Heartland Port Authority of Central Missouri Board of Commissioners

Jefferson City Area Chamber of Commerce

Tuesday, August 20, 2019 7:30am

Tentative Agenda

- 1. Roll Call
- 2. Approval of Agenda
- 3. Approve Minutes
- 4. Public Comment
- 5. Old Business
 - 5.1. USDA Grant Bonnot for Allen
 - 5.2. MASBDA Grant Bonnot
 - 5.3. Missouri River Port Tours Reschedule Mihalevich
- 6. New Business
 - 6.1. Sunshine Policy Mihalevich
 - 6.2. Stakeholders Meeting Mihalevich
- 7. Staff Report
 - 7.1. Bank Account Bonnot
- 8. Commissioners Reports & Invited Guests
 - 8.1. American Patriot Holdings Governor Meeting Report Fischer
- 9. Adjournment

Next Meeting Tuesday, September 17 - 7:30am

MINUTES

Board of Commissioners Meeting Tuesday, May 14, 2019 7:30am. Arthur P. Grimshaw Board Room

PRESENT:

BOARD:

Calvin Broughton Roger Fischer Jim Jordan Rick Mihalevich Roger Schwartze Doug Mertens Gary Wheeler

EXCUSED:

Hank Stratman Kris Scheperle

<u>STAFF:</u> Randy Allen, Missy Bonnot, Duane Schriemann

REGULAR BUSINESS:

1. Roll Call: Missy Bonnot

All Board members were present with the exception of Hank Stratman and Kris Scheperle

2. <u>Approval of Agenda</u>: Chairman Mihalevich

Gary Wheeler made a motion to approve agenda and Roger Fischer seconded. Motion passed.

3. <u>Approve Minutes:</u> Chairman Mihalevich

Roger Fischer made a motion to approve and Roger Schwartze seconded. Motion passed.

4. Public Comments: Chairman Mihalevich

Rick Campbell with Barr Engineering was in attendance. There were no public comments.

5. Old Business: Chairman Mihalevich

5.1. USDA Grant - Randy spoke about making application for the USDA-RBDG Planning Grant. The \$180,000 grant was submitted two weeks ago and we should know status by end of the month. In making application to USDA the Port Authority had to obtain DUNS and EIN numbers.

5.2 Special Meeting to Focus on Port Development – Missy reported we had a meeting on April 25 from 11:00a-1:00p to meet with Ms. Branden Criman with the U.S. Department of Transportation Director, Inland Waterways Gateway, Maritime Administration for a lunch and learn. Ms. Criman presented grant opportunities and technical support the Maritime Administration could possibly provide. A briefing document was provided to the Board.

5.3 MASBDA Grant - Missy reported we are working to submit grant application by May 31 to be considered at the June Board Meeting. We have to provide a 10% match which is \$18,370. Missouri Soybean Association has committed to providing \$5,000 so the remainder is \$13,370. The group discussed the remaining of the grant match could come from Jefferson City, Cole County and Callaway County. Jim Jordan made a motion to make a request to the three governmental entities to provide the match. Roger Schwartze seconded. Motion passed. Rick Mihalevich stated he will be asking the City Council for the match at the next city council meeting which is May 20th. Roger Fischer said members of the Port Board will need to make the request to Callaway County.

5.4 Port Visits on Missouri River – Rick reported he would like to set up port tours on our next meeting date which is June 18th. The port he is targeting is Port KC, News Brunswick, Boonville and possibly St. Joseph.

6. <u>New Business</u>: Chairman Mihalevich

No new business was introduced.

7. Staff Report:

7.1 Land Conveyance HB 813 and SB 869 -Randy discussed the recent hearing and provided a brief summary. The bill is still alive and hopefully will get passed by the end of session.

8. Commissioners Reports and Invited Guests:

8.1 Commissioner Reports-Roger Fischer reported April 25 and 26th he attended a meeting in New Orleans with Port of Plaquemines and American Patriot Holdings. The presentation was on the new containerized vessels and the design of the vessel.

