



Foreign Trade Zones: An Economic Opportunity

Alex Marach, CFIRE Research Intern

\$534 billion of goods entered US foreign-trade zones (FTZ) in 2010 (Foreign-Trade Zones Board, 2012). MAFC FTZs accounted for \$98 billion or 18.4 percent of the total US value received by FTZs in 2010. FTZs receive inputs from both domestic and foreign sources, but use US labor to turn inputs into final products. The MAFC has the transportation network to support FTZs and much of the MAFC is FTZ eligible. The MAFC has the opportunity to use FTZs to encourage economic development through the use of US labor.

FTZs by law are located adjacent to a port of entry (POE). A POE is a designated area where a customs officer is authorized to accept entries of merchandise, collect duties, and enforce customs and navigation laws (19 C.F.R. § 101.1, 2012). POEs are typically border crossings, airports, or water ports.

FTZs come in two forms, general purpose zones (GPZ) and subzones. GPZs may have multiple companies using a single site and are usually located at a POE or an industrial park. Subzones are approved for a single company use when a general purpose zone cannot accommodate the user. Subzones are typically manufacturing facilities and are located at company manufacturing facilities. Adjacency for a GPZ is defined as a location within 60 miles or 90 minutes of driving time by US law. Adjacency for a subzone is reliant on the subzone meeting supervision requirements from Customs and Border Protection (15 C.F.R. § 400.2, 2012).

FTZs confer tariff benefits on the user and exist to encourage foreign commerce (15 C.F.R. § 400.1, 2012). FTZs increase the number of options available to users when applying tariffs to imports. For instance, FTZ users are able to choose when to pay a tariff on a good. Some products have an inverted tariff structure where components have a higher tariff than the finished product. Inverted tariffs incentivize the use of American workers to assemble products. For example, a Chattanooga, TN, Volkswagen factory saved \$13 per car or \$1.9 million annually from inverted tariff savings (Bolle and Williams, 2012). Similarly, if an imported good is destroyed during the production process there is no

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Benefits to FTZ Users

Zone users can choose to pay a tariff on the final product when it exits a FTZ or pay tariffs on the inputs.

No duty is due if a good is re-exported out of the FTZ, scrapped, or destroyed in a FTZ.

Zones eliminate the need to apply for duty drawback when a good is imported and then re-exported.

Products can be transferred zone-to-zone without paying a duty.

FTZs allow the user to file a weekly entry reports and pay a single processing fee rather than individual fees for each entry.

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Water: our history, our future?

Ernie Perry, MAFC Program Manager



When I started writing this article, I knew I wanted to talk about water resources but wasn't exactly sure which direction to take or which marine freight issues to address. There are such a wide variety of issues that I could address: invasive species, flooding, fracking, drought—I could have several messages about our waterways and their role in freight movement.

My message could be that there are more and more demands on our waterways than ever and it appears from all accounts that the variety and intensity of the demands will only increase. We are all aware of increasing freight loads and the potential to use the waterways, but what about the increasing population levels that require more drinking water, or the reoccurring idea of piping the water from the Missouri River to the arid west, or new demands such as mining with hydraulic fracturing in the Dakotas, or increased recreational uses? All of these water uses appear legitimate, so who gets to decide how we use our water resources and what is their planning horizon? Can and should navigation be a DOT issue and be funded and managed as an integrated part of the total transportation system?

Or my message could be that lake levels and river levels seem to be fluctuating more and more with extreme weather. Declining Great Lake levels threaten ports and declining river levels threaten the barge industry. Shutting down the barge industry costs not only the tow businesses, but all of society. Here's a conservative and hi-level perspective. The Iowa DOT estimates that one barge carries about 52,500 bushels of grain. For example, using Missouri corn at \$7.35 a bushel, one barge load carries about \$385,875 worth of corn. A six-barge tow would carry over \$2 million dollars in corn and a 42-tow barge south of St. Louis on the Mississippi would carry about \$16 million in corn. The current drought across the Midwest is also causing major problems. According to the Iowa Farm Bureau, "two-and-a-half billion dollars worth of freight that would move during the winter and early spring months is at jeopardy of being shut down if the channel is not maintained with enough flow to get barges through it." And let's remember: that isn't just grain or fertilizer waiting to be shipped. It's also a barge crew without work, a small

town grain elevator laying off people over the holidays, and processors reducing crews to match reduced supply of raw materials. This system is important to the agricultural economy of the Midwest.

