

Summary of Activities:

Muskegon County had a wonderful opportunity to work with agricultural and infrastructure partners across the logistics sector because of the grant provided by The Corn Grower's Association. This partnership provided an opportunity for Muskegon County to partner with the Dutch Consulate and Erasmus University on the project. The partnership brought two masters level students from Erasmus University to Muskegon County to assist with the development of the market and logistics assessments needed to identify the feasibility of agricultural shipments potentially serviced through the Port of Muskegon.

Beyond the extensive research, both qualitative and quantitative, conducted by the students, Muskegon County has started the process of integrating the study findings into a comprehensive five-year implementation plan to help eliminate barriers and market strengths provided by the work of the students. Though more barriers than strengths identified, Muskegon County is much better positioned to address the barriers that will help to establish cross lake shipping to the Port of Chicago and into the river barging systems of the United States.

The students developed a common thesis from which each worked on focused topic areas. Mr. Sjoerd Raymans focused on the economic advantage that the Port of Muskegon could provide agricultural producers and processors. Mr. Chris Jan Weijzen focused on waterborne transportation models for agricultural commodities on the Great Lakes. Each focused on the following thesis statement:

"Does the Port of Muskegon have the potential to offer substantial transportation advantages for export flows via the Great Lakes for agricultural commodities in the state of Michigan compared to current, non-waterborne transportation practices?"

Included with the final report is both research assessments completed by the students from Erasmus University. Muskegon County is currently developing it's 5-year implementation strategy to eliminate identified barriers as well as move towards better understanding market capability of the Port as it relates to growers across the state of Michigan and the United States. Each of the students underwent review by all faculty advisors, and both have graduated from Erasmus University. Of note, Sjoerd is accepting a position working for a logistics hub that specializes in agricultural product movement across the world.

Economic Advantage Key Assessment Findings: this study focused on five corridors that all required a waterborne component from the Port of Muskegon. Europe Asia and New Orleans serve to be the destinations for all five routes.

Recommendations:

1. Implement a long-term pilot project with a Michigan producer to determine the actual costs and time it takes to use the Port of Muskegon for shipping of agricultural products.
2. Identify an organizational structure, either a Port Authority or similar organization to help market and focus strategic planning and economic development.

Significant Findings:

- Routes
 - Muskegon – Chicago
 - Muskegon - New Orleans
 - Muskegon – Canada - Asia
 - Muskegon – Quebec - Asia
 - Muskegon – Quebec - Europe
- Of the five corridors compared in the economic analysis
 - Two proved to have a small cost advantage when using the Port of Muskegon.
 - The same two also provide to have a transit time advantage as well.
- Unfortunately, the small cost advantage and the small transit time advantage did not make up for the 14% estimated switching cost identified by logistics specialists in the field.
- These cost advantages are only present when combined with high-value materials as well as agricultural products shipping in the same vehicle.
- Further research is necessary on mixed cargo models; there are very few in the United States.
- Further research on the emissions and road infrastructure costs associated with trucking agricultural products may prove more expensive in the long run.
- Value added branding for ecological and infrastructure friendly shipping alternatives may help to build the case for the Port of Muskegon for marketing.

Agricultural Product Shipping on the Great Lakes Findings:

Recommendations

1. Begin to eliminate barriers identified in the assessment to enhance the capacity to transport bagged cargo to the Chicago Area, accessing the Illinois-Mississippi River system.

2. Further, investigate the environmental impact of road infrastructure costs and carbon emissions to determine a value-added market that is more environmentally favorable.

Significant Findings:

- Main agricultural commodities present on the Great Lakes: corn, soybean, and wheat.
- Though processing is an opportunity, there is more of a shipping demand for bulk grains and oilseeds.
- Marketing targets to large grain trading houses already in operation as a development partner for a new load line with barge service from the Port of Muskegon to the Chicago area.
- Road conditions and congestion on both rural road/highway and rail systems all provide an opportunity for alternative shipping through the Port of Muskegon.
- The Port of Muskegon is not proximal to growers in Michigan, which give Ports on the east side of the state a better opportunity to ship commodities.
- Michigan produced agriculture is bogged down by the highly-congested rail and roadway systems in Chicago requiring significantly longer transit times.
- Limitations to the exchange with the Chicago area, via barge to the Illinois-Mississippi River system have been:
 - Load line routes in Lake Michigan for Barge services is not prohibited by the US Coast Guard, a barrier that needs addressing as soon as possible.
 - Charges and fees for things like pilotage, tolls, and harbor maintenance taxes hamper competitive advantage and development of new or added shipping capacity by water.
 - Shipping season is limited because of maintenance schedule of the locks and winter ice breaking.

Next Steps:

As Muskegon County presents this information to the public, stakeholders and funders, it's important to note that marketing and business development plans are taking shape. After receiving assessments in late November, Muskegon County is working diligently at those marketing and business development opportunities that have presented within the assessments.

Muskegon County will begin marketing the Port of Muskegon to large Grain Houses, as well as target marketing to include potential development investment to accommodate any terminals that may be needed. Muskegon County will also be focusing more on the bulk break cargo capacity of all materials by containerized shipping format, rather than just one commodity or type of cargo. Muskegon County is also focusing on developing a

marketing effort to create a small pilot project with a local, West Michigan producer to demonstrate and measure the effectiveness of shipping from the Port of Muskegon.

Muskegon County is also framing a business development plan that helps to reduce the barriers outlined in the assessments provided by Erasmus University students. The most pressing business development issue is eliminating the load line limitation to Chicago by the United States Coast Guard. If the Port of Muskegon can access the Illinois-Mississippi River System through Chicago, safely and effectively, the Port of Muskegon will certainly focus on developing that line of logistics.

Both the marketing and business development plans are currently in rough draft format. The Port Advisory Committee did not meet in December and results from assessments, and draft materials were not available in November. Muskegon County will have those plans completed by January 31, 2017. Those reports will be due to Corn Grower's Association at that point.