9. Adjournment: Chairman Mihalevich

Chairman Mihalevich declared the meeting adjourned.

Next meeting Tuesday, June 18th, 2019

Minutes submitted by: _____

Missy Bonnot, Director of Economic Development Jefferson City Area Chamber of Commerce

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If the decision contained above in this form results in denial, reduction or cancellation of USDA assistance, you may appeal this decision and have a hearing or you may request a review in lieu of a hearing. Please use the form we have included for this purpose.

Position 2

ORIGINAL - Borrower's Case Folder

COPY 1 - Finance Office

COPY 2 - Applicant/Lender COPY 3 - State Office

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is o570-0062. The time required to complete this information collection is estimated to average 15 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

CERTIFICATION APPROVAL

For All Farmers Programs

EM, OL, FO, and SW Loans

This loan is approved subject to the availability of funds. If this loan does not close for any reason within 90 days from the date of approval on this document, the approval official will request updated eligibility information. The undersigned loan applicant agrees that the approval official will have 14 working days to review any updated information prior to submitting this document for obligation of funds. If there have been significant changes that may affect eligibility, a decision as to eligibility and feasibility will be made within 30 days from the time the applicant provides the necessary information.

If this is a loan approval for which a lien and/or title search is necessary, the undersigned applicant agrees that the 15-working-day loan closing requirement may be exceeded for the purposes of the applicant's legal representative completing title work and completing loan closing.

35. COMMENTS AND REQUIREMENTS OF CERTIFYING OFFICIAL

36. I HEREBY CERTIFY that I am unable to obtain sufficient credit elsewhere to finance my actual needs at reasonable rates and terms, taking into consideration prevailing private and cooperative rates and terms in or near my community for loans for similar purposes and periods of time. I agree to use the sum specified herein, subject to and in accordance with regulations applicable to the type of assistance indicated above, and request payment of such sum. I agree to report to USDA any material adverse changes, financial or otherwise, that occur prior to loan closing. I certify that no part of the sum specified herein has been received. I have reviewed the loan approval requirements and comments associated with this loan request and agree to comply with these provisions.

(For FP loans at eligible terms only) If this loan is approved, I elect the interest rate to be charged on my loan to be the lower of the interest rate in effect at the time of loan approval or loan closing. If I check "NO", the interest rate charged on my loan will be the rate specified in Item 28 of this form. _____YES ____NO

WARNING: Whoever, in any matter within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals or covers up by any trick, scheme, or device a material fact, or makes any false, fictitious or fraudulent statements or representations, or makes or uses any false writing or document knowing the same to contain any false, fictitious or fraudulent statement or entry, shall be fined µn)der this title or imprisoned not more than five years, or both."

Date 8 - 7. (Signature of Applicant) . 20 — Date_

(Signature of Co-Applicant)

37. I HEREBY CERTIFY that all of the committee and administrative determinations and certifications required by regulations prerequisite to providing assistance of the type indicated above have been made and that evidence thereof is in the docket, and that all requirements of pertinent regulations have been complied with. I hereby approve the above-described assistance in the amount set forth above, and by this document, subject to the availability of funds, the Government agrees to advance such amount to the applicant for the purpose of and subject to the availability prescribed by regulations applicable to this type of assistance.

(Signature of Approving Official)

Typed or Printed Name: Matt Moore

Date Approved:

Title: Business Program Director

38. TO THE APPLICANT: As of this date ______, this is notice that your application for financial assistance from the USDA has been approved, as indicated above, subject to the availability of funds and other conditions required by the USDA. If you have any questions contact the appropriate USDA Servicing Office.

