwy 10 to US Hwy 151 to I-43
Rail Access	None
Storage Inside	None
Storage Outside	Free parking for passengers
Equipment	410 foot steamship
Contact	Del Whitmire, Manager dwhitmire@ssbadger.com 900 South Lakeview Drive Manitowoc, WI 54221 Tel: 920-684-0888 Tel: 231-843-1004 Tel: 800-841-4243
Website	www.ssbadger.com/



Wisconsin Commercial Ports Development Initiative (WCPDI)

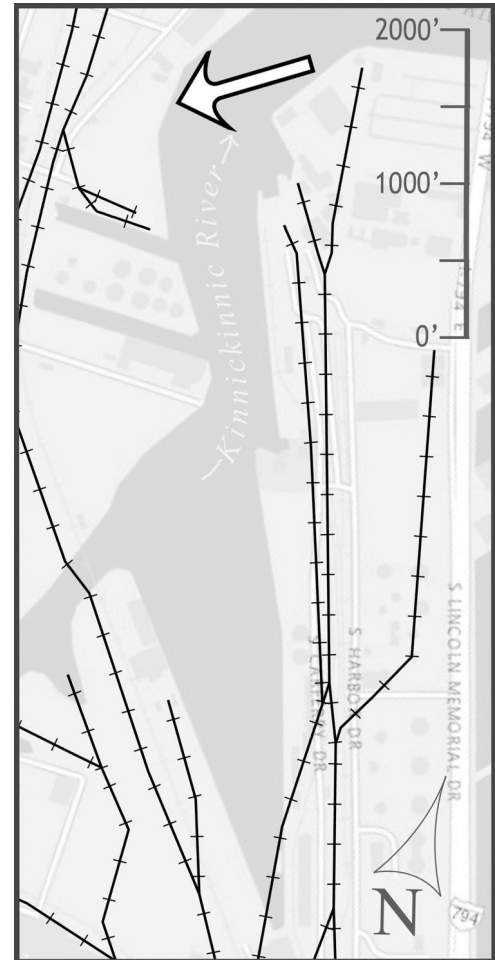
Port of Milwaukee



Wisconsin Commercial Ports Development Initiative (WCPDI)

Alter Trading

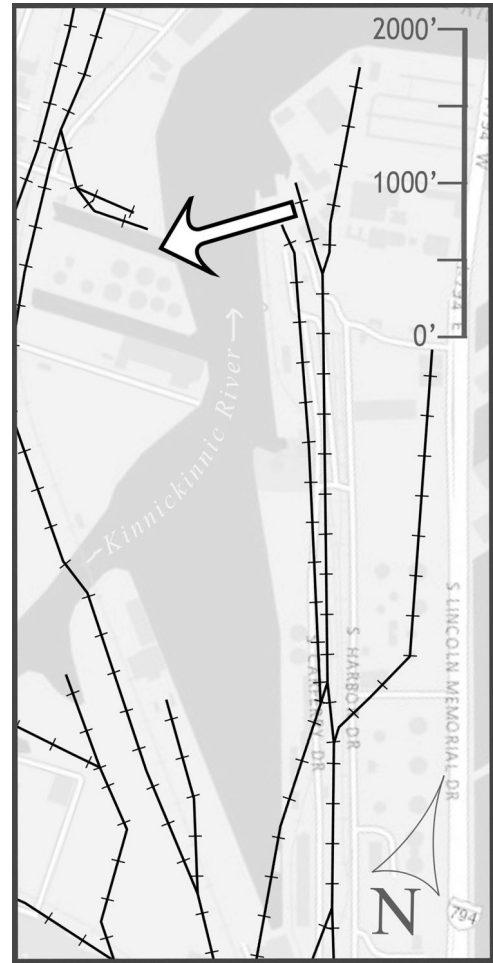
Cargo Handled	Scrap Metal
Dock/Pier Length	630 feet
Depth Along Dock/Pier	21 feet
Truck Access	S. Water Street to Washington Street to I-43/I-94
Rail Access	Union Pacific
Storage Inside	None noted
Storage Outside	11 acres
Equipment	935 Liebherr material handler, 980 Caterpillar wheel loader, 2 large Michigan wheel loaders
Contact	Phil Heston phil.heston@altertrading.com 900 S. Water Street Milwaukee, WI 53204 Tel: (414)-290-6509
Website	www.altertrading.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

Construction Resource Management Inc.

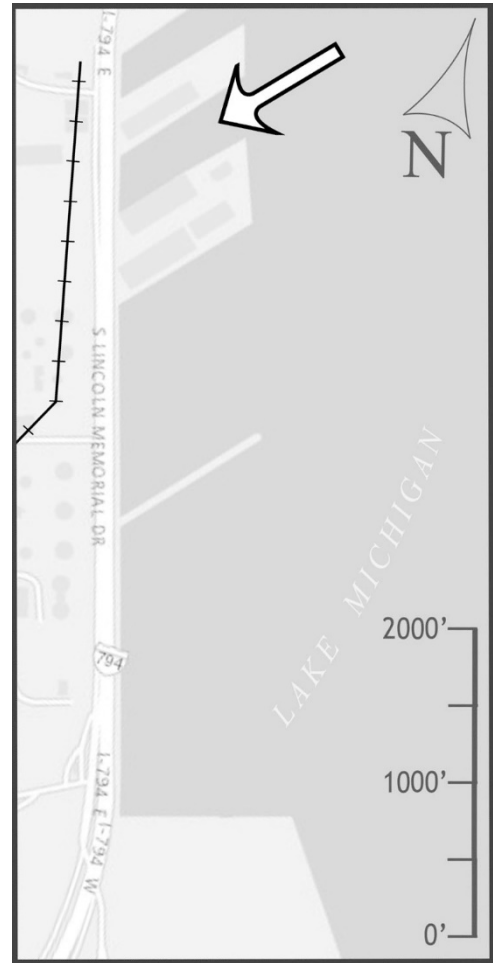
Cargo Handled	Asphalt
Dock/Pier Length	475 feet
Depth Along Dock/Pier	27 feet
Truck Access	East Washington Street becomes West Washington Street to I-43/I-94
Rail Access	Union Pacific
Storage Inside	Above ground storage Tanks
Storage Outside	None noted
Equipment	None noted
Contact	Bob Carlson BCarlson@crmanagement.com 301 E Washington St. Milwaukee, WI 53204 Tel: (920-309-0622)
Website	www.crmanagement.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

Federal Marine Terminals, Inc.

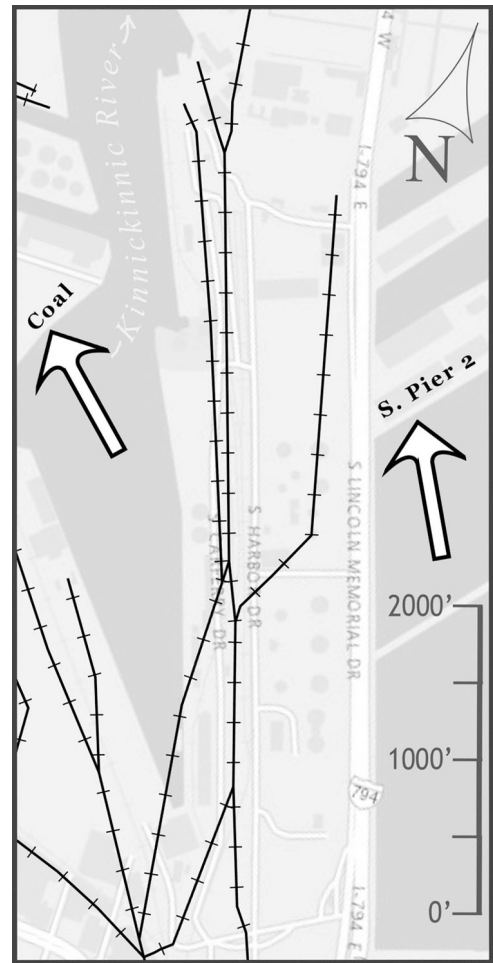
Cargo Handled	Steel, forest products, project cargo, containers, break bulk
Dock/Pier Length	965 feet and 1,000 feet
Depth Along Dock/Pier	27 feet
Truck Access	S. Lincoln Memorial Drive to I-794 or S. Lincoln Memorial Drive to Lincoln Ave. Viaduct to E. Bay St. to Becher St. to I-94/I-43
Rail Access	Canadian Pacific, Union Pacific
Storage Inside	205,000 ft ²
Storage Outside	14 acres
Equipment	25-ton overhead coil crane, indoor rail (un)-loading, food-grade warehouse, 4 cranes (185 mt max capacity), fork-lifts (up to 52,000 lb capacity), yard jockeys, Ro-Ro ramp, and container chassis
Contact	Luke Kvapil lkvapil@fedmar.com 1200 S. Lincoln Memorial Drive Milwaukee, WI 53207 Tel: (414)-769-2900 Fax: (414)-769-2928
Website	www.fmtcargo.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

Kinder Morgan

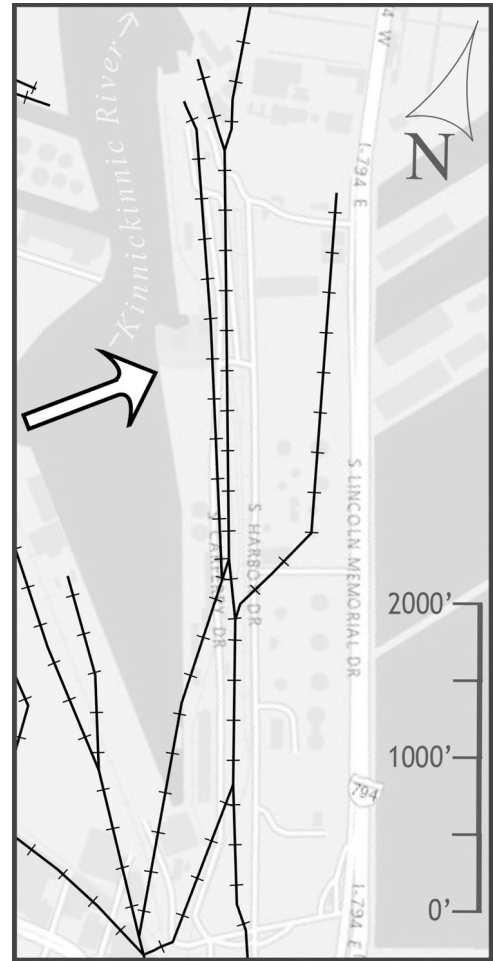
Cargo Handled	Salt, coal, limestone, fertilizer
Dock/Pier Length	1,000 feet and 825 feet
Depth Along Dock/Pier	27 feet
Truck Access	S. Lincoln Memorial Drive to I-794 or S. Lincoln Memorial Drive to Lincoln Ave. Viaduct to E. Bay St. to Becher St. to I-94/I-43
Rail Access	Canadian Pacific, Union Pacific
Storage Inside	104,000 ft ² 50,000 tons covered dome
Storage Outside	34 acres (1.5 million tons)
Equipment	Dome storage, portable transfer and handling equipment, cranes, clam/buckets
Contact	William Baines william_baines@kindermorgan.com 1900 S. Harbor Drive Milwaukee, WI 53207 Tel: (414)-769-1901 Fax: (414)-769-1144
Website	www.kindermorgan.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

Lafarge

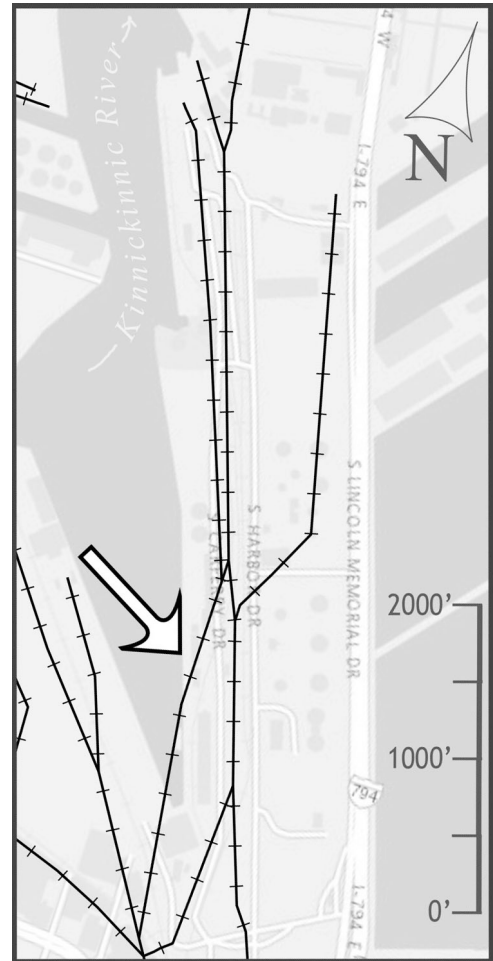
Cargo Handled	Cement
Dock/Pier Length	1000 feet
Depth Along Dock/Pier	27 feet
Truck Access	S. Lincoln Memorial Drive to I-794 or S. Lincoln Memorial Drive to Lincoln Ave. Viaduct to E. Bay St. to Becher St. to I-94/I-43
Rail Access	Canadian Pacific, Union Pacific
Storage Inside	Cement silo, storage building
Storage Outside	None noted
Equipment	None noted
Contact	Bruce Scott bruce.scott@lafarge.com 1435 S. Carferry Drive Milwaukee, WI 53207 Tel: (414)-486-9323 Fax: (414)-486-9325
Website	www.lafarge-na.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

Cargill Salt

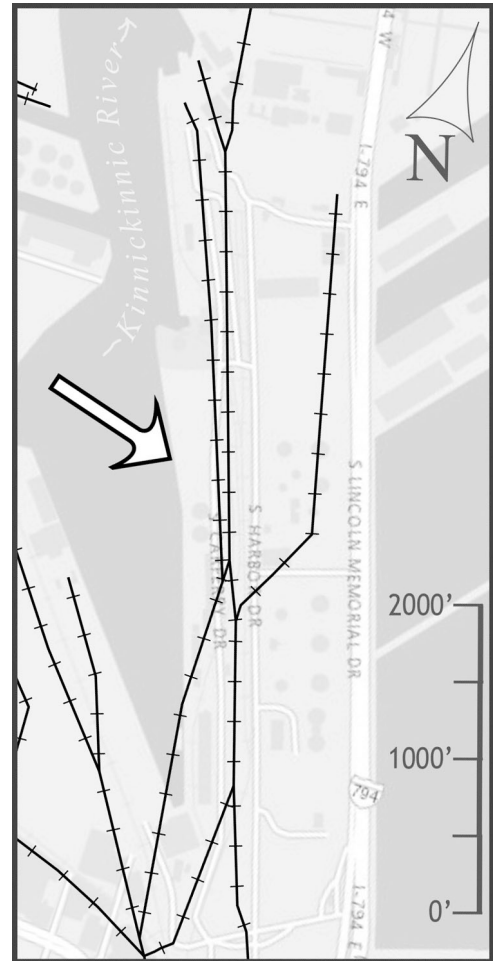
Cargo Handled	Salt
Dock/Pier Length	1000 feet
Depth Along Dock/Pier	27 feet
Truck Access	S. Lincoln Memorial Drive to I-794 or S. Lincoln Memorial Drive to Lincoln Ave. Viaduct to E. Bay St. to Becher St. to I-94/I-43
Rail Access	Canadian Pacific, Union Pacific
Storage Inside	27,000 ft ²
Storage Outside	1.8 Acres
Equipment	Contact Business
Contact	Roy Pelland roy_pelland@cargill.com 1835 S. Carferry Drive Milwaukee, WI 53207 Tel: (414)-482-2323 Fax: (414)-482-2334
Website	www.cargill.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

