

MINUTES
Inland Waterways Users Board Meeting No. 79
Walker Hall
229 Madison Street
Paducah, Kentucky 42001
July 1, 2016

[Note: The following minutes of the Inland Waterways Users Board meeting No. 79 were approved and adopted as final at Inland Waterways Users Board meeting No. 80 held on October 5, 2016 in Tinley Park, Illinois.]

The following proceedings are of the Inland Waterways Users Board meeting held on the 1st day of July 2016, commencing at 8:55 a.m. at the Walker Hall, 229 Madison Street, Paducah, Kentucky, Mr. Martin T. Hettel, Chairman of the Inland Waterways Users Board presiding. Inland Waterways Users Board (Board) members present:

CHAIRMAN MARTIN T. HETTEL, American Commercial Barge Line, LLC.

MR. CHARLES A. HAUN, JR., Parker Towing Company, Inc.

MR. ROBERT J. INNIS, LafargeHolcim, Inc.

MR. JEFFERY A. KEIFER, American Electric Power (AEP), River Transportation Division

MR. ROBERT R. MCCOY, Amherst Madison, Inc.

MR. DANIEL P. MECKLENBORG, Ingram Barge Company

MR. BRUCE REED, Tidewater Barge Lines

MR. WILLIAM M. WOODRUFF, Kirby Corporation

Board members MR. DAVID CHOATE, Bruce Oakley, Inc.; MR. G. SCOTT LEININGER, CGB Enterprises, Inc.; and MR. MICHAEL T. SOMALES, Murray American Transportation, Inc. did not attend the meeting.

Also present at the meeting were the following Federal observers, designated by their respective agencies as representatives:

MR. LOWRY A. CROOK, Principal Deputy Assistant Secretary of the Army for Civil Works, Washington, D.C.;

MR. PAUL N. JAENICHEN, SR., Administrator, Maritime Administration, U.S. Department of Transportation, Washington, D.C.;

MR. NICHOLAS MARATHON, Economic Analyst, Transportation and Marketing Division, Agricultural Marketing Service, U.S. Department of Agriculture, Washington, D.C.

MR. GARY MAGNUSON, Senior Policy Advisor, National Oceanic and Atmospheric Administration (NOAA), U.S. Department of Commerce, Silver Spring, MD.

Official representatives of the Federal government responsible for the conduct of the meeting and providing administrative support to the Inland Waterways Users Board from the U.S. Army Corps of Engineers (USACE) were as follows:

MAJOR GENERAL DONALD "ED" JACKSON, Executive Director, Inland Waterways Users Board and Deputy Commanding General for Civil and Emergency Operations (DCG-CEO), U.S. Army Corps of Engineers, Washington, D.C.;

MR. MARK R. POINTON, Executive Secretary and Designated Federal Officer, Inland Waterways Users Board, U.S. Army Corps of Engineers, Institute for Water Resources, Alexandria, VA.;

MR. KENNETH E. LICHTMAN, Executive Assistant and Alternate Designated Federal Officer, Inland Waterways Users Board, U.S. Army Corps of Engineers, Institute for Water Resources, Alexandria, VA.

Program speakers in scheduled order of appearance were as follows:

COLONEL CHRISTOPHER G. BECK, Commander, Louisville District, U.S. Army Corps of Engineers, Louisville, Kentucky;

MAJOR GENERAL DONALD "ED" JACKSON, Executive Director, Inland Waterways Users Board and Deputy Commanding General for Civil and Emergency Operations (DCG-CEO), U.S. Army Corps of Engineers, Washington, D.C.;

MR. MARTIN T. HETTEL, Chairman, Inland Waterways Users Board;

DR. MARK F. SUDOL, U.S. Army Corps of Engineers, Institute for Water Resources, Alexandria, Virginia;

MR. JEFFREY A. MCKEE, Chief, Navigation Branch, Operations and Regulatory Division, Headquarters, U.S. Army Corps of Engineers, Washington, D.C.;

MR. JOSEPH W. ALDRIDGE, Inland Waterways Trust Fund Account Manager, Programs Integration Division, Headquarters, U.S. Army Corps of Engineers, Washington, D.C.;

MR. DAVID F. DALE, Director of Programs, Great Lakes and Ohio River Division, U.S. Army Corps of Engineers, Cincinnati, Ohio.

Other individuals who provided additional information in response to questions raised by Board members during the meeting included the following:

MR. JEANINE HOEY, Chief, Engineering and Construction Division, Pittsburgh District, U.S. Army Corps of Engineers, Pittsburgh, Pennsylvania.

MR. DON B. GETTY, Project Manager, Chickamauga Lock Replacement project, Nashville District, U.S. Army Corps of Engineers, Nashville, Tennessee.

PROCEEDINGS

MR. MARK R. POINTON: We are starting a little bit early. We have all the members here and everyone is seated, so my ten minute warning was taken as a five minute warning, so we will go ahead and get started now. My name is Mark Pointon, and I am the current Designated Federal Officer of the Inland Waterways Users Board. I want to welcome everybody to the 79th Meeting of the Inland Waterways Users Board here in Paducah, Kentucky.

Paducah actually is one of our more frequent destinations for meetings of the Users Board. We haven't met here in Paducah since December of 2012 [Users Board Meeting No. 68, held on December 19, 2012], so it is not quite four years ago since the last time we met here. Obviously, the attraction to coming to Paducah is its proximity to the Olmsted Locks and Dam Project. If it sounds familiar that the last time we met in this vicinity was four years ago, I said the same thing at our last Users Board meeting held this past April at our meeting in Pittsburgh [Users Board Meeting No. 78, held on April 1, 2016] because the last time we met in Pittsburgh was approximately four years ago [Users Board Meeting No. 66, held on June 6, 2012]. We are kind of cycling through all of these locations in about a four year time frame.

I thought we had was an excellent tour yesterday of the Olmsted Locks and Dam Project [located at mile point 964.4 on the Ohio River] and the Kentucky Lock Addition Project [located at mile point 22.4 on the Tennessee River]. I thought it was an excellent tour, and I would like to thank the Louisville and the Nashville District staffs that organized those tours. They are the ones who make all that work, and we appreciate all their involvement and efforts in organizing the tours and all the help making the tours so informative and valuable yesterday.

Before we start the meeting, I am obligated to read for the record that the Inland Waterways Users Board was created pursuant to Section 302 of the Water Resources Development Act of 1986. The Board provides the Secretary of the Army and the Congress with recommendations on funding levels and priorities for modernization of the inland waterways system. The Board is subject to the rules and regulations of the Federal Advisory Committee Act of 1972, as amended. This is a "Government in the Sunshine Act" meeting, and as such is open to the public, and as you can tell, we have a fairly good crowd here today.

The U.S. Army Corps of Engineers is the sponsor of the Board, and provides for the Executive Director, the Executive Secretary, the Designated Federal Officer, and for all the normal activities of this Board.

At this time, no one has indicated they wish to make a public comment before the Board, and there were no written statements submitted for this meeting. If anyone feels they want to make a public comment, please see me at the break or give me a quick note to let me know if you would like to make a public comment at the end of the meeting.

These proceedings are being recorded, and a transcript will be made available shortly after the meeting is concluded. I would now like to call on Colonel Christopher Beck, Commander of the Louisville District, who will provide us with his opening remarks. Sir.

COLONEL CHRISTOPHER G. BECK: Good morning, and welcome to the Louisville District and the Great Lakes and Ohio River Division. We are honored to be hosting the 79th Meeting of the Inland Waterways Users Board here in Paducah, Kentucky within the footprint of the Louisville District.

Paducah was originally settled in 1821 because of its location at the confluence of the Ohio and Tennessee Rivers, so this town has been linked to our inland waterways from its beginning. That has not changed over time as both the local port facilities and manufacturing continue to grow. This region's link to the inland waterways system and how that continues today were very evident for those of you that were able to attend and participate in the tour yesterday of the Olmsted Locks and Dam project and the Kentucky Lock and Dam.

That tour was indicative of the great partnership we share between all the districts within the Great Lakes and Ohio River Division, and I would like to thank Lieutenant Colonel Stephen F. Murphy, the Nashville District commander, and his team for their extremely educational and informative site visit.

In this region, we serve two distinct but connected watersheds within the Great Lakes and Ohio River basins. They are both critical to our nation's economic success and strength as they control almost 60 percent of the commerce for the United States. I know the criticality of this is not lost on the Board members present today, and yesterday's tour also allowed us to highlight our continuous efforts to address our aging infrastructure within this region and be sure we finish the projects we start.

Collectively, this area represents one of the most critical nodes of the inland waterways system with the confluence of multiple major rivers and being one of the busiest ports for tonnage on the inland waterway system. This is definitely a great place and a place of great significance to the inland waterways system and very appropriate location to convene this Board meeting. We truly appreciate the opportunity to host the members of the Users Board and support the discussion that will occur today. Please, if there is anything we can do to make today better, please let us know. Thank you.

MR. POINTON: Thank you, sir. I would actually like to put in a personal thanks to Colonel Beck because he was a personal tour guide for us all day yesterday, and I appreciate him taking the time to do that. General Jackson, the microphone is yours, sir.

MAJOR GENERAL DONALD E. JACKSON: Can you guys hear me okay through the mic? All right. First of all, I want to thank everybody for attending today's meeting of the Inland Waterways Users Board. Chairman Hettel, thank you, and all the Board members, as always, for your time. It is not lost on me. You guys have day jobs and you do this out of passion and love for your industry. Through the giving of your time, your leadership, and tireless efforts, and advocacy in support of inland navigation is greatly appreciated, so thank you all for traveling here and being a part of this meeting today. To David Dale [Director of Programs, Great Lakes and Ohio River Division, U.S. Army Corps of Engineers] and Colonel Bigelow of the Great Lakes and Ohio River Division [Colonel Benjamin J. Bigelow, Commander, Great Lakes and Ohio River Division, U.S. Army Corps of Engineers], thank you, gentlemen, for hosting our tour yesterday and for hosting us here at Paducah, a great event. Chris, for you and the your team at the Louisville District, thank you so much for being the official District host of the Users Board for this meeting.

My very first Users Board meeting was also in the Great Lakes and Ohio River Division in Nashville last year [Inland Waterways Users Board Meeting No. 76, held August 12, 2015, at the Gaylord Opryland Resort Hotel and Convention Center, Nashville, Tennessee], and I am getting a good exposure to the activities of the Great Lakes and Ohio River Division and the importance of this particular Division to navigation across the board, and thanks for yesterday's tour of Olmsted Locks and Dam and Kentucky Lock and Dam.

I learn something new every time I visit these projects, and Olmsted and the significance of the effort that you are doing out there is not lost on me. I think we have a lot to learn and a lot to be able to take on and I applaud the Army Corps of Engineers for the great work that they are doing, the great innovation they are demonstrating, the great partnership with industry that the Corps is displaying out there at the project site, so you are doing a great job.

To Steve Murphy [Lieutenant Colonel Stephen F. Murphy, Commander, Nashville District, U.S. Army Corps of Engineers] and Mike Wilson [Mr. William M. Wilson, Chief, Planning, Programs and Project Management, Nashville District] and your team at the Nashville District, thank you for allowing us to visit Kentucky Lock.

Again, I appreciate the opportunity to see and understand the significant challenges and the difficult complexities that we face in some of our projects whether they are raising railroad and highway bridges or doing other things that a lot of members of the public don't realize that we have to do to set in motion opportunities to improve and enlarge our navigation projects. There are a lot of other things that we have to do as well, and we have to continue to tell that story.

To Julie Harris [Ms. Julie Harris, Executive Director, River Discovery Center, Paducah, Kentucky] and the members of the River Discovery Center and the river industry of Paducah, thank you very much for a great social event last night. It was a wonderful opportunity to see how vested the City of Paducah is in public outreach and educating young people and other folks on the history and importance of the inland waterways system and why the inland waterways system is so important to this region and to our nation. I applaud your efforts at the River Discovery Center.

To Mayor Gayle Kaler and to the residents and businesses of the City of Paducah, I thank you for your continual support to our nation's navigation industry and to your continuous support of the activities of the Army Corps of Engineers, your continued support, and continued hosting of the Inland Waterways Users Board over the years. The Corps values your friendship and partnership and will continue to engage with you.

Colonel Beck talked a little bit about the history of the City of Paducah. I think it is really interesting, and I mentioned last night in my remarks after I spoke with the Mayor about the strategic significance of Paducah, and Colonel Beck talked about it was originally settled in 1821, and it was settled -- as I understand it, this was a Native American trading area, and it was made that way because of the confluence of the different river systems that came here that allowed the economic development to flourish and trade to flourish.

That was the foundation that Paducah was based on and what caused Paducah to grow into the strategic transportation hub that it is today. I think that is significant. I also think it is significant that William Clark, in 1827, actually laid out the city. William Clark, of the famous Lewis and Clark expedition, came back and was a part of that in his duties and responsibilities. It was officially incorporated in 1838 when steamships and the port facilities were recognized by regional and national interests as making Paducah a significant waypoint for navigation and commerce as our country continued to grow.

Then with respect to the Army Corps of Engineers, the 1937 flood on the Ohio River obviously was a significant event for the City of Paducah that got the Corps more involved in flood risk management here, in construction of the floodwall, and our partnership has flourished with the City of Paducah and its citizens ever since.