My message could also be that we are not investing in this low-cost natural freight system. As freight advocates we know that many of our lock systems are past their prime and need work. Dam maintenance and dredging are behind and underfunded and threaten port operations, channel depth, and even communities. Our waterways policy has created a cycle of degradation for our freight waterway system. The cycle progresses as follows: as the system ages and we do not invest in innovation or maintenance, the performance and reliability of the waterway system degrade. And as reliability degrades freight moves to other modes. As waterway investments are based on tonnages moved, fewer tons means less opportunity for investment. Less investment allows the system and reliability to degrade even further and more freight moves from our waterways to the rails or highways. A declining system is not considered worthy of further investment. We have created a self-perpetuating cycle of devolution in our marine systems that can only make sense from a very narrow point of view.

We could also talk about other water-related issues and consider how fortunate we are in the Midwest, where we are bounded and served by ample lakes and rivers while 900 million people across the planet are facing shortages of fresh drinking water. The wealth and health of nations is predicated upon water, but we seem to be—to our own embarrassment—falling ever farther behind in our ability to manage this system and the resources it provides.

So what is my message? Water and waterways serve a wide variety of needs and wants. The demand for water for all these uses will only increase. The MAFC region contains about 31 percent of the inland river system and good portion of the Great Lakes. This is a tremendous economic asset. We need to make plans, decide on societal priorities, and put our plans to work on these waterways before someone else does. This is our backyard—and our front yard. And we will need more than the traditional metricized, project prioritization approach to fix these problems and solve these conflicts. We need to approach transportation systems as community and economic development systems that have tremendous impacts on our lives. We need a broad-based systems approach to addressing transportation investments, maintenance, and

even the prioritization of the activities for which the water will be used. And importantly, our region should be taking the lead on these efforts to understand and sustainably develop our waterways. We have the most to lose should the system or water supply degrade, or when others prioritize it for us.

Wishing you the best in the New Year and Happy Holidays!

Zelle Appointed MnDOT Commissioner

Minnesota Governor Mark Dayton has appointed Charlie Zelle to be the new MnDOT Commissioner, effective January 15, 2013.

Zelle is president and CEO of Jefferson Lines, which provides travel services in 13 Midwestern states. His family founded the company in 1919. It serves more than 60 Minnesota cities and specializes in connecting rural areas to destinations across North America.

He currently serves as the chairman of the Minneapolis Regional Chamber of Commerce, a member of the Corridors of Opportunity Policy Board and a member of the Minnesota Chamber of Commerce board of directors. He also is a board member and chairman of the policy committee of the American Bus Association, and he has served on the executive committee of the University of Minnesota Center for Transportation Studies.

Zelle succeeds Tom Sorel, who resigned on December 1 to be the CEO of AAA Minneapolis.

Rayman to Lead FHWA Freight Management and Operations

The Federal Highway Administration (FHWA) recently selected Caitlin Hughes Rayman to serve as the FHWA's Office of Freight Management and Operations. She will succeed Tony Furst, who now serves as FHWA's Associate Administrator for Safety.

"We are fortunate to have Ms. Rayman take the lead for freight at FHWA," said MAFC program manager Ernie Perry. "Ms. Rayman brings the state DOT freight development experience to her new position and has demonstrated innovation and openness in her work. The time is right for advancements in freight policy, funding, planning, and operations and we look forward to working with Ms. Rayman at FHWA."

Rayman is currently the Assistant Secretary for Transportation Policy and Freight at the Maryland Department of Transportation, where she has served since 2007. At the Maryland DOT, she was responsible for overseeing the development and implementation of legislation and policies aimed at improving multimodal freight transportation.

Before joining the Maryland DOT in 2007, she served as the federal legislative programs coordinator for North Carolina DOT, where she worked on freight mobility issues. Rayman is a member of the American Association of State Highway and Transportation Officials' Standing Committee on Rail Transportation and an active member of the Coalition for America's Gateways and Trade Corridors (CAGTC).

For more information, visit the [FHWA Office of Freight Management and Operations](#).