Heartland Port of Central Missouri - USDA - RE Scope of Work	BDG Planning	Grant
Scope Item	Preliminary Co USDA -	ost Estimate for Services RBDG Grant
Boundary Survey and Legal Description		\$12,000
Survey on south side of the road to define land acquisition		
Topographic and Utility Survey and Mapping		\$0
North port location		
South port location		
Roadway replacement area leading to south port		
Concept Design (Preliminary Plans and Estimate)		\$65,000
Road and bridges to the southern port		
Rail around the southern port		
Northern and southern port Design		
Roadway connecting to Hwy 94 to Northern Port		
NEPA Clearances		\$110,000
Cultural (Section 106)		
Stream/Wetland (Section 404)		
Floodplain/Floodway		
Hydraulic Modelling		
Farmland Impact		
Land Disturbance		
Threatened Endangered Species		
Total Planning Project Estimate		<mark>\$187,000</mark>
Total \$ Needed		\$187,000
RBDG Grant Request		\$187,000
Local Match		(\$12,000)
Grant Request Total		\$175,000
	Preliminary C	ost Estimate
Scope Item	USDA -	for Services RBDG Grant

Scope Item Preliminary Cost for USDA - RBI Boundary Survey and Legal Description USDA - RBI Survey on south side of the road to define land acquisition Image: Cost of the state of the road to define land acquisition	t Estimate or Services BDG Grant \$12,000 \$0						
Boundary Survey and Legal Description	<mark>\$12,000</mark> \$0						
Survey on south side of the road to define land acquisition	\$0						
Topographic and Utility Survey and Manning	\$0						
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North port location							
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Concept Design (Preliminary Plans and Estimate)	\$65,000						
Road and bridges to the southern port							
Rail around the southern port							
Northern and southern port Design							
Roadway connecting to Hwy 94 to Northern Port							
NEPA Clearances	\$55,000						
Cultural (Section 106)							
Stream/Wetland (Section 404)							
Floodplain/Floodway							
Hydraulic Modelling							
Farmland Impact							
Land Disturbance							
Threatened Endangered Species							
Total Planning Project Estimate	\$132,000						
Total \$ Needed	\$132,000						
RBDG Grant Request	\$132,000						
Local Match ((\$12,000)						
Grant Request Total	\$120,000						
Preliminary Cost	t Estimate						
Scope Item for	, for Services						
USDA - RBI	BDG Grant						

Exhibit A, Comprehensive Market Study

Description of Services

Company Name: Heartland Port Authority of Central Missouri Contact Name: Missy Bonnot

Phone: 573.638.3582 Date: August 6, 2019 Email: missybonnot@jcchamber.org

Background

In coordination with project stakeholders, the Heartland Port Authority of Central Missouri (HPACM) has identified two preliminary potential sites for investigation and feasibility study for development of a river terminal. One site is located on the south side of the Missouri River in Cole County, and the other is located on the north side in Callaway County.

The Project would potentially have one or more barge terminals on the Missouri River to help spur economic development in central Missouri region. The South Site is about 125 acres located at about River Mile 137.0 (RM 137.0), Right Descending Bank (RDB), and is controlled by the Missouri National Guard. The North Site, about 23 acres, is located at about RM 138.6, Left Descending Bank (LDB), and is owned by OCCI, Inc. with a portion of the site near the riverfront that is about 3 acres.

Methodology

To assist the HPACM, the scope of work (SOW) involves several tasks broken down in two phases:

- **Phase 1: Comprehensive market study.** The overall objective of this phase is to identify all companies in an 11-county area that could potentially utilize the port for outbound and/or inbound shipments of commodities, products, and raw materials.
- **Phase 2: Preliminary assessment of the financial feasibility of the Project.** The objective of this phase is to develop a detailed business model for the port that includes a preliminary, but comprehensive, analysis of the potential financial viability of the project.

Phase 1: Comprehensive Market Study

Phase 1 will be a four-task effort, which will support two major work blocks: (i) primary research with identified potential users of the port (as prescribed in the RFP) and (ii) validation, verification and addition of context to the primary research, which will be based upon the collective experience of the team.