I think it is fitting that we are here today and I want to thank again, all the members of the City of Paducah who have welcomed us with open arms. I think we have a great agenda today. Some of the topics you will see are similar. We have some of our folks from the Army Corps, Dr. Mark Sudol, Jeff McKee, David Dale, and Joe Aldridge, who will talk about some topics that are familiar to you.

I would encourage the Board members to ask hard questions and help us make sure that we that we are providing the information that you need to understand, how we are doing our business and why we are doing our business the way we do. This is all about collaboration and communication.

Again, I appreciate the partnerships, and we have several of our Federal observers in attendance at today's meeting. We are very honored to have -- and I will read them off and then I will turn the microphone over to each of them -- Mr. Lowry Crook, Principal Deputy Assistant Secretary of the Army for Civil Works who is here with us. We have Mr. Paul "Chip" Jaenichen who is the Administrator of the Maritime Administration (MARAD). Chip, thank you for being here. Mr. Gary Magnuson from the National Oceanic and Atmospheric Administration (NOAA), and Mr. Nick Marathon from the U.S. Department of Agriculture (USDA).

With that, I would like to go around and ask each of our Federal observers for their briefing opening remarks. Mr. Crook, I'll start with you for any opening comments that you might have.

MR. LOWRY A. CROOK: First of all, I just want to echo General Jackson's thanks to folks from the Louisville District and the Nashville District and from the River Discovery Center and the river industry of Paducah. I really appreciate the excellent and extremely informative and valuable tours yesterday and all of the great hospitality.

This is my third Inland Waterways Users Board meeting, and I have come to see just how valuable these meetings and site visits are, and really appreciate everyone's time and efforts, both for me personally to learn about the industry, the state of the industry, and the state and condition of our projects, and the need to finish these projects that we are working on, and how important it is both to the navigation industry and to the nation as a whole, so I appreciate that. Also, I see the value of these meetings and these site visits to our District offices, our Division offices, and our Headquarters staff for the Corps to understand both the state of the navigation industry, the economics of the industry, and how we can do better on some of the economics, and so with that, I will say thank you once again for the opportunity to participate in this meeting and on the site visit and I will conclude my remarks and return the microphone to General Jackson.

MAJOR GENERAL JACKSON: Thank you, Mr. Crook. Administrator Jaenichen.

MR. PAUL N. JAENICHEN: Thank you General Jackson. I truly appreciate the collaboration the Maritime Administration has with Army Corps of Engineers, both here and on the Committee on Marine Transportation System, as well as the opportunity to personally engage with both you and your predecessors.

The Maritime Administration has a vested interest in the success of the maritime industry that is doing business on our inland rivers and waterways and although we are not directly involved in funding or policy with regard to maintaining the navigation and maintenance of our inland rivers and waterways – we do support these initiatives and the efforts of the Army Corps of Engineers.

During my nearly four year tenure at the Maritime Administration, I have directed my agency to have greater focus on “Brown Water” which comprises the major portion of our Jones Act Fleet. It starts with me attending now my second Inland Waterways Users Board meeting and by ensuring participation from senior level employees at the Maritime Administration as Federal Observers here. You will notice that we routinely have one of our Senior Executives participate and I trust that will continue through the next Administration.

The Maritime Administration and the National Waterways Foundation signed a cooperative agreement last October for a study on the impact of unscheduled lock outages. In February of this year, the staff of the Maritime Administration provided input for the review of three study proposals, and the National Waterways Foundation selected a team from the University of Tennessee and Vanderbilt University to conduct the study with is scheduled for completion by early spring of next year.

I was with Lieutenant General Semonite [Lieutenant General Todd T. Semonite, Commanding General and Chief of Engineers, U.S. Army Corps of Engineers] and Assistant Secretary of the Army for Civil Works Ms. Jo-Ellen Darcy last week in Panama for the opening of the third set of locks at the Panama Canal. I had the opportunity to discuss several issues with the Chief and we agreed to meet later this summer. I am interested in ways that the Maritime Administration can better support the Army Corps of Engineers and the Inland Waterways Users Board. In particular, is the potential nexus between our Marine Highway Program and Marine Highway routes as designated by the Secretary of Transportation and the Corps' maintenance and repair investment strategy.

MARAD currently has 14 Marine Highway Projects approved by the Secretary of Transportation. That designation is important because it makes those projects eligible for Federal funding. In Fiscal Year 2016, we have \$5 million in grant funding that will be awarded to one or more of those projects. We expect the announcement of the grant or grants by the end of August.

You may recall that Mr. Joel Szabat, the Executive Director for the Maritime Administration, attended the 78th Meeting of the Inland Waterways Users Board in Pittsburgh in April. He highlighted that we were developing a Draft National Maritime Strategy and that it included five strategic pillars. The draft National Maritime Strategy is still undergoing government inter-departmental review, but we do have a new name for it. The strategy it will now be called the "National Maritime Transportation Strategy" with the one of the strategic pillars still focused on the incorporation of maritime transportation into our National Freight System in order to reduce congestion and increase mobility solutions for shippers. When the draft strategy is released, I ask that this Board review it and provide feedback to us.

I would like to introduce the Maritime Administration's new Gateway Officer for the Inland River and Waterway System, Ms. Branden Criman. Ms. Criman is based out of our St. Louis Gateway Office, and is the new Bill Paape [Mr. William Paape, former Director of the St. Louis Gateway Office], who has transferred back to our Headquarters Office in Washington, D.C. Ms. Criman has a wealth of maritime experience and was formerly employed at the Port of Kansas City.

Thank you again for allowing me to make introductory remarks and I look forward to today's meeting.

MAJOR GENERAL JACKSON: Thank you so much for being here Administrator Jaenichen. Next we will hear from Mr. Gary Magnuson from NOAA. Mr. Magnuson.

MR. GARY MAGNUSON: Thank you, General Jackson. Chairman Hettel, members of the Board, staff, and guests. For the record, Mr. Chairman, my name is Gary Magnuson. I am the Federal Observer to the Users Board, representing the National Oceanic and Atmospheric Administration. Rear Admiral Gerd F. Glang, Director of NOAA's Office of Coast Survey, sends his regards.

In my allotted time, I will briefly cover three items: water level forecasts, Admiral Glang's retirement and replacement, and my status as NOAA's Users Board representative.

Last week, Chairman Hettel and I attended a conference in Washington, D.C. sponsored by the Transportation Research Board and the Committee on the Marine Transportation System titled "*From Sail to Satellite: Delivering Solutions for Tomorrow's Marine Transportation Systems.*" The conference addressed the current and future research and development needs and challenges of the marine transportation system. One area of future research that Chairman Hettel and I discussed was the importance of improving the accuracy and reliability of forecasts of water levels on the inland waterways system.

Chairman Hettel, in response to your inquiry at last week's conference regarding accurate and reliable inland water level forecasts, I am pleased to report that NOAA and the National Weather Service have evolving efforts to improve the accuracy and reliability of inland waterway water level forecasts, which are focused on providing uncertainty information. As I have been advised, focusing on quantifying the uncertainties, will lead to what is known. Moreover, explicitly accounting for the uncertainties inherent in meteorological and hydrologic forecasts, NOAA aims to support improved risk-based decision making for a variety of water resource applications, including flood forecasting, river navigation, and water supply.

NOAA and the National Weather Service are making efforts to improve the accuracy and reliability of inland waterways water level forecasts aimed at providing improved information against what are a multitudes of unknowns and uncertainties. These efforts are part of a National Weather Service reorganization begun in 2015, to establish a centralized National Water Center with an Office of Water Prediction, located primarily in Tuscaloosa, Alabama. The Office of Water Prediction's priority is to advance the national water model and integrate national water predictions.

On behalf of NOAA and the National Weather Service, the National Water Center represents a historic transformation and modernization of hydrology and water prediction services within the National Weather Service. By complementing existing regional river forecast centers with a national center, the National Water Center will play a critical role in enhancing water related products and decision support services across the country in support of the strategic objective to build a weather ready nation.

The National Water Center is located at 205 Hackberry Lane in Tuscaloosa, Alabama on the campus of the University of Alabama. I would be glad to offer and I got clearance this morning to offer a tour to Mr. Haun [Users Board member Charles A. Haun, Jr.] or any of the other Board members and staff who want to tour the center. The center opened a little less than a year ago.

I would be glad to provide the Board, Mr. Chairman, with more specific information on this NOAA effort regarding water level prediction progress, by submitting an informational fact sheet, and offering a tour of the National Water Center in Tuscaloosa, the home as I understand it of Board member Charles A. Haun, Jr.

The next item I will briefly mention is that Rear Admiral Gerd F. Glang, current Director of NOAA's Office of Coast Survey, will be retiring this summer. President Obama has approved the promotion of Captain Shepard Smith, from Captain to Rear Admiral, a prerequisite for Captain Smith to become director of NOAA's Office of Coast Survey. Captain Smith's appointment to Director of the Office of Coast Survey will be effective on August 26, 2016.

Captain Smith has served with NOAA for 23 years, during which time he has been deeply involved in advancing the state-of-the-art in hydrography and nautical cartography. He currently serves as the commanding officer of NOAA Ship *Thomas Jefferson*. Admiral Smith will be NOAA's official Federal observer to the Users Board.

Captain Smith and I will have a discussion as to who will be attending the next meeting of the Users Board. As a result, this may be my last meeting with you. I will be retiring in December and it is likely and most appropriately, that Admiral Smith will be attending your next meeting.

I wanted – in case it isn't me, I wanted to thank you all. This has been my fourth meeting. I am so glad I went on the tour yesterday. I wish I had gone on previous tours. It has truly been my honor and pleasure to meet with you, get to know you, to work with you and support your efforts, and provide a bridge to NOAA to help support your admirable mission.

Thank you.

MAJOR GENERAL JACKSON: Thank you, Mr. Magnuson. Mr. Marathon.

MR. MICHOLAS MARATHON: Thank you, General. I appreciate the opportunity to go on the tour yesterday and attend today's meeting. Today I am representing Mr. Arthur Neal. He is the Deputy Administrator of the Transportation and Marketing Program of the Agricultural Marketing Service at the U.S. Department of Agriculture.

We at the U.S. Department of Agriculture have been busy finalizing the first draft of a comprehensive study of the transportation of agricultural products. This study was mandated by the provisions of the current farm bill, Public Law 113-79, which directs the USDA to conduct a general study of the transportation issues of agricultural products [Section 6206 entitled "Study of Rural Transportation Issues" of the Agricultural Act of 2014, Public Law 113-79, enacted February 7, 2014].

The current study underway updates the results of a previous study titled "*Study of Rural Transportation Issues*" which was prepared in 2010 and which was prepared in response to Section 6206 of the Food, Conservation, and Energy Act of 2008 (PL 110-246), the Farm Bill of 2008, which directed the Secretaries of Agriculture and Transportation to jointly conduct a study of rural transportation issues. That report reviewed transportation and its effect on rural communities, with an emphasis on agricultural transportation.

The current study is under review and we expect to have available by the end of the calendar year or early next year. While this study is a long-term project, we are preparing a

separate project that will look at how increased investments in waterway improvements can benefit U.S. agriculture and present the importance of the waterway system to the export of grains and oilseeds.

Again, I would like to thank the Corps of Engineers and the members of the Users Board for the opportunity to participate in yesterday's site visits to the Olmsted Locks and Dam project and the Kentucky Lock Addition project and today's meeting and look forward to today's meeting.

MAJOR GENERAL JACKSON: Nick, thank you very much. Mr. Chairman that concludes my opening remarks. I pass the microphone to you. Thank you.

CHAIRMAN MARTIN T. HETTEL: Thank you, General. First off, let me start off by welcoming everyone to our Inland Waterways Users Board Meeting No. 79 here in Paducah, and the Board would certainly like to welcome Maritime Administrator Chip Jaenichen to our meeting today. Glad to have you, sir.

The Board certainly wants to express their thanks to the River Discovery Center for allowing us to hold our social event at that facility last night. What a great venue that is for this Board to convene at. The Board would also like to extend a very special thanks to Ken Wheeler [Mr. Kenneth A. Wheeler, former Executive at Litton Industries, Ingalls Shipbuilding, and Midland Enterprises] for sponsoring the catering service at the social event last night. Also to Walker Hall here for sponsoring the coffee service for our meeting today, and to the Corps' Louisville and Nashville Districts for our site visits yesterday. We realize there is a lot of logistical coordination that goes into scheduling these types of events. The site visits are certainly very informative to the Board, and we appreciate your efforts in this manner.

While we have all spent a lot of time concentrating on Olmsted, it is certainly good to see work progressing at the Kentucky Lock Addition project as well, as this is just one project, along with others, such as the Lower Monongahela Locks and Dams 2, 3, and 4 project and the Chickamauga project that we need to complete before we can move on to other projects within the system.

Down at Olmsted, the Board certainly wants to recognize the efforts of Mike Braden [Mr. Michael E. Braden, Chief, Olmsted Division, Louisville District, U.S. Army Corps of Engineers] and his team for moving this project closer to operation, and after riding on the bus yesterday, I probably should also include Colonel Beck. I understand he is the driver and he accomplishes everything at Olmsted, so, Colonel, thank you also. Needless to say, the Olmsted project has been under construction too many years for all of us to be content with. We are now close -- almost -- a little bit over two years away from this facility becoming operational.