Making the Most of MAP-21



Transportation for America has just released a handbook to help policy makers and transportation stakeholders understand and implement Moving Ahead for Progress in the 21st Century (MAP-21), the recently enacted federal surface transportation legislation.

Making the Most of MAP-21: A Guide to the 2012 Federal Transportation Law — And How to Use it for Positive Change in Your Community features both narrative chapters and two-page explainers on the key features of the new program, from the consolidated highway program to the new transportation alternatives, as well as new financing options.

For more information or to download the handbook, visit the [Transportation for America MAP-21 resources](#).

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tariff due when the product is scrapped (Bolle and Williams, 2012). Therefore, companies will use FTZs as research facilities if they would otherwise pay high import tariffs on the research materials.

FTZs employed roughly 320,000 or about 3 percent of U.S. manufacturing workers in 2010. Also, 12 percent of all foreign goods entered the United States through FTZs in 2010 (72nd Annual Report of the Foreign-Trade Zones Board, 2012). Table 1 displays the role of FTZs in the MAFC and compares the MAFC to the US. The MAFC has a large number of POEs considering many of the member states are not on a border where POEs are clustered. As of 2010 only 24 of MAFC POEs had either an active GPZ or subzone as defined by The International Trade Administration (ITA) reporting an adjacent GPZ or subzone receiving goods.

Many of the active POEs have multiple GPZs or subzones federally defined as adjacent to the POE.

Additionally, each MAFC state uses GPZ and subzones at different levels. Table 2 breaks out the POEs, GPZ, subzones, and the value of goods received by each MAFC state. Nearly every state has more value received in subzones than GPZs. ITA notes that the trend in FTZs is companies utilizing subzones more than GPZs (Foreign-Trade Zones Board, 2012).

The MAFC has numerous POEs which covers a large portion of the MAFC in the 60 mile buffer where GPZs reside. Additionally, the distance from a POE to a subzone can be much larger. For instance John Deere & Company operates a subzone that is approximately 98 linear miles from the Des Moines, IA airport POE. Figure 1 uses 2010

