

# Question and Answer Document Freight Summit #1

December 2020





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## 1. INTRODUCTION

The Kentucky Transportation Cabinet (KYTC) and Kentucky Cabinet for Economic Development (CED) conducted the first summit for the *Kentucky Riverports, Highway and Rail Freight Study* during November 16-18, 2020. The summit was titled *Kentucky Summit on the Economic Role of Freight Modes*. The virtual meetings represented an opportunity for the project team to engage with port leaders, economic development staff, industry representatives, and other stakeholders to discuss the existing conditions of Kentucky's waterborne freight network, specifically focusing on eleven public ports.

Seven one hour-long sessions were held over three days:

- Opening Session
- The State of the Ports
- A Review of Current Freight Movements in the Market
- Role of Economic Development with Riverports
- Funding: Options, Opportunities, and Peer Comparisons
- Port Interactions and Logistics
- Closing Session

This document lists all the questions and responding answers listed during the summit sessions. They are separated by the session headings. Only the questions generated during the session or immediately afterwards will be included in this document. Questions originated from the session attendees through the chat box function of the Zoom meeting platform, where stated during an open forum period, or relayed to the Riverport consulting team via email during the summit.

## 2. SESSION 1: OPENING

- Will the Port Interactions session address regional and global connections—or potential connections—of our ports?

Yes. Later in the summit there will be a speaker from Port New Orleans and a major freight mover to grab a larger perspective.

- Will we be looking at how other states are funding their riverports compared to Kentucky's model?

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.

## 3. SESSION 2: STATE OF THE PORTS

- In the Cincinnati/Northern Kentucky area, Amazon is growing quickly. Is the inland waterway system too slow to serve its needs?

Getting logistics right to shorten the supply chain is essential; reliability is more important than overall speed. Reliability and infrastructure condition are concerns for the Ohio River, particularly with its flooding and low water events. Port New Orleans has seen success with container on vessel, which may be a long-term interest.

- Base mapping should be updated to reflect recent interstate designations for I-69, I-169, and I-165.
- Eddyville is the only riverport on a lake in Kentucky, providing stable water levels for tenant. How do they do that?

A system of locks and dams control pool stages along the Cumberland River (managed by TVA) and portions of the Ohio River.

- What is the key to Louisville's flexibility?

Its large population base, multimodal connections, and proximity to major support services within a large urban area help position it for success.

- How are public ports established in Kentucky?

An application is submitted to KYTC to be reviewed/approved prior to recognition.

- Where do large international quantities get broken down into smaller warehouse deliveries—at the source, receiving port, an intermediate facility?

It depends on the commodity. This can occur at the port, but restrictions of local infrastructure must be considered, e.g. posted load ratings on bridges. The river offer flexibility to haul large items—windmill parts, generators—that highway and rail travel cannot match.

- If you can show that river transport can reduce congestion on highways, you can qualify to use highway funds for improvements.
- Can part of the load be a moving warehouse on water or a part of an effective system that moves goods slowly but with high volume?

That concept defines a transportation pipeline; consistency and reliability remain core issues.

## 4. SESSION 3: FREIGHT MOVEMENTS IN THE MARKET

- For water tonnage, any breakdown between intermodal and bulk?

There is not a direct indication from the database but categories we might be able to derive some assumption from the individual commodities. It is not a huge flow for the waterborne mode. 2020 has seen large rates increase for rail/intermodal shipping, with several shippers trending back to trucks. This is an opportunity to influence future mode choices, assuming competitive reliability. Conventional distance/commodity assumptions may be more flexible following the pandemic.

- What happens when coal and oil start the downturn, being replaced by non-fossil fuels? How will KY river ports recover or how do they prepare?

No question, parts of KY have been challenged with downward trend in coal. Natural gas and cargoes classified as “manufactured products” (e.g., windmill blades) can be readily absorbed into the waterway mode.

- Will you be able to drill down into the Freight Generator data? For example, who is shipping steel near Henderson?

There is a database of 7,200+ business establishments with estimates of their output and freight generation. It represents a rich source to understand potential suppliers and customers; we will coordinate with KYTC about how to make the information more accessible.