Compass Minerals

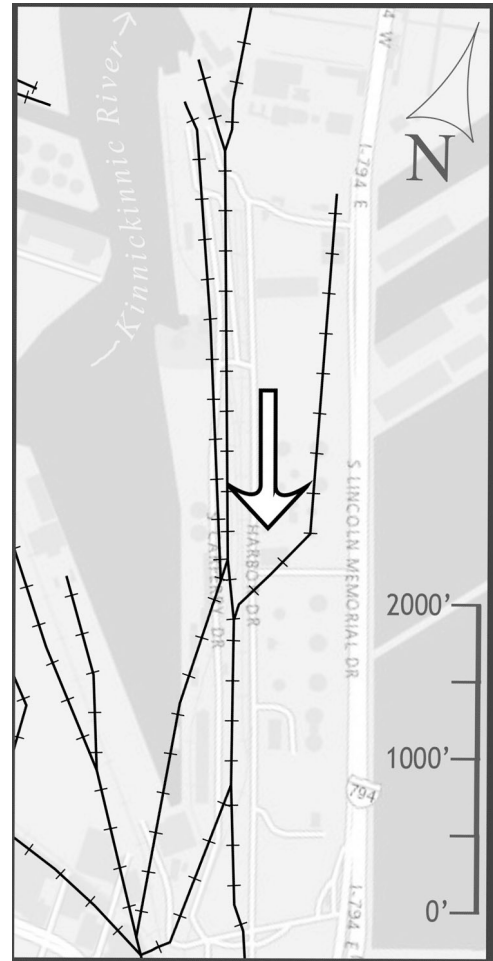
Cargo Handled	Salt
Dock/Pier Length	1000 feet
Depth Along Dock/Pier	27 feet
Truck Access	S. Lincoln Memorial Drive to I-794 or S. Lincoln Memorial Drive to Lincoln Ave. Viaduct to E. Bay St. to Becher St. to I-94/I-43
Rail Access	Canadian Pacific, Union Pacific
Storage Inside	None
Storage Outside	9 acres
Equipment	None noted
Contact	Tom Czajkowski czajkowski@compassminerals.com 2001 S. Lincoln Memorial Drive Milwaukee, WI 53207 Tel: (414)-482-3434 Fax: (414)-482-4451
Website	www.compassminerals.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

IFI Tanco

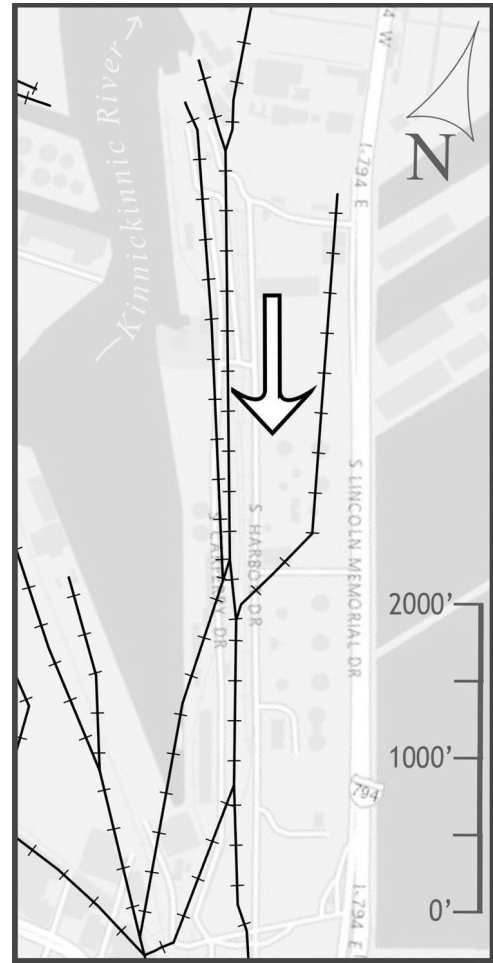
Cargo Handled	Bio-Diesel, cooking oil, used motor oil
Dock/Pier Length	No Direct water access
Depth Along Dock/Pier	No Direct water access
Truck Access	S. Lincoln Memorial Drive to I-794 or S. Lincoln Memorial Drive to Lincoln Ave. Viaduct to E. Bay St. to Becher St. to I-94/I-43
Rail Access	Canadian Pacific, Union Pacific
Storage Inside	2,000,000 gallons
Storage Outside	None
Equipment	Contact Business
Contact	John Fox jfox@fusionrenewables.com 1726 S. Harbor Drive Milwaukee, WI 53207 Tel: (866)-631-4447 Fax: (414)-483-8198
Website	www.fusionrenewables.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

U.S. Oil

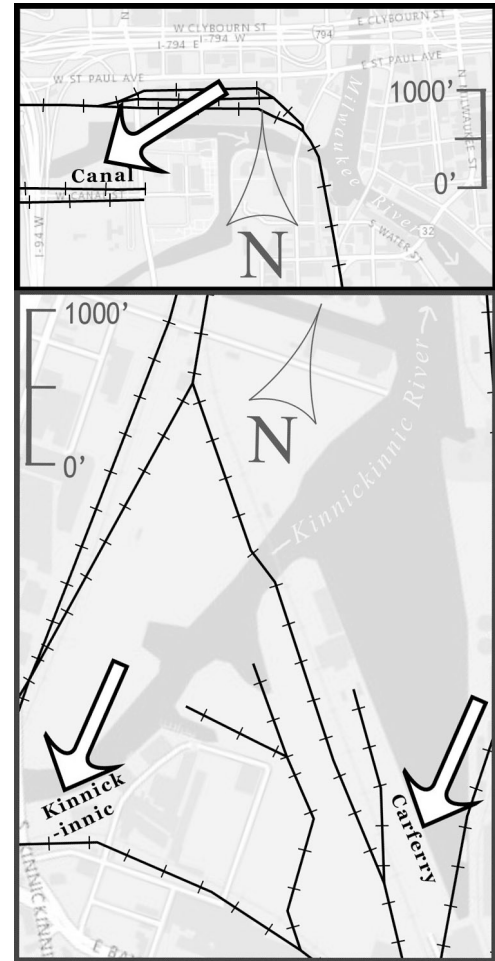
Cargo Handled	Bulk liquids
Dock/Pier Length	Currently no access to waterfront; future pipeline investment could provide access to 1,040 feet
Depth Along Dock/Pier	27 feet
Truck Access	S. Lincoln Memorial Drive to I-794 or S. Lincoln Memorial Drive to Lincoln Ave. Viaduct to E. Bay St. to Becher St. to I-94/I-43
Rail Access	Canadian Pacific, Union Pacific
Storage Inside	312,000 barrels
Storage Outside	None
Equipment	None noted
Contact	Richard Sawall rsawall@usoil.com 1626 S. Harbor Drive Milwaukee, WI 53207 Tel: (414)-469-8534
Website	www.usoil.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

St. Mary's Cement

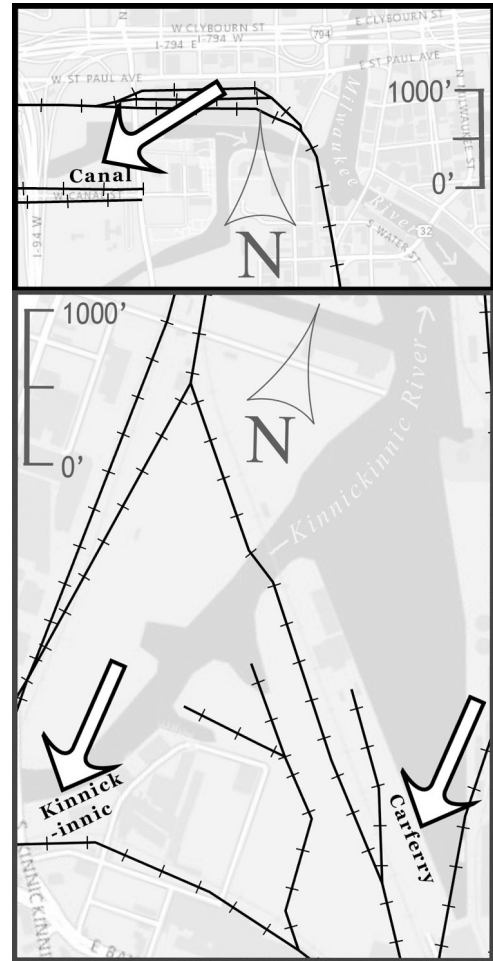
Cargo Handled	Cement products
Dock/Pier Length	800 feet
Depth Along Dock/Pier	27 feet
Truck Access	S. Lincoln Memorial Drive to I-794 or S. Lincoln Memorial Drive to Lincoln Ave. Viaduct to E. Bay St. to Becher St. to I-94/I-43
Rail Access	Canadian Pacific, Union Pacific
Storage Inside	Cement silo (9,000 tons)
Storage Outside	None
Equipment	Contact business
Contact	Maurice Costello MJCostello@vcsmc.com 1975 S. Carferry Road Milwaukee, WI 53207 Tel: (414)-486-7660 Fax: (414)-486-7659
Website	www.stmaryscement.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

St. Mary's Cement

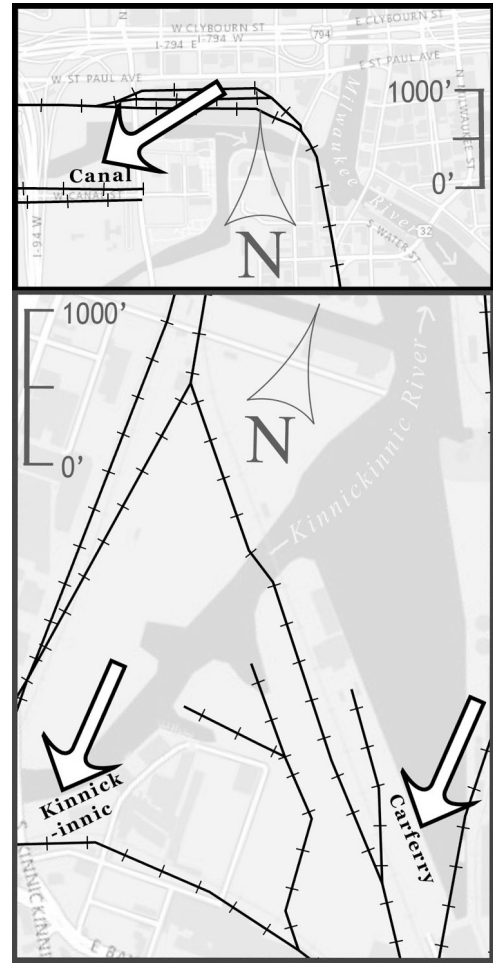
Cargo Handled	Cement products
Dock/Pier Length	600 feet
Depth Along Dock/Pier	21 feet
Truck Access	Contact business
Rail Access	Canadian Pacific, Union Pacific
Storage Inside	Storage area (22,550 Tons)
Storage Outside	None
Equipment	Contact business
Contact	Maurice Costello MJCostello@vcsmc.com 712 W. Canal St. Milwaukee, WI 53233 Tel: (414)-486-7660 Fax: (414)-486-7659
Website	www.stmaryscement.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

St. Mary's Cement

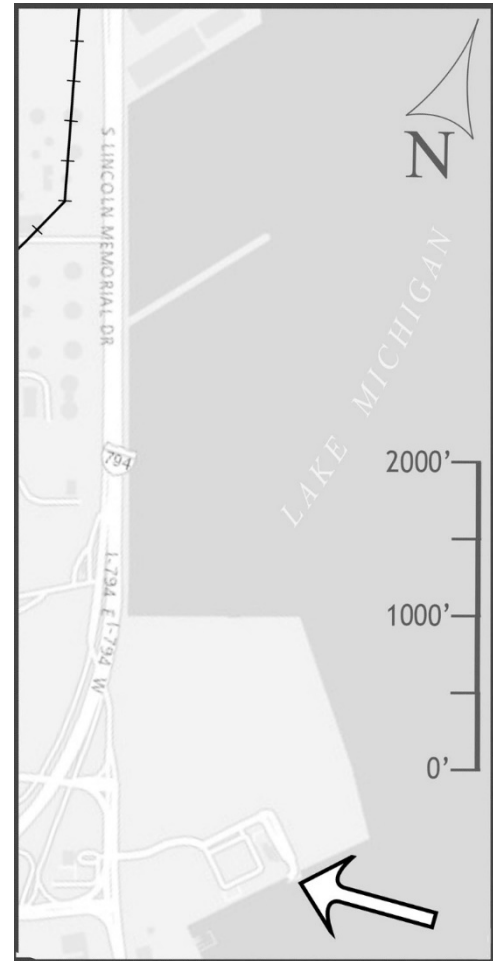
Cargo Handled	Cement products
Dock/Pier Length	550 feet
Depth Along Dock/Pier	21 feet
Truck Access	Contact business
Rail Access	Canadian Pacific
Storage Inside	Cement silo (20,000 tons)
Storage Outside	None noted
Equipment	Contact business
Contact	Maurice Costello MJCostello@vcsmc.com 2006 S. Kinnickinnic Ave. Milwaukee, WI 53207 Tel: (414)-486-7660 Fax: (414)-486-7659
Website	www.stmaryscement.com