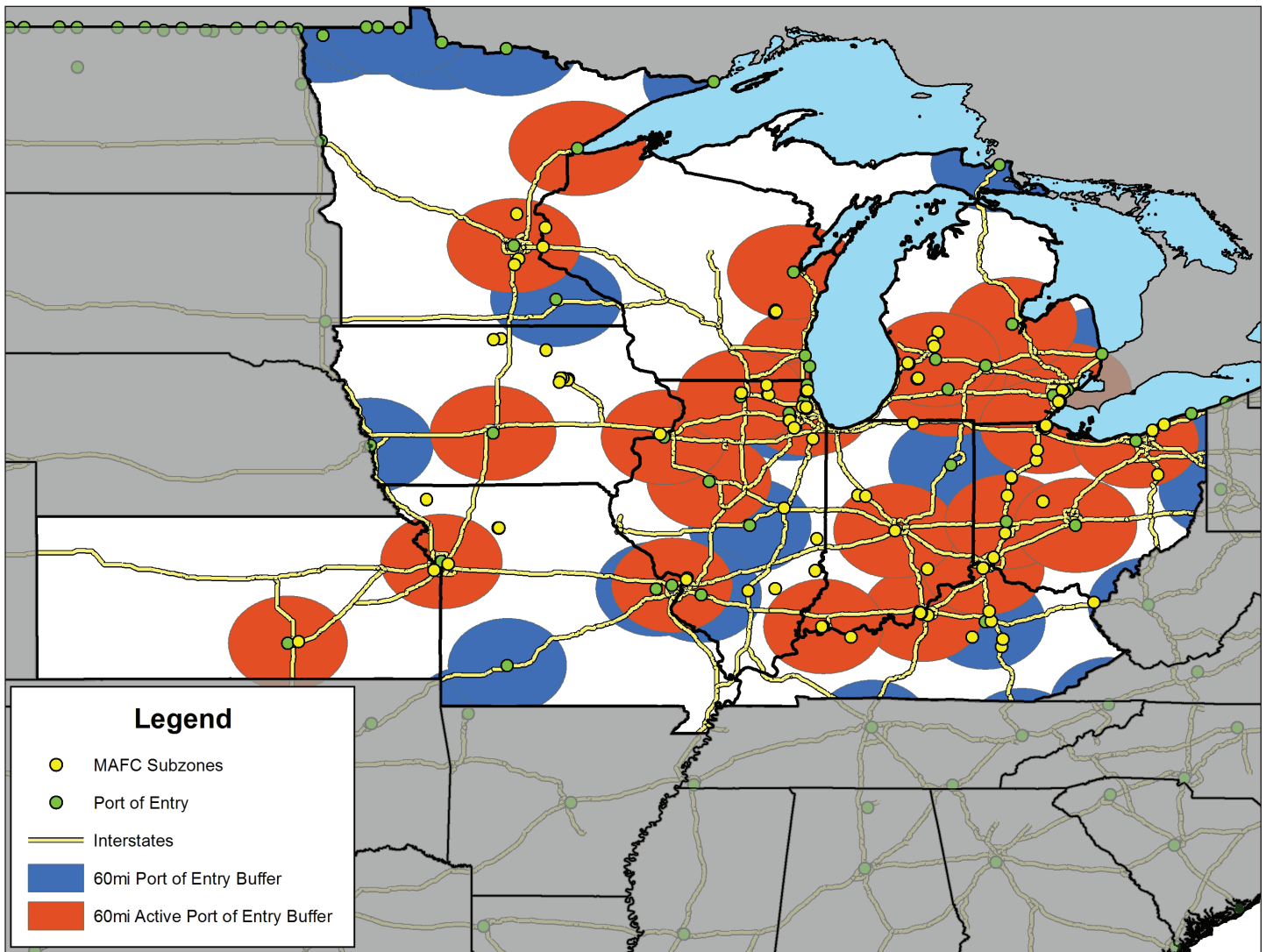


Figure 1

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data from the ITA and Customs and Border Protection to map US POEs with 60 mile buffers. The map shows displays orange buffers around POEs that have an active GPZ or subzone associated with the POE. In contrast the blue buffers do not contain an active GPZ or subzone and represent an opportunity for states to encourage businesses to utilize the benefits of a GPZ or subzone. Some POEs may have a GPZ or subzone within 60 miles, but the zone shown is not legally associated with that POE. Therefore, goods are imported through a different POE that may be further away from the manufacturing or distribution facility.

Overall, FTZ status offers benefits to importers of foreign goods and promotes economic development in the state where the FTZ resides. Furthermore, the MAFC's location and access to multiple transportation modes creates an attractive environment for companies. State and local