Moving on to our meeting schedule. We started our meetings late this year with Meeting No. 78 held in late March and early April, and here we are July 1st convening only our second meeting, No. 79, which means in order to accomplish all four meetings in 2016, we need to schedule Meeting No. 80 the first week of October with our final meeting in the first half of December.

The importance of having the fourth meeting this year is twofold. First, we need to have the most recent data on projects under construction in order for us to compile our Annual Report to the Assistant Secretary of the Army and to the Congress. Second, WRRDA 2014 [the Water Resources Reform and Development Act of 2014, Public Law 113-121, dated June 10, 2014], Section 2002, under Duties of the Secretary, states the following: "The Secretary shall communicate not less frequently than once each quarter to the Users Board the status and study of design or construction of all commercial navigation features or components of the inland waterways or the inland harbors of the United States."

While I am not a lawyer, this tells me we should be receiving information on these projects under construction at least each quarter. Without having our four meetings, we don't meet the requirements of the WRRDA 2014 legislation.

We also need to discuss the Board's current membership. As I spoke at our last meeting, we are now 11 months away from 10 of our Board members out of the 11 terms expiring on May 27, 2017. At our last meeting, we requested that five of the 10 Board members whose terms are expiring be extended by the additional two-year term as it states in the Board's charter, which can be accomplished, in order not to have a complete turnover of the Board. This would assure continued collaboration and continuity between the Board and the U.S. Army Corps of Engineers continues without interruption.

So these are my brief statements. I will talk briefly on - General Jackson and I discussed last night about our Users Board meetings. He committed to getting our four meetings in this year, so we are going to look at scheduling Meeting No. 80 the first week of October, and I think we are going to do a site visit to Brandon Road and Lockport to see the work that the Corps has done at Lockport. We will hold the meeting in Chicago the week of October 3rd, and then the General committed to holding our fourth meeting somewhere convenient. The General and I both decided that the Washington, D.C. area would be a great spot, so we will get on the schedule a date for Users Board Meeting No. 81 in the Washington, D.C. area the first half of December.

Also I would like to address, as I stated in my opening comments, the Users Board appointee process. I would ask Mr. Crook to update us on that scenario.

MR. CROOK: Thank you, Mr. Chairman. I appreciate you citing this issue early and often, and as I said in my earlier comments, I really value the work and contributions of the Users Board and understand that in a transition year that, first of the year, things can sort of slow down and get caught up, so we have begun discussions with -- first of all, I agree with your approach of extending terms such that we have staggered terms and do not face the issue where 10 of the 11 Board members go off the Board at the same time, and we have begun discussions with the folks at the Pentagon and the Office of the Secretary of Defense to get that on track before the end of the year.

CHAIRMAN HETTEL: Thank you, Mr. Crook. As you well know, it is important -- I think we have come a long way with this Users Board in the last about two and a half years --

well, soon to be three and a half years, and I think it is extremely important that we continue without a complete turnover of the Board, and we appreciate your efforts in this matter, and hopefully, we will have some good news by our meeting in December.

That will conclude comments, Mr. Pointon. Thank you.

MR. POINTON: Thank you sir. Thank you, Mr. Crook. The next item on our program is the approval of the minutes from our last Board meeting, Meeting No. 78, held in Pittsburgh, Pennsylvania on April 1st. Those minutes were provided to the members electronically ahead of this meeting as part of your read ahead materials and are also included in the blue read ahead information notebooks that are provided before each meeting. Gentlemen, can I ask for a motion to approve the minutes from Users Board Meeting No. 78?

MR. DANIEL P. MECKLENBORG: So moved.

MR. POINTON: Do I have a second?

MR. WILLIAM M. WOODRUFF: Second.

MR. POINTON: All right. I think that was Dan Mecklenborg and Matt Woodruff that moved and seconded the motion to the minutes of Board Meeting No. 78, for the record. Can we have a vote of the members? All in favor of approving minutes, say aye?

ALL MEMBERS: Aye (unanimous).

MR. POINTON: Any nays? (No response). Excellent. Thank you, gentlemen. The minutes are approved unanimously. Next on our program is Dr. Mark Sudol, Director of the Navigation and Civil Works Decision Support Center at the Institute for Water Resources. He is one of my colleagues in the Institute for Water Resources, and he is going to talk about some of the issues concerning the waterborne commerce data. In fact, Dr. Sudol has a demonstration of a geographic information system [GIS] database displaying vessel traffic and lock delays that he is hooking up now. It will be a live demonstration coming right in from our current website. It is a Beta test of a GIS-based presentation of our waterborne commerce. Dr. Sudol, if you are ready, please proceed.

DR. MARK F. SUDOL: Good morning everyone. Before I do the demo of our web based GIS system for tracking vessel traffic and lock delays, I have a couple of slides to go through to address some of the questions that Chairman Hettel and some of the other Board members had from the last Board meeting.

One question that came up before was how are vessel movements recorded during open pass situations and navigable pass situations, and the question that came up during the last meeting was "Does the Corps collect that data?", and the answer is "Yes." The Corps -- the lock operators and the LPMS [Lock Performance Monitoring System] does collect that vessel movement data, whether it is open pass and navigable pass, and you see the difference on the screen. Also, in talking to our folks, the technical folks that do all the work, there are times and

there are delays in these conditions, so they do collect the vessel delay information and they do do it. Also, in talking to the folks from Huntington [the Planning Center of Expertise for Inland Navigation (PCXIN) located in Huntington, West Virginia] that do the analysis of the data, when there is open pass and navigable pass, they do take that into account when they do their analysis, so it is done.

They do it both with the averages, the monthly average they have used and they do it without the monthly average. In talking with P.J. Donovan [Mr. Patrick J. Donovan, Director of the PCXIN] they do both to make sure that if it does affect or doesn't affect the analysis. I think that was a question that you had Mr. Chairman from the previous meeting.

Are there any other questions on this issue? Okay. Moving on I'll just go right into the demonstration. This is going to be a live demonstration now, so everything from now on is live. This is all live. This is run off my computer. I have a hot spot over here, so anything from now on is all live. I am going to do a demonstration and then open up to questions.

General Jackson asked us to do a display of all the locks and which ones are supposed to be shut down for maintenance during the next three to six months, and that is what this screen shows. Anything that is shown in yellow is a proposed closure. The lock is not closed, but it is either scheduled to have some type of closure now on or off between chambers or it is proposed for closure in the next three to six months. I will go into that.

Anything that is green is open. There is at least one chamber fully open. If there is more than one chamber in a lock -- if one of the chambers is scheduled to being closed and there other chamber is scheduled to remain open, you would see a half green, half yellow, but right now, there aren't any scheduled to be like that.

I will zoom in here a little bit. You can see the whole country. These are our dredges right now. We are getting the location of our Corps dredges on the map, so you can see where they are in each minute, and let me step back a little bit before I go any further.

This is designed to be a live demonstration, and it is more of a desktop, so my folks have gone out to existing databases and pulled the information, so everything here is not entered by a person in a database. This is information that is being pulled live on each of these locks and each of these information. That is the most important part of it. If the General pulls it up on his screen, he would see it. If a lock went down, say, within two hours, he would probably see it red here.

As I zoom in, you are starting to see the boat tracker from the AIS [Automatic Identification System] signal. Red means the vessel is stopped. There is a hold up right now. The green are live boats, ones that are moving. You can zoom in, and you can see where the information on each boat is.

As I zoom in, I am going to go over here -- actually, let me go back out and go where we are here today, and then I will move down to other locks and see where we are.

Let's start with Kentucky Lock, just as an example. I am zooming in here. Now, the interesting part of this is not that this is a map. Anybody can do a map. We can switch to a map, we can put all the information about it. We can put satellite -- that is easy to do. What this does is as I pull up the information here, this is where it gets interesting.

This is one of the questions that Chairman Hettel had. How long is the traffic stopped? What is the time? What is the time of delays? As I zoom in here, now I can see the traffic. This is two years of data, in this case. In some cases we have two years of data, in some we have got six years of data, in some cases we actually have eight years of data.

You can see the time of the queue. These are the delays that are here showing up. If I do here, the queue to start, it's almost 20 million minutes, so one million minutes is about six to seven hours in of time, approximately, something like that. You can get an estimate of the minutes. We are cleaning up the scales, but this actually shows the delay. If I go into here, I can actually track the trends. Which one is it now? Tracking stat -- meaning this one. This will give you the last times where the traffic -- so you see here, in November of 2015, we had a big delay for some reason, and then we can go in and figure out what to do.

Now, another thing I need to look at is time and in queue. Let me zoom down here. Nothing is coming up for this one. But traffic trends, this shows how much traffic is going in. If I select here, I can zoom out and move this over, and you can see approximately how many -- what is going through each of these. You notice this is through June.

What this is doing is pulling LPMS data right now, so as this data goes out, you can see how many vessels -- what the river traffic is. In calendar view, this gives the time and how much is going through and this gives you the delay. You notice the screen -- you start with less than an hour and more than three hours. The heavy red is more than an hour. We are looking at about a two hour delay at Kentucky Lock on average.

If we go to commodities, again, this is from the LPMS database. We can get an LPMS data - how many tons of cargo per month goes through the lock. Again, this is live as of June. There is June. There is June data. You can see the data. As I go up here -- there are the stoppages that are there, and you can see about where it is for the different locks, but commodities -- if I go to years, now I can see the commodities by year. So there is 2012, 2013, 2014, and 2015. You are not seeing 2016, but it is there. Then you can go into commodities. You can go to tonnage by commodity. This shows what is happening over the last 12 months-- so if you notice 2012 here -- coal in 2012 was that and you go up, you can see it is staying about even in Kentucky. Different ones, you can see the trend changing. Then the stoppages, you can see the monthly stoppages. Here are the stoppage times, how long was it there, and this is in days, and then getting to the recent stoppages, if I go here, that gives me a list of stoppages out of the -- the Notice to Mariners is done on the inland system, so this pulls up those notices. For example, on June 15th, there was a rain delay, lock hardware on June 6th.

Getting back to Chairman Hettel asking why there was a delay, you can start pulling that up here. Then the calendar view, again, you get to the stoppage. When did we have them and why did it occur? You can see this information. We are going to add execution and budget

information to the Corps portion of this information system so that folks in the Corps can go in and see the budget and see the information. We can pull that type information up for all the locks and dams in the system right now. Again, this is pulling live data. Sir, you have a question?

CHAIRMAN HETTEL: Mark, could you do me a favor and go down to Inner Harbor and pull that up for a moment? Because that lock was recently shut down for 12 hours a day Monday through Thursday. We have got quite a backup there.

DR. SUDOL: Let's see. There it is. If I go into here, performance and traffic trends.

CHAIRMAN HETTEL: What about the delay times?

DR. SUDOL: There are the stoppages.

CHAIRMAN HETTEL: Okay. And how recent is that?

DR. SUDOL: This is as of today.

CHAIRMAN HETTEL: Okay. How many hours are you showing as of today for an average transit through there?

DR. SUDOL: Let me get over to it. The display is having trouble right now because of the different displays. There is the display right there. We notice it is pretty heavy. Let me go into traffic and get the calendar view. Why this is delayed -- because this is going out to LPMS and pulling up the data, so that is more than three hours. If I go to stoppages. Let me pull up the recent stoppages.

CHAIRMAN HETTEL: Do you have the actual hours of delays?

DR. SUDOL: Yes sir. There, starting on June 23rd, and it is a bridge or other structure causing the problem and it's been going on since the 17th.

CHAIRMAN HETTEL: Okay. If you could go back to your average delay. What day is the most recent day you have there, today?

DR. SUDOL: I am trying to go over to it.

CHAIRMAN HETTEL: Okay.

DR. SUDOL: It is not letting me go over right now because, again, the display -- it goes into June of 2016.

CHAIRMAN HETTEL: Okay.

DR. SUDOL: There we go. Right now, it is showing a queue of about 28 million minutes, so approximately seven hours -- seven, eight hours --.

CHAIRMAN HETTEL: Okay.

DR. SUDOL: -- About 140 hours, so about six days.

CHAIRMAN HETTEL: Six days for the boat vessels to that transit it?

DR. SUDOL: Yes sir.

CHAIRMAN HETTEL: Because this morning, when I looked at IHNC [Inner Harbor Navigation Canal Lock], LPMS had reflected 10.5 hours average delay, when the actual delay was 39.51 hours.

DR. SUDOL: Remember, average is monthly average, so it is an ongoing monthly average versus the daily.

CHAIRMAN HETTEL: That is not -- it states the last 24 hours average on LPMS.

DR. SUDOL: Yes. But that is not what I have been -- my tech people are telling me the average is the last 30 days, so that is -- I mean, that is one of the questions I have for you when we talk about these average delays. What you are seeing as average and what is saying at LPMS is not what my tech people -- and that is one of the things I want to get on --

CHAIRMAN HETTEL: Does it have an effect on this?

DR. SUDOL: It will affect this. This is all the delays, so this is as of June. It may not have the latest data, but you can see here an entry and exit and queue to start. That is the delay, queue to start. That is the delay you are talking about.

CHAIRMAN HETTEL: Correct.

DR. SUDOL: Correct.

CHAIRMAN HETTEL: If we don't have the actual data correct in LPMS, your graph is going to show inaccurate data, correct?

