

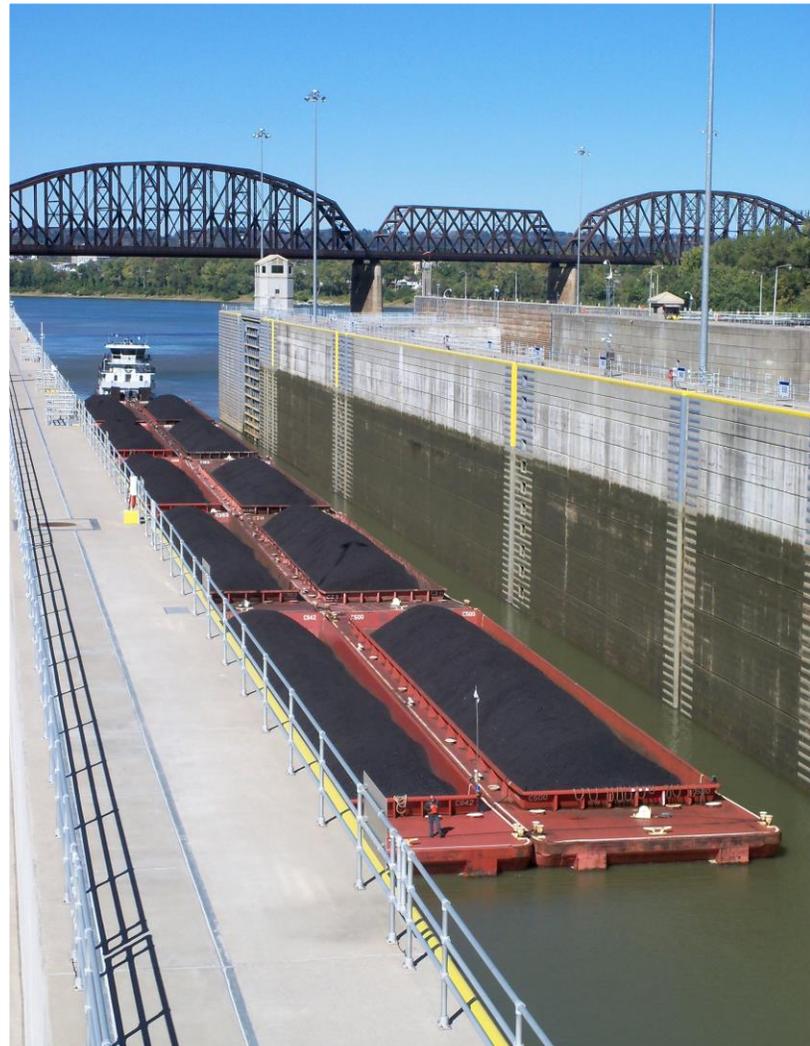
Summary of Freight Summit #2

Kentucky Summit on the Economic Development Strategies to Leverage Kentucky Riverports & Freight Network

March 2021



**KENTUCKY RIVERPORTS, HIGHWAY
& RAIL FREIGHT STUDY**





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1. INTRODUCTION

The Kentucky Transportation Cabinet (KYTC) and Kentucky Cabinet for Economic Development (CED) held the second summit for the *Kentucky Riverports, Highway and Rail Freight Study* during March 24-26, 2021. Titled *Second Kentucky Summit on Economic Development Strategies to Leverage Kentucky Riverports and Freight Network*, the virtual summit provided an opportunity for the project team to engage with port leaders, economic development staff, industry representatives, and other stakeholders to focus on opportunities to leverage the riverports, highways, and rail system to promote economic development.

Seven sessions were held over three days. Sessions ranged from 45 minutes to two hours, and expanded on the following topics:

- Opening Session
- 2021 Changes in Federal Transportation and Trade Policies
- What's New in the Neighborhood? Updates from Adjacent State Riverports
- Forecasting the Future of Kentucky's Freight Economy
- How Will the Future of Freight Impact Other Modal Operations?
- Freight Infrastructure Needs and Kentucky's Funding Process
- Economic Development and Riverport Markets

The event was publicized via email invitations to key stakeholders and associations, with announcements on the project website¹ and social media. Over 124 participants registered with 133 unique attendees between the seven sessions.

A future third summit will provide updates on technical analyses and continue to engage with interested parties. All three summits will be documented in a separate technical memorandum.

Baseline Survey

Prior to the summit, a survey was sent to registered attendees to gauge the audience's interests and understand their background to tailor panelist and moderator content. Minimal responses were received.

¹ <https://transportation.ky.gov/MultimodalFreight/Pages/Kentucky-Riverports%2C-Highway-and-Rail-Freight-Study.aspx>

Report Organization

The following sections describe key content from each session. Recordings and meeting materials are accessible via the study website and KYTC's YouTube channel².

2. SESSION 1: OPENING

Wednesday, March 23, 2021 at 10:00 AM Eastern

Presenters: Jimmy McDonald	Deputy Project Manager & Senior Freight and Logistics Planner, Metro Analytics
Mikael B. Pelfrey	Director, KYTC Division of Planning
Jeff Taylor	Commissioner, Department for Business Development
Kristina Slattery	Deputy Commissioner, Department for Business Development
Chandler Duncan	Project Manager & Vice President, Metro Analytics

Presentation Content

Jimmy McDonald, deputy project manager with Metro Analytics for the *Kentucky Riverports, Highway and Rail Freight Study* opened the summit by welcoming all attendees and walking through Zoom tool-tips—showing participants the multiple way to engage through the platform during the course of the summit. All sessions were recorded and are available for viewing online. A total of 69 individuals joined the session.

Chandler Duncan, the project manager for the Metro Analytics team, recalled the first *Kentucky Summit on the Economic Role of Freight Modes*, which occurred last fall. Since then, the team has been working to develop an understanding of the Kentucky market with relation to the riverports. This summit is presenting the economic development process and how that may change over time for Kentucky riverports. The summit also serves to kick-off the second round of engagement with public riverports across the Commonwealth. All task three components are shown in **Figure 1**. Scheduling of the second round of port visits will commence following the completion of this summit.

² <https://www.youtube.com/playlist?list=PLFou1OwtHzfReFWW7xtcVxtw8SNj7LNiG>

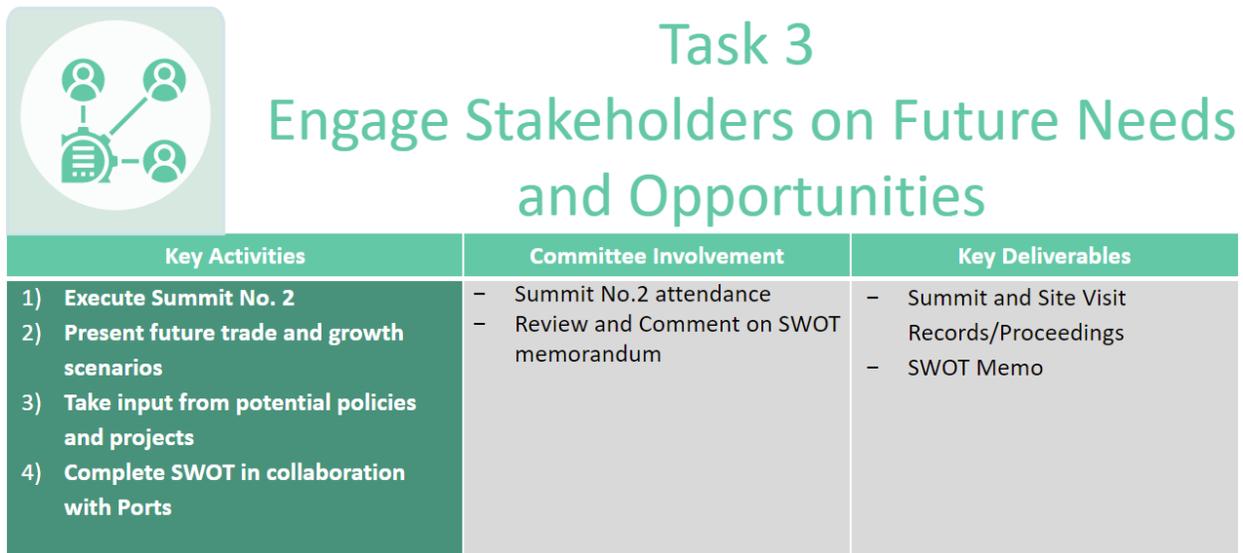


Figure 1. Task 3 Components

Information gleaned from this next round of engagement will serve to inform investment and performance scenarios, as shown in **Figure 2**.



Figure 2. Outline of Six Study Tasks

Chandler summarized the tasks completed to date and prepared attendees for items to expect from the remaining tasks. Because forecasting efforts are ongoing, investment and performance scenarios will be available this fall.

Jimmy shared the speakers slated for each session this summit. Due to technical difficulties, Kristina Slattery, Deputy Commissioner for the Kentucky Department of Business Development, stepped in and shared remarks on behalf of the scheduled speakers. She discussed the importance of this study and the opportunity it presents by providing a better understanding of the market and capabilities of the riverports. While other states may have been more innovative, soon we will have information indicating what we can

do to maximize utility our public riverports. As a state we have access, are centrally located, and are the ideal location for businesses to move goods. Riverports not only support Kentucky industry, but also *are* Kentucky industries themselves. Her team is excited to have the opportunity to work with the riverports.

Commissioner Taylor added to Kristina's comments. Riverports play a huge intermodal role in the economy—particularly for rural communities. He strongly supports this study and is excited for the competitive edge it could provide the Commonwealth. He welcomed comments and reiterated CED's willingness to remain engaged throughout the study effort.

Mikael added comments for Secretary Gray—speaking to his support for this study, transportation planning efforts, and multimodal projects. He knows the Secretary is looking forward to continuing this partnership with CED.

Question and Answers

After opening remarks, there was an opportunity for questions from attendees.