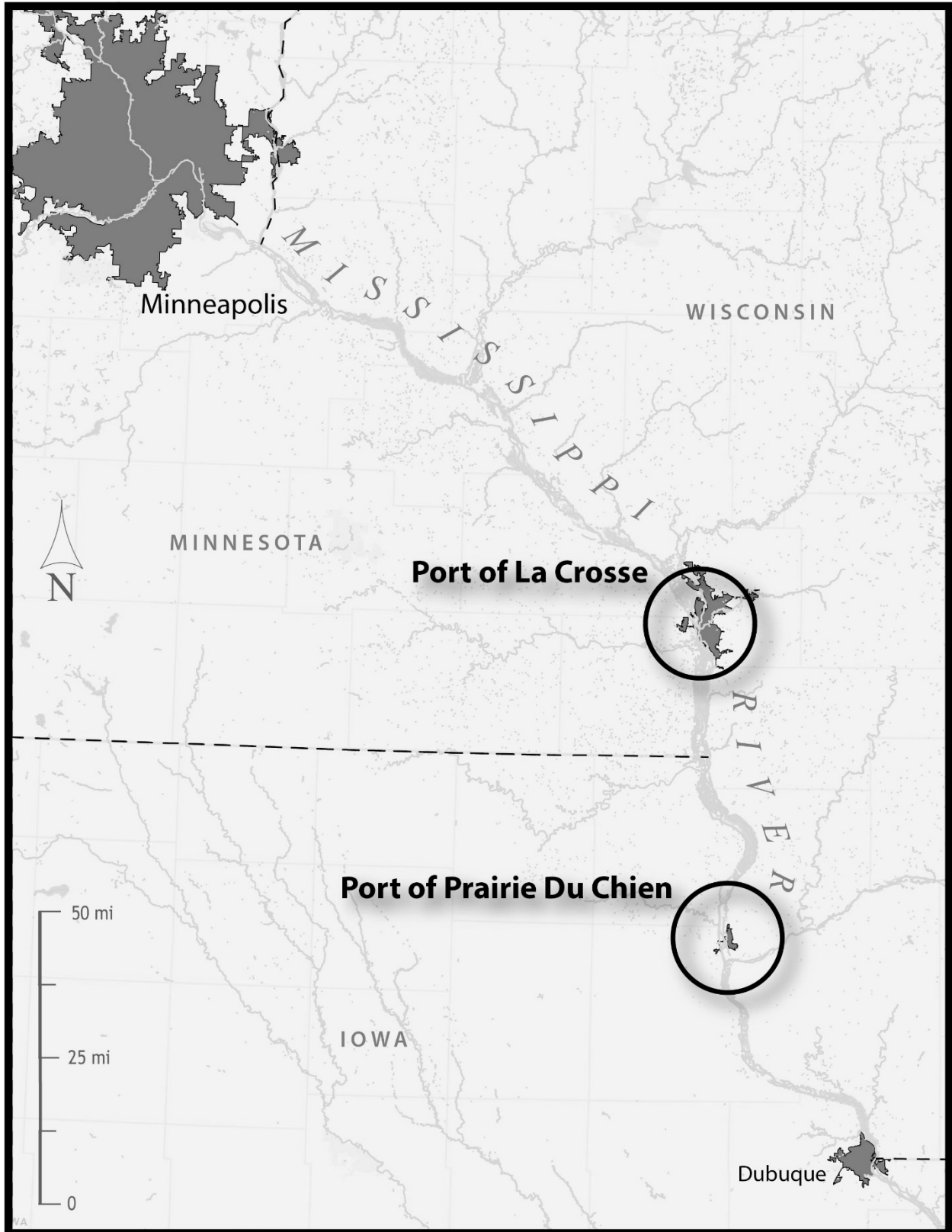
Wisconsin Commercial Ports Development Initiative (WCPDI)

Lake Express

Cargo Handled	Tourists (passengers, vehicles)
Dock/Pier Length	330 feet
Depth Along Dock/Pier	27 feet
Truck Access	S. Lincoln Memorial Drive to I-794 or S. Lincoln Memorial Drive to Lincoln Ave. Viaduct to E. Bay St. to Becher St. to I-94/I-43
Rail Access	None
Storage Inside	None
Storage Outside	None
Equipment	192' x 57' aluminum hulled catamaran powered by 4 diesel engines (12,000 HP), reaching 40 mpg or 34 knots
Contact	Ken Szallai kszallai@lake-express.com 2330 S. Lincoln Memorial Dr. Milwaukee, WI 53207 Tel: (866)-914-1010
Website	www.lake-express.com

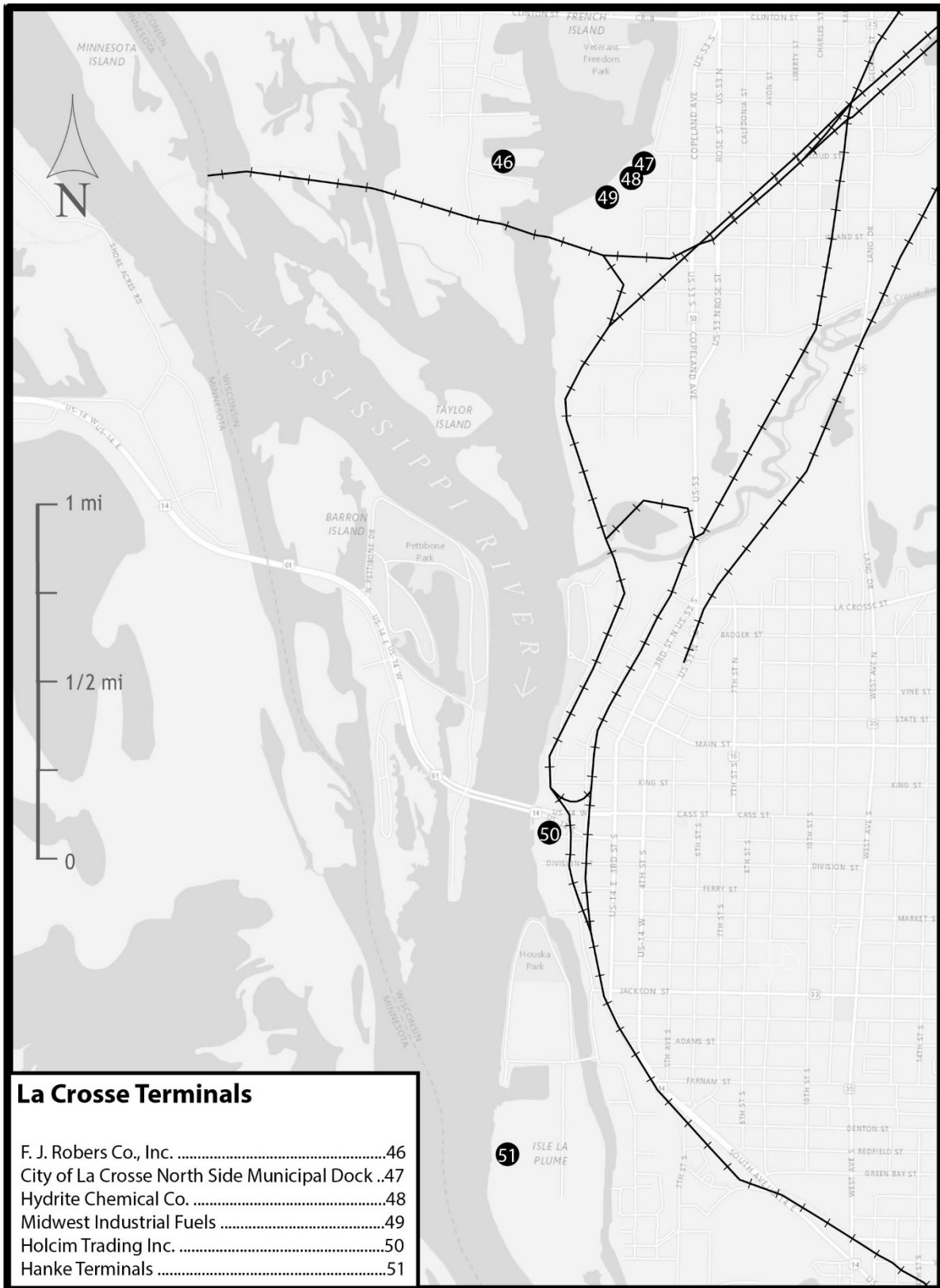


Mississippi River Terminals



Wisconsin Commercial Ports Development Initiative (WCPDI)

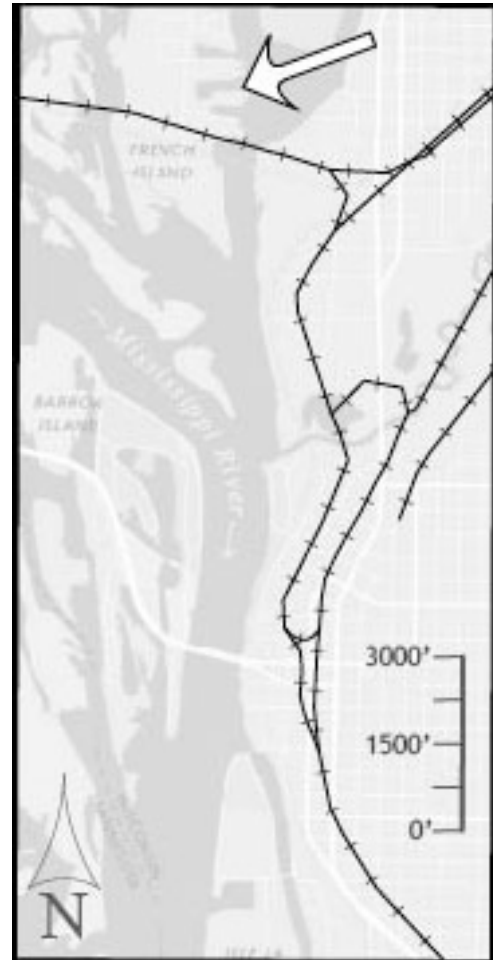
Port of La Crosse



Wisconsin Commercial Ports Development Initiative (WCPDI)

F.J. Robers Co., Inc.

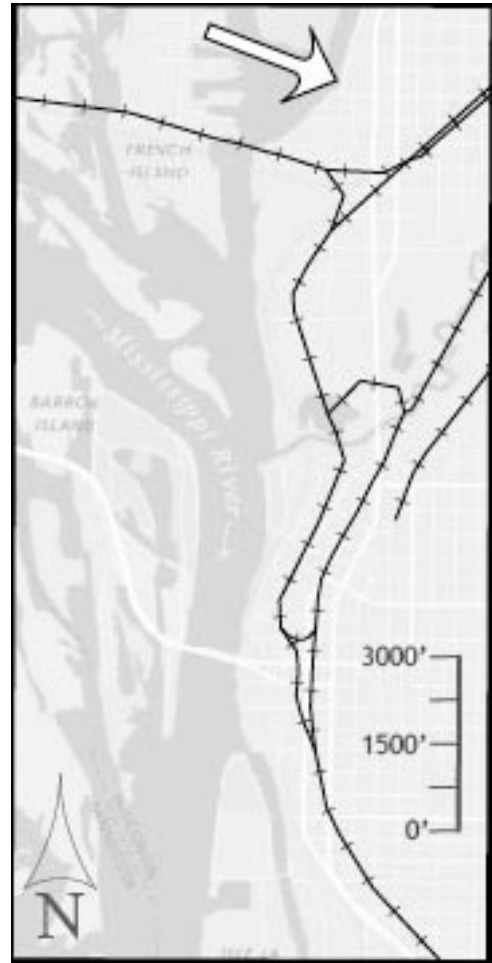
Cargo Handled	Grain, dry bulk, coal, salt, aggregate, cotton seed, pig iron, scrap metal, forest products
Dock/Pier Length	710 feet
Depth Along Dock/Pier	13 feet minimum
Truck Access	Bainbridge St. to Clinton St. to US Hwy 53 or Bainbridge St. to I-90
Rail Access	Canadian Pacific
Storage Inside	44,000 ft ² for dry bulk; 6,000 ton fertilizer dome; 1,000 ton cement silo; two grain silos (140,000 bushel capacity)
Storage Outside	40 acres (10 acres of paved storage pads)
Equipment	Grain conveyor; 3- seven yard end loaders; 2-5 mobile cranes (100 ton capacity); two bulk rail dump pits; truck scale
Contact	John Noyes jnoyes@fjrobers.com 816 Bainbridge Street La Crosse, WI 54603 Tel: 608-784-1711
Website	fjrobers.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

City of La Crosse North Side Municipal Dock

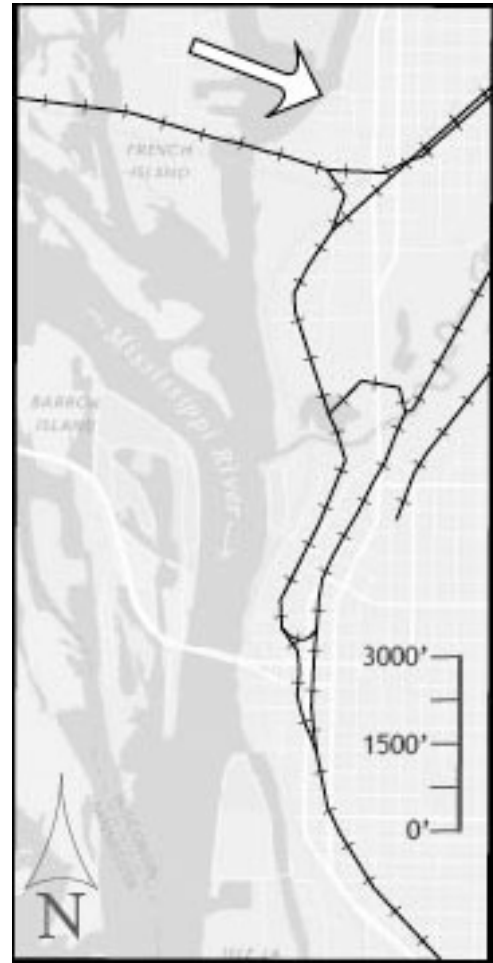
Cargo Handled	This is a general purpose dock owned by the city and leased to firms for use
Dock/Pier Length	205 feet
Depth Along Dock/Pier	13 feet
Truck Access	Bainbridge St. to Clinton St. to US Hwy 53 or Bainbridge St. to I-90
Rail Access	No direct access
Storage Inside	None noted
Storage Outside	2 acres on-site, 4 acres at Island Street rail siding
Equipment	None noted
Contact	Larry Kirch kirchl@cityoflacrosse.org City of La Crosse 400 La Crosse Street La Crosse, WI 54603 Tel: 608-789-7512
Website	www.cityoflacrosse.org



Wisconsin Commercial Ports Development Initiative (WCPDI)

Hydrite Chemical Co.

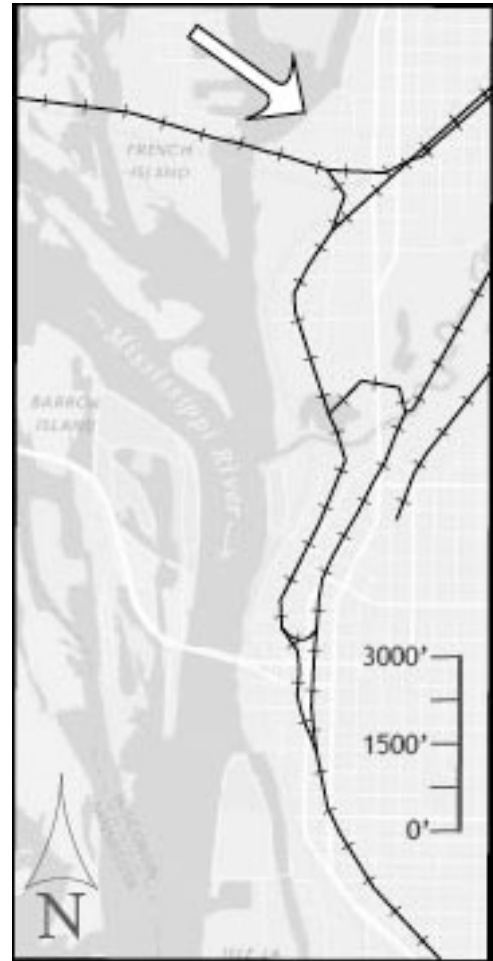
Cargo Handled	Caustic soda
Dock/Pier Length	200 feet
Depth Along Dock/Pier	13 feet
Truck Access	Bainbridge St. to Clinton St. to US Hwy 53 or Bainbridge St. to I-90
Rail Access	Canadian Pacific
Storage Inside	2,100,000 gallon tank capacity
Storage Outside	None
Equipment	One 8-inch pipeline from wharf to storage tanks
Contact	Tia Davis tia.davis@hydrite.com 701 Sumner Street La Crosse, WI 54603-2622 Tel: 608-784-0024 Fax: 608-785-2990
Website	www.hydrite.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

Midwest Industrial Fuels

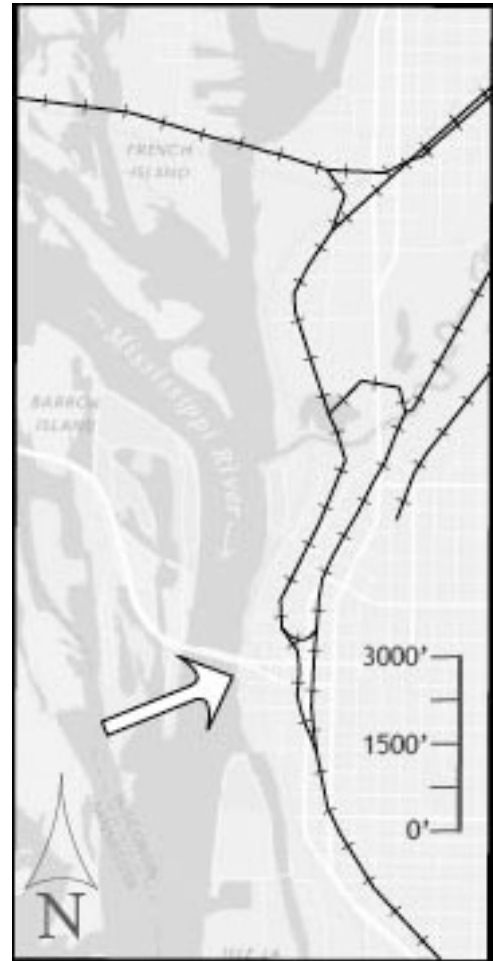
Cargo Handled	Liquid fuels, asphalt, dry-bulk
Dock/Pier Length	265 feet
Depth Along Dock/Pier	13 feet minimum
Truck Access	Bainbridge St. to Clinton St. to US Hwy 53 or Bainbridge St. to I-90
Rail Access	Canadian Pacific
Storage Inside	5,000 ft ² shed; two 10,000 gallon tanks, sixty-four storage tanks with 747,600 barrel capacity; one 11.2 million gallon tank
Storage Outside	None
Equipment	Pneumatic pipeline, a 25-foot hand operated mast-and-boom derrick
Contact	Joe Gaspers joe.gaspers@midwestfuels.com 615 Sumner Street La Crosse, WI 54603 Tel: 800-769-3308
Website	www.midwestfuels.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

Holcim Trading Inc.