Task 1. Organize kick-off meeting and stakeholder coordination

- 1.1. **Organize kick-off meeting.** Organize an inception meeting with the HPACM and other relevant project stakeholders (e.g., HPACM, Jefferson City Area Chamber of Commerce, Callaway County, Cole County and Jefferson City) to discuss relevant sub-sectors to be targeted, identify potential data sources, and any other aspects relevant to the Project to successfully achieve the objectives of each task comprising this scope of work.
 - a. Coordinate regular update meetings to discuss data availability, data interpretation, potential contacts, present and review of the different value chains.
 - b. The Team uses a secure cloud-based Microsoft SharePoint environment to facilitate a collaborative approach for projects of this nature. We can include designated client

representatives as external users thereby enabling them to contribute to the process and gain real time understanding of project status.

c. Follow-up with public and private stakeholders under the direction of the HPACM and discuss priorities and next steps.

Task 2. Collect and analyze relevant data and review available information.

- 2.1. Collect and analyze relevant data and review available information. The Project Team will collect and review information regarding the potential cargo markets and the cargo operations. Historical cargo traffic flows by barge, rail, and truck, publicly available studies regarding the project, as well as the necessary historical statistics for key cargo commodities will be studied. The scope of Phase 1 is identified as all companies in an 11-county¹ area in and surrounding Jefferson City, MO. Relevant companies are identified as those containing the following 2-digit NAICS codes:
 - Agriculture, Forestry, Fishing and Hunting (NAICS 11)
 - Mining (NAICS 21)
 - Manufacturing (NAICS 31-33)
 - Wholesale Trade (NAICS 42)
 - Transportation and Warehousing (NAICS 48-49)
- 2.2. **Prioritize NAICS classification by order of relevance**. While the above NAICS codes are of initial interest, some NAICS classifications may not prove to be as relevant as others (expectations are that at least NAICS 11 and 31-33 will be relevant). As work commences, a prioritized list, if appropriate, will be approved by HPACM.

Task 3. Primary Research

With geographic and industrial scope determined, a series of questions will be answered through a survey of potential users of the port. These questions, once answered (or as they're answered in a few instances), will inform Phase 2 of the project. A significant portion of the data for this phase will be gathered through direct contacts (primary research) with producers, manufacturers and consumers of incoming commodities. Depending on the number of identified businesses, a representative sample of the group may be contacted for input on these questions.

The primary research component of the market study (the "questions") will be organized into three logical groups. The first group will include data collected about the content of inbound and outbound shipments in the study area. The second group will focus on the current status of inbound and outbound shipments to and from businesses in the study area. The third group will examine the potential changes to the current status resulting from adding a new port to the infrastructure of the study area. The three groups along with the questions assigned to those groups are listed below; as a survey instrument is developed, we will likely include additional questions to increase understanding of potential users of the port.

3.1 Content:

- a. Identify the commodities, products, and raw materials the businesses ship and receive.
- b. What markets do your commodities, products, and raw materials get shipped to?
- c. What form (bulk, containerized, dry, liquid, etc.) is your commodity, product, or raw material in when received and when shipped outbound?

¹ The following eleven counties will be included in this analysis: Audrain, Boone, Callaway, Camden, Cole, Gasconade, Miller, Moniteau, Morgan, Montgomery and Osage.

d. Are commodity, products, and raw materials inbound and outbound shipments time sensitive, seasonal, consistent (i.e. weekly, monthly, etc.) and what is the stability of the markets?

3.2 Current Status:

- a. How are the commodities, products, and raw materials currently shipped to or received from the markets or suppliers?
- b. Who are the current transportation providers of your commodities, products, and raw materials?
- c. What are the current transportation costs of outbound and inbound shipments?

3.3 Potential changes:

- a. What is the current and potential volume and weight of commodities, products, and raw materials shipped and/or received?
- b. What transportation obstacles do you currently face getting your products to market?
- c. Are there opportunities for partial load shipments inbound or outbound?
- d. Are there other entities that might utilize the port facility, i.e. military, federal, state or local governments? If so, what would be their needs?

