

Question and Answer DocumentFreight Summit #2

March 2021











Question and Answer Document-Summit 2

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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

This document lists all the questions and responding answers listed during the summit sessions. They are separated by the session headings.

2. SESSION 1: OPENING

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 website 1 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

 $^{{}^1\,}https://transportation.ky.gov/MultimodalFreight/Pages/Kentucky-Riverports,-Highway-and-Rail-Freight-Study.aspx}$



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.² We do not know for sure at this time but will share more information once it becomes available.

> Kristina, what department are you in?

Kristina Slattery

Deputy Commissioner, Department for Business Development

Kentucky Cabinet for Economic Development

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> How can riverports efficiently navigate environmental regulations?

The Energy and Environment Cabinet³ 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

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

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² http://kydlgweb.ky.gov/

³ https://eec.ky.gov/Pages/index.aspx



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

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.

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

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 though 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?

A question-and-answer session followed the presentation.

> 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 Cinci/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

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

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.