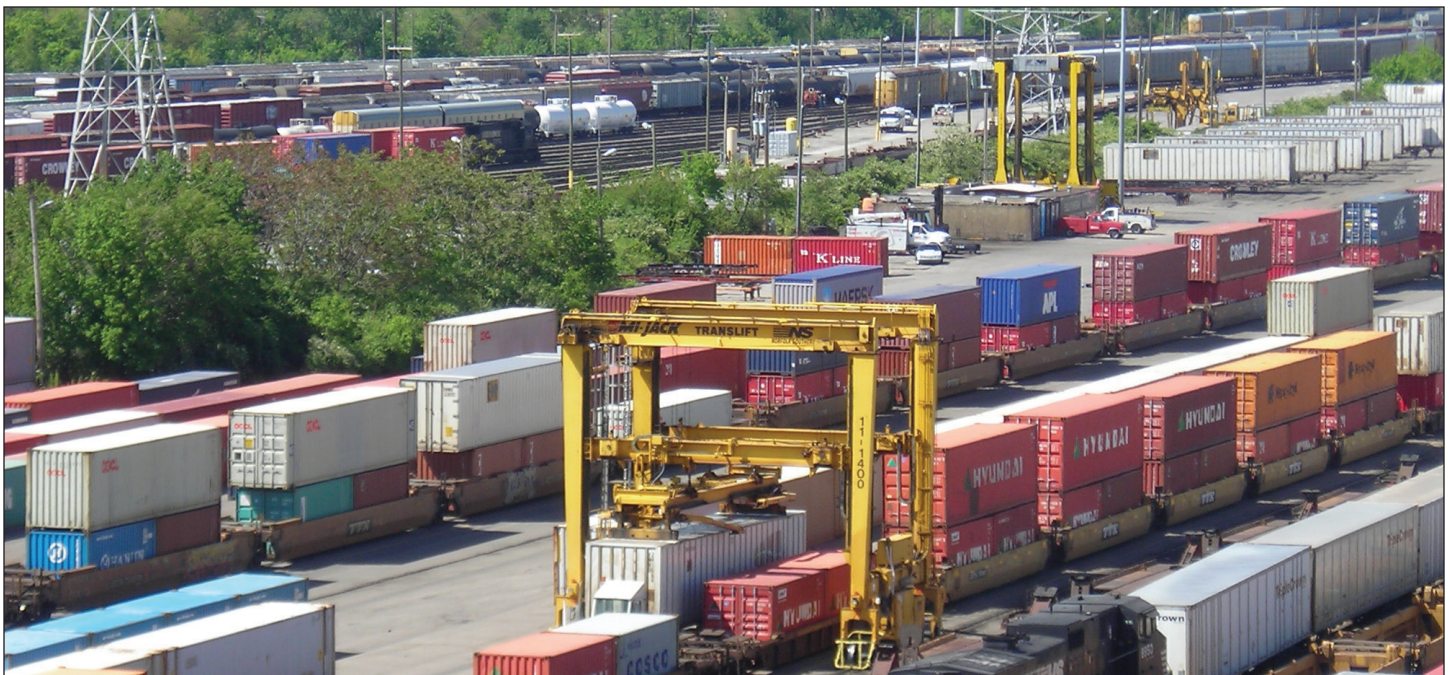
MAFC economic development organizations should be aware of local POEs, FTZs, and subzones to attract businesses and enhance the economic competitiveness of their state.

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Table 1

	Port of Entry	Active General Purpose Zones (2010)	Active Subzones (2010)	Total Value of Received Shipments (Billions)
MAFC	47	24	51	\$98
United States	329	132	263	\$534
MAFC as a Percentage of the United States	14.3%	18.2%	19.4%	18.4%



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Table 2

	Port of Entry	Active General Purpose Zones	Total Value Received (Millions)	Active Subzones (2010)	Total Value Received (Millions)
Illinois	9	3	\$6,416	10	\$22,587
Indiana	3	2	\$1,096	5	\$5,880
Iowa	1	-	-	3	\$340
Kansas	1	2	\$19	2	\$1,229
Kentucky	3	2	\$3,088	8	\$19,957
Michigan	8	4	\$3,406	6	\$5,058
Minnesota	10	2	\$532	2	\$36
Missouri	4	2	\$490	3	\$585
Ohio	5	6	\$3,153	9	\$23,682
Wisconsin	3	1	\$0.4	3	\$382
MAFC Total	47	24	\$18,203	51	\$79,740



Wood Pellets in High Demand in the EU

C. Bryant Dudley, CFIRE Project Assistant

In 2009 the European Union (EU) ratified the Renewable Energy Directive, which outlined three objectives for member states to meet by 2020:

1. Increase renewable energy consumption to 20 percent of total energy consumption;
2. Reduce total energy consumption by 20 percent;
3. Reduce greenhouse gas (GHG) emissions by 20 percent.

These initiatives, especially those that focus on renewable energy consumption and emissions, provide an opportunity for expansion of the renewable energy market. The EU is scheduled to release details about required certifications for importers of renewable energy products by the end of 2012.

According to the Environmental Defense Fund, the EU is the world's largest consumer of wood pellets at 10.4 million tons per year. Projections suggest that the EU will require between 16 million and 60 million tons of imported wood pellets to carry out the goals of the Renewable Energy Directive (Joudrey, 2012).

Wood pellets are scraps of wood that are transformed to a high density and low moisture content (usually under 10 percent). Pellets burn hotter (reducing their harmful

emissions) and are more economical to transport. The demand for wood pellets is driven by 1) a nation's reliance on fossil fuels, 2) the need to address the effects of climate change, 3) the need to improve energy security and independence.

The United States currently produces only 1.8 million tons per year. Eighty percent of domestic wood pellets are consumed in the United States, mostly in residential heating applications in the Northeast. In addition, the United States only uses 66 percent of its capacity for producing wood pellets. In comparison, Canada exports 90 percent of their domestic supply, primarily to the EU.