- **Will these recording be made available for us to share with others?**

Absolutely! The videos will be posted to the study website³ following the summit.

- **Is there opportunity for OKI to join in on the NKY Port visit?**

Yes. The project team will coordinate scheduling.

- **How may CED use this study to move Kentucky forward? Or keep the study refreshed?**

It will be used as a marketing tool and to have a better understanding of what opportunities exist statewide. Currently, each port does not have a great marketing tool. It will serve as a tool to put in front of companies and consultants to be able to answer questions pertaining to the riverports. It will also provide an understanding of what gaps are at each port, especially in terms of infrastructure, to provide insight where resources may need to be invested. For example, if workforce issues are apparent, there could be an opportunity to shift funding and education to supplement. Now more than ever, we expect an influx of funds to local communities from relief funds.

- **How do the riverports have an opportunity to receive those dollars coming to local communities?**

The legislature will be a have a session to discuss how these dollars will be distributed. Typically, they are funneled through the Department of Local Government.⁴ We do not know for sure at this time but will share more information once it becomes available.

- **Kristina, what department are you in?**

³ <https://transportation.ky.gov/MultimodalFreight/Pages/Kentucky-Riverports.-Highway-and-Rail-Freight-Study.aspx>

⁴ <http://kydlgweb.ky.gov/>

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➤ **How can riverports efficiently navigate environmental regulations?**

The Energy and Environment Cabinet⁵ is a wonderful partner to work with on projects. They can facilitate the process and allow for expediting permitting, when possible. Kari Johnson shared her contact at the Cabinet where she serves as a consultant with companies and advises on the permitting processes and timelines.

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3. SESSION 2: 2021 CHANGES IN FEDERAL TRANSPORTATION AND TRADE POLICIES

Wednesday, March 24, 2021 at 1:00 PM Eastern

Presenter: Deb Calhoun Senior Vice President, Waterways Council, Inc.
Tim Pickering Acting Director, Office of Ports & Waterways Planning (MARAD)

Presentation Content

Deputy project manager Jimmy McDonald provided session opening remarks—thanking participants for their attendance and for their thoughts, input, and involvement, which are essential for the development of this study. A reminder of Zoom functionality was provided prior to introducing the goal of this session—to learn about the 2021 changes in the federal transportation and trade policies. There were 77 individuals on this session.

⁵ <https://eec.ky.gov/Pages/index.aspx>

The first presentation was provided by Deb Calhoun, Senior Vice President of the Waterways Council, Inc.⁶ (WCI)—the national public policy organization that advocates for a modern and well-maintained system of inland waterways and ports. She has worked with WCI since its inception in 2003, and developed the communications program of its predecessor organization, Waterways Work! Ms. Calhoun also serves as Secretary of the National Waterways Foundation, whose mission is to develop the intellectual and factual arguments for an efficient, well-funded, and secure inland waterways system. WCI advocates for the representatives shown in **Figure 3**, by direct lobbying of Congress, grassroots efforts, and media communications. Deb provided a snapshot of the importance of the inland waterway system, emphasizing the significance waterways have on benefiting the entire nation. The American Society of Civil Engineers (ASCE) released its quadrennial *Report Card for America’s Infrastructure*⁷ on March 3, 2021. This assessment grades the condition and performance of 17 categories of infrastructure—including inland waterways, locks, dams, drinking water, roads, levees, and more. The primary reasoning behind the inland waterways D+ rating is summarized in **Figure 4**. This is an improvement from the previous D rating. However, the locks are predominately past their economic design life with the average age of 50-60 years; the unscheduled lock and dam closures are very costly.



Figure 3. Representatives WCI Supports

⁶ <https://waterwayscouncil.org/>

⁷ <https://infrastructurereportcard.org/>



Figure 4. ASCE Infrastructure Report Card for Inland Waterways

The new administration seems to be in support of increased funding for America’s infrastructure. Going into “infrastructure week” next week, President Biden may introduce a \$2 trillion infrastructure package; however, details of the package have not been released. WCI is hopeful for receiving future support, referring to the US Secretary of Transportation, Pete Buttigieg’s quote.

“We must ensure all of our transportation systems – from aviation to public transit, to our railways, roads, ports, waterways, and pipelines – are managed safely during this critical period, as we work to defeat the virus.”
--Pete Buttigieg

Speaking next, Tim Pickering, Acting Director of the Office of Ports & Waterways Planning for the US Department of Transportation’s Maritime Administration (MARAD) shared an overview of his team’s duties, projects, and the Marine Highway Grant Program.⁸ Tim started by providing a snapshot of economies of scale, as shown in **Figure 5**, to emphasize the importance of marine highways.

⁸ <https://www.maritime.dot.gov/grants-finances>

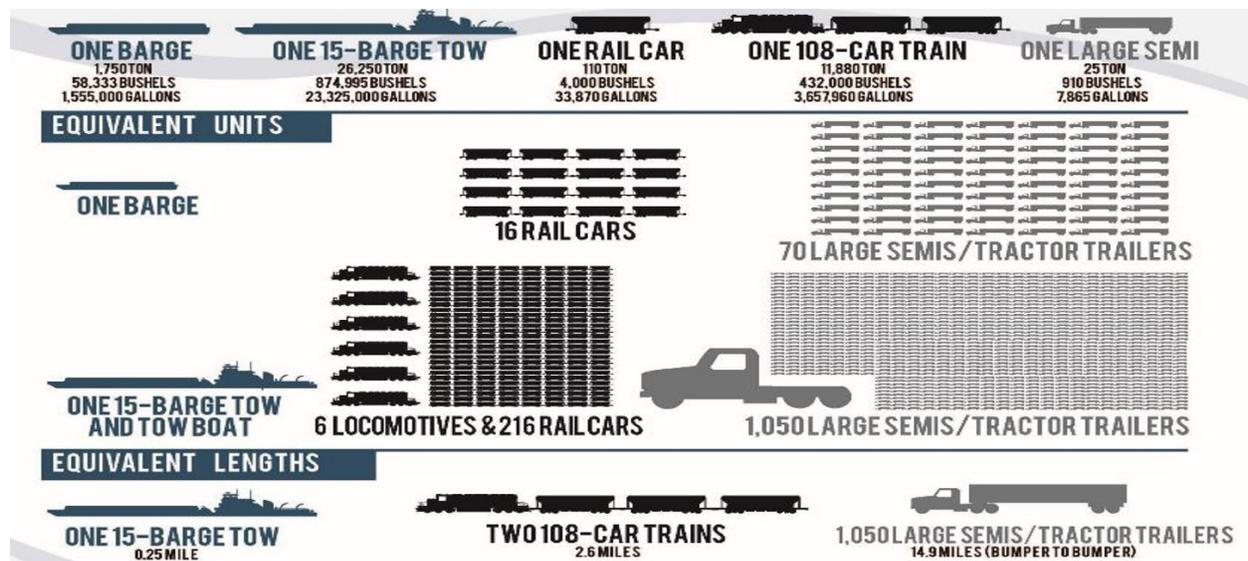


Figure 5. Marine Highway Economies of Scale

He then reviewed America’s Marine Highway (AMH) Program, which includes the vast majority of US navigable waterways, and the three steps to receive federal support (Figure 6). AMH grants can be used to alleviate the upfront capital risks associated with initiating new services. Since 2016, MARAD has provided \$33.8 million in AMH grants to 18 eligible projects. A notice of funding opportunity for \$10.8 million in Marine Highway Grants will be released soon. The notice will include the administration’s priorities, but we expect the emphasis will be on emissions and opportunity zones. Look for the notice mid-April. The advertisement cycle will be open for five weeks with awards in late July.

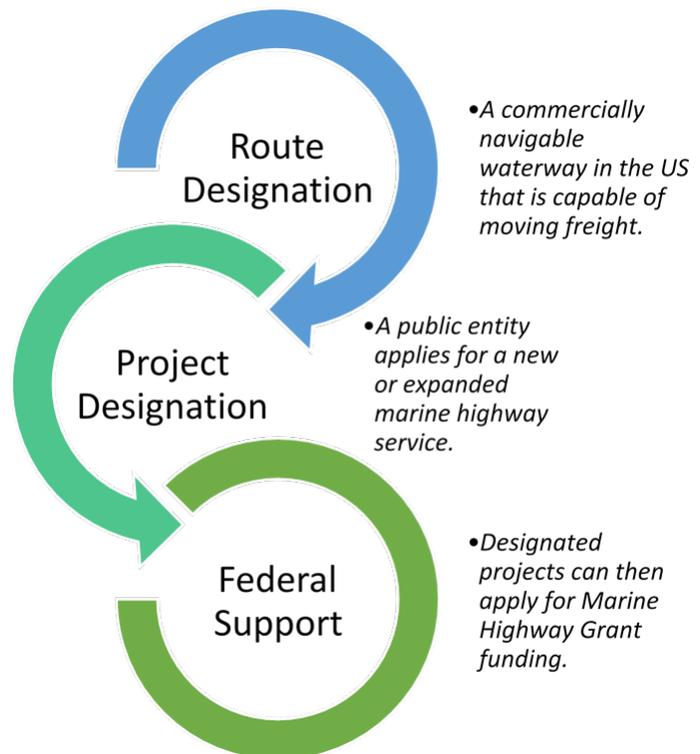


Figure 6. Three Steps of AMH Program

Question and Answers

A question-and-answer session followed the presentations.

- **Is the Harbor Maintenance Trust Fund being successfully used to continue the deepening of coastal ports and the LMR in New Orleans?**

Yes. We are seeing some much-needed efficiency overlaid on the Harbor Maintenance Trust Fund. About \$1.7 billion goes into the fund with the target to expand \$1.67 billion annually to cover dredging and harbor maintenance needs. There was a \$9 million surplus in 2020. There is funding available to deepen the Mississippi River to get larger ships on it.