DR. SUDOL: Well, we are -- yes. It shouldn't. I don't know why this is not updated. I will have to check with that, but this is as of LPMS today. The system pulls current LPMS data up and displays it here.

MR. MECKLENBORG: This is Dan Mecklenborg. Would that graph show if the delays were much longer in the summer of 2015 than they are currently?

DR. SUDOL: Yes sir. That is July of 2015.

MR. MECKLENBORG: Thank you.

CHAIRMAN HETTEL: The point I am making – and I want to make sure -- Dr. Sudol, I like this, and it would be great to have it -- once this is published and have the industry have it. We just need to make sure that we are collecting the right data you described in here.

DR. SUDOL: Correct.

CHAIRMAN HETTEL: As I stated, we are close to 40 hours delay at 26 vessels this morning at IHNC.

DR. SUDOL: If we zoom in, you can see a lot of red vessels that are waiting.

CHAIRMAN HETTEL: Well, there you go. Correct.

DR. SUDOL: Yes sir.

CHAIRMAN HETTEL: Okay. Thank you.

DR. SUDOL: We can do this, again, for all the vessels. Interesting, other things that I can show -- let me zoom back out for a second. Again, this is a beta version, so the plan for this is to get your comments starting today, and then we will have a conference call in a couple of weeks to see what you want. There is going to be a version behind the firewall for Corps folks, and that is where things like budget and all the things that Jeff McKee is looking for is in there. There will be a public version, which you will have, and that is where we are looking for your comments. What do you want to see in here? Things that we have already added into here are -- and let me pull it up. You can see some of the things here. We have hydropower. We have the Notices to Navigation. These need work because some of these have not gone away. Some of those are still up there. We are combining the Notices to Navigation system that we have that is out there. It is a web based service. It is out there on the website -- with a graphical display. We have cleaned up both so you can see where these things are. If I click on one, use caution from March to September of 2016. The whole point of this is you can go in and see these graphically, and we will have them correct and display. Because Chairman Hettel and I talked briefly. Some of them don't have good end dates. Our folks in the field aren't putting end dates so they are staying up there for years. We have to clean that up and have real notices out there, and we will have the right colors, red, green and amber, for information.

CHAIRMAN HETTEL: As we discussed this morning, Dr. Sudol, the Notices to Navigation Interests website (web address <http://ntnnotices.usace.army.mil/lpwb/f?p=150:1:0>) certainly needs some more work, and I know you are working on that, but we have Districts starting to state they are no longer going to put out Notices to Navigations Interests and directing people to go to the NTNI website to view any navigation notices, so either we have the Districts continue to send these notices out until the website is somewhat user friendly, or I think the Districts need to continue to send these notices until we get finished reconfiguring the Notices to Navigation Interests website.

DR. SUDOL: I have already discussed that with some of our senior leaders and we are going to take care of it.

CHAIRMAN HETTEL: I think that is why -- okay.

DR. SUDOL: Yes, sir. We can bring that website up here. You can see this information. Other information that we can have is we can change the map box to look at it differently. The hydropower is up here. I will pull that information up. There will be the inland navigation charts. Right now, there is a problem with the ESRI [Environmental Systems Research Institute] server that displays those. It is not showing up this morning. It went down last night or yesterday afternoon sometime, so that the navigation charts are not showing right now, but as I zoom in we should be able to see the navigation charts that are published. But right now, they are not showing up. I don't know why. My tech people tell me it is part of the ESRI server; that is where we get them from. That is the problem. It is not our network or anything like that. We can zoom in and you can see all the information at the locks. There is a race going on there, so you see that went on the 30th of June. There is the lock. I can change the display to the satellite. You can actually see the lock and dam. This is just standard GIS stuff that will be available to the public website.

The biggest thing is we can get the information about it, the information on cargo and different things. You can see the trends at some of our Ohio River locks. You can watch the trend up above, coal going down. In other trends, you can see the trend going up, for petroleum products and things like that.

You start to get the idea of looking ahead, seeing the trends, not only here at meetings with to you, but to our folks at the Operations Division. They can start seeing the trend of the data going up and down, and so we they can start making forecasts and seeing what might happen. We can watch the commodity cargo going up and down in some cases.

Is there anything else anyone would like to see? Again, this is a live demonstration. Yes sir?

MR. WOODRUFF: This is Matt Woodruff. I have a question, and I think this is probably beyond what was envisioned when this was started, but I am curious as to whether this could be an opportunity to provide additional use. What this is starting to look like is a common operating picture of the inland waterways system, and there is probably no better time to have a common operating picture that is more critical than during an emergency situation, such as a hurricane, where you might have downed power lines, or shoaling in a waterway, or navigation buoys moving off of their location station, or sunken vessels in a waterway, and a lot of data that people need, and we need to have everyone seeing the same data at the same time as close to real time as possible so that people can make decisions about waterways, reopening waterways and initiation of commerce movements and things of that nature and the restoration of vessel movements. Does this system have that ability where people perhaps at a field command post level could be updating real time waterway closures, impediments of vessel traffic, and things

like that -- sunken vessels or other issues such as that so that this could be used as a common operating picture in a post-storm environment?

DR. SUDOL: Yes sir, it could. What this system does, it is a very simple display system that goes out to a database, pulls information geospatially and displays it on a map. It is open source, so it can be used for whatever, so if there is information put into a standardized database that has geospatial coordinates, we can display it. One of the things we are talking to ERDC [the U.S. Army Corps of Engineers' Engineering Research and Development Center] about we have talked to them about is the River Information System, some of the things they have. We can display it here or wherever so that you can see that information. That is why we put the Notices to Navigation Interests on here, so as data is coming out of the website we need to display it geospatially and collect it and make it easier for you to use, and if you want to see it on a map, you could do that. It is a pretty easy system. My people have done a great job. Joel Schlagel and his folks put it together. I just provide overall project direction and give overall guidance and direction and get the funding for them. This is very simplistic, very easy to use, and as General Jackson needs more information, we can add those layers because we don't want to have one of our folks having to update this every morning. We want the General or Eddie Belk [Mr. Edward E. Belk, Chief, Operations and Regulatory Division, Headquarters, U.S. Army Corps of Engineers] or the folks at Headquarters -- or Jeff McKee, if he wants to go in and look at this in the morning and see what is going on, he can see it at a moment's notice without us having to do anything. That is the beauty of these dashboard type systems. Yes sir?

MAJOR GENERAL JACKSON: Mark, thanks very much for this rundown, and thanks for continuing to respond to the different needs and stuff that have been expressed. One question that comes to mind, especially when I start to see the AIS ship identifiers and where they are on the map and stuff, I guess my mind, comes to the issue of cybersecurity and how do we, while on the one hand in the interest of trying to put together a tool that is great for everybody to have on their dashboard, not provide so much information, or not have some way of requiring a log in or encryption type of thing for those who have the need to have that information from putting too much information out there that might make it us vulnerable. Administrator Jaenichen, do you have any thoughts on the subject of cybersecurity or vulnerabilities to users of the waterways or those responsible for operating and maintaining the waterways. I think it is something we need to think about as we put this information system together, and are we making sure we get the information to those who need it, but not make that information available to those who might use it for other purposes.

DR. SUDOL: Yes, sir. The idea of this system is to have a public version and a version available to Corps personnel behind the Corps' firewall. This would be the Corps version behind the Corps' firewall.

MAJOR GENERAL JACKSON: Okay.

DR. SUDOL: For the public version, we are not allowed to put the location of the vessels out to the public. A lot of our performance data, especially budget data, some of it is allowed; some of it is not. The President's budget is allowed.

MAJOR GENERAL JACKSON: Okay.

DR. SUDOL: We are going to be careful splitting the two, so there will be public information that everybody will have, for example the Notices to Navigation Interests, the status of locks, things like that, whereas, the behind the firewall version -- you can turn these off, if I want to turn off the vessels, then I can turn off that easily, and the list is not going to get that much bigger for the Notices to Navigation Interests. It is going to be a very small list. Mr. McKee or yourself, if you want to see certain things in the morning, you can see it.

MAJOR GENERAL JACKSON: Okay. Thanks.

DR. SUDOL: You have the weather up there. You can see that. Just a few things like that so that you get the information.

MR. JAENICHEN: Does the behind the firewall version of the information system allow you to look at some of the locations of the actual vessels carrying hazardous materials and explosive materials cargoes, where the vessels are? That would be my concern if you had access to those particular vessels and the cargoes that they are carrying, that would be dangerous.

DR. SUDOL: The AIS signal, as I have been told, does not have that information right now, so we do not have access to it. If we did have access to that type of information, we could display it, but currently it is not displayed behind the firewall.

MR. WOODRUFF: This is Matt Woodruff again. As the nation's largest operator of tank barges, I have some thoughts on this subject and a vessel's AIS signal. Whether you put it on your chart or not, it is being broadcast, collected, and distributed by various commercial providers and anyone in a cave anywhere in Afghanistan could sit with their laptop and find the location of any vessel in the United States anytime they want to. One of the things that I think is of a great concern, and I will mention it in this forum, is the fact that the AIS information has data fields that previously have not been used and we are now being compelled to use them, which, in my mind, creates a significant security risk, and that is the origin and destination information down to the dock level of where our vessels are going.

That was a field not commonly in use, and a lot of people who were wanting to collect AIS data for database purposes and for research purposes want to have that specific origin and destination, and this is down -- there is this massive database that identifies down to the dock level in a port, and what they are saying is "Don't say your tow is going to Houston; say you are going to Berth Number 3 at this specific terminal."

Well, often those berths are associated with certain types of cargoes, and an enemy would only have to know that that is the dock at that particular terminal that only handles anhydrous ammonia, and they can search for every vessel in the United States that is bound for that dock and what pops up on their screen are all the anhydrous ammonia tows within a few minutes because that happens to be one cargo that goes to particular docks.

As a word of caution, in our desire to create this data for future analysis, we need to think about the security risk, and whether you are putting information on your display or not, when we are forced to put all that data in the database, we are broadcasting all this information to the world, and there are commercial service providers who are more than happy to give that information to anyone who wants it, and it does create a threat.

MR. JAENICHEN: Another question that I would have is whether this database would have a live video feed or access to view this or do we have to go somewhere else?

DR. SUDOL: Sir, do you mean a live video feed at the locks, when you refer to a live video? We probably can develop something like that. We have not started work in that direction yet, but as long as it is available on the web, we can get access.

Also we added the dimensions of the lock chambers last night, so we are still developing this information system. This is still in the beta version of development, for example, up here, you can see the dimensions of the main lock chamber. We are adding that lock chamber dimensions information.

We are going to put on the website, again, based upon what Chairman Hettel has been asking for, for example, what is the queue, what is the current queue. Over on the top right top of the screen there will be an estimate of the length of the queue and the number of vessels in the queue that is reported by LPMS. The main lock chamber and there is a chamber offline, which one is open, which one is closed, and why a stoppage occurs right here on this screen. That is what we are cleaning up and fixing as we speak. We added the lock chamber dimensions. Sir?

CHAIRMAN HETTEL: Dr. Sudol, where do you get the information that is fed into this visual display? You mentioned we would see a half-green, half-yellow circle for a lock that had one chamber out of service. Where do are you getting your information from because Greenup [Greenup Locks and Dam, located at Ohio River mile point 341.0 below the Pittsburgh, Pennsylvania] currently has its main 1,200-foot chamber out of operation due to replacement of the downstream gates of the main lock chamber. I did not see a circle that was half green and half yellow.

DR. SUDOL: That is why we are working on the Notice to Navigation Interests website. That should have been listed as a Notice to Navigation Interests because we are trying to work with the field to have that in there and we can publish that information. There is a hiccup between the Notice to Navigation Interests, what is put in there and what is not put in there, and that is what we are fixing.

CHAIRMAN HETTEL: I understand this is certainly under development, but I just know that lock has got the main chamber out of service.

DR. SUDOL: That is exactly one of the things we want to fix.

CHAIRMAN HETTEL: Okay.

DR. SUDOL: You see a half-red, half-green. The red would indicate the main chamber. You will be able to see that. Why is it down and how long is it down. Then you have the green, the operating chamber. It will also tell you the dimensions. Sir?

MR. ROBERT J. INNIS: Is there a way that we are going to be able to get the data and to get the trends so that we can see what the impact -- the navigation impacts us so we can look at why we were delayed and look back at the data so we can actually download some of the some of the delays in an Excel format?

DR. SUDOL: Yes sir.

MR. INNIS: Okay.

DR. SUDOL: Exactly. The data will be summarized and you will be able to go in and do your own analysis. Again, this is the beta version. We are going to be working with Jeff McKee and his folks. What are his requirements? What does he need to have done?

I will stop there and will open it up for your comments. Since this is a public meeting, you can ask your questions or provide comments here and keep improving the website.

MR. POINTON: Any comments that you have, any input you want to provide, absolutely feel free to provide that to Dr. Sudol. It is literally changing every day. I go sit in his office and look at what is up there every other day and see the improvements and progress that we are making on it every day. Any input from the industry folks, whatever you want to do, talk to Dr. Sudol.

DR. SUDOL: That is my direct phone line, or please send me an email. I think everybody has my email by now. I know the Chairman does and you can get it from him. I am glad to receive your feedback and comments because I like the comments. That is how we are going to make this site better. I really appreciate your comments and your attention. Thank you very much.

MR. WOODRUFF: Very nice work. It is coming along nicely.