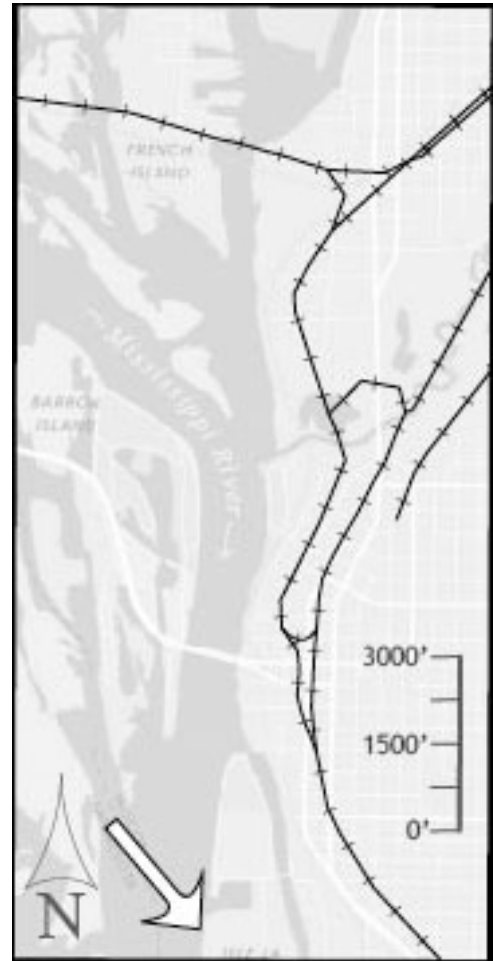
Cargo Handled	Cement
Dock/Pier Length	325 feet
Depth Along Dock/Pier	13 feet
Truck Access	Cross St. to Division St. to US Hwy 14/US Hwy16/US Hwy 53 to I-90
Rail Access	No direct access
Storage Inside	Two 25-ton surge silos; three steel storage silos (total capacity of 11,900 ton)
Storage Outside	None noted
Equipment	14-inch pneumatic pipeline
Contact	Chuck Anderson chuck.anderson@holcim.com 618 Cross Street P.O. Box 394 La Crosse, WI 54601 Tel: 608-784-0964
Website	www.holcim.us



Wisconsin Commercial Ports Development Initiative (WCPDI)

Hanke Terminals

Cargo Handled	Coal, road salt, pig iron, aggregate
Dock/Pier Length	210 feet
Depth Along Dock/Pier	13 feet
Truck Access	Marco Dr. to Hood St. to Norplex Dr. to Jackson St. to US Hwy 14/US Hwy 53 to I-90
Rail Access	No direct access
Storage Inside	None noted
Storage Outside	2 acres (100,000 tons of bulk materials)
Equipment	None noted
Contact	Tim Stowasser cpp20771@centurytel.net 1700 Marco Drive La Crosse, WI 54601 Tel: 608-784-6313
Website	hanketrucking.com



Wisconsin Commercial Ports Development Initiative (WCPDI)

Port of Prairie du Chien



Wisconsin Commercial Ports Development Initiative (WCPDI)

Prairie Sand and Gravel

Cargo Handled	Bulk commodities (corn, soybeans, rock salt, fertilizer)
Dock/Pier Length	400 feet total (5 Dock/Piers)
Depth Along Dock/Pier	>12 feet
Truck Access	County Road K to US Hwy 18
Rail Access	Wisconsin & Southern Railroad, Burlington Northern Santa Fe
Storage Inside	125,000 ft ² ; two 1.5 million gallon tanks; two 45,000 bushel silos
Storage Outside	35 acres
Equipment	Overhead grain conveyors, front end loading vehicles, clam shell bucket, pipelines, service vehicles
Contact	Kyle Kozelka kozelkak@centurytel.net 34592 County Road K Prairie du Chien, WI 53821 Tel: 608-326-6471
Website	None listed



Appendix 2: 2014 Wisconsin Directory of Port Services

Agent

Benchmark Marine

Richard Laurion
10048 Indianapolis Boulevard
Chicago, IL 60617
773-221-7400
benchmark@g-lakes.com

C & M Shipping, Inc.

Henning Christianson
5320 West 159th Street, Suite 505
Oak Forest, IL 60452
708-687-7970
cinship@urbancom.net

Central Marine Logistics, Inc.

Tom Wiater
445 North Broad Street
Griffith, IN 46319-2223
219-922-2672
www.centralmarinelogistics.com

World Shipping

Doc Mahoney
Cleveland, OH
216-356-7676

Compliance Agency

U.S. Coast Guard

Captain Amy B. Cocanour
2420 South Lincoln Memorial Drive
Milwaukee, WI 53207
414-747-7100

Wisconsin Commercial Ports Development Initiative (WCPDI)

U.S. Coast Guard - Marine Safety Prevention Department

2420 South Lincoln Memorial Drive
Milwaukee, WI 53207
414-747-7154

U.S. Coast Guard Station – Green Bay

100A Bay Beach Road
Green Bay, WI 54302
920-435-7042

U.S. Customs and Border Protection - Office of Field Operations

Bill Braun
4915 South Howell Avenue, Suite 200
Milwaukee, WI 53207
414-486-7790

U.S. Customs

Chad Shulfer
2077 Airport Drive
Green Bay, WI 54313
920-496-0606

U.S. Department of Commerce - International Trade Administration

Damian Felton
1025 North Broadway, RO 1
Milwaukee, WI 53202
414-297-3473
damian.felton@trade.gov

U.S. Naval & Marine Corps

2401 South Lincoln Memorial Drive
Milwaukee, WI 53207
414-744-7155

U.S.D.A. Animal and Plant Health Inspection Service

Alecia Marson
5007 South Howell Avenue, Suite 115
Milwaukee, WI 53207
414-744-6662

Wisconsin Commercial Ports Development Initiative (WCPDI)

alecia.l.marson@aphis.usda.gov

Construction, Marine

Kadinger Marine Service, Inc.

David Kadinger

401 East Greenfield Avenue

Milwaukee, WI 53204

414-383-2040

Lunda Construction

Dan Oudenhoven

2000 Taylor Street

Little Chute, WI 54140

920-788-5238

doudenhoven@lundaconstruction.com

McMullen & Pitz

Erich Pitz

17 Maritime Drive

Manitowoc, WI 54221

920-682-0131

pitzmcmp@sbcglobal.net

RJS Construction

Dan Markham

5300 Stinson Avenue

Superior, WI 54880

715-394-0128

dmarkham@rjs5300.com

Roen Salvage Company

John R. Asher

180 East Redwood Street

Sturgeon Bay, WI 54235

920-743-6533

info@roensalvage.com

Wisconsin Commercial Ports Development Initiative (WCPDI)

Ward Welding and Fabrication, Inc.

Carl Ward
1711 South Carferry Drive
Milwaukee, WI 53207
262-302-6485
<http://www.wardweldingandfabrication.com/>

Consulting and Engineering

AECOM

Terry Peterson
1035 Kepler Drive
Green Bay, WI 54311
920-406-3167
terry.peterson@aecom.com

Arcadis

Mike Maierle
126 North Jefferson Street, Suite 400
Milwaukee, WI 53202
414-276-7742
mmaierle@arcadis-us.com

Ayres and Associates

Sue Vasey Leith
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
608-249-0471
leiths@ayresassociates.com

Baird & Associates

Matthew Clark
2981 Yarmouth Greenway Drive
Madison, WI 53711
608-273-0592
mclark@baird.com

Wisconsin Commercial Ports Development Initiative (WCPDI)

Bay Engineering

Wendell Wilke
253 North First
Sturgeon Bay, WI 54235
920-734-8282
fishtug@ezdsl.net

Chicago Bridge & Iron

William Kralj
200 South Executive Drive, Suite 101
Brookfield, WI 53005
262-754-8719
bill.kralj@cbi.com

Collins Engineers, Inc.

2033 West Howard Avenue
Milwaukee, WI 53221
414-282-6905
<http://www.collinsengr.com/Home.aspx>

Docks & Marinas, Inc

Dave Wentland
1304 Raebrooke Lane
De Pere, WI 54115
920-621-3464
davewentland@gmail.com

Foth Infrastructure & Environment LLC

Brian Hinrichs
5117 West Terrace Drive, Suite 401
Madison, WI 53718
608-242-5958
brian.hinrichs@foth.com

GEI Consultants, Inc.

Paul Killian
3159 Voyager Drive
Green Bay, WI 54311

Wisconsin Commercial Ports Development Initiative (WCPDI)

920-455-8200

pkillian@geiconsultants.com

GRAEF

Michael Lefebvre

1150 Springhurst Drive, Suite 201

Green Bay, WI 54304

920-592-9440

michael.lefebvre@graef-usa.com

J.F. Brennan Co.

Anthony Binsfeld

818 Bainbridge Street

La Crosse, WI 54603

608-784-7173 ext 224

tbinsfeld@jfbrennan.com

Krech Ojard

Lauran Larson

101 Putnam Street

Eau Claire, WI 54703

715-552-7374

lauran.larson@krechojard.com

Mead & Hunt

Jim Botz

1345 North Road, Suite B

Green Bay, WI 54313

920-496-0500

jim.botz@meadhunt.com

Robert E. Lee & Associates

Jared Schmidt

1250 Centennial Centre Boulevard

Hobart, WI 54155

920-662-9641

jschmidt@releeinc.com

Wisconsin Commercial Ports Development Initiative (WCPDI)

Crane Service

Dawes Rigging and Crane Rental

Dave Weinschrott
805 South 72nd Street
Milwaukee, WI 53214
800-236-5335
dweinschrott@dawescrane.com

Badger Crane & Dragline

1316 Russett Court
Green Bay, WI 54313
920-662-7624

Barlament Erection Crane Rentals

1575 Lineville Road
Green Bay, WI 54313
920-434-3677

Green Bay Crane Service, Inc.

838 Dousman Street
Green Bay, WI 54303
920-435-1740

Romenesko Crane Service, Inc.

1119 Randolph Drive
Appleton, WI 54913
920-788-0588

Schuh Construction Inc.

N9351 Isaar Road
Seymour, WI 54165
920-833-6465

United Crance Service, Inc.

206 Hudson Street
Green Bay, WI 54303
920-494-7666

Wisconsin Commercial Ports Development Initiative (WCPDI)

United Erecting of Wisconsin, Inc.

1111 Park Avenue

Kiel, WI 53042

800-356-6683

<http://www.unitederectingofwisconsin.com/>

Custom Broker

Hellmann Worldwide Logistics

440 Bell Court, Suite 100

Oak Creek, WI 53154

414-571-9312 ext 223

http://www.hellmann.net/en/united_states/

M.E. Dey & Co., Inc.

Sandi Siegel

700 West Virginia Street, Suite 700

Milwaukee, WI 53204

414-294-2115

sandi@medey.com

PLS Customhouse Brokers Inc.

Mimi Rodriguez

5200 West Loomis Road

Greendale, WI 53129

414-859-1051

mimir@plschb.com

Equipment

Marine Travelift

Steve Pfiefer

49 East Yew Street

Sturgeon Bay, WI 54235

920-743-6202

Wisconsin Commercial Ports Development Initiative (WCPDI)

Excursion

Julia Belle Swain

John Desmond
227 Main Street
La Crosse, WI 54601
608-784-4882

La Crosse Queen Cruises

Kathy Jostad
405 Veterans Memorial Drive
La Crosse, WI 54601
608-784-8523
kathy@lacrossequeen.com

Madeline Island Ferry

Gary Russell
P.O. Box 66
LaPointe, WI 54850
715-747-2051
vacation@madelineisland.com

Foreign Trade Zone

Foreign Trade Zone No. 41, General Warehouse Operator: Bentley World Packaging

Lisa Dixon
4080 North Port Washington Road
Milwaukee, WI 53212
414-967-5010
l.dixon@bentleywp.com

Foreign Trade Zone No. 167, General Warehouse Operator: Brown County Port and Solid Waste Department

2561 South Broadway
Green Bay, WI 54304
920-492-4953

Wisconsin Commercial Ports Development Initiative (WCPDI)

Freight Forwarder

Agility Global Integrated Logistics

Chuck Kilpatrick

5007 South Howell Avenue, Suite 110

Milwaukee, WI 53207

414-483-3062

ckilpatrick@agilitylogistics.com

BAX Global

Nancy Phillips

1448 Constitution Drive

Neenah, WI 54956

920-772-7900

nancy.phillips@baxglobal.com

BDG International, Inc.

Bengt Reed Anderson

840 Tollgate Road

Elgin, IL 60123

847-760-0011

banderson@bdginternational.com

Brahm International Ltd.

Del Brahm

3321 West Rawson Avenue

Franklin, WI 53132

414-761-7166

delb@brahmintl.com

CEVA Global Logistics

Erich Michalak

5390 Ashland Way, Suite 100

Franklin, WI 53132

414-281-1400

<http://www.cevalogistics.com/en-US/Pages/default.aspx>

Wisconsin Commercial Ports Development Initiative (WCPDI)

Classic Freight Services/Classic Cargo International, Inc.

Michael Hintz
300 North Chicago Avenue
South Milwaukee, WI 53172
414-571-2807 ext 112
mike@ccintl.net

DAMCO USA, Inc.