- Please confirm values shown represent millions of dollars.

Values in the slides represent thousands of tons and millions of dollars, respectively.

- You cannot examine freight movements in NKY without including air due to DHL's North American Global Hub and Amazon Air Prime Hub.

Air flows shown are truck-air moves, excluding air-to-air transfers. This move represents a huge value but is less relevant to the study as it has extremely low potential to divert to the waterway.

- Is it possible to drill down within each transportation mode to identify the cargo movement by tonnage/value?

This data exists in Transearch; the team will coordinate with KYTC on how to make it more accessible.

- How much volume originates from or is delivered to a facility located on the river in Kentucky beyond the public ports—powerplants, grain facilities, chemical production, etc.?

That volume is included in the waterborne commerce statistics. For the study, we defined the market areas around the 11 public ports, which do not capture all the freight movements, with a focus of divertibility. These flows are included in the potential but there are competitive and proprietary restrictions.

- Can the study be broken down to the US Gulf commodities? I believe most of your truck and rail is coming off the east coast.

This data exists in Transearch but was not part of today's presentation specifically; the team will coordinate with KYTC on how to make the data more accessible.

- How can you estimate disrupting an existing freight flow to divert through a port? What value are you adding to the trip to make it worthwhile to disrupt the existing flow?

Analysts made assumptions about potential modal competition, using an Oak Ridge National Labs model with an impedance applied to account for drive times, loading, etc. The full methodology will be presented in the report. Analysis attempts to mimic market realities: what would shippers consider if thinking about a switch to the waterway mode?

- It appears to me that truck, rail, and water operate as competitors for many goods. Can you speak to the challenges for these industries to be more cooperative for their mutual benefit?

There will be competition between trucking, rail and water that is natural for commodities and origin/destination shipments where price, performance and reliability are comparable. The economic incentive to cooperate is there through negotiating gain sharing, but with unequal market power due to access and underlying operating costs (which are not the same as rates.) It is the shippers who ultimately decide with respect to multimodal shipping options. When shippers choose water over pure truck or rail or truck/rail moves, trucking companies and even the railroads will participate in serving the riverports if their compensation from the shippers is sufficient. Truckers work with barge shippers already and trucking is perhaps the easiest mode in which to find willing partners for the riverports. Rail partners can be more challenging depending on how the riverport connectivity affects the railroads' regional operations and costs for more than just the barge shipments alone, especially for the Class 1 carriers such as CSX, CN and Norfolk Southern. Where they have operations, the short line railroads may offer more flexibility as riverport partners, still qualified on the returns for their operations being adequate. Shippers can be the catalyst for truck, rail and water operators to cooperate, and the riverports can assist by identifying and working to connect shippers to the operators of each mode of transport.

- How does river cargo from Pittsburgh figure into the freight flows through KY and its neighboring states? Is this where the steel movement comes into play?

Ohio River cargoes from Pittsburgh and other producing and consuming areas upriver in Pennsylvania, Ohio and West Virginia are handled through Kentucky, connecting to producing and customer sites up and down the greater Mississippi and Tennessee River systems through Kentucky. Iron and steel products are a portion of that traffic, taking advantage of plant locations on the Ohio River system and the cost advantage of shipping heavy weight commodities by barge.

## 5. SESSION 4: ECONOMIC DEVELOPMENT

- Can you help connect industries to create opportunities? e.g. having rail, truck, and shipping work together for mutual benefit?

CED can help connect companies who may have opportunities to support each other.

- Does CED's 6,163 new employees include actual new employees hired/working now or committed employees (X number of people by X date) for the company to get state incentive?

Committed

- How does the CED team coordinate economic inquiries with local economic development agencies?

CED talks to local economic developers every day. They are a true partner for us through the Kentucky Association of Economic Development and otherwise. We answer economic inquiries together. Happy to connect offline to talk through!

- How can riverports help connect education to the economy?

Bringing in maritime and freight-related educational and mentoring opportunities to high schools and technical trade schools within port communities is a great idea. Many maritime related jobs are higher paying than the national average.