Task 4. Conduct validation, verification, and addition of context information

Conducting primary research with potential users of the port in Jefferson City will undoubtedly yield important insights which will provide a basis for Phase 2 of the research. Notwithstanding these valuable insights gained from primary research, the Team will add significant context to the overall goal of the research. For instance, DIS will leverage current and past projects and our expertise in production and value-added agriculture and industrial economic analysis, work with private and government produced reports and lean on our own internal database of relevant industry participants to ensure the best understanding of port use is provided to the HPACM. Below are our additional thoughts on how to enhance the insights gained from primary research.

4.1. Content:

- a. To supplement and validate the data obtained through business contacts, a port flow analysis will be conducted relative to the study area. Representative primary sources of data for conducting a Port Flow Analysis will be data from the U.S. Army Corp of Engineers (USACE), U.S. Department of Agriculture's (USDA) reports such as the Grain Transportation Report.
- b. Other potential sources of data for the content group will be the Freight Analysis Framework tool developed by the Center for Transportation Analysis, US Census Bureau, and the Economic Impact Analysis for Planning dataset (IMPLAN).
- c. DIS maintains a database with key information on many businesses within the study area. This database has been populated and kept current through data purchases, an extensive web alert process and interaction with contacts in the industries tracked. We intend to use this database as additional input to the information gathered through contacts with businesses in the study area. We continue a monthly subscription to SalesGenie.
- d. One of the objectives of Phase 1 is to understand the costs associated with different modes of travel and what impact having an alternative place to ship from has on movement of goods up and down the Missouri River. A primary measure of this impact from an agricultural production standpoint is what is called Basis". Basis is defined as the difference between local cash price and the nearby future contract price (i.e. Chicago Board of Trade) for a given

commodity. In our experience, the availability of an additional port will have a favorable (from a crop producer's standpoint) impact on basis. We intend to analyze this and incorporate our findings.

4.2. Current Status.

- a. Market type has implications for distance, quantity and mode of travel. Furthermore, most markets will have differing infrastructure needs for inputs versus outputs. Public policy, such as livestock zoning and renewable fuels legislation, also have significant implications for movement of commodities and finished goods in the study area.
- b. Movement of processed grain and oilseeds is largely determined by location of ethanol/biodiesel plants, local livestock and poultry production and size, location and nature of export markets.
- c. Use data and experience to understand volumes, forms and timing of shipments to international destinations.
- d. In nearly all cases, farm-produced commodities produced in the study area are likely to be delivered via the road system, primarily by truck. Results from prior work will be used to add context.
- e. More variation in transportation mode occurs at the primary and secondary stages of processing. This is primarily due to a processor generally having few (in number) inputs but several co-products, for example:
 - Soybean processors purchase soybeans and sell soybean oil, soybean meal and soy hulls. If local demand (food processors or biodiesel plants for the oil, livestock for the meal and hulls) is less than the commodity it produces, the excess production must be shipped to other markets via truck, rail or barge.
 - An ethanol plant will likely receive the majority of its inputs (i.e., corn) by truck, effectively acting as an elevator, from farms within about 75-100 miles. Depending on location of the ethanol plant, ethanol, corn oil and DDGS can be shipped to their intermediary or final consumption point via truck, rail or barge. The decisions related to how to ship product from an ethanol plant is typically influenced by presence of local demand (livestock and poultry demand for DDGS, etc.), options for export (either domestically or internationally), and management preferences. In all cases, economics of competing alternatives influences these decisions. Other commodities may be shipped or received by rail or river waterway.
- f. Other products or materials that are likely candidates for outbound shipment are aggregates (at least four quarries in the study area) and manufactured products. The Team will identify the current transportation modes used that may be located or operating outside of the study area. This will include:
 - What are the commodities that are currently being produced within the study area and being shipped out of state for further processing?
 - What are the commodities which are produced outside the study area which could be furtherprocessed in the study area?
 - What commodities are transported into the study area for processing?
 - What are the current transportation costs of outbound and/or inbound shipments?

4.3. Potential changes.

- a. Preceding work will provide additional data to include with interviews in evaluating the potential for utilization of the HPACM port.
- b. There are two major military bases located near to the study area. The information available from USACE should include existing utilization of existing ports by these bases. It is possible that at least liquid fuels are shipped into the state by barge and then transported to these bases. The Team will evaluate the potential of the new port being a preferred choice for these and other government entities.