Cindy Mullner
955 West Hawthorn Drive
Itaska, IL 60143
630-361-6152
cindy.mullner@damco.com

DB Schenker

Denise Stevens
330 East Mahn Court, Suite 300
Oak Creek, WI 53154
414-574-2400
denise.stevens@dbschenker.com

Etters International

Les Etters
211 North Broadway, Suite 201
Green Bay, WI 54303
920-496-2900
etters@ettersinternational.com

Expeditors International

Bob Mittelstaedt
849 Thomas Drive
Bensenville, IL 60106
630-616-2376
bob.mittelstaedt@expeditors.com

International Freight Services Inc.

C.J. Miller
PO Box 92

Wisconsin Commercial Ports Development Initiative (WCPDI)

Bailey's Harbor, WI 54202

920-609-5400

joem@ifscargo.com

Krenz & Hannan International

Thomas Krenz

2230 East College Avenue

Cudahy, WI 53110

414-570-3550

thomas@krenzhannanintl.com

Leman USA Inc.

Tommy Knudsen

1860 Renaissance Boulevard

Sturtevant, WI 53177

262-884-4700

racine@lemanusa.com

Livingston International

John Raiski

1126 South 70th Street, Suite 209

Milwaukee, WI 53214

414-431-1105

jraiski@livingstonintl.com

Miller & Thompson Forwarding, Inc.

Angela Porter

W191 S7737 Racine Avenue

Muskego, WI 53150

262-570-3550

angp@miller-thompson.com

Quality Global Logistics/Quality Customs Broker

Carrie Pinzer

4464 South Whitnall Avenue

St. Francis, WI 53235

414-482-9447

cpinzer@qualitybrokers.com

Wisconsin Commercial Ports Development Initiative (WCPDI)

RAM International

Steve Mahal
1650 Carmen Drive
Elk Grove Village, IL 60007
847-439-0300
ramrod@ram-intl.com

Universal Forwarding Overseas

Marc Mugfor
941 North Perkins Avenue
Appleton, WI 54914
920-731-0822
mmugfor@UFOLTD.com

Uti, United States, Inc.

Carolyn Hills
5000 West Ashland Way
Franklin, WI 53132
414-423-5370 ext 225
chills@go2uti.com

W.J. Byrnes & Co.

Mary Sega
13890 Bishops Drive, Suite 310
Brookfield, WI 53005
262-860-7777
mary.sega@byrnesglobal.com

Western Overseas

Paula Hubbard
3321 West Rawson Avenue
Franklin, WI 53132
414-761-7166
paulah@westernoverseas.com

Fueling/Lubrication Services

Edward H. Wolf & Sons

Tim Glynn
414 Kettle Moraine Drive South
Slinger, WI 53086
800-236-9653
tglynn@ehwolf.com

Servco FS Cooperative

Jerry Caldie
3091 Voyager Drive, Suite B
Green Bay, WI 54311
920-437-0466

Fumigation

Ecolab Pest Elimination Service

St. Paul, MN
800-325-1671

Wil Kil Pest Control

N140 N5910 Lilly Road
Menomonee Falls, WI 53051
414-535-0090

Grain Elevator

Chicago & Illinois River Marketing LLC

Zach Krug
960 East Bay Street
Milwaukee, WI 53207
414-482-1900
zkrug@nidera-us.com

Labor Union

International Longshoremen's Association Local 1037

John C. Reed

Wisconsin Commercial Ports Development Initiative (WCPDI)

424 Tower Avenue
Superior, WI 54880
715-392-1290
jmcnamara@ilaunion.org

International Longshoremen's Association Local 1295

George L. Bindas
3295 East Barnard Avenue
Cudahy, WI 53110
414-771-5704
garsch@yahoo.com

International Longshoremen's Association Local 815

Tom Reitzner
1300 South Lincoln Memorial Drive, Terminal 3
Milwaukee, WI 53207
414-482-2646
union@ila815.com

Marina

Ashland Marina

Scott Stegmann
601 Main Street
Ashland, WI 54806
715-682-7049
sstegman@coawi.org

Barker's Island Marina

Joe Radtke
250 Marina Drive
Superior, WI 54880
715-392-7131
info@barkers-island-marina.com

Black's Cove Marina

David and Karen Elliot
2003 Rose Street

Wisconsin Commercial Ports Development Initiative (WCPDI)

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608-781-1212
bcmarina1@gmail.com

South Bay Marina

Chester McDonald
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Green Bay, WI 54302
920-465-3230
cmcdonald@newbc.rr.com

Marine Museum

Wisconsin Maritime Museum

Rolf Johnson
75 Maritime Drive
Manitowoc, WI 54220
920-684-0218 ext 103
rjohnson@wisconsinmaritime.org

Marine Services

ARGO Technical Inspection Services

Arnold Gonzalez
Milwaukee, WI
414-964-1870
<http://argoinspect.com/>

Dave's Welding

Dave Fell
3304 West Pierce Street
Milwaukee, WI 53215
414-647-8950
daveswelding78@yahoo.com

Marine Surveyor

ABS Americas

253 North 1st Street

Wisconsin Commercial Ports Development Initiative (WCPDI)

Sturgeon Bay, WI 54235

920-743-9271

Inland Surveyors, Inc.

Daniel Boltz

1740 Colonial Lane

Northfield, IL 60093-8289

312-914-4721

danielboltz@comcast.net

Marine Surveyors Group

Stewart Hobbs

219-510-5177

USCG Marine Safety Detachment

57 North 12th Avenue #108

Sturgeon Bay, WI 54235

920-743-9448

Marine Transportation

Andrie, Inc.

Steve Stanek

561 East Western Avenue

Muskegon, MI 49443-1548

231-728-2226 ext 241

sstanek@andrie.com

Brennan Marine

Kent Pehler

818 Bainbridge Street

La Crosse, WI 54603

608-784-7173

kpehler@jfbrennan.com

Busch Marine

Gregg Busch

989-798-4794

Wisconsin Commercial Ports Development Initiative (WCPDI)

Calumet River Fleeting

Terry Doyle
10048 South Indianapolis Avenue
Chicago, IL 60617
773-721-1600
tdoyle@calriverfleeting.com

Celtic Marine

Tim Klein
6830 North Osceola
Chicago, IL 60631
773-774-2569
tklein@celticmarine.com

Ceres Consulting LLC

Vince Shu
3808 Cookson Road
East St. Louis, IL 62201
618-271-7903
vincses@ceresbarge.com

Dawson Marine Services

Glenn Dawson
219-395-8710
gvdawson@hughes.net

Five Lakes Marine Towing LLC

Nate Price
PO Box 11
Sturgeon Bay, WI 54235
920-493-2496
nateprice@fivelakesmarine.com

Great Lakes Towing Co.

Captain Dale Wiegand
100 West Mason Street
Green Bay, WI 54303
800-321-3663

Wisconsin Commercial Ports Development Initiative (WCPDI)

dalewiegand@sbcglobal.net

Great Lakes Towing Co.

Gregg Thauvette

1225 South Carferry Drive

Milwaukee, WI 53207

800-321-3663 ext 133

gat@the greatlakesgroup.com

MBLX

Steve Brooks

504-561-6211

steve.brooks@mblx.com

McKeil Marine Ltd.

Don Pitts

208 Hillyard Street

Hamilton, ON, Canada

905-528-4141 ext 226

dpitts@mckeil.com

Selvick Marine Towing Corp.

Sharon Opiela

212 Alabama Street

Sturgeon Bay, WI 54235

920-743-6016

slondo05@charter.net

Volunteer Barge & Transport, Inc.

Mark Hommrich

783 Old Hickory Boulevard, Suite 300

Brentwood, TN 37024

615-361-0330

markh@volunteerbarge.com

Washington Island Ferry Lines, Inc.

Dick Purinton

264 Lobdell Point Road

Washington, WI 54246

Wisconsin Commercial Ports Development Initiative (WCPDI)

920-874-2546

richard@wisferry.com

Pilotage

Western Great Lakes Pilots Association

Don Willecke

1111 Tower Avenue

Superior, WI 54880

715-392-5204

dwillecke@chartermi.net

Port Authority

Port of Green Bay

Dean Haen

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Green Bay, WI 54304

920-492-4953

haen_dr@co.brown.wi.us

Port of Milwaukee

Paul Vornholt

2323 South Lincoln Memorial Drive

Milwaukee, WI 53207

414-286-8130

paul.vornholt@milwaukee.gov

Port of Superior

Jason Serck

1316 North 14th Street, Suite 210

Superior, WI 54880

715-395-7335

sercki@ci.superior.wi.us

Rail Transportation & Motor Carriers

For individual railroad and motor carrier services, contact a vessel agent, freight forwarder, or one of the port authorities directly.

Wisconsin Commercial Ports Development Initiative (WCPDI)

Seafarers' Service

Seafarers' Ministry of Green Bay

Kent Schneider
2340 Old Plank Road
De Pere, WI 54115
920-499-0035
kenandiean@new.rr.com

Ship Broker

Project Transport & Trading, Ltd.

Andrew Dudley
157 Harwood Avenue North, Suite 112
Ajax, ON Canada
andrew@pttship.ca

Shipyard/Ship Repair

Bay Shipbuilding Co.

605 North 3rd Avenue
Sturgeon Bay, WI 54235
920-743-4439

Frasier Shipyards

Tom Curelli
1 Clough Avenue
Superior, WI 54880
715-394-7787
tjcurelli@frasershipyards.com

Johnson Controls, Inc.

Arthur Shelton
529 North Jackson Street, Suite M-75
Milwaukee, WI 53201
800-950-7539

Midwest Maritime Corp.

Thomas Balistreri

Wisconsin Commercial Ports Development Initiative (WCPDI)

PO Box 07195
Milwaukee, WI 53207
414-588-7784

Third Party Logistics

GENCO

Bob DeVos
1400 Lombardi Avenue, Suite 204
Green Bay, WI 54304
920-593-8942
devosb@genco.com

Peninsula Logistics

Alex and Peter Allie
1 Maritime Drive
Manitowoc, WI 54220
920-684-1545
acallie@comcast.net
pcallie@comcast.net

Schneider National

Tom Bartel
3101 Packerland Drive
Green Bay, WI 54313
920-592-2000
bartelt@schneider.com

Trinity Transportation Group/Aero Logistics

Rick Mueller
W4320 Artesian Road
Fond du Lac, WI 54937
920-907-6121
mueller@trinitytransgroup.com / rmueller@aerologistics.net

Unishippers

Wanda Sieber
1240 Main Street, Suite 2

Wisconsin Commercial Ports Development Initiative (WCPDI)

Green Bay, WI 54302
920-437-1055
wanda.sieber@unishippers.com

Vision Logistics

Dave Henry
9401 West Beloit Road
Milwaukee, WI 53227
414-750-7579
eyrish@sbcglobal.net

WOW Logistics

Sheryl Leitner
3040 West Wisconsin Avenue
Appleton, WI 54914
920-830-5302
sherylle@wowlogistics.com

Underwater Services

Advanced Diving

James M. Nilsson
2948 East Badger Way
New Harmony, UT 84757
866-237-3483
info@advanceddiving.org

Ballard Marine Construction

John Schue
3401 Knox Lane
Neenah, WI 54956
866-782-6750
infor@ballardmc.com

Edward E. Gillen Marine, LLC

Gary Jackson
10134 North Port Washington Road
Mequon, WI 53092

Wisconsin Commercial Ports Development Initiative (WCPDI)

414-763-0441

www.gillenco.com

Jerry's Mooring Service

Jerry Guyer

1103 West Oklahoma Avenue

Milwaukee, WI 53215

414-482-1430

www.len-der.com

Michels Foundations

16500 West Rogers Drive

New Berlin, WI 53151

262-938-6060

Underwater Construction Corporation

Griffin Eckert

2757 South 5th Court

Milwaukee, WI 53207

877-717-3483

geckert@uccdive.com

Visitor Centers

Bayfield Chamber of Commerce and Visitor's Bureau

David Eades

42 South Broad Street

Bayfield, WI 54814

715-779-3335 ext 12

david@bayfield.org

Greater Green Bay Convention & Visitors Bureau

Julie Gerczak

1901 South Oneida Street

Green Bay, WI 54307

920-405-1154

julie@greenbay.com

Wisconsin Commercial Ports Development Initiative (WCPDI)

Kenosha Area Convention & Visitor's Bureau

Deanna Goodwin
812 56th Street
Kenosha, WI 53140
262-654-7307
dgoodwin@kenoshacvb.com

La Crosse Area Convention and Visitors Bureau

Dave Clements
410 East Veterans Memorial Drive
La Crosse, WI 54601
608-782-2366
clements@explorelacrosse.com

Manitowoc Area Convention & Visitors Bureau

Jason Ring
4221 Calumet Avenue
Manitowoc, WI 54221
800-627-4896
jring@manitowoc.info

Sturgeon Bay Visitor & Convention Bureau

Todd Trimberger
36 South Third Avenue
Sturgeon Bay, WI 54235
800-301-6695
todd@sturgeonbay.net

Waste Disposal

AAA Sanitation

1334 Mid Valley Drive
De Pere, WI 54115
920-336-5409
info@aaasanitation.net

City Disposal Services, Inc.

Tim Inglese

Wisconsin Commercial Ports Development Initiative (WCPDI)

3330 West Highview Drive
Appleton, WI 54914
920-730-9500
tim@citydisposal.com

Deyo Disposal

7434 Schwahn Road
Greenleaf Road, WI 54126
920-864-5808
www.deyodisposal.com

Fox Shore Disposal

6164 Highway 57
De Pere, WI 54115
920-532-6360

Future Environmental

Cheri Milligan
3420 West Elm Road
Franklin, WI 53132
414-761-9421
cheri@futureenvironmental.com

Halron Lubricants, Inc.