- **What would be the best way Kentucky could leverage funding opportunities with the US Army Corps of Engineers (USACE)—working with the WCI or targeting combined projects?**

Join WCI! As a member of WCI, there is great opportunity with an infrastructure bill. We have a \$7 billion portfolio of projects across all geographies; last year's House infrastructure bill allocated \$3 billion for waterways although it did not get full approval. We have a great delegation supporting inland waterway projects and proper funding for USACE programs for operations and maintenance, the Harbor Maintenance Trust Fund. The outlook is positive and hopeful. Please reach out to Deb if she can talk to you specifically or provide support.

- **Is there any discussion to include Mexico to USA trade in the Marine Highways Program?**

Yes. There is an internal proposal at MARAD in the works to request legislative change to add Canada and Mexico. We are still working through the nuances, and it will likely have the requirement to be on US documented vessels.

- **Can and how would they combine with other marine highways?**

The project can be contiguous and non-contiguous marine highways as long as start and end points are on marine highways.

- **Do you expect any proposal from the President's budget this year?**

Yes. We are currently conducting a peer review of surrounding states and some successful funding programs to inventory what is working and what innovative approaches exist to leverage public/private dollars.

4. SESSION 3: WHAT'S NEW IN THE NEIGHBORHOOD? UPDATES FROM ADJACENT STATE RIVERPORTS

Wednesday, March 24, 2021 at 2:00 PM Eastern

Presenters:	Mark Locker	Maritime & Freight Program Manager, Ohio Department of Transportation
	Dan Pallme	Assistant Chief of Environment & Planning / Freight & Logistics Director, Tennessee Department of Transportation
	BJ Murray	Section Chief, Marine & Aviation Transportation Program Planning, Illinois Department of Transportation

Presentation Content

This session provided insight to what three neighboring states—Ohio, Tennessee, and Illinois—are doing to support their riverports. Jimmy welcomed participants by providing a brief overview of this session’s topic, introducing the representatives from the three neighboring states, and reviewing Zoom how-to’s for participants. Throughout the session, 77 individuals attended.

The first presenter was Mark Locker, the Maritime & Freight Program Manager of the Ohio Department of Transportation (ODOT). He opened by providing a snapshot of Ohio’s freight system (**Figure 7**) and maritime system (**Figure 8**).

Snapshot of Ohio’s Freight System

Ohio has an extensive and robust multimodal freight system.



*ODOT owned, operated and maintained, only.

OHIO'S FREIGHT SYSTEM TRANSPORTED NEARLY 900 MILLION TONS OF GOODS WORTH OVER \$1 TRILLION IN 2018.

Figure 7. Transport Ohio⁹ Freight System Snapshot

⁹ <https://www.transportation.ohio.gov/wps/portal/gov/odot/programs/transport-ohio/>

Ohio has recently updated its state freight plan, which is a robust multimodal transportation plan to maintain freight dollars. Ohio has three port districts with 97 ports/terminals and is looking to potentially add a fourth district. Ohio funds these ports through its biennial budget for ODOT Maritime Assistance Funding, which included \$23 million to be awarded to port authorities. Ohio also takes advantage of federal funding opportunities and has recently submitted an Infrastructure for



Figure 8. Ohio's Maritime System

Rebuilding America (INFRA)¹⁰ grant for a project that would install technology to have real-time barge-to-shore information for users to see movements on the Ohio River for scheduled freight deliveries. Additionally, they complete transportation planning studies to identify the needs of the ports and justify future investments supporting industries.

Following Mark, Dan Pallme, Director of the Freight and Logistics Division and Assistant Chief of Environment and Planning for the Tennessee Department of Transportation (TDOT) presented. Dan serves as a liaison between TDOT and freight stakeholders to find opportunities to improve access for existing freight and appropriately prepare for the projected increases in freight as it moves in and out of the state. TDOT is unique by providing a competitive rail program¹¹ that leads to more business on its waterways. These competitive rail connectivity grants seek to strategically expand rail access and opportunities within the state to provide benefits by:

1. Impacting job creation and capital investment by industries that require rail access,
2. Enhancing the marketability of available industrial sites, and/or
3. Reducing highway and bridge maintenance costs by diverting heavy freight from the roadway network to rail.

These grants were open to rail authorities, port authorities, local governments, industrial development corporations, and governmental entities. They provided a total of \$10.3 million, with an individual request capped at \$2 million, and required a 10% match. Dan shared three of the projects selected in the 2019

¹⁰ <https://www.transportation.gov/buildamerica/financing/infra-grants/infrastructure-rebuilding-america>

¹¹ <https://www.tn.gov/tdot/transportation-freight-and-logistics-home/competitive-rail-connectivity-grants.html>

award cycle that had direct benefits for TN ports. One project (Cheatham County) improved rail track to serve a new riverport, another project (Memphis) installed new track and switches on a public terminal facility at a port, and the third project (Marion County) constructed a rail spur at the Nickajack Port Industrial Park.

Illinois' vision for transportation is for all modes to be integrated, coordinated, planned, and built with the idea that present and future travel options are user-focused, economically supportive, and ecologically sensitive.

BJ Murray, the Section Chief for the Aviation & Marine Transportation Program Planning group at the Illinois Department of Transportation (IDOT), also shared his state's perspective. Illinois' vision for transportation is for all modes to be integrated, coordinated, planned, and built with the idea that present and future travel options are user-focused, economically supportive, and ecologically sensitive.

The marine transportation section was added in 2017. High water events moved transportation from water to the roads to develop a section to better address their freight needs. A Long-Range Transportation Plan kick-started this effort to learn more about freight needs. Illinois has 19 public port districts, 27 locks, Lake Michigan, four large rivers, and the Chicago areas waterways system. Its *Marine Systems Transportation Plan*¹² included an economic impact analysis to identify the benefit the marine system brings to the state. The plan showed legislators the need for funding, and in 2019, \$150 million was dedicated to the ports. While guidance and applications for their capital investment program are still being developed, a call for projects is coming soon. All 19 public port districts will be eligible to apply with the goals being to address safety, modal connectivity, state of good repair, economic competitiveness, mode shift, and environmental sustainability. In addition to this funding, there is \$24 million through the competitive port investment program (currently a one-time fund but looking to set up an annual appropriation). They also fund ports through State Planning Research funds. IDOT is continually looking to new funding opportunities to support their ports.

Question and Answers

After hearing how a few adjacent states are funding their ports, the presenters responded to participants' questions.

- **Dan, if the rail project is not finished according to the contract, is the DOT obligated to pay back the funds?**

The timeline for the grants is five years. Of the eight projects, one is already done and three others are advertised. In 2023, a decision will be made on the status of projects and could decide to not allocate dollars—so if a project does not get finished, the dollars could be recouped.

¹² <https://idot.illinois.gov/transportation-system/transportation-management/planning/index>

➤ **Will the Nickajack improvements support the VW Auto plant?**

No. they have other rail improvements straight to Chattanooga. It will not have water, just rail and truck.

➤ **What agencies are funding AIS ship-to-shore?**

We (Ohio) have submitted for an INFRA Grant. The DOT is providing the lion share of funding (state and federal), but the Ohio Rail Development Commission and the safety section are also contributing. For Monroe County, the Development Services Agency had an industrial park development loan program (forgivable loan) and money through the state of Ohio; the port system also contributed.

➤ **What is your state's largest commodity moved on the waterway system?**

IL: Outbound food and food product, followed by coal; inbound primarily metal products.

OH: We still carry a lot of coal, bulk, and break bulk; petrochemicals just became #2 with fracking.

TN: Petroleum is a major commodity, and our pipelines are almost at capacity. We have seen huge growth in the petroleum industry through our barge system.

➤ **Check out the fourth edition (Nov 2019) of the US CMTS' Marine Transportation System Federal Funding Handbook:**

<https://www.cmts.gov/posts/8531cee6-1671-4275-9c99-b32fd979e347>

➤ **Since earmarks may come back, are you considering any to fund ports/rail?**

IL: \$40 million of \$150 million is earmarked for improvements for the Cairo terminal.

OH: Nothing specific yet but we are developing a wish list.

TN: Federal grant programs like INFRA and BUILD are just as important. TDOT has been submitting applications regularly, including one last year along I-69 in partnership with Kentucky.

➤ **Which blue water port is the largest for your rail traffic?**

TN: Memphis is blessed with Class I rail connections, many heading to Charleston or Savannah ports.

OH: We mostly link to deep water ports on east coast as most of our rail lines tie east. A NS "orange train" runs between Jacksonville and Cincinnati daily. Our intermodal facility at Rickenbacker (south of Columbus) has the Heartland Corridor, running double-stacked loads to Norfolk, VA. There is also a CSX yard north of Columbus running double-stacked to Baltimore. We run a good deal of traffic to New York and New Jersey. Canadian National and Canadian Pacific have lines near Cleveland.

IL: We only have two deep water ports: Waukeegan and Illinois International, both on Lake Michigan. IL International is served by six Class I railroads plus the interstate system through Chicago. Our port system is focused on rebuilding, getting utilization and efficiency up. They are in a good position with all modal components represented, just looking for money.

➤ **What do you see are the biggest challenges/opportunities to moving commodities onto the river?**

IL: Reliability—with aging infrastructure, unscheduled and scheduled outages, etc. Many companies cannot commit to waterborne modes with the limited reliability. We see container on barge as an emerging opportunity, expecting new growth markets. Water is an underutilized mode and we are trying to find new markets.

OH: General cargo is taking coal's place as it trends downward. We expect growth for container on barge and for repositioning empties.

TN: Two locks are slated to be improved and we already see container on barge moving out of Memphis to Baton Rouge. We foresee really positive growth opportunities moving forward.