CHAIRMAN HETTEL: I agree.

MR. POINTON: Mr. Jeff McKee is next up on the agenda. He will be providing some information on the benefit-to-cost data that you requested. It was sent out in the read ahead materials, so you have the detailed information, and Jeff has summarized the information for his presentation. Jeff will discuss benefit-to-cost data for Trust Fund projects. Jeff, you are up.

MR. JEFFREY A. MCKEE: Good morning, Mr. Chairman, General Jackson, ladies and gentleman. Thank you, Mark. The data that I will have on the screen is going to be the same data that is on the handouts at the front desk and was provided in the read ahead materials, except I did add the Remaining Benefits to the Remaining Costs ratio to the slides. I put it in this format. I thought it would be a little bit easier for the audience to read. I am not going to read

all the numbers, but you can see at the top of the slide the “Authorized Total Project Cost” followed by the “Authorized Fully Funded Project Cost.” As we have discussed before, the difference between the “Authorized Total Project Cost” and the “Authorized Fully Funded Project Cost” is that the Fully Funded Cost includes cost escalation through the midpoint of construction, and that is the reason why the Fully Funded costs are higher than the Total Project Costs.

You can see the authorized Benefit to Cost Ratio [BCR] for Olmsted is 5.4 to 1 using a seven percent interest rate. Olmsted was authorized in November of 1988. The current BCR for Olmsted is 3.4 to 1 using a seven percent interest rate, and the Remaining Benefit to Remaining Cost Ratio is 16.3 to 1. You can see how these project costs and benefits are going to change over time. We see a lot of project costs have increased; some due to inefficient funding and some due to changes in the contract, some due to claims on the contract, changes in the anticipated cost of the contract as a result of the actual bids that come in. You see this general format on each project. Are there anything specific questions concerning the Olmsted project before I move on? Yes, sir?

CHAIRMAN HETTEL: Jeff, on your handout to us, it doesn't have the Remaining Benefit to Remaining Cost Ratio information.

MR. MCKEE: That is correct sir.

CHAIRMAN HETTEL: Would you be so kind as to distribute these to us? Can you do that?

MR. MCKEE: I will absolutely do that.

CHAIRMAN HETTEL: Thank you.

MR. MCKEE: You are welcome sir. Are there any questions specifically on Olmsted? Okay. Moving on the Lower Monongahela River, Locks and Dams 2, 3, and 4 project, you see a similar display of information. You see the changes in the costs. The original Benefit to Cost ratio was 6.7 to 1 at seven percent, the current BCR is 1.4 to 1 at seven percent, and a Remaining Benefit to Remaining Cost Ratio is 2.2 to 1 at seven percent.

CHAIRMAN HETTEL: Jeff. On the Lower Mon project, you show a Current Total Project Cost of \$2.733 billion. Is that --

MR. MCKEE: That is for the total cost of the project. That does not --

CHAIRMAN HETTEL: I take it that that project cost figure includes the second landside lock chamber and the Port Perry Railroad Bridge --

MR. MCKEE: That is correct sir. That project cost estimate does include the cost of the second landside lock chamber and the relocation of the Port Perry Railroad Bridge; that is correct sir.

CHAIRMAN HETTEL: In Mr. Aldridge's presentation, he also includes a Current Total Project Cost estimate which excludes those project elements, so if we excluded those project elements, that would certainly increase the BCR, would it not?

MR. MCKEE: If you excluded those project elements and changed the project -- but at this point in time, the Total Project Cost Estimate is still \$2.733 billion. We are not eliminating those project features. We are just deferring them into the future.

CHAIRMAN HETTEL: I understand. Could you --

MR. MCKEE: When we estimate the benefit to cost ratio -- the official benefit to cost ratio for the project, we are basing it on the total project.

CHAIRMAN HETTEL: I understand that, and I understand why you have to report it that way, but could you possibly get us the benefit to cost ratio for the project without the second landside lock chamber and the relocation of the Port Perry Railroad Bridge for our knowledge?

MR. MCKEE: Yes sir.

CHAIRMAN HETTEL: Great. Thank you.

MR. MCKEE: We will try to get it. It involves a lot of different computations and changes in both the calculations of the benefits as well as costs because we won't have the benefits of the second lock chamber.

CHAIRMAN HETTEL: I understand.

MR. MECKLENBORG: Chairman Hettel mentioned that and we understand that the benefits would change. I just want a refresher of the explanation as to why we don't just eliminate those additional project features. Does that take a re-authorization of the project?

MR. MCKEE: We would need some sort of Post Authorization Change Report that would recommend not following through with those project elements, which would be approved in a Water Resources Development Act to actually change what the project is, and that would eliminate those project elements permanently, of course.

MR. MECKLENBORG: Okay. Thank you.

CHAIRMAN HETTEL: Jeff. My question is, and Mr. Somales [Board member Michael T. Somales] is not here at the meeting, who operates on that upper region of the river, but I guess we need to check with the Board members on why we would not want to authorize those project elements. I understand the deferment. We have all agreed we can defer those project elements, and we can still achieve I want to say 90 percent of the benefits associated with the project by not raising the Port Perry Railroad Bridge and not building the second lock chamber at Charleroi Lock [Lock and Dam 4 located at Charleroi, Pennsylvania], and I do not want to call a vote of

the Board members without the representative of the region that primarily operates on that portion of the river, but I think we should bring this up at our next Users Board meeting and voice the Board's opinion on why we would not move forward for completely removing those project elements from the project.

MR. MECKLENBORG: I think we probably need to see the numbers that you are asking for. That would help us make a decision.

CHAIRMAN HETTEL: If we could maybe have that information available for the next Users Board meeting, we can hold a vote on that on what we see we ought to do with the Lower Mon project.

MR. MCKEE: I would say at the next Users Board meeting, we have either Mr. Dale or somebody from the Pittsburgh District actually go through the pros and the cons of sticking with the existing project or going through the process of de-authorizing those two project features.

CHAIRMAN HETTEL: As we developed our Capital Investment Strategy prior to delivering it to the Assistant Secretary, we did not include the additional features on the Lower Mon within that project, and if we were to include them, that was going to push a lot of projects further out into the future, so I think it just makes sense to provide the Board the BCR excluding the second lock chamber at Charleroi and excluding the raising of the Port Perry Railroad Bridge. I think then we could vote on whether we move forward to completely de-authorize those elements from the project, and I think that would help our friends in Congress because that would be a cost savings, then we could possibly authorize another project, so that is simply my opinion there, but I think we could get a vote by the Board at our next meeting if we could have that information.

MR. MCKEE: I think we need to provide the entire picture to the Board to make an educated decision.

CHAIRMAN HETTEL: I agree. Agreed. Thank you, Jeff.

MR. MCKEE: Are there any other questions on the Lower Monongahela project? Okay moving on the Kentucky Lock and Dam project. Yes, sir?

CHAIRMAN HETTEL: Would you go back one moment to the Lower Mon project? You have the remaining benefits to remaining costs ratio that is based on the total project cost; you could also develop that RBRCR for us, excluding the other two features we have discussed, is that correct? Okay. Thank you.

MR. MCKEE: Kentucky Lock. The authorized cost, benefit to cost ratio --

MR. WOODRUFF: Just for the record, in case it doesn't come out on the transcript -- it should be noted that Mr. McKee nodded his head in agreement to Chairman Hettel's question as to whether Mr. McKee could develop the RBRCR excluding the two project elements on the Lower Mon project that that is something you can do; is that correct.

MR. MCKEE: Yes, sir.

MR. WOODRUFF: Thank you.

MR. MCKEE: We will work on doing that. I will have to make sure that we can get something like that done by the next Users Board meeting because it does involve a lot of work, looking at both the economics, the estimation of the benefits, as well as the costs.

MR. WOODRUFF: Okay. I just wanted to make sure the record captured your nonverbal response. Thank you.

MR. MCKEE: I understand. Thank you, Mr. Woodruff. Continuing with the information on the Kentucky Lock and Dam project. You can see the Authorized Total Project Cost and the Authorized Fully Funded Project Cost. The Authorized Benefit to Cost Ratio of 1.7 to 1 at seven percent and the Remaining Benefit to Remaining Cost Ratio of 3.9 at a seven percent interest rate.

I guess I should have said a little bit more about that at the start, but the remaining benefits to remaining cost ratio is just that. It takes what the remaining benefits are and compares it to the remaining costs, so it excludes some of the costs that have already been expended on the project.

Moving on to the next slide, Chickamauga Lock and Dam. For Chickamauga Lock, you can see in the original at Benefit to Cost Ratio was 2.2 to 1 at seven percent interest rate. The current BCR is 1.8 to 1 at seven percent. The Chickamauga lock project is currently undergoing an economic re-evaluation, but at the current BCR of 1.8 to 1, the comparable Remaining Benefit to Remaining Cost Ratio would be 2.8 to 1 at seven percent. Are there any questions on the benefit to cost ratios and the remaining benefit to remaining cost ratios?

CHAIRMAN HETTEL: Just a comment Jeff. In looking through Mr. Aldridge's upcoming slides for these four projects, to emphasize the Lower Mon project and pulling out the second lock chamber and the raising of the Port Perry Railroad Bridge, Mr. Aldridge's numbers are in line with your numbers exclusive of the Lower Mon project, so to be able to talk apples to apples and not apples to oranges, I think it would be beneficial that we have that data for our next Board meeting.

MR. MCKEE: Correct sir. As we discussed at our last Board meeting there was discussion over the total project cost versus the fully-funded project cost.

CHAIRMAN HETTEL: Correct.

MR. MCKEE: And that is what I included both on the sheets, so you can see the comparison. Are there any other questions on the benefit to cost ratio data?

Okay. Moving on. Mr. Chairman, you also had a couple of questions on the Upper Mississippi and the Illinois Waterway in terms of the PED [Pre-construction Engineering and Design] costs. A few things that are going on that. The District is re-scoping the economics that needs to be done. The BCR on the project that was originally submitted was 1.23 to 1 at seven percent. Headquarters provided \$50,000 in Fiscal Year 2015 for the District to re-scope the economics. The District believes that at this point in time, the revised economics analysis would take approximately \$6 million to \$7 million and take three years to perform, just as background. From the standpoint of the process of going through the budget for PED work, before a decision is made to fund the PED analysis, we will need to complete the economic analysis, and I state that up front.

For LaGrange Lock and Dam [at Illinois River mile 80.2 from its junction with the Mississippi River], the PED itself would take about four years and would cost about \$26 million.

For Lock and Dam 25 on the Mississippi River [located at mile 241.4 of the Mississippi River above Cairo Point], the PED would take about four years and \$38 million for the design there.

CHAIRMAN HETTEL: That is just for the Pre-construction Engineering and Design?

MR. MCKEE: That is correct, sir.

CHAIRMAN HETTEL: I am sorry. You said that would take four years at LaGrange?

MR. MCKEE: Yes sir.

CHAIRMAN HETTEL: And \$26 million? What was the cost at Lock and Dam 25?

MR. MCKEE: \$38 million.

CHAIRMAN HETTEL: I am sorry. 38?

MR. MCKEE: \$38 million.

CHAIRMAN HETTEL: And time frame?

MR. MCKEE: Again, another four years.

CHAIRMAN HETTEL: Another four years?

MR. MCKEE: And the way the District has it tentatively scheduled is that -- the projects would overlap. The District would start the LaGrange PED first. Then on the fourth year of the LaGrange PED, the District would start the PED at Lock and Dam 25.

MR. MECKLENBORG: Jeff, this sounds very disappointing in terms of the time frame, and I would urge you to carefully scrutinize those cost and time estimates to see whether there is

a way we can accelerate that process. These projects have been programmed as a whole that, has been -- off and on. We have been waiting at the starting gate for these projects for any awfully long time, and, it is something that -- those kinds of cost estimates and time frames are disheartening.

CHAIRMAN HETTEL: I agree, Mr. Mecklenborg, and let me make sure I have this time frame correct, Jeff. You say you have to spend six to seven million dollars to do another revised economic estimate, and that would take three to four years to accomplish?

MR. MCKEE: It would take three years, sir.

CHAIRMAN HETTEL: Three years. Then it would take four years and \$26 million for the PED --

MR. MCKEE: The detailed designs, plans and specifications, et cetera.

CHAIRMAN HETTEL: -- plans, engineering, design at LaGrange Lock and Dam, and then four years after that for Lock and Dam 25. Just to emphasize Mr. Mecklenborg's point, if we you were to start today, you are seven years before you could even start construction at LaGrange, and 11 years before you could even start construction at Lock and Dam 25?

MR. MCKEE: The District would overlap the PED for LaGrange Lock and Dam and Lock and Dam 25 by one year. Your point is well taken. The length of time -- it is a long time to get to construction. Yes, sir.

CHAIRMAN HETTEL: Ten years.

And these projects were authorized in 2007 [the Navigation and Ecosystem Sustainability Program, also known as the "NESP" project, formerly referred to as the Upper Mississippi and Illinois Waterway Project, authorized by Title VIII of the Water Resources Development Act of 2007, P.L. 110-114, dated November 9, 2007]. This is 2016. If we were to proceed based on the information presented today, we would not start these projects until 2026, which, according to my calculation, is 19 years after authorization.

MR. MCKEE: (Nodding head in agreement in place of a verbal response).

CHAIRMAN HETTEL: That is hard to swallow.