Although the annual production of wood pellets in the United States is small in comparison to the needs of the EU, this market is growing steadily, doubling in capacity every 2-3 years since 2001 (Spelter, 2009). In 2009, nearly 800,000 tons of wood pellets were produced in Midwestern states.

The EU Renewable Energy Directive could create an opportunity for economic growth for the states of the Mid-America Freight Coalition, many of which have wood pellet production facilities.

This export market, which includes three distinct end-user segments—industrial power plans, smaller scale district heating or CHP plants, and residential heating—is only likely to grow as the shift to more renewable forms of energy continues. Producers, exporters and shippers in the MAFC region could benefit from this trend.

References

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Wood pellet production facilities (Spelter, 2009)

2013 MAFC/ITTS/KYTC JOINT ANNUAL FREIGHT MEETING



BUILDING PATHS TO PROSPERITY: THE ROLE OF REGIONAL CORRIDORS

Sessions and Events

- State and MPO Working Sessions
- Freight Planning and Performance Measures
- Global Economic Implications for Freight
- Perspectives on MAP-21
- Industry Trends and Perspectives
- Practical Approaches to the New Economy
- Regional and Local Planning Approaches
- Tours of Kentucky Freight Facilities
- MAFC and ITTS Partner Sessions

The CFIRE-sponsored Summit on the Beneficial Use of Dredging Materials will also be held in conjunction with the 2013 MAFC/ITTS/KYTC Joint Annual Freight Meeting.

For updates about this event, visit midamericafreight.org/events/2013am/

LOUISVILLE, KENTUCKY ■ MARCH 12-14, 2013

For more information about this conference, contact Ernie Perry (MAFC) at ebperry@wisc.edu or Bruce Lambert (ITTS) at bruce@ittsresearch.org.

MID-AMERICA - SOUTHEAST FREIGHT CORRIDORS Critical to the Regions, Critical to the Nation

MID-AMERICA REGION

- Economic output... 3.2 trillion
- Population... 79 million
- No. of firms... 1.4 million
- Miles of highways... 1,197,185
- Miles of interstates... 11,423

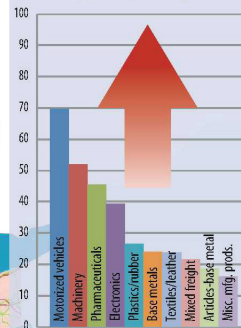
SOUTHEAST REGION

- Economic output... 2.9 trillion
- Population... 68 million
- No. of firms... 1.3 million
- Miles of highways... 1,029,893
- Miles of interstates... 11,362

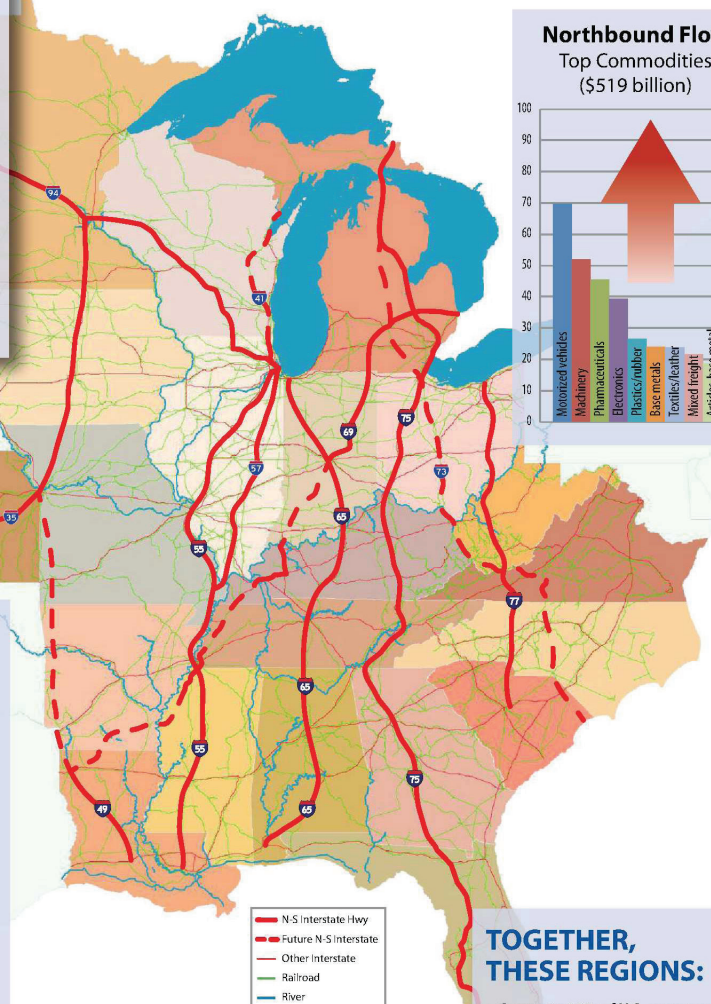
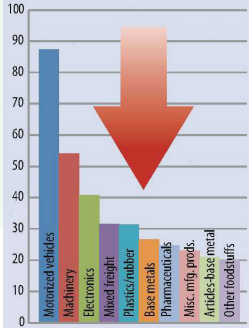
TRADE WITH CANADA