5. SESSION 4: FORECASTING THE FUTURE OF KENTUCKY'S FREIGHT ECONOMY

Thursday, March 25, 2021 at 10:00 AM Eastern

Presenters: Paul Bingham Director of Transportation Consulting, IHS Markit
Chandler Duncan Vice President & Project Manager, Metro Analytics

Presentation Content

In the Forecast session, Paul provided an in-depth discussion of the future freight forecasts developed for the Commonwealth and each individual public riverport facility. A total of 61 attendees participated. Forecasts are multimodal, tracking individual commodity movements for a given year by tonnage and value across a range of potential future scenarios. Data is derived from 2018 base year Transearch data, incorporating some subsequent updates to 2020 that account for the impact of the pandemic. Forecasts address all freight movements through each hinterland—defined as counties with a ± 90 -minute drive time from each port—not specific to freight moving through the physical ports. The focus of the analysis is to identify divertible freight that could be pulled from other modes onto the river system.

The 2045 scenarios were developed:

- Baseline is the most likely of possible paths for the overall economy without further major disruptions or shocks
- Higher growth reflects higher investment and employment with generally optimistic performance of the economy
- Lower growth reflects slower investment and development with generally pessimistic performance of the economy

Table 1 summarizes key differences between the scenarios, comparing metrics versus 30 years of historic trends. The top row represents both goods and services as potential output with even the optimistic scenario representing a slowdown versus the previous 30 years. The rows below represent components of the top

line conclusions: consumption—which makes up around 70% of the US economy and has historically grown faster than the GDP, business fixed investment, government spending—currently higher than historic levels with various stimulus packages, exports, and imports. While import/export indicators are below historic trends, they still represent a greater opportunity for growth than domestic markets. Workforce projections reflect relatively low population growth and technological advances.

Table 1: Comparison of Forecast Scenario Indicators

Avg. Annual Real Growth	Historic Avg 1989-2019	Baseline	Optimistic	Pessimistic
Potential Output	2.5	1.9	2.3	1.4
GDP	2.5	1.9	2.3	1.3
Consumption	2.7	2.2	2.5	1.5
Business Fixed Investment	4.3	2.6	3.2	1.8
Government	1.3	0.7	1.1	0.5
Exports	4.9	2.8	3.4	2.5
Imports	5.1	3.2	3.4	2.6
Average Annual Growth				
Labor Force	0.9	0.5	0.8	0.4
Productivity	1.9	1.6	2.0	1.2
Industrial Production	1.8	1.3	2.0	0.7
Inflation (% GDP Deflator)	2.1	2.1	1.8	3.4
Unemployment (%)	5.8	4.4	4.2	5.1

On the infrastructure side, all three future scenarios assume ongoing and planned projects are completed—like the Chickamauga and Kentucky Lock and Dam projects Deb mentioned in an earlier session. However, no new investments to modernize are assumed. The relative competitiveness between ports and regions is assumed to remain constant.

Accordingly, **Figure 9** presents a visual comparison between scenarios for each mode. The decline in rail traffic is largely tied to the long-term decline in coal. Coal also influences future trends for waterborne freight and the trucking industry though its less pronounced. Even the low-growth scenario represents an increase versus 2018. Even if riverports do not capture extra traffic, there is still market growth anticipated.

Freight Forecast Scenarios By Mode, All Riverports

Total Tonnage Growth to 2045

Baseline Scenario: 18.3%

Optimistic Scenario: 24.5%

Pessimistic Scenario: 10.7%

Truck Tonnage Growth to 2045

Baseline Scenario: 34.7%

Optimistic Scenario: 42.2%

Pessimistic Scenario: 25.7%

Rail Tonnage Growth to 2045

Baseline Scenario: -5.4%

Optimistic Scenario: -1.4%

Pessimistic Scenario: -10.7%

Freight Forecast Scenarios in 2045, All Ports Hinterlands (1000s of Tons)

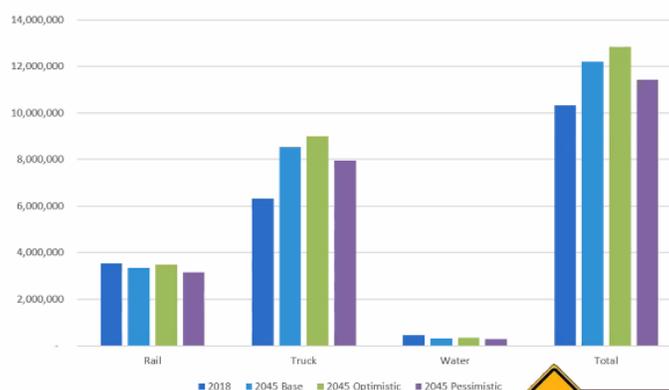


Figure 9: Comparison of Modal Forecasts for Freight between Scenarios

Paul then stepped through the forecasts for each of the 11 port hinterland areas, summarized in **Table 2**. The range of percentages shown compare 2018 tonnage forecasts versus the pessimistic and optimistic projections.

Table 2: Forecast Comparison between Hinterlands

Port Hinterland	Hinterland Counties	Rail Growth	Truck Growth	Water Growth
Hickman-Fulton	21	-9% to -2%	32% to 49%	-13% to 32%
Western KY Regional	27	-11% to -4%	28% to 45%	-4% to 13%
Paducah-McCracken	32	-17% to -9%	29% to 46%	-48 to -39%
Eddyville	32	-15% to -6%	30% to 48%	-51% to -43%
Henderson	30	-29% to -21%	23% to 40%	-27 to -16%
Owensboro	21	-28% to -20%	25% to 42%	-40% to -31%
Meade	29	3% to 13%	29% to 46%	-15% to -1%
Louisville	37	4% to 16%	28% to 44%	-37% to -27%
Northern KY	44	5% to 16%	21% to 37%	-36% to -25%
Maysville-Mason	32	4% to 15%	21% to 36%	-15% to -2%
Greenup-Boyd	25	-22% to -14%	17% to 32%	-44% to -35%

The top commodities by tonnage were also listed for each port hinterland, comparing rank order between 2018 and 2045. Many regions saw a drop in coal: ranked the top commodity in 2018 at six port hinterlands but dropping to the second or third slot by 2045. Grain replaced it as the top commodity by volume in 2045 for most of the western regions. While Louisville and Northern Kentucky include sizeable air freight

operations, these volumes were not included as there is minimal opportunity for diversion to waterborne modes.

Chandler Duncan then described the transportation modeling effort—understanding how the ground transportation system supports the freight movements that Paul presented. Graphics examined national-scale changes, regional markets, state-level flows, and individual corridors. An emphasis was placed on commodities that could be diverted to waterborne modes. Flows are volume-based, with conversion to truckloads occurring later this summer to understand capacity impacts on the highway network.

Dots in **Figure 10** highlighted projected changes in market sizes; largest growth occurs in Louisville, followed by Nashville and Cincinnati. Shaded county outlines identify the rate of growth in divertible shipment sizes.

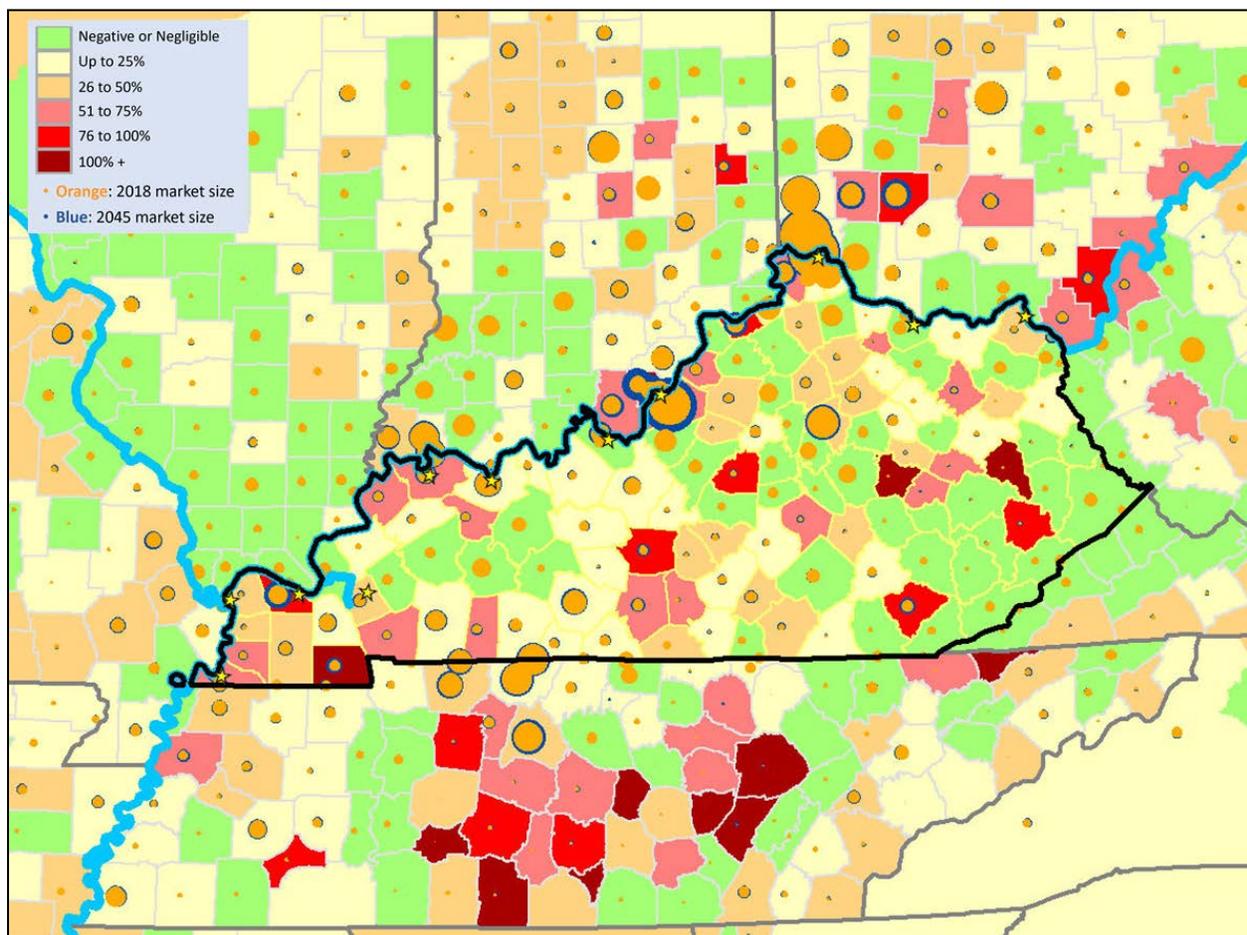


Figure 10: Market Growth (Dots) versus Percentage Change in Divertible Shipment Sizes (County shading)

Figure 11 summarizes corridors of interest that project increases in water-divertible growth. As expected, interstates generally carry the largest share as the majority of freight moves by truck today. Pink lines, representing freight that could be diverted to a waterborne mode, represents a relatively large share of the

total truck-based freight volumes (blue lines). The 2045 projections (bottom) show sizeable growth versus 2018 (top) but most of the growth occurs in non-waterborne modes. The forecasts and network analyses will be discussed in greater detail at the upcoming visits with individual ports.