Phase 2: Preliminary assessment of the financial feasibility of the project

The objective of Phase 2 is to conduct a preliminary assessment of the economic and financial feasibility of the project. To achieve this objective, the DIS-Mercator Project Team has structured this SOW for Phase 2 to provide HPACM with a practical analytical framework that will allow testing different levels of market demand, business cases, operational models, and their associated potential impacts on the expected levels of cost-recovery, payback periods, and ultimately the financial success of this project.

Task 1. Assess potential levels of market demand

- **1.1 Review critical freight transportation infrastructure in central Missouri.** To save time and cost for this project, the Team will leverage on previously developed studies recommended by the client² and any available datasets for this project. The Team will then proceed to create an inventory of highways, rail routes, waterways, peer river ports, and intermodal facilities critical for the movement of freight in central Missouri, with particular attention to the hinterland area of the proposed port.
- **1.2 Analyze route and modal choice costs and the overall competitiveness of the port.** The Team will review the collected data on cargo flows by transportation mode and available origin-destination (O-D) pairs to identify the infrastructure networks and examine the modal trends for each of the supply chains identified in Phase 1.
 - a. By integrating this analysis with the outputs of Task 1.1, the team will evaluate for which set of commodity flows the proposed port can provide a potential commercial or logistical advantage as compared to existing modes.
 - b. The Team will evaluate the competitiveness (in terms of logistics costs and time to market) of logistics chains that utilize the new port as the existing alternatives/modes serving the same cargo markets. This analysis will address the question as to how much shippers or receivers could expect to save if using a new Heartland Port facility, and what the transit time advantage (or disadvantage) would be.
- **1.3 Identify the commodity flows with the highest potential to be attracted by the port.** The Team will identify the commodities with the highest potential (i.e. the commodities for which the port offers a competitive advantage) that can successfully be attracted by the port (by commodity, O-D pair, current mode or routing) and estimate tonnage that could be captured.
- **1.4 Construct econometric forecasts and model target capture rates.** The Team will identify key micro- and macro-economic drivers of outbound and inbound cargo flows. Particular attention will be paid to key commodity subsectors with the highest potential to become regular users of the proposed facility, as identified in Task 1.1. Given the greenfield nature of the project, the Team will breakdown the forecasting into the following two periods:

² Examples of previously developed relevant studies include: *MoDOT Port Authority Application, Missouri State Freight Plan, MoDOT Economic Impacts from Public Ports, Central Missouri Multimodal Port Feasibility Study,* and *Missouri River Freight Corridor Assessment Plan,* among others.

- a. *Short-to-medium term (10-years)*—emphasis will be based heavily on our understanding of key business factors to determine growth of the cargo market, the potential share of this market that the project can capture, and the client mix likely to use the project.
- b. *Longer-term (10-30 years)*—the forecast will be based on econometric trends. We will seek to establish correlations between historical growth in cargo volumes in key markets and in key commodities, and economic drivers, and use this correlation to project future levels of demand to forecast tonnage in 2020-2050.

Task 2. Design conceptual organizational structure and operational model

- 2.1. **Design conceptual organizational structure.** The Team will develop a conceptual business management structure for the hypothetical case of an "operating port", in which the port Authority is responsible for the management and operation of the facility, including the handling of cargo. The Team will identify the scope of the organization and expertise that the port would need to have and maintain to effectively operate and market the facility, including both general management and management for the operations, maintenance, and marketing functions. We will draft job descriptions for the key operating positions for the port. This will be a critical input for the preliminary estimation of operating expenditures (opex).
- 2.2. **Develop conceptual operational model.** Based on the target markets/commodities with the highest potential to use the facility, the Team will develop a conceptual model for the day-to-day operations of the facility and its different elements (e.g. equipment, yards, wharves, storage areas, conveyors, mixers, dry-bulk elevators, scales, energy consumption, etc.). Work under this task will not be an engineering study, but rather a conceptual framework that allows to explore expected levels of cost-recovery from a business and financial perspective for the potential mix of different services to be offered by the port. This design will be a critical input for the preliminary estimation of capital expenditures (capex).