MR. WOODRUFF: I am sorry. I just want the record to reflect, to get your nod again, but you are nodding.

MR. MCKEE: Yes. It is going to take a long time to get these projects started.

CHAIRMAN HETTEL: Wow.

MR. MCKEE: On that happy note, are there any more questions?

CHAIRMAN HETTEL: Jeff, what is your next portion in your presentation?

MR. MCKEE: Sir.

CHAIRMAN HETTEL: Where are you going next in your presentation? What are you going to present to us next, or are you finished?

MR. MCKEE: I don't have anything else sir.

CHAIRMAN HETTEL: Okay. Well, that's good. I am going to rearrange the agenda a little bit and ask you a question on what we are facing at Brandon Road with the Asian carp and possible ANS [Aquatic Nuisance Species] barrier that they are talking about at Brandon Road [Brandon Road Lock and Dam, located 286 miles above the confluence of the Illinois River with the Mississippi river at Grafton, Illinois. The complex is located 27 miles southwest of Chicago and 2 miles southwest of Joliet, Illinois].

We hear from folks in the Corps that they could shut down Brandon Road, that they are authorized to shut it down. I would like to quote from a February 8, 2016 Army Corps Memorandum, Subject "*Implementation Guidance for Section 1039(c) of the Water Resources Reform and Development Act of 2014, Public Law 113-121 – Invasive Species, Prevention, Great Lakes and Mississippi River Basin*" that was distributed by Mr. Steve Stockton, Director of Civil Works, and in Paragraph number 7, it states:

"Consistent with direction provided by the explanatory statement regarding the Consolidated Appropriations Act, 2016, USACE shall develop formal emergency procedures under authorities provided under in Section 1039, including rapid response protocols, monitoring, and other countermeasures, that are appropriate to prevent Asian Carp from passing beyond Brandon Road Lock and Dam while still complying with Lock's existing authorized purposes and the Rivers and Harbors Act of 1899 (33 U.S.C. 401 et seq.). These procedures shall be established in coordination with the U.S. Fish and Wildlife Service and in consultation with the Asian Carp Regional Coordinating Committee."

Again, I am not a lawyer, but that tells me whatever we do at Brandon Road, we have to keep it open for navigation. Is that not --? Am I reading that incorrectly?

MR. MCKEE: I am not a lawyer either, sir. We can take that back and get a formal opinion on that for you.

MAJOR GENERAL JACKSON: Mr. Chairman, if I may. My understanding is your interpretation of the statute in the Implementation Guidance is correct. As part of the emergency measures, though, I believe the District Commander has the authority to temporarily close the lock and dam for up to 30 days, as I understand it, and that will be in coordination with the full interagency -- federal and state interagency committee for that invasive species task force. When you hear that the Corps has the authority to shut the lock down, in fact, we do, temporarily, and

we will if we have to if certain criteria are met, but we will do that in full transparency and in full coordination and only under the most dire circumstances as the District Commander is required to do, and I think that may explain some of the things that you are hearing. But not having heard those things, I am not sure exactly what you heard, and, Mr. Crook, you can add, if there is anything you want to from the Office of the Secretary's perspective on this subject.

MR. CROOK: No sir. I think that you described the situation accurately the way that we are viewing it, and I know that the Chicago District and the interagency group were working on some more clarity on what those circumstances would be.

MR. WOODRUFF: Just to follow up with another question. If we were going to do some sort of project at Brandon Road, would we expect, say, three years for an economics study and then four years thereafter for PED, so it would be beyond seven years before anything might be done there?

MR. MCKEE: Sir, a lot of that depends on the complexity of the project and the economics. If you are looking at Brandon Road, you are looking at one project there by itself. When you compare that with the Upper Mississippi and Illinois Waterway project, you are looking at those two systems as well as the interaction with the Ohio River system, the economic analysis that goes with the transportation forecast for going through all those systems, it is a little bit more complex when you look at the Upper Mississippi and Illinois Waterway project versus a standalone lock project.

MR. WOODRUFF: Understood.

MR. MCKEE: This analysis would be more on the order of a -- I guess it could be somewhere between a major rehabilitation type project and a new construction type project at Brandon Road.

MR. WOODRUFF: Okay. Well, I guess maybe I am a bit confused then because I thought we were saying that to do anything at LaGrange would require -- so the study that is necessary to proceed with the PED on LaGrange is not just LaGrange related, but it is the entire NESP project?

MR. MCKEE: When you look at the economic analysis for the NESP project, yes. You are looking at an entire set of locks that were authorized as part of that project when you go through your economic analysis and your updated cost estimates. When you look at Brandon Road, you are looking strictly at that one project site. That is for the economics portion of the study. That is \$6 million to \$7 million for three years. That is what you are looking at. When you are looking at the Preconstruction Engineering and Design, that four years is specifically for LaGrange, and all I am saying is you would not necessarily have those same lengths of time for Brandon Road, depending on the complexity of what you're doing.

MR. WOODRUFF: I see. That brings up something, and this is -- it is making me think of an issue closer to home, and I know that I am shifting gears radically on you, and I do not expect an answer right now, but I want to pose a question, perhaps, that we could talk about at a

future meeting. About a year ago, the Users Board went down and looked at the Brazos River floodgates on the Gulf Intracoastal Waterway [a site visit to the Brazos River floodgates, located at mile point 401.2 west of the Harvey Lock on the Gulf Intracoastal Waterway West [GIWW] was conducted on 13 May 2015, the day prior to Inland Waterways Users Board Meeting No. 75 which was held in Galveston, Texas on 14 May 2015] and that was a project that had been identified by the local waterway users through a study that the Texas Department of Transportation conducted as being the biggest impediment on the GIWW at this point, and the state actually came forward with funding to study what might be done there, and at some point in the process -- and I don't know exactly when because we didn't hear about it until a public meeting a few months ago --, apparently, the Corps has decided, in addition to studying the Brazos River floodgates, that they would also throw in the Colorado River Locks, some 40 miles away [the Colorado River Locks, located at mile point 441.5 west of the Harvey Lock on the Gulf Intracoastal Waterway - West now as part of that study.

Now, one of the consequences I have already heard is that that has caused a one year delay in the completion of the study of the Brazos River Floodgates, so we have lost a year as a result of that, but also you are going to put both of those projects together in one single bucket with one single BCR and one single project for Congress to consider for authorization. It makes no sense when you have two vastly different projects, two different risk profiles, potentially two different costs for a solution, to take these two disparate projects and put them together, and so I see that sort of as a situation where we are looking at -- we have got a big problem at LaGrange, but we are not going to talk about LaGrange until we have gone back and re-studied the entire system. That would seem to me to advocate for looking at these projects individually so that Congress, as it authorizes funds, can say this one needs to be authorized, this one needs to be moved up, and give us the ability and the flexibility to do that. I would hate for us to see a situation arise like we're seeing apparently right now at LaGrange, arise on the GIWW, so maybe at our next Users Board meeting, we could put an item on the agenda to talk about why these two projects have been lumped together, and if there is a way that they can be separated so that Congress will have the opportunity to direct the Appropriations committees, and the Corps, in its budgeting, would have the opportunity to budget those separately if the numbers suggested that one was a higher priority than the other.

MR. MECKLENBORG: Mr. Chairman. This brings to mind -- perhaps of value to the Board might be -- and it does not have to be by the next Board meeting, but at some point in the not too distant future, to ask the Corps to provide an overview of how the economic re-analysis of the Upper Mississippi and Illinois Waterway project will be conducted because that is an area where that has already been done. To a layman, it would seem like you would update what has already been done. That probably is not what is going to happen, and it would be interesting to see what changes in the approach are contemplated.

MAJOR GENERAL JACKSON: Mr. Chairman, this is General Jackson. My recommendation, -- to pull in the thread of Mr. Mecklenborg, is perhaps -- we are bouncing around all over the inland navigation system, and poor Jeff is up here -, he has come to this meeting and he wanted to talk about a few projects that we have put on the agenda and we are killing him with a thousand cuts. My recommendation might be that we, at some future meeting, whether it is the next one or the one following, or maybe we use several meetings to do this, but

lay down all the activities on the inland navigation system what we are doing and show the Board what the long term plan is that we are doing or planning to do, where are we doing studies, where are we doing major rehabilitation projects, where are we looking at closures, where are construction projects going on, and first of all, give you kind of a complete lay of the land so that the Board members have the full, comprehensive view. Then I think there are some things that would be helpful because it would be helpful to the layman in terms of why do we do these five-year re-evaluations, what is driving us to do that? Is it law? Is it policy? Is it something that we have control over? Who is the one that is directing that we do these things? That way everybody has a full understanding of why we do things that don't seem to make sense without knowing what is driving the requirement.

Mr. Chairman, if it is okay with you, I would recommend that you allow us in the Corps to take a stab at that because number one I think that would generate some good discussion. Number two, I think it would be very illuminating, and I think it would give us all good situational awareness. Then from that point forward, I think that would potentially allow us to take a deep dive at future meetings into certain specific areas, whether it be a specific waterway, or river systems in general, where we can talk about the river systems and why or how perhaps we might package different projects together, or why not, and then again continue to provide the information that the Board asks for in terms of the priority projects for the Inland Waterways Trust Fund. That would be, for the record, my recommendation to you.

CHAIRMAN HETTEL: I am going to bounce this around one more time, General, then I am going to digress back to Brandon Road and the Implementation Guidance for Section 1039. I believe I heard you say, and Mr. Crook agree, that the District has the authority to close the lock in an emergency situation, is that correct?

MAJOR GENERAL JACKSON: Temporarily.

CHAIRMAN HETTEL: Temporarily.

MAJOR GENERAL JACKSON: Because I think that is the key word.

CHAIRMAN HETTEL: Okay. I don't see the word "temporarily", again, in this Implementation Guidance. I just want to read it again so we are certain "*....USACE shall develop formal emergency procedures under authorities provided under Section 1039, including rapid response protocols, monitoring, and other countermeasures that are appropriate to prevent Asian Carp from passing beyond Brandon Road Lock and Dam while still complying with the Lock's existing authorized purposes and the Rivers and Harbors Act of 1899.*"

To me, that is a direct conflict. General, you and I don't disagree on much, but I am going to politely agree to disagree with you that. To me, the Implementation Guidance says you have to keep locking through navigation. I just wanted to put that on the record. Thank you.

MAJOR GENERAL JACKSON: Thank you, Mr. Chairman.

MR. MCKEE: Mr. Chairman, if I may go back and briefly address Mr. Woodruff's comments on Brazos River floodgates and the Colorado River locks. Sir, the thought behind that study was they are both located on the Gulf Intracoastal Waterway. Forty miles away, yes, but when you are looking at an economic analysis, it made sense to do it one time, look at the entire system on the Gulf Intracoastal Waterway, and then you would have a lot of other efficiencies that would be gained by doing the economic analysis as a single study as opposed to doing multiple studies. In response to your question on separating them, I believe that when we do that, we could also address those as separable elements and move forward with one versus two, and certainly, if we found that there was not - if it was not in the Federal interest to move forward with say the Colorado Locks project because the BCR was too low, then we could move forward with strictly an authorization for the Brazos River Floodgates. That is something we will look at. We will bring that back to the Board for a more in-depth discussion.

MR. WOODRUFF: Thank you, sir. Again, I wasn't going to try to put you on the spot for an answer today, but I do think -- at least I personally and I don't want to speak for the rest of the Board, but efficiency and looking at things systematically is something that this Board generally has been an advocate of, and being efficient in the use of your resources, again, makes a lot of sense. I have just gotten conflicting answers when I have asked this question around as to whether the optionality and the severability between the two projects would exist, and that is the only thing I wanted to ensure is that we do have separate numbers at the end of the day so that it maximizes the flexibility that the Corps and Congress and this Board would have in making recommendations from the Board.

MR. MCKEE: Understood sir. Mr. Chairman, do you have any other questions?

CHAIRMAN HETTEL: Not from me, Mr. McKee. Thank you very much for your patience with us.

MR. MCKEE: Thank you sir.

MR. POINTON: I am afraid to ask if there are any more questions for Jeff. If not, we are going to deviate from the program a little bit here. Mr. Joseph Aldridge will be going next on the program instead of Mr. David Dale. We will have Mr. Dale at the podium one time to cover all his items together. Mr. Aldridge is next up. Joe, please go ahead and proceed with your presentation, sir.

MR. JOSEPH W. ALDRIDGE: Thank you very much Mark. Good morning, Chairman Hettel, Major General Jackson, Mr. Crook, Board members, and guests. I am Joseph Aldridge, USACE Headquarters Inland Waterways Trust Fund account manager. It is good to be here at today's meeting to provide the Board with an update on the financial status of the Inland Waterway Trust Fund and status of Inland Water Trust Fund projects. I will be briefing these slides as you flip them from top to bottom and from left to right.

Next slide please. Beginning with slide number 2, this slide shows the financial status of the Inland Waterways Trust Fund as of 31 May 2016. We began Fiscal Year 2016 [October 1, 2015] with a beginning balance of \$54,223,049.

Fuel tax receipts collected for the first eight months of Fiscal Year 2016, October 1, 2015 through May 31, 2016, equaled \$70,954,559. Interest earned during the first eight months of Fiscal Year 2016 equaled \$113,889, for a total amount of revenue deposited into the Trust Fund of \$71,068,448.