- Web link for CED's New & Expanding Industry dashboard:

[https://ced.ky.gov/KYFacts/Kentucky\\_Facilities.aspx](https://ced.ky.gov/KYFacts/Kentucky_Facilities.aspx)

- In response to Kevin's comment on working with Department of Agriculture, Commissioner Quarles and our team are very interested in working with our ports, state agencies, and other stakeholders to increase commerce. Our Trade web site has links to a number of resources and videos highlighting over 70 unique agricultural businesses throughout the state, online at <https://www.kyagr.com/trade/international-trade.html>

## Breakout Session

Specific to this session, there was a breakout session where attendees were divided into one of six groups and asked to discuss three questions.

- 1) How can CED better coordinate with riverports? What are these opportunities?
- 2) What incentive programs could be added or modified to benefit development?
- 3) Do the metrics used in Kentucky help identify performance?

**Figure 1** summarizes the compiled results for each.

Figure 1: Summary of Breakout Session Discussions

## CED Coordination

- Tutorial for the CED to understand the riverport background, function and role in the economy. Highlight the riverports.
- A list of potentials and infrastructure for each port. What the ports can do and their capabilities.
- Decentralize more from Frankfort. Transparency on evaluation. More coordination efforts between CED region and ports.
- Networking – building connections
- Great new information to share about the opportunities that riverports offer
- More trucks on road with COVID
- Get to know one another
- Tableau dashboard – example of people outside a stadium starving (match people starving with extra food)
- Visual dashboard to showcase
- Match riverport with rail with trucks to collaborate
- Community involvement, particularly making local folks and economic development group aware of what’s going on at the ports. Generally, Kentucky freight is very interstate-centric. The study and its resulting toolkit were viewed as a very positive step in the right direction.
- Paducah engages regular – process of engaging potential opportunities
- Riverports need help to deal with regionalism (multi-state); 4 ports in Western KY; need help with marketing and coordination
- Do we co-market?
- Develop and distribute clear, easy to understand visual dashboards that capture value and volume of port activity.

## Incentives

- How are incentives calculated? We need a better understanding of potential options.
- Incentives are typically a local initiative without specific guidance/standards statewide.
- Incentives for mobile warehouses on barges
- Interest in working with specific companies to develop throughput guarantees to generate an incentive, e.g. # tons during a one-year period through port X.
- Port authorities are able to invest beyond their borders and still pull in revenue from a community project, renting/selling to industries, then capturing revenue.

## Performance Metrics

- Realize congestion relief potential
- Reduce poverty levels
- Workforce – pathways for careers
- Construction – hard to find skilled trades
- Get skilled workers into the economy

## 6. SESSION 5: FUNDING

- How much autonomy does the US Army Corps of Engineers (USACE) have to direct funds to the river infrastructure versus Congressional direction?

Along with industry representatives, USACE is represented on the Inland Waterways Users Board (IWUB) that makes recommendations to Congress on priority navigation projects. Through the

IWUB, USACE and industry coordinate and collaborate on top projects, funding mechanisms, etc. USACE develops its fiscal year Work Plan each February to outline its allocations for the previous fiscal year funding appropriated by Congress.

- BUILD and INFRA are solicited and competed at the Departmental level. Is the PIDP solicited and competed by MARAD?

MARAD coordinates all programs through the USDOT Secretary's office for all final decisions.

- Any chance of bulk cargo being included in the Marine Highway Program?

As of now, it is not included. We are working on a proposal to possibly include it in the future.

- I believe Louisiana dedicates a portion of its gas tax for port development.
- Public-private partnerships (P3s) participate in grant applications and grant awards. Is there a set match percentage for these awards?

Every federal notice of funding opportunity describes its scoring process. Many discretionary grants show benefits in scoring process for ventures that are able to leverage private funds.

- Missouri also has a small amount that we provide for Port Admin funds and small amounts of capital funds for our ports. I can give additional information on what Missouri offers as the slide only has information on one of our three programs.
- Some Kentucky ports can apply for US Environmental Protection Agency (EPA) grants to replace aged equipment, depending on their status as an air quality concern area. A compiled list of all federal funding grants available would be beneficial.

A list of grants will be included in the final report.