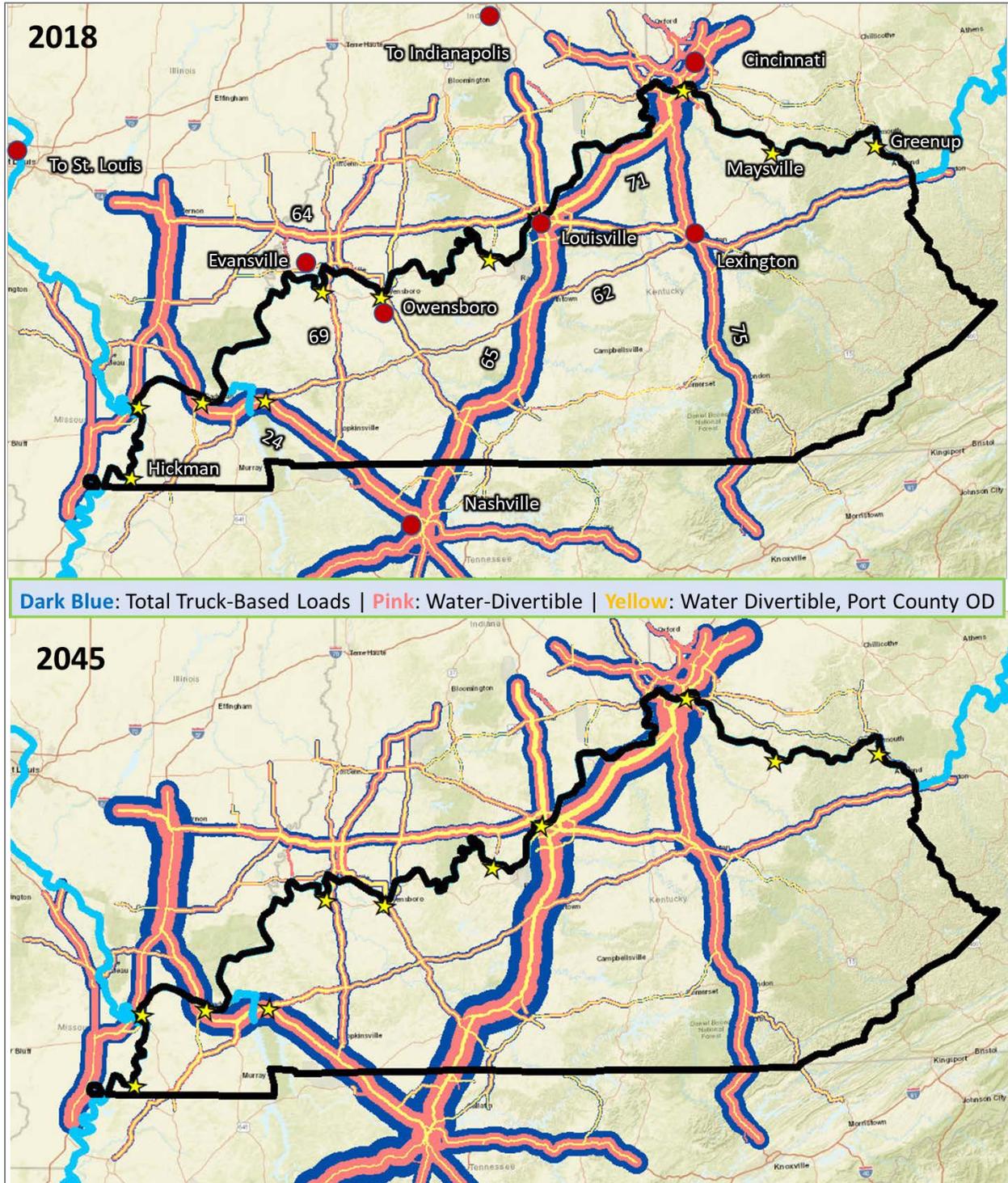


Figure 11: Corridors of Interest for Divertible Freight

Question and Answers

A question-and-answer session occurred throughout the session.

- **Is the 90-minute range defining the hinterlands one-way or round trip?**

One-way drive time.

- **Do you think the Canadian Pacific (CP) Railroad's purchase of Kansas City Southern (KCS) will have an adverse impact on western Kentucky tonnage forecasts?**

CP runs east-west across Canada with lines dropping south into Minnesota, Chicago, and Kansas City. KCS owns lines in Mexico and Texas, connecting north through the Gulf Port. If connected—which has not received regulatory approval to date—it'll form a triangular service area between Mexico and Canada. But with limited network in the US, we anticipate less impact on KY markets compared to a hypothetical merger with one of the big four east-west lines in the US. You could see more competition for north-south flows. We could see increased commodity flows between the three countries. Alternatively, we could see increased competitiveness issues with auto manufacturers (for example) shifting operations to Mexico. It is unclear how this could play out, but we do not foresee a huge downturn.

- **Why is rail tonnage anticipated to decline?**

This is driven by the continuing decline of the coal industry.

- **Does the truck tonnage include local drayage (including last mile drayage from rail and water)?**

Forecasts capture truck tonnage, including some drayage from ports to rail, but TranSearch does not capture truck activity considered secondary, i.e., parcel pickups or local delivery. The team has been coordinating with KYTC how to address these moves. Primary commodity “last mile” moves are mostly included but only some of the residual activity to connect divertible freight to the ports.

- **What forecast scenarios does the summary cover: one port, all ports? Or is this a forecast for all of KY from the influence of ports?**

Paul presented a combined statewide forecast initially, followed by individual forecasts for each of the 11 port hinterland areas in subsequent slides.

- **Has the shift to cleaner energy been considered in the forecasts? Are there any impacts for Kentucky ports—such as by commodities used to create electricity with the foreseen shift to zero emissions vehicles?**

We have incorporated energy market insights into these forecasts. E.g., shifting away from coal is reflected, as discussed. But forecasts also account for natural gas, solar, and wind adoption, electric vehicle use in fleets, etc. These assumptions vary between different scenarios too. However, there are still opportunities beyond what we incorporated in this economic forecast—ethanol production, biofuels, etc.

- **How do we best to determine where infrastructure is most needed to accommodate the growth you are forecasting?**

Infrastructure needs can be identified through a combination of modal analysis, existing infrastructure conditions analysis, and economic development opportunities identification among the industries forecasted for growth. The infrastructure needed to accommodate inadequate capacity can be identified through an analysis of existing network capacity compared with the growth in forecasted demand. The commodity forecasts importantly are demand forecasts and do not assume any transportation infrastructure capacity constraints. To identify infrastructure needs from the growth in commodity demand, matching the physical handling needs for growth commodities with the appropriate infrastructure needed to handle those products can reveal where potential infrastructure bottlenecks could need alleviation. Port-specific infrastructure needs identification also benefits from the assessment of the road and rail access to the port properties and economic development opportunities identification that may be outside of the port properties yet have infrastructure needs of their own to be realized.

- **For any given top commodity listed, will you be able drill down as to the companies represented for each commodity category?**

The analysis blends several similar datasets. One indicates what commodities are moving through a county while another identifies the top business/industries generating a commodity in a county. However, the two datasets are not linked 1:1. The Freight Finder data with individual business names/industries will be delivered as part of this study.

- **Can you explain how you forecast for developing ports without a baseline existing?**

For developing ports, we obviously do not have a volume defined. However, forecasts look at the entire hinterland geography. Essentially, the developing ports have 100% diversion potential since they are not handling volumes today.

- **Petroleum and Ethanol provide strong modal transload opportunities.**

- **Can you discuss the diversion challenges?**

Diversion challenges are multi-faceted including the momentum behind customers used to shipping products using a certain mode of transport or specific transportation providers and the ability of waterborne transportation to demonstrate cost effectiveness and reliability when regular delivery times are likely to take longer than use of truck or rail. Diversion challenges also include physical limitations for cargo handling to and from and at the riverports, those may include infrastructure improvement needs or additions to the skilled riverport workforce. There are also diversion challenges from the financial side of riverport capital and operating budgets, where investment resources to prepare a riverport to capture divertible traffic may not be readily available. In some cases, there may also be regulatory challenges in obtaining approvals for infrastructure or operating improvements. There are also diversion challenges that can come from the capabilities of locations required for the cargo handling at the 'partner' riverports that are at the other end of the shipping or receiving of cargos that could be handled through the Kentucky riverports. The constraints to some potential diversion of cargo originating or destined for the Kentucky riverports hinterlands may be significantly outside of the ability of Kentucky to influence directly when those inland waterway partner locations are in other states, which is common for inland waterway transportation.