Task 3. Conduct high level analysis of indicative capex

- 3.1. **Identify potential capital investments required.** Based on the cargo outlook and conceptual operational model designed prepared in Tasks 1 and 2 of Phase 2, the Team will describe the infrastructure and equipment required for the proposed port to handle the forecasted cargo flows (e.g. storage facilities, cranes, ship-loaders, top-picks, fork-lifts, tractors, etc.).
- 3.2. **Review and estimate** *short- and long-term* **capex requirements.** The Team will review the initial infrastructure costs previously developed, for the port, and establish sensitivity bands around the initial estimates. These high/low capital estimates will be used for the initial investment analysis to be undertaken in Task 7.

Task 4. Conduct high level analysis of indicative opex

- 4.1. **Quantify indicative** *fixed* **opex**. The Team will obtain data representative for a project of similar scale and estimate the terminal's fixed staffing requirements, and fixed (non-volume-dependent) annual operating costs for the baseline cargo and facility development scenario.
- 4.2. **Quantify indicative** *variable* **opex**. The Team will obtain data representative for a project of this similar scale and estimate the terminal's expected productivity performance levels, variable staffing, and unit operating costs, for each business line (commodity types) defined in the baseline plan.

Task 5. Exploratory analysis of handling rates

- 5.1. **Collect information about handling rates.** The Team will collect information from barge operators and other sources about market rates for comparable services at barge ports within the region, and also discuss how and why these rate levels have trended over the past years.
- 5.2. **Define expected range of current and future handling rates**. Considering its location and logistical advantages created by a Jefferson City port facility, identify for each target commodity flow the expected range of handling rates that the Heartland Port could realistically command.

Task 6. Construct financial modelling and scenario development tool

6.1. **Construct financial model.** The Team will integrate indicative volume, pricing, revenue, opex, and capex forecasts into a proforma discounted cash-flow (DCF) model. The Team will estimate the expected net-present value (NPV) and internal rate of return (IRR) for the baseline scenario and generate two additional scenarios, one upside and one downside.

A sophisticated financial modeling approach for greenfield projects

Given the inherent level of uncertainty typical of greenfield projects (i.e. unknown cargo prospects or volume commitments for the project, uncertainty in micro- and macroeconometric variables, uncertainty in the development competitive market environment, and uncertainty in both capital development costs, and operational costs), Mercator will utilize tools based on Monte Carlo simulation techniques to analyze the potential range of outcomes for the project (as expressed by payback periods, NPV, or IRR), These tools would also allow the Team or the port to conduct sensitivity analyses.



6.2. **Construct forecast scenarios.** The Team will estimate the expected NPV and IRR for the baseline scenario and generate two additional scenarios, one upside and one downside.

³ Bujanda, et al (2010). Valuing Public Sector Risk Exposure in Transportation Public-Private Partnerships. UTCM Project 08-41-01, **Department of Transportation** Research Innovative Technology Administration. Washington, DC.

Task 7. Identify environmental regulatory requirements

- 7.1. **Identify the environmental regulatory requirements.** The Team will summarize the expected characteristics of the project and make a preliminary identification of the environmental and regulatory requirements that would need to be satisfied in order for the project to move forward. This task will provide a roadmap for the different types of factors that would need to be considered in an Environmental Impact Review process typical for a project of this magnitude. Such roadmap will consider the roles of agencies and rules such as:
 - National Environmental Policy Act (NEPA)
 - The Council on Environmental Quality (CEQ)
 - The U.S. Army Corps of Engineers (USACE)
 - The Missouri Department of Natural Resources (DNR), and
 - Any other agency deemed relevant by the client or the DIS-Mercator Team.