The current balance in the Inland Waterways Trust Fund as of 31 May 2016 is \$125,291,497, the summation of the beginning balance of \$54,223,049 and the total of the tax receipts collected and the interest earned of \$71,068,448.

The \$71,068,448 in revenue collected over the first eight months of the current fiscal year are on pace to meet the U.S. Department of Treasury's estimate of \$107,000,000 in revenue to be collected in the Trust Fund over the entire fiscal year [October 1, 2015 to September 30, 2016].

CHAIRMAN HETTEL: Joe, before continue -- you brought up previously, before your presentation, a comparison of the first four years before the Trust Fund was increased 29 cents a gallon. Are you going to address that later on?

MR. ALDRIDGE: I hadn't intended to, but....

CHAIRMAN HETTEL: Well, I saw this slide come up, and the reason why I ask that, -- while I understand -- and I think the Board members have this with them?

MR. POINTON: Yes.

CHAIRMAN HETTEL: While I understand this is not a comparison to a fiscal year, I think it is a good comparison -- well, we know it is a definite comparison for 12 months of revenue at 20 cents a gallon and 29 cents a gallon from April of 2014 to March of 2015 and the same time frame during the 2015 to 2016 time frame, which shows us, having a -- I am going to call it a verified balance -- I am not sure where these numbers came from that were presented to us -- of \$121,473,362 in the 12 months balance in the Trust Fund, but yet you just stated that the \$71 million is on track for \$107 million, so where is the differential of the \$14 million?

MR. ALDRIDGE: Well, sir, as you know, for any given month, the Trust Fund, the revenue generated by the Trust Fund can vary, and depending on which 12 months you are using. I know you specified which ones, so those numbers could be -- let's say you shifted a month. You might have a couple down months in the summer time or late in the winter time or something, and that number could have changed. All I am using is what was provided by the U.S. Treasury as an estimate for FY 2016 and there was a \$6 million decrement or reduction or cost adjustment, if you will, for this past May, and that is what brought it from -- down to \$107 million, based on what you had talked about at the previous Board meetings, roughly what was previously forecasted to be \$114 million. I am not really sure where the \$120 million comes from, but as far as that figure, I guess I just can't answer that question. I mean, it is a 12-month period. It is a verified period, as you have stated. We have U.S. Department of Treasury figures for FY 2016, and they are on track to meet the \$107 million as the U.S. Treasury estimated. I am not really sure how to answer that question.

CHAIRMAN HETTEL: Okay. Well –

MR. ALDRIDGE: Mr. Dale or Mr. McKee, if you have a better response?

CHAIRMAN HETTEL: Joe, if I may. First, let me understand. You are – almost \$71 million, you are talking about deposits into the Trust Fund was through May 31st of this year, is that correct?

MR. ALDRIDGE: Yes sir, that is correct.

CHAIRMAN HETTEL: And that would include October, November, December, January, February, March, April, and May – eight months?

MR. ALDRIDGE: Eight months. Yes, sir.

CHAIRMAN HETTEL: Okay. And have we – and that should total those same eight months as shown in this handout?

MR. ALDRIDGE: Yes sir, it should. And during those eight months, it averages out to about \$8.8 million a month, is what the average is, so that yields approximately a full year, 12 month total of \$106.6 million, rounded up to approximately \$107 million.

CHAIRMAN HETTEL: Okay. Thank you Joe.

MR. ALDRIDGE: You are welcome, sir. Next slide. On this slide you will see the current year, Fiscal Year 2016 represented by the green bars and it is compared to the past five years of revenue side by side to get a better understanding about the revenue trends. I stated earlier, the revenue deposited into the Trust Fund during the current fiscal year as of 31 May was \$71,068,448. You can see the green bars. You can see the red bars, which represents Fiscal Year 2015, and April 2015, when the 29 cents per gallon fuel tax took effect, and now it has continued on into Fiscal Year 2016 and you can see the larger amount of revenue is being generated.

CHAIRMAN HETTEL: Joe, I'm sorry. I had to add this up. You know me better than that. Those eight months on this handout that we have been given totals \$75.6 million. You stated that \$71 million was collected, so we are \$4.63 million off from what you say is through the end of May of 2016.

MR. ALDRIDGE: How many million off?

CHAIRMAN HETTEL: I am counting October, November, December, January, February, March, April and May.

MR. ALDRIDGE: All right, sir. And you said about \$4 million?

CHAIRMAN HETTEL: Those same eight months, at 29 cents a gallon is \$75.63 million. You are referencing almost \$71 million, so we are off somewhere in here.

MR. ALDRIDGE: All right, sir.

CHAIRMAN HETTEL: Thank you.

MR. ALDRIDGE: I will look at that again. I used those same slides to generate my bar chart, so I am not really sure where the difference is, but I will look at that.

Mr. JAENICHEN: Mr. Chairman, if you take a look and you compare the 20 cents versus 29 cents, it is a delta of about 45 percent, and if you were to take that \$71 million figure, and just multiply it by the 45 percent, you come out at about \$32 million. If you take that and compare that, your total is about the same, and what that tells me is the fuel consumption is about the same. The only difference is that additional funds were provided by the extra fuel tax. Actually, this is what you are seeing in terms of the total revenue.

CHAIRMAN HETTEL: Thank you.

MR. JAENICHEN: It looks to me that it is fairly consistent. The delta is just the increase in the fuel tax-- what you are seeing is the difference in the fuel tax and what the industry is providing in the Inland Waterways Trust Fund.

CHAIRMAN HETTEL: Yes. Thank you, Administrator Jaenichen. It will be interesting to see how these numbers come out when we end the fiscal year because I think we are going to do better than the \$107 million that the Department of the Treasury forecasts being deposited into the Trust Fund.

MR. JAENICHEN: That would be great.

CHAIRMAN HETTEL: And, of course, the importance to this Board is the more we contribute to the Trust Fund, the more that the funds are matched, the more capability funding we can lobby for the Corps to finish these projects sooner, which is going to save everybody money.

MR. JAENICHEN: That would be great.

CHAIRMAN HETTEL: Thank you.

MR. ALDRIDGE: Thank you, Chairman. Like I said, I am using what the Treasury Department reported, and the numbers just happen to match, and I am hoping that you are correct and we do get between \$114 million and \$116 million. That would be awesome.

CHAIRMAN HETTEL: I understand, and I try to --.

MR. WOODRUFF: Mr. Chairman. Just a point of order real quickly. Mr. Aldridge, if you could reposition your microphone, you are not being picked up very well, and not everybody, I think, is able to at the table can hear your comments.

MR. ALDRIDGE: Is that better?

MR. WOODRUFF: A little bit.

MR. ALDRIDGE: Better?

MR. WOODRUFF: Yes. Much better.

MR. ALDRIDGE: Thank you. Moving to the next slide. This slide shows a comparison of the past three months [March, April and May] for the period from Fiscal Year 2011 to Fiscal Year 2016, and gives you a better picture of the fluctuations and the amount of revenues deposited into the Trust Fund in the last three months. You will notice that as of March of this year the revenue deposited into the Trust Fund was \$57,301,980, and then in April it increased by another \$10.36 million to a total of \$67,682,507, and then this noticeably small increase in the month of May. It is a \$3.36 million increase in May to a total of \$71,068,448 and as I stated previously, that was because of an adjustment in the Department of the Treasury's figures down by \$6,217,803. The Department of the Treasury did not give a reason for the downward adjustment, other than to say that these are supposedly accurate actual numbers versus the estimated numbers that were previously reported. Are there any questions on this slide before I move on to the next slide?

Next slide. This next slide is displays a historical overview of the past four years [Fiscal Years 2012 to 2015], the current fiscal year [2016], and the President's budget request for the next fiscal year, Fiscal Year 2017, for the eight Inland Waterways Trust Fund identified projects. You can see which projects were funded with money from the Trust Fund and where and what the draw was from the Trust Fund, and how we managed the balance in the Trust Fund.

As you can see, for Fiscal Year 2016, funds from the Trust Fund were directed to five projects, the Olmsted Locks and Dam project, the Lower Monongahela River Locks and Dams 2, 3, and 4 project, the Kentucky Lock and Dam project, the Chickamauga Lock and Dam project, and the Lockport Pool Major Rehabilitation project, and the projected transfer of \$108 million from the Trust Fund to the Corps during the current fiscal year.

If you want, I can give you a breakdown by project of what is the projected amount to be drawn from the Trust Fund for each project. Mr. Chairman?

CHAIRMAN HETTEL: It is your call, Joe.

MR. ALDRIDGE: Well, if you want to go home, then maybe not. Like I said, you can see the numbers. The only – there is a 50 percent draw from the Trust Fund and 50 percent draw from the General Treasury for all projects except the Olmsted project, which is 15 percent from the Trust Fund versus 85 percent from the General Treasury.

CHAIRMAN HETTEL: Yeah. I think we have got that. Thanks Joe.

MR. ALDRIDGE: All right, sir. The next set of slides -- and we are moving to the project updates -- shows the update of projects in the Mississippi Valley Division, and after I cover the projects in the Mississippi Valley Division, I will go into an update of the project in the Great Lakes and Ohio River Division.

Next slide. First up is the Lockport Pool Major Rehabilitation project on the Illinois Waterway in Illinois. The only change on this slide since the last Users Board meeting is the updating of the Total Project Cost to a figure of \$150,875,575, which includes the Fiscal Year 2016 allocation of \$1.7 million.

In the lower left hand box titled "Funding Overview" you see information on the Original Authorized Cost of the project and other pertinent information concerning the financials of the project.

The next slide shows the Schedule of Remaining Work at the Lockport project. The Stage 1C Powerhouse Forebay Wall is still on track for completion in December 2016.

Next slide. The next project is the Inner Harbor Navigation Canal Lock Replacement project. Delays have been encountered in the development and execution of the capacity modeling used to identify the amount of congestion associated with various levels of vessel traffic as part of the General Re-evaluation Report. This has resulted in a slip in the completion schedule of the General Re-evaluation Report from December 2017 to June 2018.

In the box on the lower right side of the slide titled "Next Steps", you will see there is an update based upon a question that the Board asked a few meetings ago concerning the amount of money -- the request for the amount of money owed by the Port of New Orleans, and the New Orleans District will be sending that letter in December of 2016.

CHAIRMAN HETTEL: Joe. I want to ask you a question pertinent to your slide here, but maybe Mr. McKee --, maybe you can -- or maybe Mr. Belk can answer this. This General Re-evaluation Report on the IHNC Lock Replacement project, why is it being delayed -- what is the reason for it being delayed to June 2018? Is it funding? Do you have any idea on it?

MR. MCKEE: Sir, I am not sure of the exact reason for the delay. It is not the level of funding. We provided accurate funding to complete the General Re-evaluation Report. We will find that out and let you know for sure.

CHAIRMAN HETTEL: Because if it is not going to be completed until June of 2018, you have got to have in your work plan funding for the re-evaluation of the Inner Harbor Navigation Canal Lock for FY 2017, correct?

MR. MCKEE: We fully funded the completion of the General Re-evaluation of the Inner Harbor Navigation Canal Lock with FY 2016 funds.

CHAIRMAN HETTEL: Okay.

MR. MCKEE: It has enough funds to carry it through.

CHAIRMAN HETTEL: Okay. Thank you for clearing that up, and to understand why it has been delayed. What was the original date estimated for completion of the GRR? Wasn't it October of this year?

MR. MCKEE: Sir, I would have to check on that.

CHAIRMAN HETTEL: Okay, thank you. The IHNC is a very important facility as we are going into a 90- to- 120-day closure to replace the miter gates at that facility, and we all know what we are going to be facing if we want to do the alternative route, and it is just disappointing to see these studies be delayed and the completion dates be extended. I guess I am dovetailing off of the information we just received on Lock and Dam 25 and on LaGrange Lock and Dam, but it is disappointing to see them continue to be delayed, so -- I'm sorry, Joe, for the interruption.

MR. ALDRIDGE: Not a problem, sir. We will get you an answer to that question, and we will get back to you.

CHAIRMAN HETTEL: Thank you.

MR. ALDRIDGE: I appreciate the question. Next slide. The next project is Locks and Dam 27 Major Rehabilitation, Mississippi River. There were no changes in the financials associated with the project. The project was fiscally completed on the 29th of June, so this project is completed, and I am requesting concurrence from the Board that we remove this project from the reporting cycle. Mr. Chairman, do you have your concurrence --

CHAIRMAN HETTEL: I am sorry, Joe. I was having a sidebar.

MR. ALDRIDGE: The Lock and Dam 27 Major Rehabilitation project, it was completed, fiscally closed out on the 29th of June. The Operation and Maintenance manuals have been completed. All the contracts have been completed and any remaining fund would be used for internal administrative processes and finalizing project reports. The project is done.

CHAIRMAN HETTEL: Very good.

MR. ALDRIDGE: Mr. Chairman, my recommendation is to remove this project from the reporting cycle.

CHAIRMAN HETTEL: Absolutely. If it is behind us, there is no need to rehash history.

MR. ALDRIDGE: Excellent, sir. Thank you very much. The next set of slides will cover the updates on the projects in the Great Lakes and Ohio River Division. The Olmsted

Locks and Dam project and the Lower Monongahela projects will be covered by Mr. Dale after I complete my report on the other projects in the Great Lakes and Ohio River Division.