- **I assume the next step will be to determine how much of the forecasted tonnage can be captured by each KY port. How will that capture rate be determined, and how will that capture rate consider existing ports within the 90-mile capture area but located in neighboring states?**

The determination of what share of forecasted tonnage can be captured by each Kentucky riverport will ultimately depend on the success of economic development activities promoting the use of each port. The capture rate can be calculated from the aggregation of customer-specific volumes to be handled at particular points of time in the future once those are known. The competitive aspect of the market capture includes future infrastructure and economic development activities being undertaken or planned by out-of-state riverports, some directly competing for the some of the same shipments while other out-of-state riverports are planning for growth that would complement Kentucky riverport activity by being the ‘partner’ ports at the other end of Kentucky riverport shipments. The current study scope is not attempting to produce individual Kentucky riverport commodity forecasts that would be deterministic regarding potential intra-Kentucky riverport competition. The individual Kentucky riverport draw areas do and will continue to overlap geographically both within Kentucky and in neighboring states.

- **FYI, KCS rail tracks run on the western side of Missouri, approximately a 5-6 hour drive away.**
- **The presentation indicates a significant tonnage increase in truck freight. Considering the aging population and downturn on birth rate, will producers be forced to look at alternative forms of freight logistics?**

The long-term growth in truck freight reflects the overall growth of the economy, even as national population growth rates slow and the population ages. There are challenges in trucking with availability of qualified drivers interested in those jobs at the levels of compensation offered today. In the long term this forecast includes a continuation of the productivity improvement trends in freight transportation that leverage technology to reduce the amount of labor required for handling forecasted freight demand. There are many innovations in trucking, as in all modes of freight transport, that offer the prospect of higher labor productivity to handle greater volumes without an equal increase in labor. Producers of products will continually look to modal alternatives as part of their logistics network management, which may include use of trucking-supportive modes such as intermodal rail and container-on-barge or containerized river vessels to handle commodities that can be planned to use those networks. The aggregate modal freight forecasts significantly reflect the composition of forecasted consumption across the economy.

6. SESSION 5: HOW WILL THE FUTURE OF FREIGHT IMPACT OTHER MODAL OPERATIONS?

Thursday, March 25, 2021 at 1:30 PM Eastern

Presenters:	Ken Erikson	Senior Vice President, Head of Client Advisory & Development, Energy & Transportation, and Policy
	Tim Kizer	Executive Vice President, Louisville Riverport Authority
	William Downey	Director of Government Affairs, R.J. Corman Railroad Group
	Patrick “PJ” Donovan	Planning Center of Expertise for Inland Navigation & Risk-Informed Economics Division, US Army Corp of Engineers

Presentation Content

This panel discussion, moderated by Ken, builds on the forecast data and freight network presented in Session 4, looking at how projected changes may influence modal operations. There were 69 attendees. Before beginning the question-and-answer session, each panelist provided some opening thoughts.

Tim Kizer

At the Louisville Riverport Authority, we consider ourselves to be a critical regional asset throughout the Kentuckiana region. We are a truly multimodal facility. We are developing a strategic plan with a significant capital plan, trying to develop infrastructure that address value to our constituents. Currently we own a 13-mile rail facility with on-site links to CSX, NS, and Paducah and Louisville (PAL). We are excited about expanding across all modes—more so rail and marine than truck although we are looking at creative opportunities for efficient truck deliveries within our grid. With some sizeable infrastructure investments, our marine impact will be substantial. We also have a historic 2,500-foot elevated conveyor system for moving coal to barge, which we are looking to modernize to convert to bulk transload movements—including liquids—to create a high-speed, efficient, affordable bulk transload system. We have studied current trends—precision railroad scheduling, the ups and downs on river system, and disruptions on our highway system. We want to be an efficient provider: if a customer can move more efficiently by rail or barge or small haul truck, we want to empower them to use it. And play our part as a public port to accommodate efficiency.

“The bottom line for Louisville Riverport Authority: we want to be a supply chain solutions provider, not just a logistics facility.”

--Tim Kizer

William Downey

R.J. Corman is a rail transportation provider based in Nicholasville, KY with a growing footprint in 11 states now operating 17 different shortlines, three in Kentucky. The Commonwealth’s network includes five Class I railroads—equivalent to the high volume, high speed interstate system on the highway side—plus several shortline and regional roads—equivalent to higher access state highways and local streets. Shortlines typically provide the first mile/last mile services between facilities and larger Class I interchanges.

In Kentucky, coal is the predominant commodity originating/terminating in the state, even though the overall industry is declining. The rail industry as a whole is continuing to diversify its commodity mix, picking up chemicals, transportation equipment, auto industry, grain and agricultural products, plus aggregates. There is a lot of cargo moving through the state; 2019 saw over 400,000 carloads originating in the state (over 27 million tons of traffic) versus just under 300,000 carloads terminating in state (22 million tons).

The PAL connects several of the state’s public ports and derives around 2/3 of its volume from bulk commodities transloaded to barge. There have been significant investments to serve our ports. Rail is connected and capable, with capacity to take on the level of projected freight growth. The last 40 years have seen \$700 billion of private investment in modernizing the rail system and we are now pivoting back to growth mode.

P.J. Donavon

The Planning Center of Expertise for Inland Waterways in Huntington, WV provides the data management branch for USACE, specifically understanding the benefit-cost side for investments in the inland waterways system (ports, locks and dams, etc). The national benefit we provide is the transportation rate savings that this inland navigation system provides to the nation; that is the crux of what we do.

A big part of that analysis is forecasting cost and tonnage. Coal makes up about 25 million tons of the freight moving to/from Kentucky by barge, followed by limestone (8 million tons), sand (5.3 million tons), aggregates (3.9 million tons), and gasoline/aviation fuels (2.4 million tons). Thinking about value, we see \$1.4 billion of petroleum moving in and out of the state via the waterway system; coal is running around \$1.2 billion. On the Ohio River system, we see more agricultural products south of the KY/WV line at the Big Sandy River, with more aggregates, steel, and petroleum to the north. Kentucky sits in a unique space with that commodity mix. 43 million tons of coal float past us on the river, never touching the shore. It is a domestic system, moving domestic freight from county to county. There's real power digging into the data, looking at freight moves, markets, cost efficiencies.

Question and Answers

A question-and-answer session followed.

- **The ship stuck in the Suez Canal represents a global event, capturing a lot of attention. PJ, how involved does your group get when events impacting freight moves like this happen, whether it's a natural disaster or other event? Transportation infrastructure provides foundational in these forecasts.**

PJ: Reliability is essential; the inland navigation system is reliable though we do face challenges and delays. USACE is actively engaged in disaster response. Our group did a drill looking at the impact of Covid19 on the nine locks and dam in the Huntington District. We modeled safety protocols to maintain 24-hour navigation service; there were some downturns in volumes and delays, but traffic continues moving. Hats off to our industrial partners who were able to keep working, keep moving products to support the economy during this tough time. Will be curious to see how the Suez Canal blockage impacts fuel costs short-term and other micro- and macro-economic impacts.

- **What infrastructure requirements do you see going forward, particularly with a multimodal perspective? What is the process like to improve connectivity amidst the pandemic, infrastructure failures, and other natural disasters? How do we become that solution provider?**

Will: Looking at rail connections to Class I's or transloading facilities, these are opportunities for customers to improve productivity, reduce emissions, and gain other competitive advantages to access more markets. As a shortline, positioning to bring these benefits to local communities and industries allows for competitive rates. As a local community or business park, having a relationship with a rail provider secures a long-term asset, representing a key piece of infrastructure. Setting up a rail authority with public ownership and a private operator provides a key investment to benefit

the community. You can divert freight from crowded highways. You can attract more businesses to your parks/ports. We view ourselves as a small business and are looking to partner with local communities/industries to grow where it makes good business sense—whether it's on our line, at an off-site facility, transload terminals, etc. There are a lot of different perspectives; if I were a site with a spur or rail access, I would want to capitalize on that asset to be more competitive long-term.

➤ **If a port does not have a spur or is looking to develop elsewhere, what is the process to consider?**

Will: Look at how big a gap you have to fill. How much of an investment is needed? What is the potential for growth? It is important to have a good relationship with state/regional partners to leverage assets. You have to consider the long-term benefits/growth behind the connection. Both sides can benefit.

Tim: The dynamics of putting in rail are very isolated to each individual opportunity but always come down to volume and velocity. The recent concept of supply chain solutions moves us into a more competitive environment where creativity is essential. As a public facility, we can offer larger, shared services and choices than a smaller single entity could afford on their own. Louisville has a lot of land and almost 7,000 jobs on our port property. We have opportunities for specialized growth, serving as a collective to extend options to smaller firms and reduce individual investments. Choices are essential, giving our customers options to find the path of least resistance for reliable, low-cost supply chain solutions. Amazon, Walmart, and others are changing how we think about freight movements. Maintaining our infrastructure in good shape to be responsive to client needs is important too.

PJ: During my time with WV's port authority, we were looking at commonalities of traffic to identify modal shifts in rural economies. What opportunities exist that our rural ports can capture? Do they have the capacity with their existing infrastructure? In our river valley, we have emerging dynamic economies and global supply chains. How can we leverage our capacity, particularly as a green mode, to provide regional benefits?

➤ **Henderson area rail customers are served directly by our Class I railroad. Should we stay with the Class I service or consider looking for a shortline to enhance local service?**

Will: There are different factors to consider. A Class I provides the best access to the biggest markets. But if the port is not getting the level of service they desire, a smaller shortline carrier may be beneficial. They generally provide more service with less bureaucracy. The connection could make you more viable or competitive but would also require an additional investment, so it really depends on the amount of service you need.

Greg: Henderson's service is not restricted to the port. The connection is good but the daytime operations lead to major block on arterial highways, creating havoc for the public.

Tim: The question comes down to volume, velocity, and level of service needed by your customer base. With our model, we would use our public rail frontage so that individuals do not have to invest in their own tracks, which can cost around \$325/linear foot. We balance up front capital costs, letting them stage cars on our rail and can switch them more often with our own locomotive than a Class I crew can. We are seeing a boom in rail these days, both Class I and shortlines, with expanded services.