Task 8. Prepare final report

- 8.1. **Draft Report.** The DIS-Mercator Team will produce a draft report of our findings which will then be reviewed and discussed with the client. This draft report will include a summary of conclusions and strategic considerations relative to the project.
- 8.2. **Presentation of Findings.** If requested by the client, the Project Team can be available to make a presentation of major findings to the client and incorporate its feedback into the Final Report.
- 8.3. **Final Report.** Following the receipt of feedback on the draft report from management, the Team will produce a final report.

Deliverables

- A final report detailing background, methodology, results and implications of research
- A PowerPoint presentation with highlights of research
- Supporting data will also be included, likely in Excel format and other appropriate formats

Timeline/Investment

Date of delivery/completion of Services:	2/15/2020
DIS will complete the project for a total of:	\$183,700
50% of above amount (\$91,850) due by:	8/31/2019
25% of above amount (\$45,925) due:	Upon completion of Phase 1
25% of above amount (\$45,925) due:	Upon completion of Project
50% of above amount (\$91,850) due by: 25% of above amount (\$45,925) due: 25% of above amount (\$45,925) due:	8/31/2019 Upon completion of Phase 2 Upon completion of Project

Decision Innovation Consulting, LLC

By:	
Name:	Spencer Parkinson
Title:	Executive Director

Date Received: _____

HPACM of Central Missouri

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Name:	James R. Mihalevich
Title:	Chairman



Comprehensive market study for a multimodal port facility in Central Missouri **PROJECT SCHEDULE**



Month —>	Tack	A	ug			Sep)			C	Oct			N	ov				Dec	: 1			Ja	in		Fe	eb
Week of—>	lead	19	26	2	9	16	23	30	7	14	21	28	4	11	18	25	2	9	16	23	30	6	13	20	27	3	10
Phase 1: Comprehensive market study	D																										
Task 1. Organize kick-off meeting and stakeholder coordination	D+M																										
1.1. Organize kick-off meeting	D+M																										
1.2. Coordinate regular update conference calls																							Ì				
1.3. Data sharing																											\square
1.4. Stakeholder coordination	D+M					ĺ																	Î	ĺ			\square
Task 2. Collect and analyze relevant data and info	D+M																										
2.1. Collect and analyze relevant data and info	D+M																										
2.2. Prioritize NAICS classification by order of relevance	D+M																										
Task 3. Primary Research	D																										
3.1. Assess content and 3.2. current status	D																										
3.3. Identify and document potential changes	D																										
Task 4. Conduct validation, verification, and add context info	D																										
4.1. Assess content and 4.2. current status	D																										
4.3. Identify and document potential changes	D																										
Phase 2: Preliminary assessment of the financial feasibility	Μ																										
Task 1. Assess potential levels of market demand	D+M																										
1.1. Review critical freight transportation infrastructure in MO	М																										
1.2. Analyze route/mode costs & competitiveness: truck, rail, barge	М																										
1.3. Identify commodities with highest potential to be attracted	D+M																										
1.4. Construct forecasts and model target capture rates	D+M																										
Task 2. Design conceptual org. structure and operational model	Μ																										
2.1. Design conceptual organizational structure	М																										
2.2. Develop conceptual operational model	М																										
Task 3. Conduct high level analysis of indicative capex	Μ																										
3.1. Identify potential capital investments required	М																										
3.2. Estimate short- and long-term capex requirements	М																										
Task 4. Conduct high level analysis of indicative opex																											
4.1. Quantify indicative fixed opex	М																										
4.2. Quantify indicative variable opex	М																										
Task 5. Exploratory analysis of handling rates	Μ																										
5.1. Collect information about handling rates	М																										
5.2. Define expected range of current and future handling rates	М																										
Task 6. Construct financial modelling – scenario dev tool	Μ																										
6.1. Construct financial model	М																										
6.2. Construct forecast scenarios																											
Task 7. Identify environmental regulatory requirements																											
Task 8. Prepare final report	D+M																										
8.1. Phase 1 draft report	D												D1														
8.2. Phase 2 draft report	М]		M2			
Contingency time																							.				1