1618 State Street
Green Bay, WI 54304
920-436-4000

International Garbage

Art Provencher
3239 North Green Bay Road
Racine, WI 53404
262-631-5620
service@battenairport.aero

Jet Air Group

2009 Airport Drive
Green Bay, WI 54313
920-498-7466

Wisconsin Commercial Ports Development Initiative (WCPDI)

OSI Environmental

Gary Schacht
4702 North 124th Street
Wauwatosa, WI 53225
262-278-4870
gschacht@osienv.com

Van's Waste

Jeff Vander Heiden
N2061 Vandenbroek Road
Kaukauna, WI 54130
920-735-9600
<http://vanswaste.com/>

Veolia Environmental Services

Julie Welch
N104 W13275 Donges Bay Road
Germantown, WI 53022
920-946-5160
julie.welch@veoliaes.com

Wisconsin Commercial Ports Development Initiative (WCPDI)

Appendix 3. Referenced Planning Documents

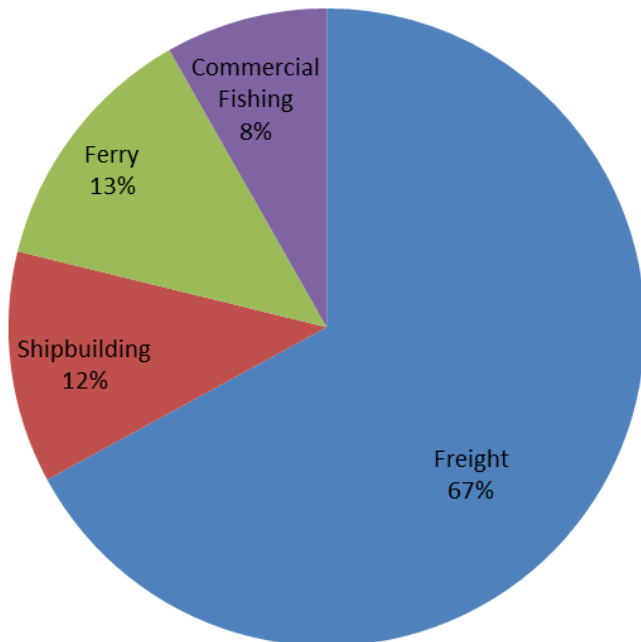
1. Algoma Comprehensive Plan (2003)
2. Ashland Comprehensive Plan (2004)
3. Ashland Waterfront Redevelopment Plan (2010)
4. Bayfield Comprehensive Plan (2001)
5. Bayfield Waterfront Plan (2003)
6. Cassville Comprehensive Plan (2009)
7. Cornucopia- Town of Bell Comprehensive Plan (2010)
8. Green Bay Strategic Initiatives (2010)
9. Kenosha Comprehensive Plan (2010)
10. Kewaunee Comprehensive Plan (2007)
11. La Crosse Waterfront Plan (2011)
12. La Pointe Comprehensive Plan (2006)
13. La Pointe Long Range Plan & Feasibility Study (2011)
14. Manitowoc Master Plan (2009)
15. Marinette Comprehensive Plan (2004)
16. Milwaukee Redevelopment Plan (2010)
17. Oconto Comprehensive Plan (2002)
18. Oconto Comprehensive Plan (2007)
19. Pensaukee Comprehensive Plan (2007)
20. Port Washington Comprehensive Plan (2010)
21. Prairie du Chien Comprehensive Plan (2010)
22. Prairie du Chien Waterfront Plan (2009)
23. Racine County Comprehensive Plan (2010)
24. Saxon Harbor Comprehensive Plan (2005)
25. Sheboygan County Comprehensive Plan (2010)
26. Sheboygan Master Plan (2014)
27. Sister Bay Comprehensive Plan (2010)
28. Sister Bay Waterfront Master Plan (2010)
29. Sturgeon Bay Comprehensive Plan (2010)
30. Suamico Comprehensive Plan (2005)
31. Superior Comprehensive Plan (2011)
32. Superior Land Use Plan (2003)
33. Two Rivers Comprehensive Plan (2010)
34. Washburn Comprehensive Plan (2007)
35. Washington Island Comprehensive Outdoor Recreation Plan (2011)

Wisconsin Commercial Ports Development Initiative (WCPDI)

Appendix 4. HAP Program Investments by Function and Port Class

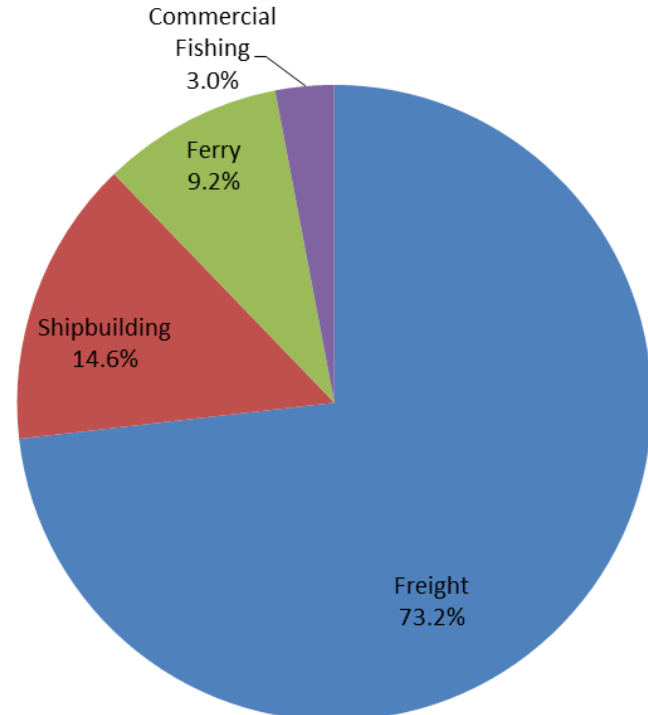
Wisconsin Commercial Ports Development Initiative (WCPDI)

HAP Projects



Harbor Assistance Program 1980-2013
(86 total projects funded)

HAP Total Grant Awards



Harbor Assistance Program 1980-2013
(\$138,558,876 total awarded adjusted in 2013 dollars)

Figure 28. HAP Projects and HAP Total Grant Awards by Type

Wisconsin Commercial Ports Development Initiative (WCPDI)

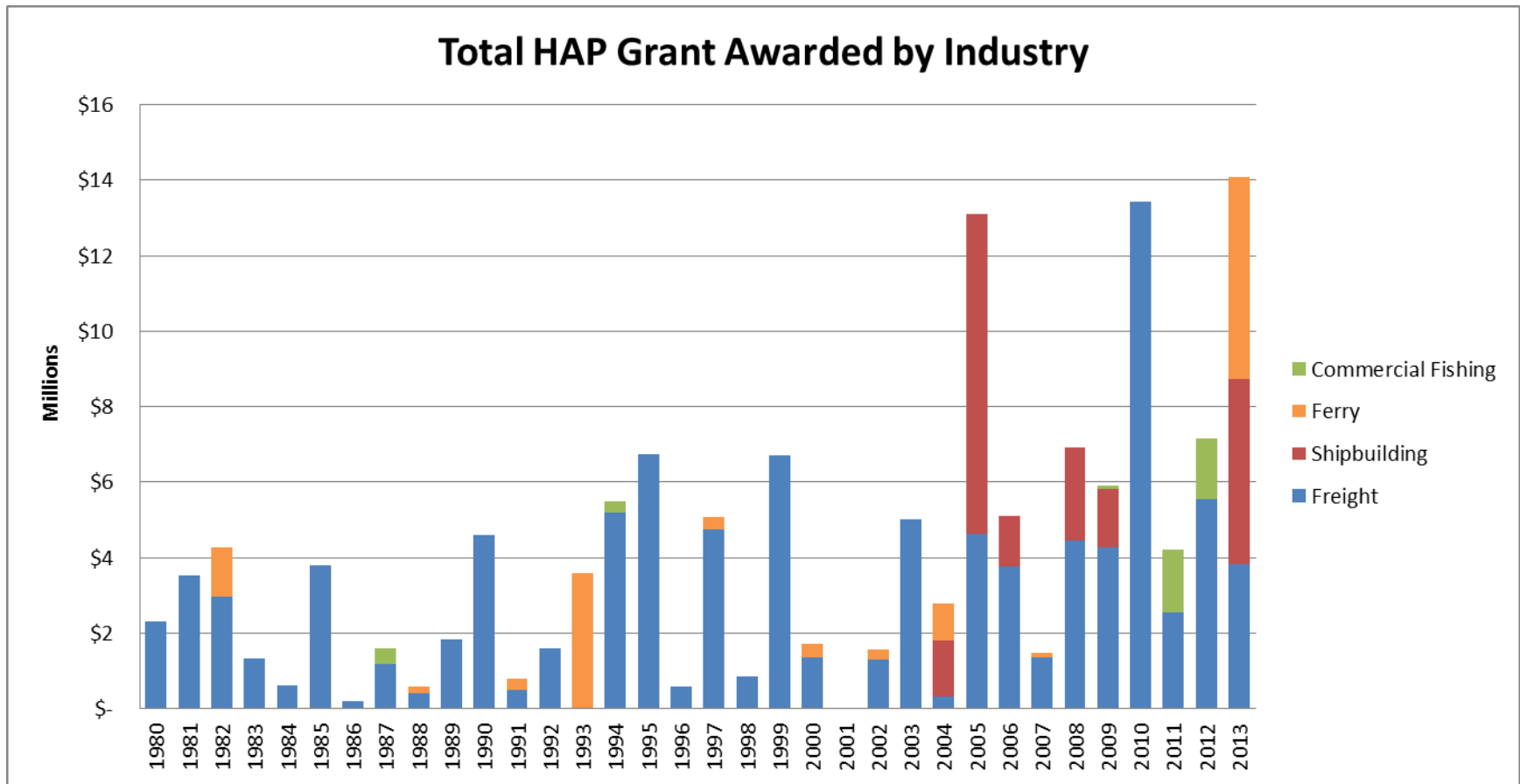


Figure 29. Total HAP Grants Awarded by Industry

Wisconsin Commercial Ports Development Initiative (WCPDI)

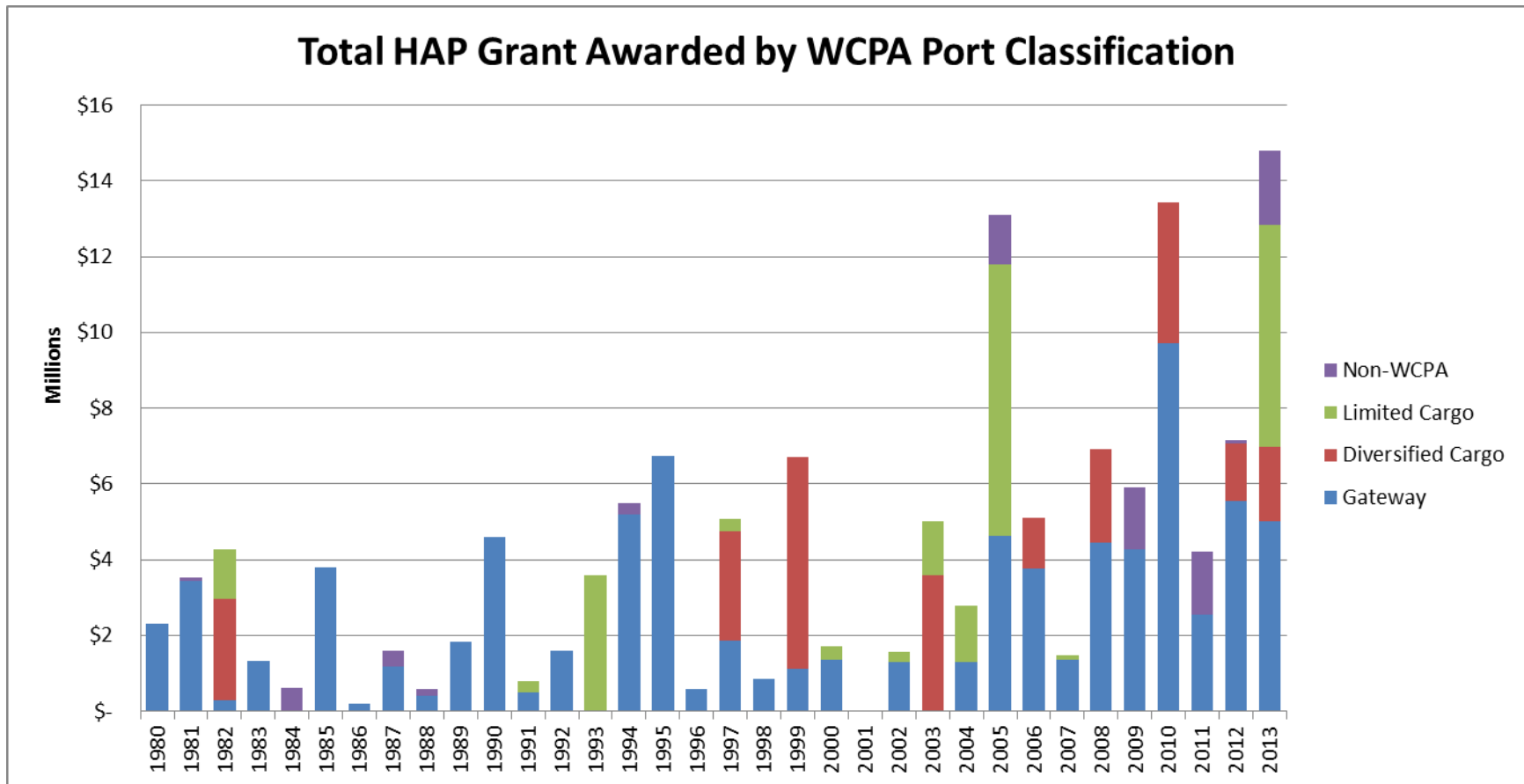


Figure 30. Total HAP Grants Awarded by WCPA Port Classification

Wisconsin Commercial Ports Development Initiative (WCPDI)

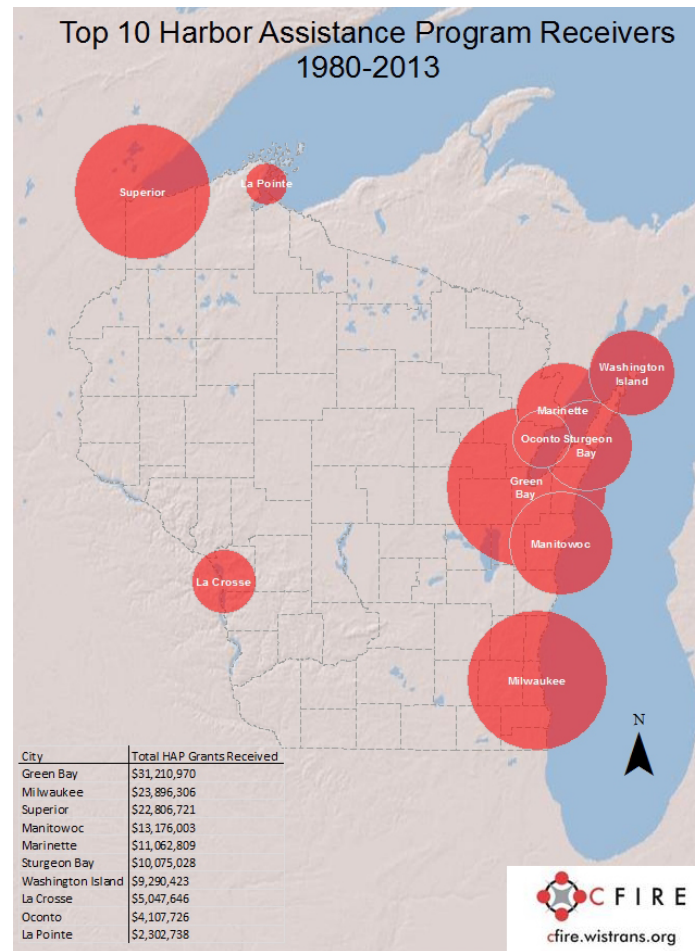


Figure 31. Top 10 Harbor Assistance Program Receivers 1980-2013

Wisconsin Commercial Ports Development Initiative (WCPDI)