- **Should KY riverports consider consolidating tonnage reporting by region (West, Mid, East), similar to CORBA’s model near Cincinnati/Northern Kentucky? Do you see this as a good opportunity for KY marketing leverage?**

PJ: I am an advocate of inland port districts.

- **Has anyone considered a hold design for barges (like an ocean-going vessel) that can carry mixed commodities (for example, steel items, crated goods, bagged goods) similar to LTL truck loads?**

PJ: When I was at Rahall Transportation Institute (RTI) at Marshall University, we did an economic analysis on a dedicated container on vessel for the inland waterways.

- **What do you hope to see in the upcoming federal infrastructure bill?**

Tim: We face a growing problem getting consumer goods—including fresh foods—into large urban markets. Rail and river are going to have to play a larger role than just highways. There are fewer and fewer long-haul truck drivers. We have an opportunity to use our rail network to distribute finished goods and food, returning empty containers.

William: From a policy perspective, we don’t want regulations to prohibit growth. We limit greenhouse gas emissions, reduce carbon footprints, etc. Rail covers 2.1% of greenhouse gases but 40% of overland freight volumes. We want to be part of the conversation, a part of the greater logistics solution. Other modal carriers are indispensable to the economy and quality of life. Trucking includes significant costs to build new highways, not to mention impacts to the environment and land use. Looking at projected growth, it is unlikely we could even build sufficient highway capacity to handle the expected volumes. Rail represents a viable, socially beneficial complement to the highway network.

PJ: 1,200 ft chambers for upper Mississippi; 1,200 ft chambers along Illinois River; 1,200 ft chambers on the Ohio River; proper investment in maintenance to extend the useful life of our locks/dams another 50 years; full support of the marine freight highway with exit ramps to link up with railroad and multimodal systems.

7. SESSION 6: FREIGHT INFRASTRUCTURE NEEDS & KENTUCKY’S FUNDING PROCESS

Thursday, March 25, 2021 at 3:00 PM Eastern

Presenter: Lindsay Hoskins Transportation Engineer, Qk4, Inc.

Presentation Content

Jimmy McDonald started the session by welcoming participants and reviewing Zoom functionality. He introduced speaker, Lindsay Hoskins, a transportation engineer at Qk4 currently working to deliver this Riverport Freight planning study. Lindsay started her career at the KYTC with her most recent position in the Division of Program Management where she helped program the current Six-Year Highway Plan (SYP). Her presentation expanded on the KYTC’s funding priority process and provided an interactive opportunity

to identify infrastructure needs in breakout sessions following her presentation. A total of 48 individuals logged on throughout the session.

Lindsay provided an overview of the KYTC Division of Program Management and the host of duties they are responsible for, including the development of the SYP which is recommended to the Kentucky General Assembly every two years. She also shared how projects are funded through this plan—programmed with either state or federal funds. Drawing attention to the funding breakdown in the current SYP FY 2020-2026¹³ as shown in **Figure 12**, it was evident most of the state's transportation dollars are allocated through federal programs. The anticipated total federal-aid dollars and matching funds scheduled through 2026 is expected to be about \$5.2 billion, emphasizing the importance of identifying projects to be programmed in the SYP.

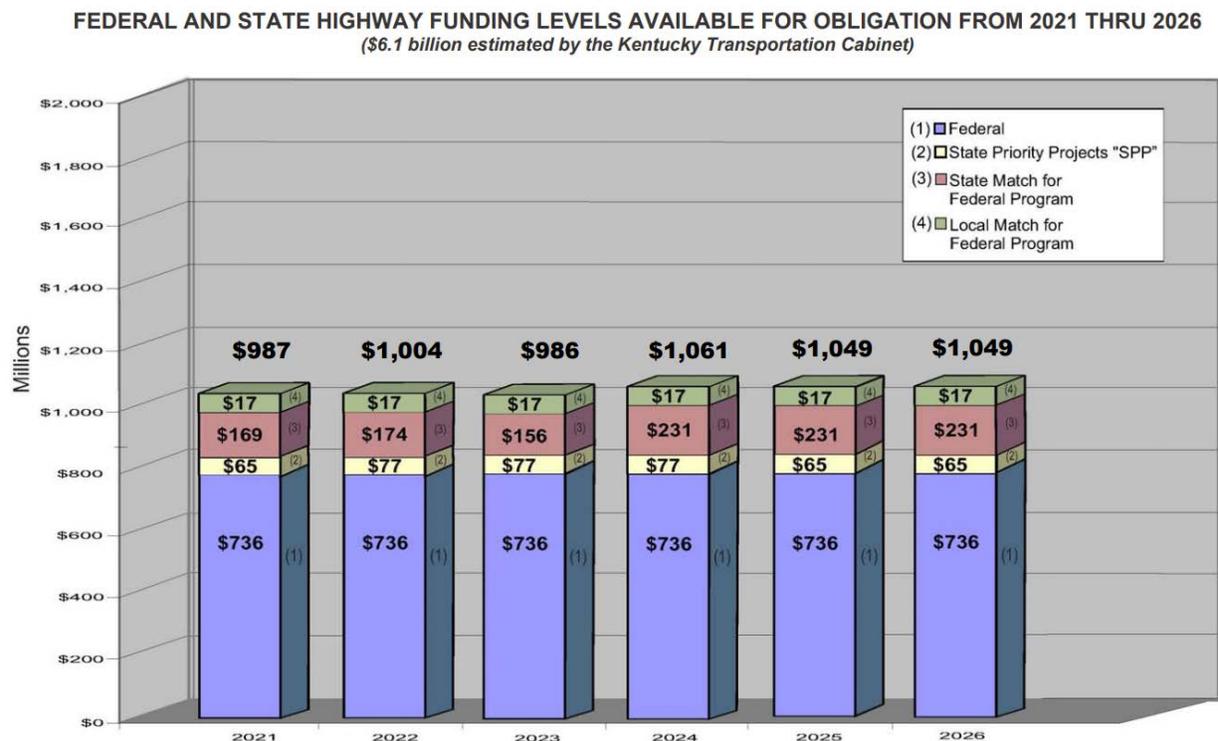


Figure 12. Six-Year Plan FY 20-26 Funding Levels

KYTC utilizes the Strategic Highway Investment Formula for Tomorrow (SHIFT), a data-driven approach to compare capital improvement projects to prioritize the limited transportation funds available. Kentucky has the 9th largest road system in terms of mileage and the 7th largest inventory of state-maintained bridges in the country, so those limited dollars must stretch. The SHIFT process helps to reduce overprogramming,

¹³ <https://transportation.ky.gov/Program-Management/Pages/2020-Highway-Plan.aspx>

provides a clear roadmap to construction, and applies to all transportation funding that is not prioritized by other means. The scoring process in SHIFT is based on five key attributes as shown in **Figure 13**.



Figure 13. Five Key Attributes of SHIFT

As shown in **Figure 14**, this eight-step process starts with a list, signifying the importance of the upcoming breakout sessions to identify infrastructure needs surrounding the ports. Lindsay walked through each step of the process and shared where the Cabinet is in the development of the 2022 Recommended Highway Plan.



Figure 14. How SHIFT Works

Immediately following her presentation, participants were broken out into three separate groups to discuss infrastructure needs at each port. Lindsay shared previous outreach efforts the study has conducted to start identifying infrastructure needs, including a survey to KYTC Districts and local stakeholders in late 2020. To-date the top themes were:

- Increased funding for grants that support riverports—including support for domestic and international freight movement and infrastructure development.
- Stable funding for operations and infrastructure. Specifically, for aged infrastructure, improving locks, and container-on-barge initiatives. Other needs include river channel maintenance and dredging needs.
- Marketing support of property and service on a regional, national, and international platform.

Breakout Sessions

Breakout sessions provided summit attendees an opportunity to help identify infrastructure needs surrounding the ports prior to the second round of port visits, to be scheduled immediately following this summit. There were three breakout rooms consisting of 3-4 ports as listed in **Table 3**.

Table 3. Break-out Groups by Port

West	Central/East	Developing
Eddyville	Owensboro	West Kentucky Regional
Henderson	Louisville	Meade
Hickman-Fulton	Greenup-Boyd	Northern KY
Paducah-McCracken		Maysville-Mason

The rooms reviewed regional maps showing the needs identified to-date. The goal was for each port to answer the following questions:

1. Are there existing infrastructure needs not already captured?
2. Based on freight forecasts shown today, are there other infrastructure needs you foresee?
3. Does the port have sufficient equipment to transfer commodities from water to truck or rail? If no, what equipment is needed?

There were not representatives available from all of the ports; however, the second round of port visits will provide another opportunity to voice concerns. Input received will be added to the maps included with the port profiles. Comments received from the breakout sessions are summarized in **Figure 15**.

Eddyville Riverport & Industrial Development Authority

- High-speed internet is biggest need-important for logistics.
- Lake wall shoring and stability of the bank is needed.
- Would need infrastructure to support container on barge-need significant crane investments.
- For the lake, a telehandler is needed.

Henderson County Riverport Authority

- Need structural face-lifts for existing assets and restoration work.
- Maintain existing infrastructure.

Hickman-Fulton County Riverport Authority

- Road connectivity to parkway needs to be improved, currently narrow, two-lane roads.
- Persistent need for dredging operations.
- Poor rail connectivity and location on other side of the floodwall.

Louisville-Jefferson County Riverport Authority

- Congestion relief is needed throughout the city, particularly in the Outer Loop Area.
- City-wide partnership opportunities for grants to include ports.
- Can port divert flows from cross-river traffic to Indiana?
- Can the port pull traffic off I-64/I-65?
- Opportunity to improve SHIFT from ADD perspective-allowing Districts, ADDs, and MPOs to create new CHAFs and shift focus to overall mobility, not just highway-centric.