- Canada is largest trading partner for most states in region, especially with auto-producing states.
- Exports through Mid-America border crossings equaled \$123 billion in 2011.
- 19% came from the Southeast: (\$22 billion).

Northbound Flow Top Commodities (\$519 billion)



Southbound Flow Top Commodities (\$586 billion)



TOGETHER, THESE REGIONS:

- Generate 41% of U.S. economy
- Produce 38% of domestic energy
- Grow 48% of America's agriculture
- Ship 40% of the nation's exports
- Make 50% of U.S. manufacturing

TRADE WITH SOUTHEAST GATEWAYS

- The Mississippi River serves as a major export gateway for agricultural products, but other gateways are just as important.
- Southeast gateways handled \$244 billion in export trade.
- \$32 billion (13%) had a Mid-American origin.

The Mid-America freight coalition member states include:
Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Ohio, Wisconsin

ITTS member states include Arkansas, Alabama, Florida, Georgia, Kentucky, Louisiana,
Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia

Kentucky estimates are included in each regional summary, but are not double counted in the total figure.

U.S. Coal Exportation: A New Frontier

C. Bryant Dudley, CFIRE Project Assistant

The demand for coal in the United States has declined sharply since 2008. Much of this decline is driven by the decreased use of coal for power generation, which has dropped from nearly half to just under a third. This trend is likely to continue: 20 percent of coal-burning power plants in the United States are scheduled for permanent closure in the coming years (Figure 1) (Soward, 2012). The low cost of natural gas, new EPA regulations, and a slowing demand for electricity all contribute to the decline in the use of coal for power generation.

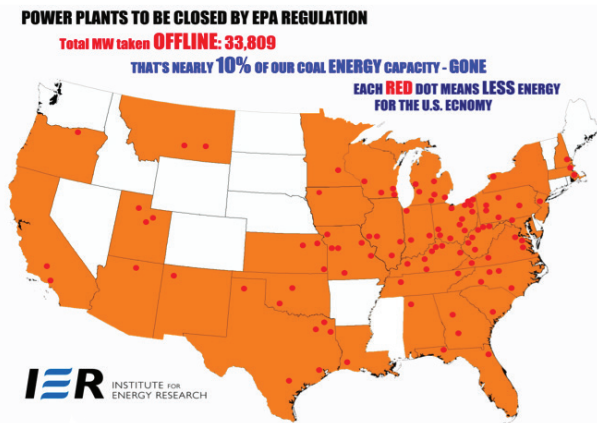


Figure 1 (Source: Institute for Energy Research, 2012)

China's coal imports have increased by a factor of 60 over the past decade. The bulk of this coal comes from Australia, which also supplies much of China's iron ore. The US Energy Information Administration predicts that China will account for more than 88 percent of the increase in worldwide coal consumption by 2030 (Figure 2) (Con, 2011).

U.S. coal producers—particularly those in the Powder River Basin—are currently looking to shift from supplying the declining US market to exporting coal to the emerging Asian market. This shift from supplying domestic markets to exports will also cause a shift in the movement of rail-borne coal, particularly on rail lines operated by BNSF and Union Pacific in the Midwest and Western areas of the United States (Colman, 2012).