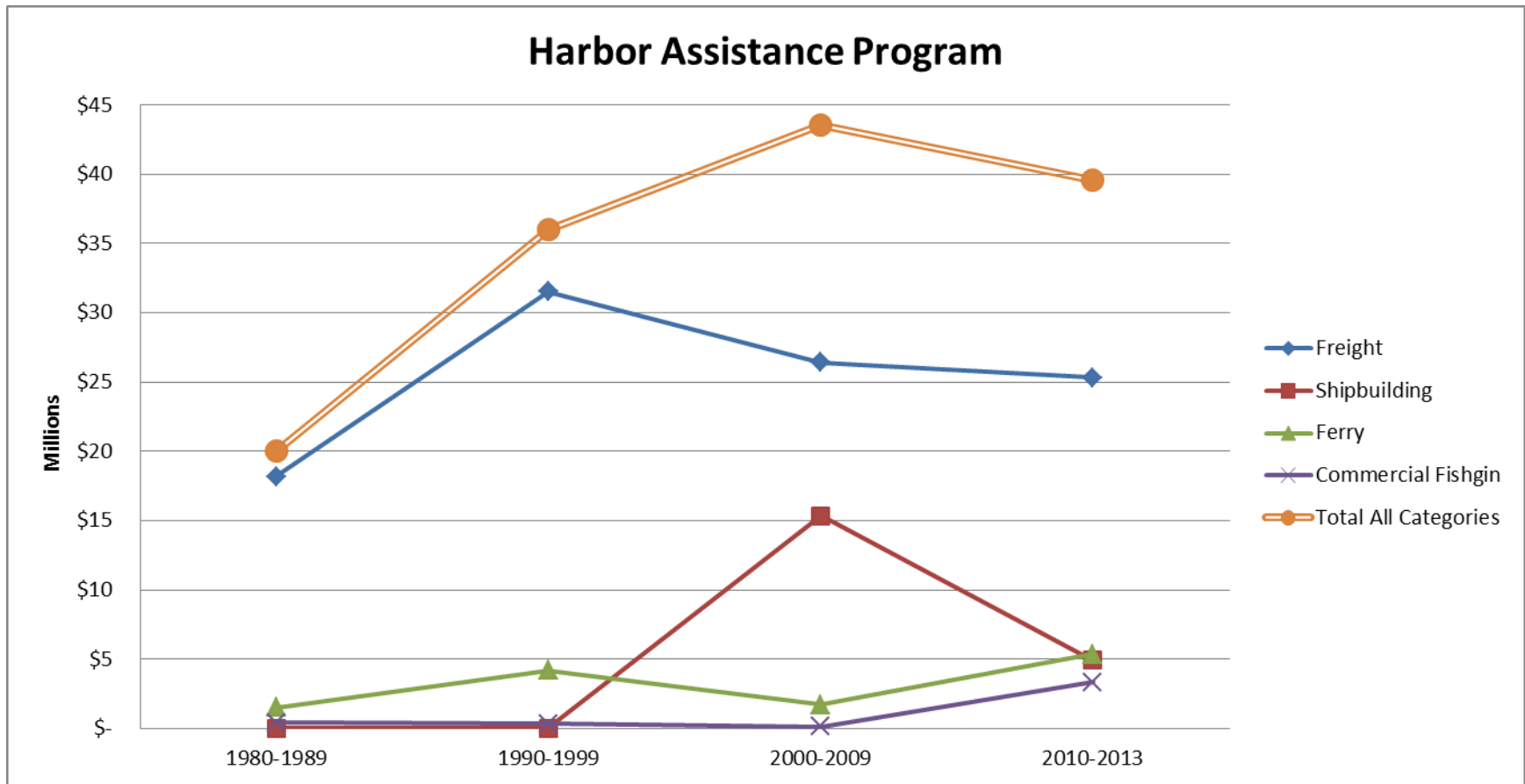


Figure 32. Total Grants Awarded by Decade (1980-2013)

Wisconsin Commercial Ports Development Initiative (WCPDI)

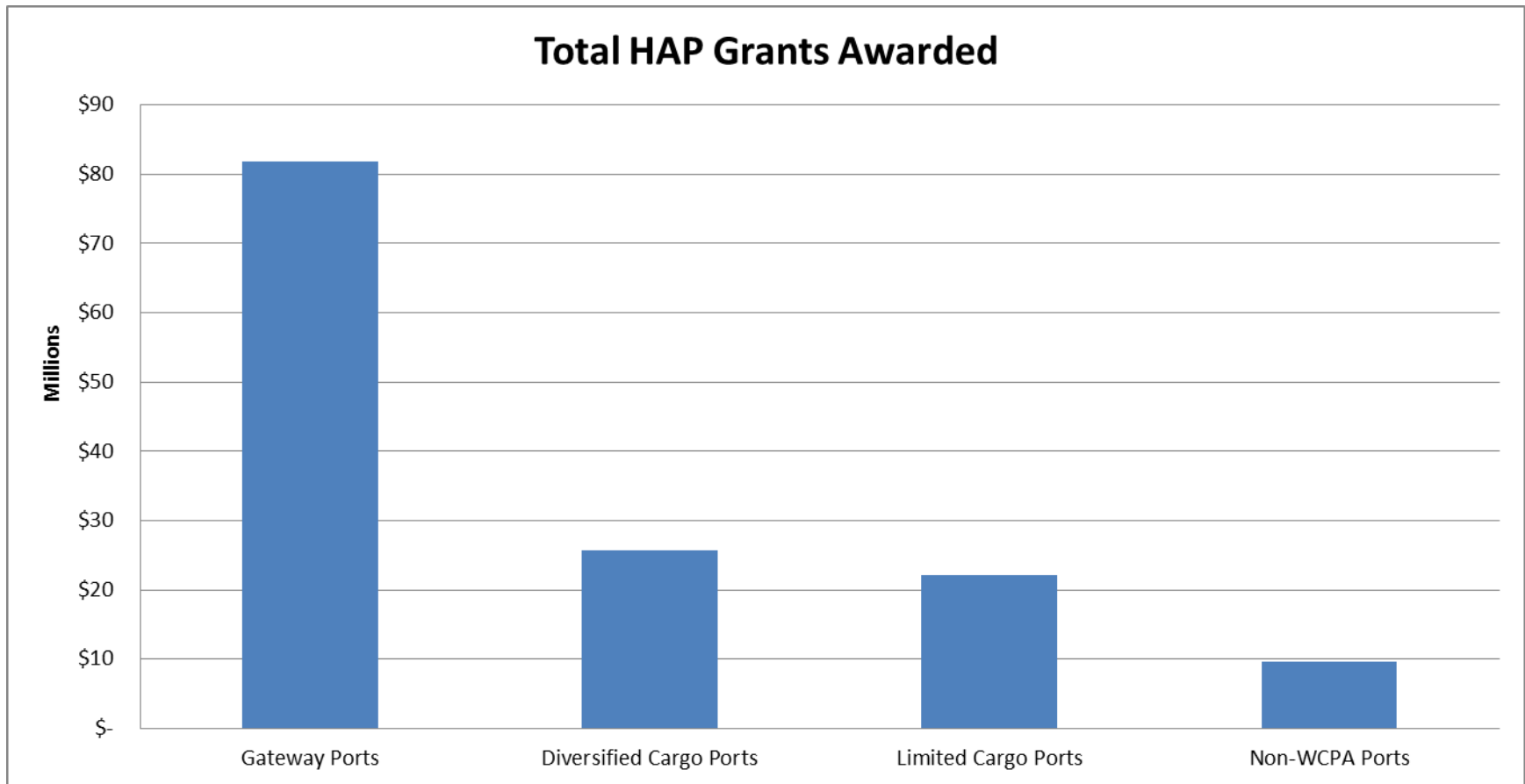


Figure 33. Total HAP Grants Awarded

Wisconsin Commercial Ports Development Initiative (WCPDI)

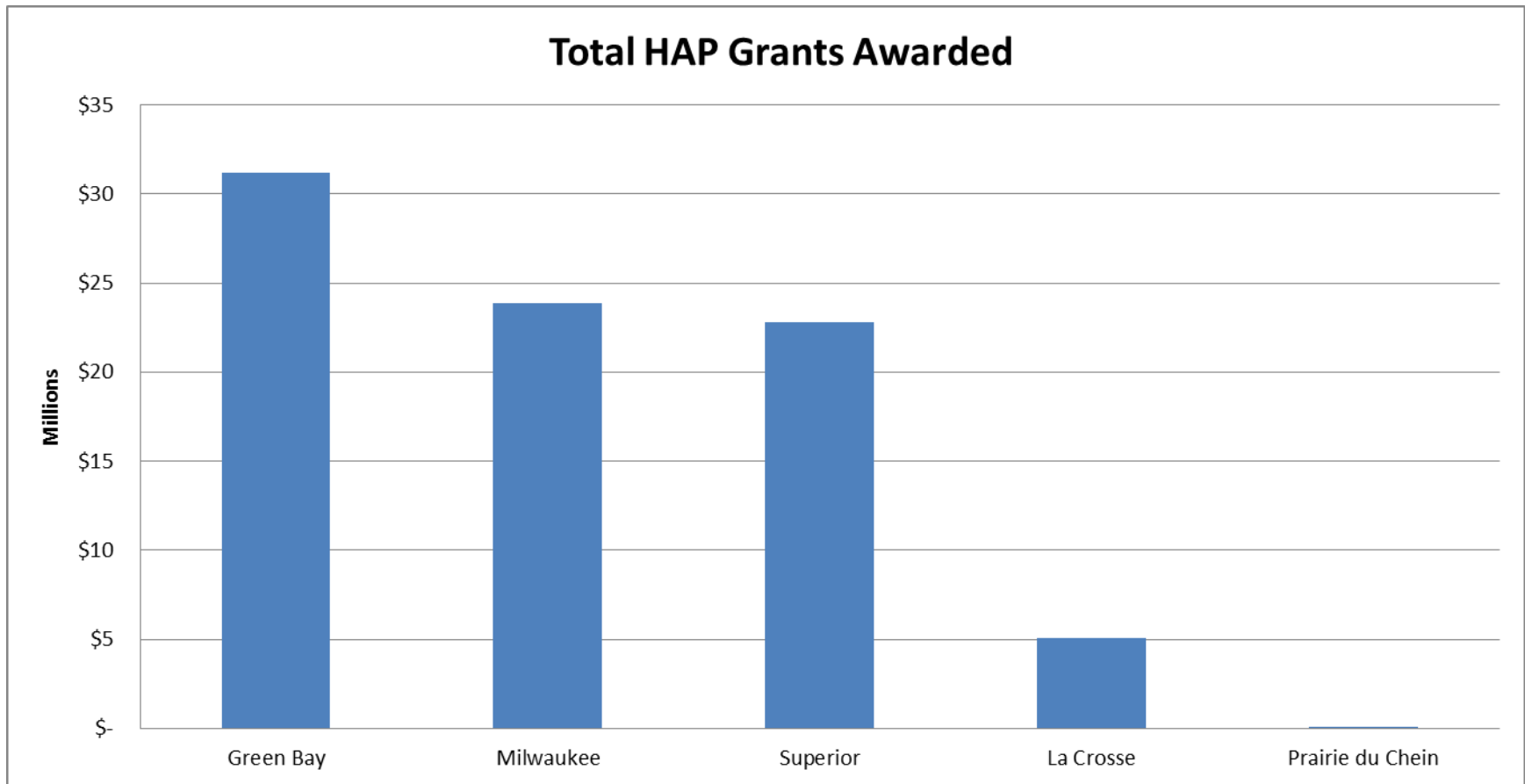


Figure 34. WCPA Gateway Ports 1980-2013: Funding Distribution Across WCPA Port Categories

Wisconsin Commercial Ports Development Initiative (WCPDI)

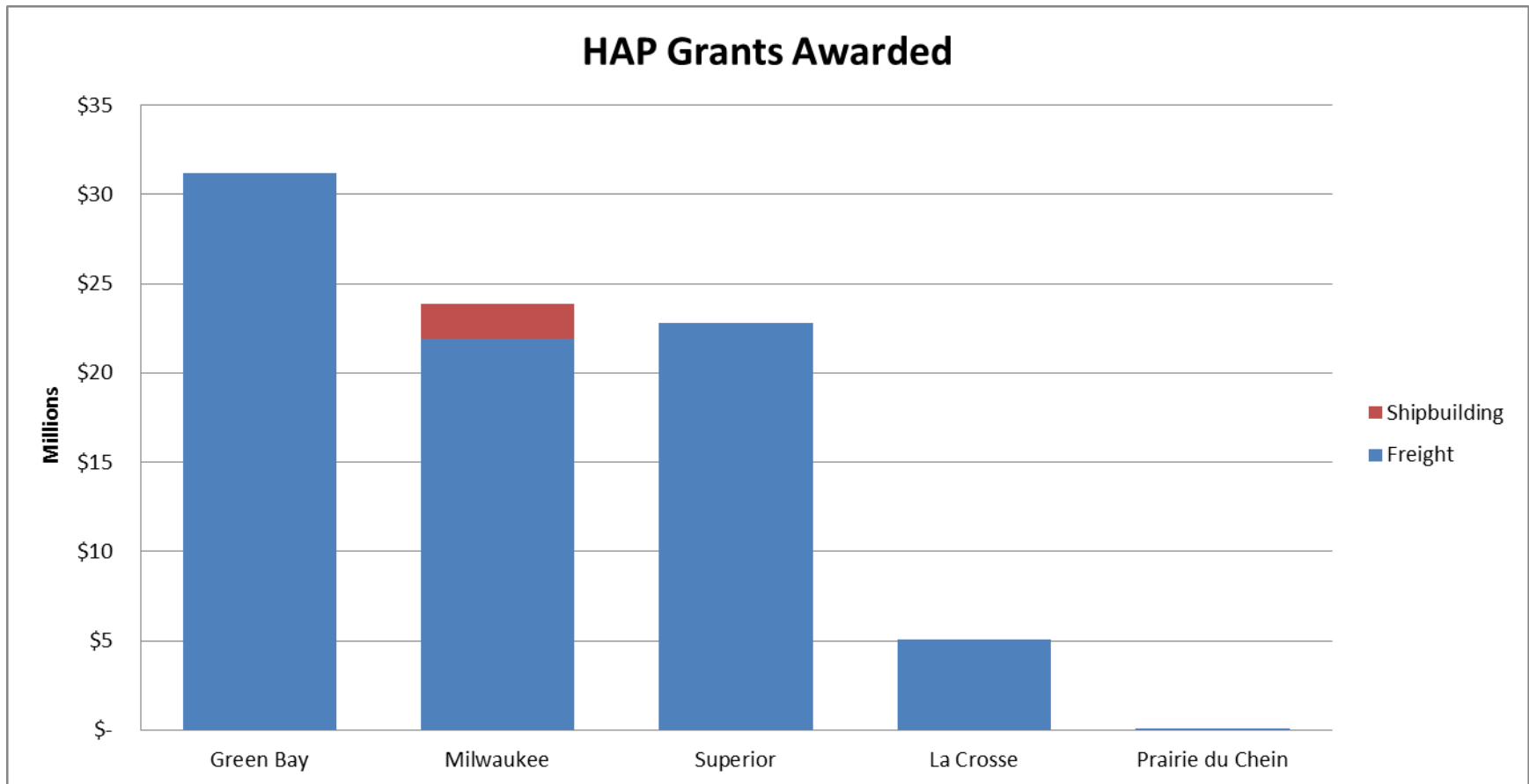


Figure 35. WCPA Gateway Ports 1980-2013: Funding Across Ports, Gateway Classification

Wisconsin Commercial Ports Development Initiative (WCPDI)