Owensboro Riverport Authority

- I-165 link to Indianapolis needed to divert congestion away from I-65.
- For growth, property is key.
- Expansions and maintenance of aging infrastructure is important.

Paducah-McCracken County Riverport Authority

- Railroad spur has been abandoned; rail service is needed.
- The bulk yards conveyor systems need to be refurbished, tower cranes specifically.
- Landlocked (from selling off property) which limits development opportunities.

West Kentucky Regional Riverport Authority

- Support for master plan for reusing a former major site south of town.

Figure 15. Breakout Session Comments

Question and Answers

A question-and-answer period followed the breakout session.

- **Any idea if the legislature may be shifting to lift prohibition on gas tax dollars going to non-highway issues?**

Representative Sal Santoro has reached out with a bill to allow multimodal investments, but it has not received any traction. The study will include discussion on the next steps for ports to collectively find more innovative finance options within KY and through other federal sources.

- **If a port can prove saving money on road repairs by diverting traffic, is there any way to get credit added from the highway tax?**

To use state funds, the project has to be a direct roadway investment as the program currently stands.

- **Are on-port roadways considered local roads? Or can they be designated to be eligible for federal funding?**

Many are city/county roads, but inside the gates are considered private since it's not publicly accessible.

8. SESSION 7: ECONOMIC DEVELOPMENT AND RIVERPORT MARKETS

Friday, March 26, 2020 at 10:00 AM Eastern

Presenters:	Kevin Johns	Economic Development Strategist, Metro Analytics
	Anthony Ellis	Executive Director, KY Innovation
	Adam Wasserman	Managing Partner, GLD Partners
	Derek Cutler	Chief Economist, EBP
	Matt Yates	Vice President, Louisville Riverport Authority

Presentation Content

Jimmy welcomed all to the final session, reviewed Zoom tips, and briefly introduced panelists before handing it over to Kevin Johns, Metro Analytics Economic Development and Globalization Strategist. Kevin invited a team of national and state experts to share their mechanisms to increase revenue streams for the ports. A total of 59 individuals joined the session.

First, Anthony (Tony) Ellis, the Executive Director of Kentucky Innovation,¹⁴ provided an update. His goal is to develop innovation hubs across the state to build vibrant, regional innovation clusters to grow the overall economy. The strategy modernizes Kentucky's support for entrepreneurs and high-tech, high-growth-potential startups by leveraging each region's unique strengths. Tony shared three programs available through KY Innovation with the first being innovation hubs. There are currently six regional hubs as shown in **Figure 16**. They are public-private partnerships that serve as the front door for anyone who wants to be involved in the statewide economic ecosystem.



Figure 16. KY Innovation Hubs

¹⁴ <https://www.kyinnovation.com/>

A second program is the Kentucky Commercialization Ventures (KCV), a public-private partnership to commercialize university technology through the Kentucky Science and Technology Corporation, University of Kentucky, and the University of Louisville. A third program is the Small Business Innovation Research and Small Business Technology Transfer (SBIR/STTR) grants and match. These are micro grants and professional services to help Kentucky companies find and manage these federal grants. He shared other capital and state funding opportunities:

- Kentucky Enterprise Fund (KSTC)
- Commonwealth Seed Capital (CSC)
- Angel Tax Credit/Fund Tax credit
- Kentucky Small Business Tax Credit—a non-refundable tax credit for businesses creating full-time jobs and investing \$5,000 or more in qualifying equipment and technology
- Kentucky Small Business Credit Initiative—a tool for lenders to use on creditworthy loan requests that are just outside of acceptable underwriting standards

Tony shared their 2021-2022 priorities which are to focus on connectivity; metrics, data, and transparency; diversity, equity, and inclusion; industry clusters; maximize investment dollars; and attracting talent and innovation. He extended his support to link riverports to their economic ecosystem and help to improve efficiencies.

Following Tony was Adam Wasserman, a managing partner with Global Logistics Development (GLD) Partners,¹⁵ an independent international investment advisory firm. He focuses on economic strategy, infrastructure developments, ports management, and public policy. Adam shared project partner examples and project examples. Understanding “logistics is a means to an end” he seeks to create connectivity and efficiencies to generate opportunities in a competitive setting. His observations in reviewing the US inland port system are summarized in **Figure 17**. In terms of opportunity, he advocated for investing in legacy business and capitalizing on your location by focusing on 1) which supply chains you can connect with in your area, 2) what multimodal opportunities are available, and 3) incorporating technology to improve efficiency.

¹⁵ <http://www.gldpartners.com/>



Figure 17. Observations of US Inland Port System

Derek Cutler, the Chief Economist at EBP—a company that provides economic expertise, tools, and analysis to help clients make better decisions on policies—was the third panelist. Derek focused on freight-economy relationships and modes to quantify the role that infrastructure plays in supporting regional economic development. Derek shared a behind-the-scenes perspective through case studies of how to use freight data in planning study. His goal was to provide an integrated understanding of how to use freight data to confront challenges, make informed decisions, and better market the ports. He walked through the process of using the raw data to identify behaviors, enhancing the data to communicate with stakeholders (**Figure 18**), and informing solution planning (scenarios and sensitivity testing) to be able to integrate into a broader analysis to communicate needs in the area or implement change. Essentially, Derek illustrated how data can be interpreted to provide a blueprint for economic analysis.

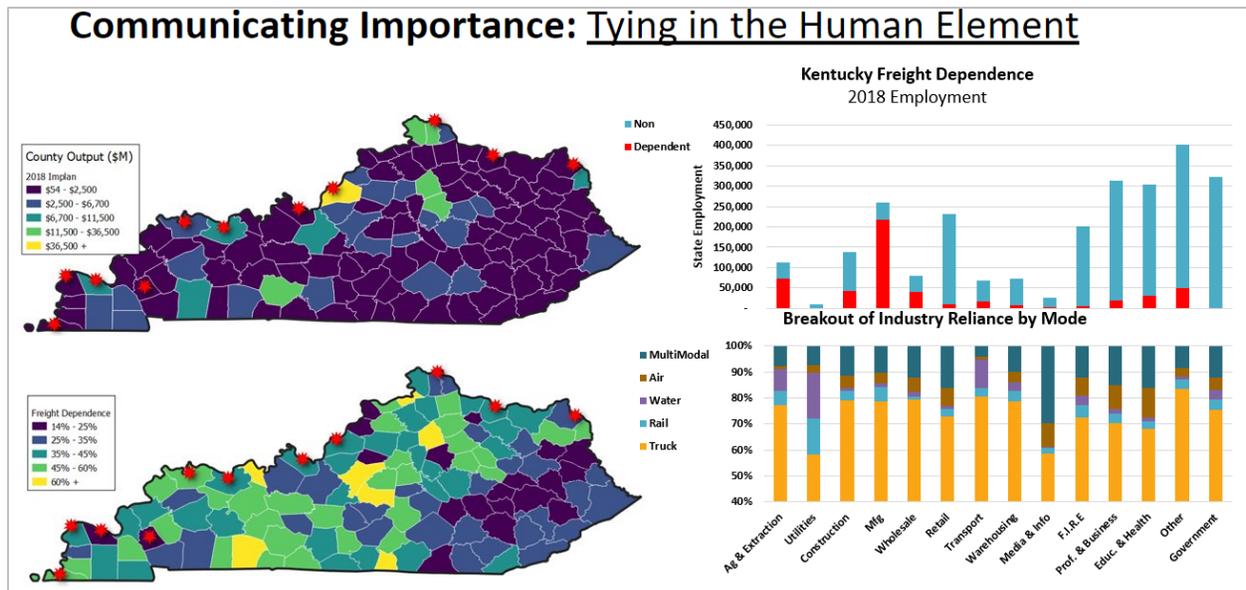


Figure 18. KY Freight Dependence

Lastly Matt Yates, Vice President of the Louisville Riverport Authority, shared insight on how he handles new investment, foreign trade zones, and daily operations. Matt shared his experience working as a local economic developer for the port. He elaborated on how the ports are catalysts for economic development and the importance of developing relationships with local and state economic development agencies. He stressed the importance of how the ports can add value to their communities and attract potential business seeking to locate there.

Question and Answers

The panelists fielded questions after their presentations.

- **Matt, what advice would you give the Kentucky CED to benefit the port system?**

It is important that the ports benefit the economic vitality of the state overall. It is important they understand what we have to offer to be able to loop us into conversations with potential new businesses. Not just our location, but how we can serve the broader region—what tools we have to offer and how we can support growing industries in the state.

- **Derek, does the case study include freight that just travels through Kentucky, but the destination is not Kentucky?**

When we are talking about the role of freight in an economy, the emphasis is on inbound, outbound, or internal goods movement in relation to Kentucky, so not explicitly. Through flows do not play a direct role in the Kentucky economy, but they do have implications on the infrastructure (congestion) that can place added costs on Kentucky industries, or have to be accounted for explicitly if they utilize Kentucky services. That said, from a communications point of view, through flows are incredibly relevant as these types of analyses can identify who is being affected and make a case for shared investment.

- **Tony, what is your take on the port system trying to “future proof” itself and how to compete.**

It needs to be more of a continuing conversation of how we can incorporate the port system into conversations we have every day. The time-to-market is a critical piece in the decision-making process so it is important to have ready-made sites.

- **Do you think that the introduction of innovative automation technology in the barge system and ports can both make the speed imperative work but also generate the human talent needed to create automation, run the software, and reimagine the ports? Do you think that could happen for all of the ports?**

Tony: There are a limited number of people who have the talent and ability to do this work; the more we make this an interesting area, the more opportunity there will be there.

Derek: Now more than ever, we are moving towards a knowledge-based economy, and it is important to leverage data to make it more painless to utilize, focus on what we are good at, and what resources we have to attract more opportunities. We need to be looking at what kind of workforce training we have in place or need to help address these problems.



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