The direct impact to the MAFC region could prove to be stifling. According to a US Energy Information Administration Carload Waybill sample,* six of the ten states within the region receive at least 96 percent of their coal directly from the Powder River Basin (Sample, 2008). With the plausible combination of Powder River Basin coal being exported to Asia and the decline in the demand of

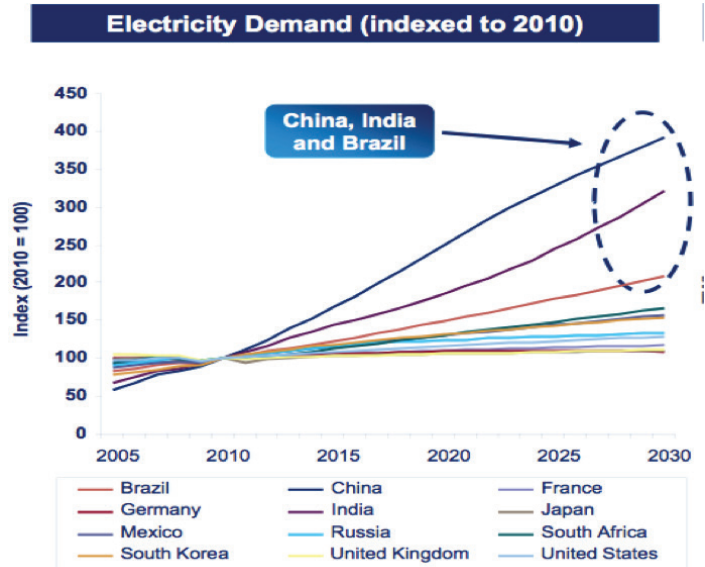


Figure 2 (Source: Roberts, 2012)

coal powered electric facilities in the Midwest, there could be disruptions in the freight transportation both to and from the MAFC region and the Powder River Basin route lines in the future.

* Note: A waybill can include one or more train cars and a train can include one or more waybills.

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Save the Date!



Summit on the Beneficial Use of Dredged Materials Turning a Surplus Material into a Commodity of Value LOUISVILLE, KENTUCKY – MARCH 14-15, 2013

ABOUT THE SUMMIT

This summit will explore the use of dredged materials in state transportation projects and in other beneficial ways, as both a sustainable dredging strategy, and an opportunity to utilize a readily available commodity.

CONFERENCE THEMES

- Economic impact of the disposal problem
- State of the art of the beneficial use
- Beneficial use in practice
- Opportunities for departments of transportation

WHO SHOULD ATTEND?

The summit is open to all interested attendees, but focuses on issues important to state department of transportation engineers, including chief engineers, materials engineers, and geotechnical engineers.

- Federal and state policy and regulatory perspectives
- Tools for finding available dredged materials
- The future of beneficial use of dredged materials



For more information about this summit,
visit cfire.wistrans.org/events/dredging/

You are invited to the
2013 Wisconsin Transportation Reception
 During the TRB Annual Meeting



HOSTED BY



Sunday, January 13, 2013

5:30 p.m.—7:30 p.m.

Marriott Wardman Park Hotel
 Thurgood Marshall Ballroom East
 2660 Woodley Road, NW
 Washington, D.C.

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- UW Traffic Operations and Safety Laboratory
- Great Lakes Maritime Research Institute
- Wisconsin Highway Research Program
- Recycled Materials Resource Center
- Construction and Materials Support Center
- Wisconsin Concrete Pavement Association
- Wisconsin Transportation Builders Association
- CH2M Hill
- Collins Engineers
- ITS—Wisconsin
- Lakeside Engineers, LLC
- Mead & Hunt
- TransSmart Technologies

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Mid-America Freight Coalition
midamericafreight.org



The Mid-America Freight Coalition (MAFC) is a regional organization that cooperates in the planning, operation, preservation, and improvement of transportation infrastructure in the Midwest. The ten states of the AASHTO Mid-America Association of State Transportation Officials (MAASTO) share key interstate corridors, inland waterways, and the Great Lakes. The MAFC is funded by the National Center for Freight & Infrastructure Research & Education and the DOTs of the ten member states.