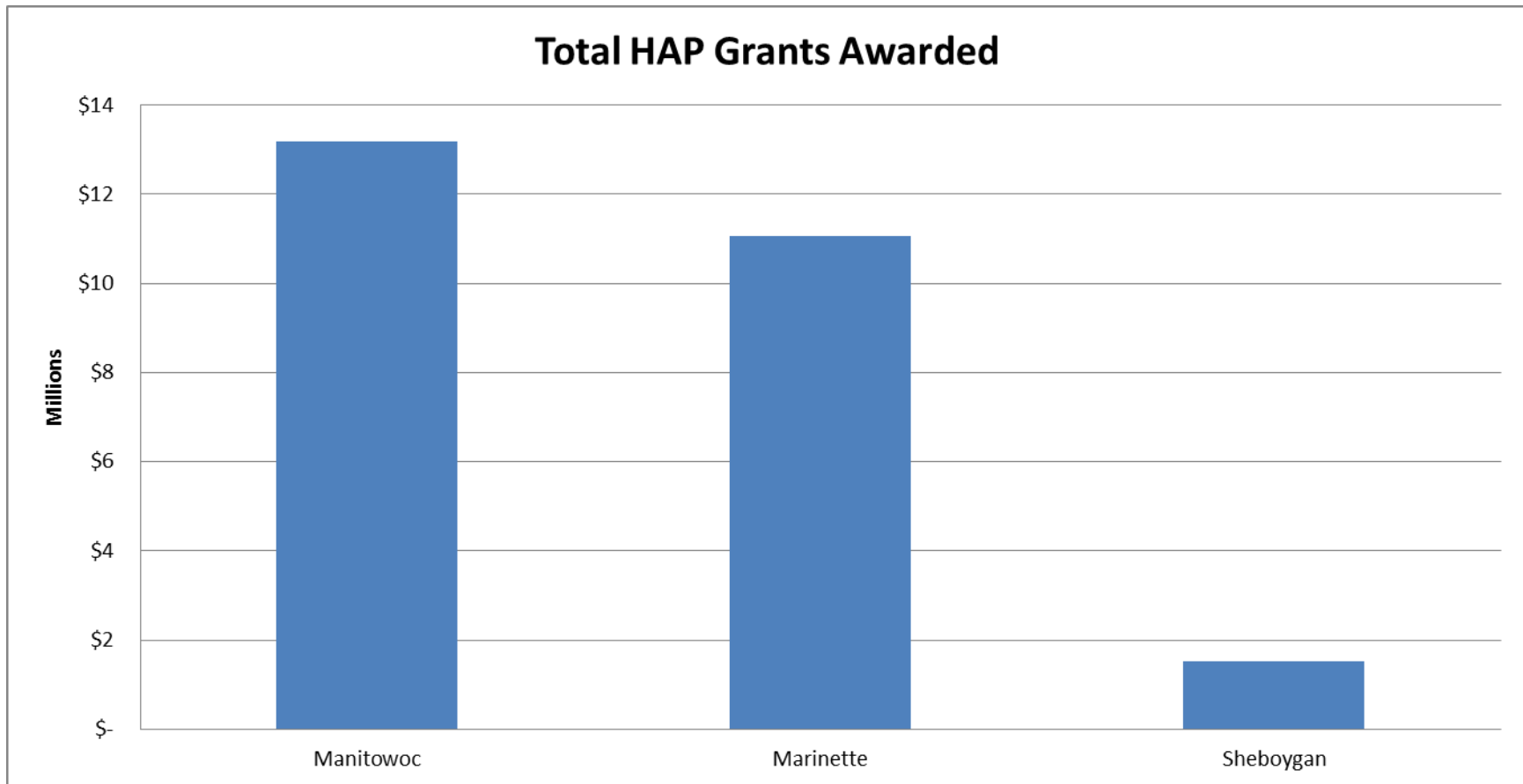


Figure 36. WCPA Diversified Cargo Ports 1980-2013: Funding Across Ports, Diversified Cargo Classification

Wisconsin Commercial Ports Development Initiative (WCPDI)

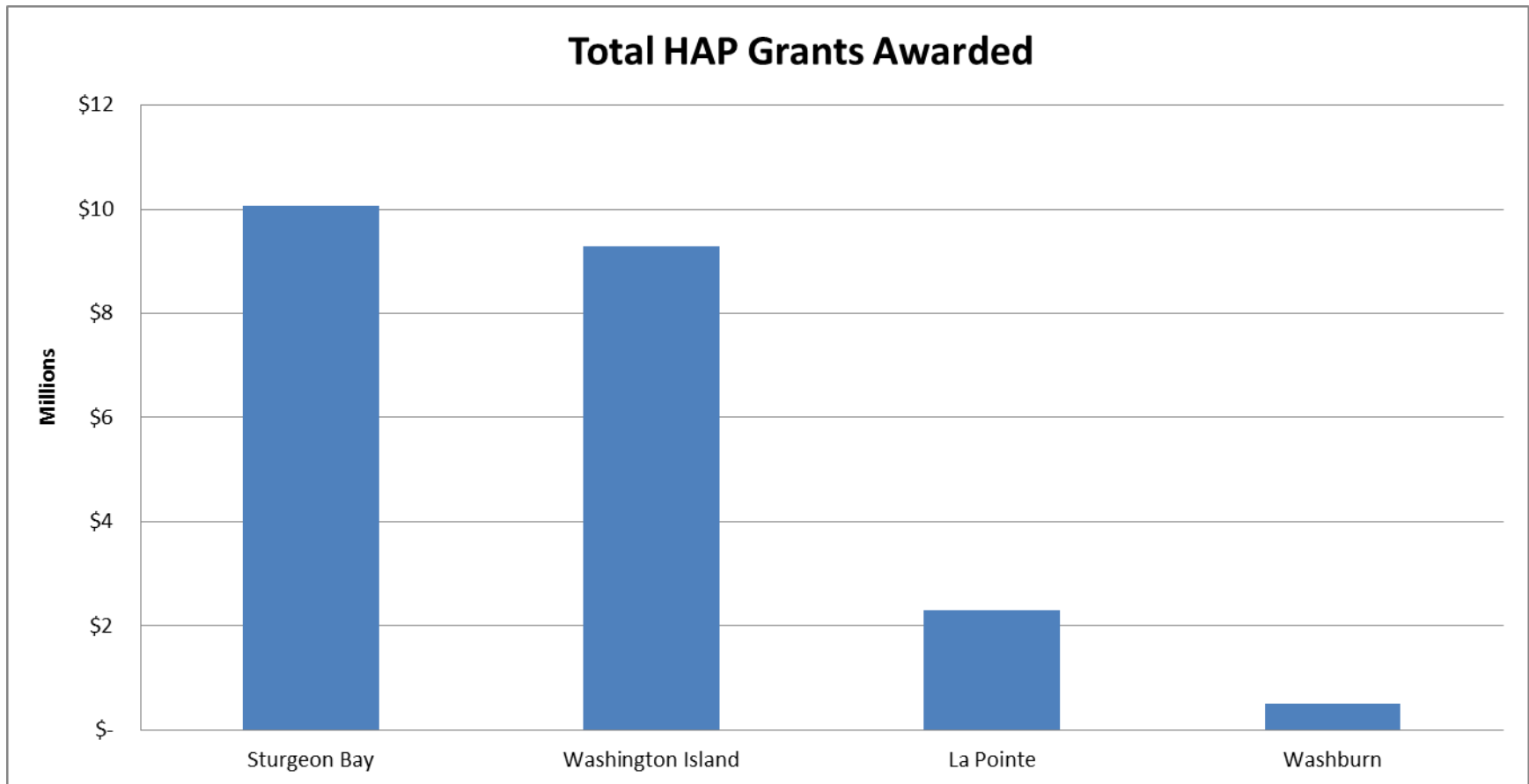


Figure 37. WCPA Limited Cargo Ports 1980-2013: Total HAP Grants Awarded

Wisconsin Commercial Ports Development Initiative (WCPDI)

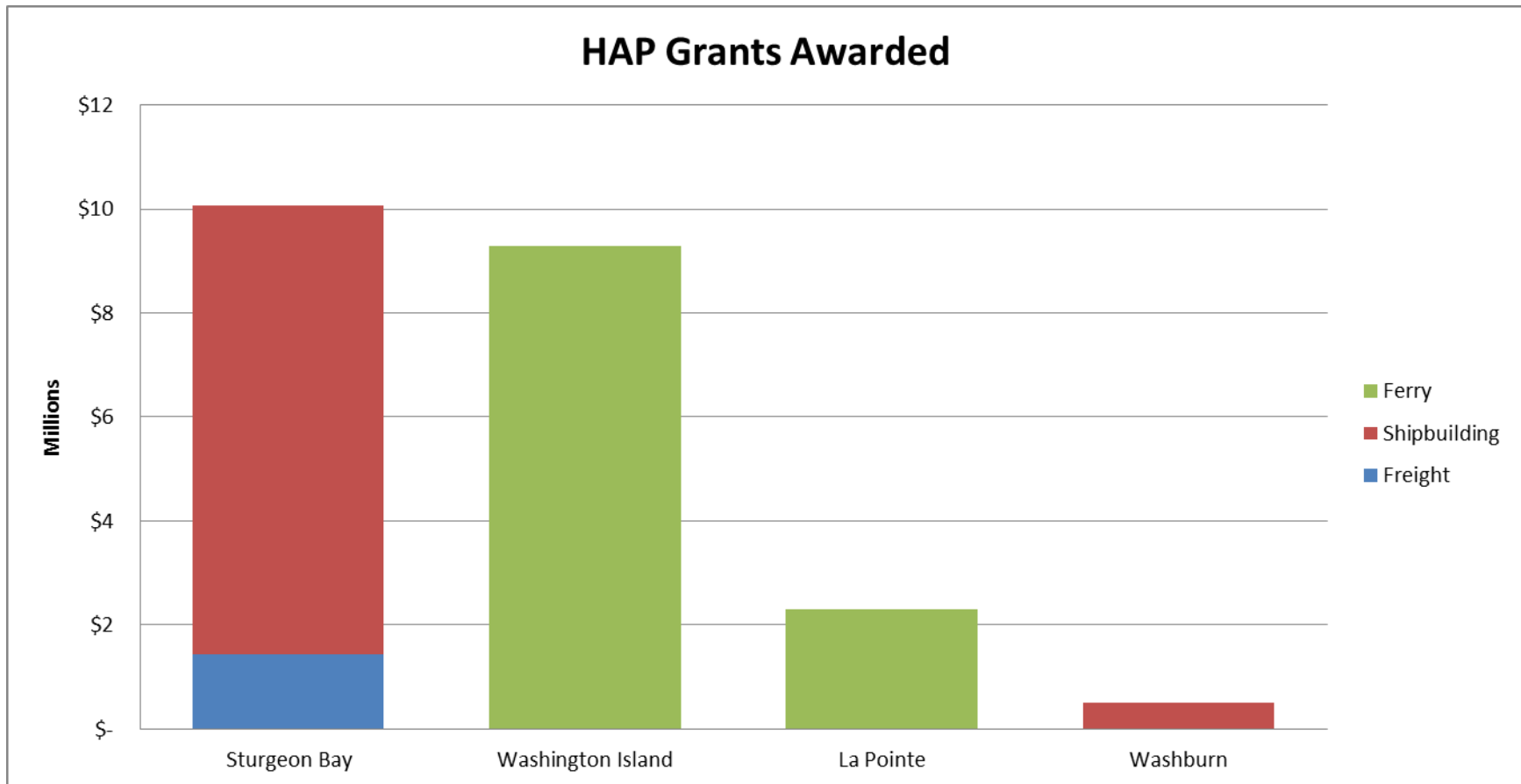


Figure 38. WCPA Limited Cargo Ports 1980-2013: HAP Grants Awarded

Wisconsin Commercial Ports Development Initiative (WCPDI)

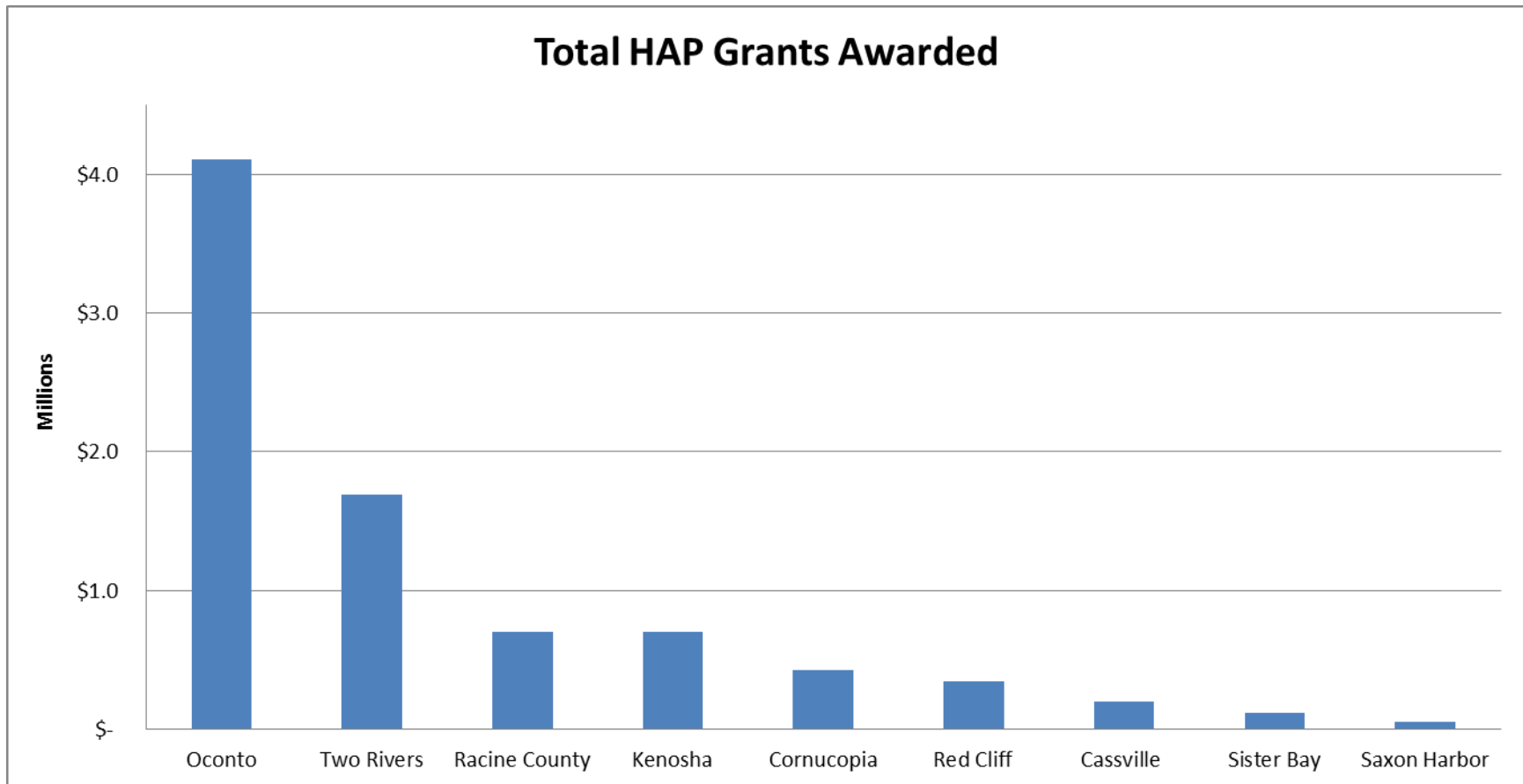


Figure 39. WCPA Limited Cargo Ports 1980-2013: Funding Across Ports, Limited Cargo Classification



CFIRE

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Department of Civil and Environmental Engineering
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Phone: 608-263-3175
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