## 7. SESSION 6: PORT INTERACTIONS AND LOGISTICS

- Why container on vessel verses on barge? Seems the power unit would be a challenge to compete with tugs.

There are a lot of inefficiencies in loading containers from barges. Barge transportation is slow and these vessels have a distinct speed advantage, in addition to a hull design that minimizing the wake it generates. This translates into a quicker transit time—14 days faster than barge via Mississippi Gulf and 6 days faster than intermodal rail via Los Angeles/Long Beach (St. Louis to Shanghai).

- Please overlay the hinterland market area maps presented yesterday with the post-dredge map presented today.
- Would container reduce the lag time at terminals for silos and transfer by going straight from barge or (river vessel) to container ship?

Yes.

- What do you think are the most pressing challenges to effective and efficient movement of goods on the river system? You talked about moving containers on barges in the non-lock portion of the river system, but what would it take to extend that service into the lock portion? What would have to happen to make that a reality. What investments are necessary?

The Lock and dam system is a critical connector; major infrastructure investments are needed to extend container on barge/vessel into these reaches. At best, the industry is two years away. APH has the vessel designed with two types; they are the same length, but one is narrower to navigate the locks.

On the investment side, robust funding is essential—and not just size of the check but also predictability of funding. What can happen with predictable funding? Just this summer, USACE conducted major rehabilitation work on five of eight Illinois locks/dams. With predictable funding, they were able to commence work simultaneously and complete the effort by the end of October. This illustrates the key point: when Congress provides clarity of mission and predictability of funding, we can get exceptional work done. Asking government agencies to work among uncertainty spurs delays.

- Are new liner routes in the Gulf (e.g., ZIM, CMA, CGM) driving this growth in bulk containerization?

We do see new services that are driving more bulk containerized cargos—not specifically those called out—but yes, the direct connection to Asia via the Panama Canal helps.

- Are the major grain companies on board with containerized grain? What efforts are they putting towards the APH project?

While grain is still mostly a bulk load, some larger players are taking an interest. The traceability that containers offer is a major factor as trends point towards increased transparency of food sources.

- What about reefer type container versus reefer vessels?

Reefer vessel fleets continue to age and are being replaced with capacity for reefer containers and we expect this trend will continue. It offers less liability, more diversification, and better access to global networks.

- Could farmers realistically load containers in the field?

Yes. That is the ideal scenario, assuming they are located close to ports, since containers are subject to highway weight restrictions. Farmers are growing soybeans under specific growing and transporting rules. Having fewer steps helps reduce time and costs, translating to higher market value for farmers.

- If a riverport is interested in containerized movements, what infrastructure would they need?

At the port, a landing place, a yard for empties, and chassis unless there is a transloading facility to accept the loads. Maybe a container crane to accept shipments. It is a big investment if ports do not already have equipment in place.

- What port metrics are most important in your perspective? What features would you look for?

Amanda: Connectivity and proximity to consumer markets.

Mike: A reliable and predictable supply chain is most important for competitiveness.

- How can KY riverports connect with Port of New Orleans?

“When Congress provides clarity of mission and predictability of funding, we can get exceptional work done. Asking government agencies to work among uncertainty spurs delays.”

-- Mike Steenhoek

Amanda can help facilitate introductions.

- What could government at the local and state level do to improve efficiency of goods movement on the river (policy, regulations, funding)?

Amanda: Our current system works well. However, further incentivizing startups for waterway travel would be a great promotion. It is environmentally friendly with excess capacity on the waterways. Another way to support is through economic development partners to promote the benefits of inland waterways and help emphasize benefits and incentives.

Mike: Maintaining robust funding for ports with a clear direction on allocations, establishing predictable sources of funding, and updating investment plans regularly.

## 8. SESSION 7: CLOSING

- What can we expect at the second summit?

Infrastructure needs and economic opportunities will be discussed. The team will examine what are the growth markets for the ports? What might relate to divertible freight? How does COVID affect the ports system? There will be more strategic discussion on how we can take proactive steps to position ourselves.

- Is there any opportunity to increase engagement with each Riverport Board of Directors in addition to the staff?

We can explore this opportunity with KYTC.