We had a great tour yesterday at Olmsted Locks and Dam and Kentucky Lock and Dam. I think a lot of the questions related to the status of the projects were answered yesterday, but in case you have any other questions, please ask.

I will start with the Olmsted Locks and Dam project. At the top of the slide where it says "Total Project Cost", I would add the words "Current Fully Funded" so that it reads "Currently Fully Funded Project Cost" so that this cost figure is consistent with the cost figure that Mr. McKee showed earlier in his presentation. The change to the Fully Funded Project Cost is to reflect the latest certified cost estimate for the project. The "Currently Fully Funded Project Cost" is \$3,059,266,000. The Olmsted project has a remaining balance of \$743,863,000 after including the Fiscal Year 2016 allocation.

CHAIRMAN HETTEL: Joe, what date was that projected cost? Does that include Fiscal Year 2016 funding?

MR. ALDRIDGE: Yes sir, it does. The allocation does include the Fiscal Year 2016 allocation of \$268,000,000.

CHAIRMAN HETTEL: Okay.

MR. ALDRIDGE: The remaining balance does not include the amount proposed in the President's Fiscal Year 2017 request budget.

CHAIRMAN HETTEL: Thank you.

MR. ALDRIDGE: Again, these changes will be covered by Mr. David Dale, but you can see the numbers have changed, they have moved to the left because a great construction season and we have covered that at the beginning.

The next project is Lower Monongahela River, Locks and Dams 2, 3, and 4. At the top of the slide you will see the "Current Fully Funded Project Cost" of \$2.733 billion, which is consistent with the cost figure that Mr. McKee showed earlier, and which includes the relocation of the Port Perry Railroad Bridge and the construction of the landside lock chamber. As you stated earlier, I have also shown the current project cost where I did not include the relocation of the Port Perry Bridge, nor the construction of the landside lock chamber, and that project cost estimate is \$1.22 billion. If there are no questions, I will move on.

Next slide. This shows the schedule of remaining work. The date in the column titled "Project Benefits" has slipped from 2022 to 2023 because we did not award the entire River Chamber Completion Option 1 contract in total in May 2016, based on the Government's schedule, so that is the reason for that slippage.

Next slide. The next project is the Emsworth Locks and Dam project. You can see there have been no financial changes since the last Board meeting. The project will be fiscally completed in Fiscal Year 2017.

Next slide. The next project is Kentucky Locks and Dam. You can see the Current Fully Funded Project Cost of \$874,222,000. This project cost is reflective of the latest annual price level adjustment as of October 2016, fully funded for a 2023 completion. In the lower left hand corner of the slide you can see the box titled “Current Status of the Project”. The status of the Upstream Monolith contract went from 95 percent completed to 93 percent completed because of the additional contract, the modification of the contract for this project, a \$9 million modification.

Next slide. This slide shows the Schedule of Remaining Work. I draw your attention to Task Number 4, the completion of the construction of the Downstream Cofferdam. The completion date has slipped from 20 May 2019 to 30 September of 2019 due to a detailed schedule review. This is an added performance metric to the contract during the contract solicitation.

Next slide. The next project is Chickamauga Lock and Dam. Again, you can see the Current Fully Funded Project Cost of \$754,678,000. The project was not budgeted for in Fiscal Year 2016 so the Fiscal Year 2016 allocation is money came from the work plan in the amount of \$29,900,000.

In the lower left hand corner of the slide you can see the box titled “Current Status of the Project.” The current status of the project is the substantial completion date of August 2016 for the Cofferdam Stabilization construction contract which was awarded in September 2015 is still on track. The Total Project Cost Estimate update was certified in June 2016. In the lower right hand corner of the slide you can see the box titled “Next Steps.” There have been no changes in the box.

Next slide. This slide shows the Schedule of Remaining Work. I draw your attention to Task Number 3, Lock Excavation. The completion date has slipped from June of 2018 to September of 2018 due to a detailed schedule review. Again, this was added as a performance metric to the contract solicitation.

Mr. Chairman, I do have one additional question. We agreed to take off the Lock and Dam 27 project from the reporting schedule, and the Emsworth Locks and Dam project is also pretty much wrapping up, and I didn't know if the Board wanted to go ahead and remove the Emsworth project from the reporting cycle as well.

CHAIRMAN HETTEL: Joe, I would think if there are no more Trust Fund dollars being spent on the project, yes, you can go ahead and remove it from the reporting schedule.

MR. ALDRIDGE: Thank you sir.

CHAIRMAN HETTEL: But if you see some Trust Fund dollars that are trying to be applied, please let us know – or are being applied, let us know.

MR. ALDRIDGE: Will do, sir. That concludes my presentation, unless there are any further questions.

CHAIRMAN HETTEL: None here, Joe, and thanks. And I am sorry to trip you up on that May Trust Fund amount. You know I always try to touch base with you first on these things but thank you for your summary.

MR. ALDRIDGE: I appreciate it, sir. It is good to be here. That concludes my presentation.

MR. POINTON: If there are no more questions for Joe, we are going to take a break right now, a short break -- 15, 20 minutes, and that way David Dale can get up to the microphone and go through his project updates simultaneously. He says he is going to go fast so you guys can time him. Let us take a quick break, and we will resume in about 15 minutes. Thank you.

(WHEREUPON A BREAK WAS TAKEN; OFF THE RECORD)

MR. POINTON: Can you please take your seats. We are going to reconvene the meeting. Thank you. No one has indicated that they would like to make a public comment at the end of the meeting. The Louisville District staff has put out some comment cards so if anybody feels the urge to fill out a comment card, they have a box at the registration desk. You are welcome to fill a comment card and hand it to the Louisville District staff, so the next time we hold a meeting here in a few years, they will apply the lessons learned from this meeting. With that, I will now turn the floor over to Mr. David Dale, Director of Programs in the Great Lake and Ohio River Division. David.

MR. DAVID F. DALE: Can you hear me okay over the mic? Good. All right. I am going to ask Jeanine Hoey [Ms. Jeanine Hoey, Chief, Engineering and Construction Division, Pittsburgh District, U.S. Army Corps of Engineers] to come up here and close the loop with a little more information on the Lower Mon project, the question that Marty had asked, if you would, please, real quick?

MS. JEANINE HOEY: Sure. Mr. Chairman, you asked about calculating the BCR without the landside lock chamber included. We have actually run that number very roughly, not a precise calculation, and it is almost essentially the same as the current BCR. The current BCR includes the landside lock chamber pushed out about 50 years, and by pushing that out 50 years, the BCR is, my economists tell me, -- and I am not an economist -- is based on the present value, and when you bring that present value back, it is almost a zero cost, and by pushing it out 50 years is almost equivalent to eliminating it completely. There would be very little change to the BCR if we take it out versus what we have showing right now.

CHAIRMAN HETTEL: Jeanine, I am sorry. Help me understand that. If they pushed it out 50 years, the cost of construction would increase, correct?

MS. HOEY: The cost -- and the major difference between the costs that we are showing without the landside lock chamber and with the landside lock chamber is the escalation cost for the landside lock chamber. There is about \$800 million in escalation pushing it out 50 years. But when you bring the present value back to the actual base cost, it almost equals to zero, so it is the same as eliminating it completely. It is hard to wrap your brain around it, but that is what my economist says, and that is how it works.

CHAIRMAN HETTEL: Yeah. I am sorry. That is difficult for me to understand. You have not added the cost --

MS. HOEY: So they did do the wrap rough calculation, and it is essentially the same.

MR. DALE: Thanks, Jeanine. Again, my name is David Dale. I am going to quickly attempt to go through a bunch of slides, and I think we can do that because we have covered most all this already. Much of it you saw at Olmsted and Kentucky. You had the briefs, so I am going to move very quickly.

If you think about the Great Lakes and Ohio River Division, you think about what we do, we want to move very quickly, but we also want to provide you a quality product, so with that said, I am going to move quickly and hopefully, for the record, you have got the slides.

Next slide. This is the agenda. We have talked about the Olmsted project, the Lower Monongahela River Locks and Dams 2, 3, and 4 project, the Kentucky Lock project, the Chickamauga Lock project, the status of the Upper Ohio River Navigation Study, and then the Inland Waterways Trust Fund projects cost data. Jeff McKee covered that mainly, but I will touch on it briefly to correct an error in the slide.

Next slide. Olmsted, bottom line in front, I think you have got that. The project is on schedule for being operational in 2018. The total estimated price of the project is \$200 million under the current total project cost. That is without risk. Total project cost summary is \$41 million under budget when you include risk -- excuse me -- yes, with risk.

Full capability funding has been a tremendous enabler along with the great work that Mike Braden and folks are doing down at Olmsted. His team is doing a great job and driving the project forward.

Next slide. I am going to move very quickly, so don't hesitate to stop me, but you have seen this slide before. You can read the details about the progress we are making at the project site on the slide.

Next slide. These are some photos of work underway at the project site. You saw much of this work yesterday when we were on the tour.

MR. JAENICHEN: Mr. Dale, can I ask a question? This is just for edification, as a Federal observer.

MR. DALE: Yes, sir.

MR. JAENICHEN: On an earlier slide, you noted that there was going to be a potential cost savings if you complete the project under budget. What happens to that funding? Can it be used or go back to the U.S. Treasury?

MR. DALE: It will not be used on this project. It will be available for other Inland Waterways Trust Fund projects. The money will go back into the Inland Waterways Trust Fund, it will be available there, and the Federal funds for other projects also. It really doesn't go back to the Treasury. It is just available for other projects. But those are future funds that we would likely never request for this project.

MR. MCKEE: Sir. We would not request those funds. We request funds on an annual basis, so as we are tracking the decrease in the cost of the project, when we budget for it, if we know that we won't need all that money, we would not request that in the budget.

MR. DALE: Very good. Thank you. Next slide. I am going to pause at this slide -- and I think you saw this yesterday, but we set three paving blocks, and we have one paving block left to set on this slide. The one we just set was Paving Block Number 11. We talked to you about that yesterday that we are ahead of schedule, so that is a good news story. That is where we want to stay. It is looking very good. We have one stretch goal which is setting Navigable Pass Shell Number 10, which is a stretch goal that we would like to set this year, but it is our stretch goal, but we are having a very good year.

CHAIRMAN HETTEL: David?

MR. DALE: Yes sir.

CHAIRMAN HETTEL: Can you please go back to your previous slide, if you would. Which Paving Block is yet to be set? I think we heard yesterday you had one more Paving Block to set.

MR. DALE: This one right there.

CHAIRMAN HETTEL: Okay.

MR. DALE: Which is Paving Block Number 10. We set Paving Block Number 11 just a few days ago.

CHAIRMAN HETTEL: That's Dewey -- Paving Block Dewey.

MR. DALE: Dewey. That's right. We call it Paving Block Dewey. And Navigable Pass Shell Number 10 right behind it is our stretch goal for 2016.

CHAIRMAN HETTEL: Okay.

MR. DALE: You see these three blocks we have yet to set this low water season and then we have that stretch goal there.

CHAIRMAN HETTEL: Got it. Thank you.

MR. DALE: Thank you. Next slide. This slide this shows our time and cost scorecard for the Olmsted project. We are still on track, ahead of schedule, for being operational in 2018 -- October 2018 is still our official commitment to you, and we are tracking that very well, and the team continues to look for opportunities to better that, but we are not to the point to commit to anything other than October of 2018 at this point in time. In the lower left hand corner of the slide you can see the red bars, as you are familiar with it, is what we call our TEP [Total Estimated Price]. That is the \$3.1 billion project with risk. That has not changed since we got the project authorized.

What you do see, and you kind of lose it in the scale, but the team's projection, the green bar, the Corps estimate of the Total Estimated Price of the project is where we are at, and that is continually going down as we progress in the project, and that is a good news story.

There was some concern, probably two or three Users Board meetings ago, because the TEP was creeping up a little bit, but it is on the way back down. Are there any other questions on Olmsted?

Next slide. The next project one I am going to talk about is the Lower Monongahela River, Locks and Dams 2, 3, and 4 project. On this slide, I want to draw your attention to -- we have talked about it, but the 902 limit of \$1.76 billion.

Right now, without the Port Perry Railroad Bridge or the landside lock chamber, we are looking at a project cost to completion of \$1.2 billion, including contingencies. That is a good news story.

Next slide. This slide is an update of the project schedule. Not much has changed. There have been no changes since the April Users Board meeting. The second column shows what we reported at the April Users Board meeting. That was assuming that we had no funding in the President's FY 2017 budget request. The column just to the right of that, titled "Revised with FY 2017 work plan" funding is an assumption. That is not a guarantee. If there was work plan money that is the schedule we believe we would make or could make.

CHAIRMAN HETTEL: David, let me clarify that, if I may. If you do not get funding of -- is it the \$82.7 million --

MR. DALE: I think that's right.

CHAIRMAN HETTEL: -- in Fiscal Year 2017 for Lower Mon, then that project could be extended by four years before it would be completed?

MR. DALE: That is correct.

CHAIRMAN HETTEL: Okay.

MR. DALE: And it would be extended by four years, and roughly would incur a cost increase to the project of just under \$200 million -- \$180 to \$200 million -- and that is driven by the sequence of the options and the fact that that one year delay would likely cause us a four year delay because of the contracts and the number of contractors on the site resulting in a \$200 million cost increase in round numbers.

CHAIRMAN HETTEL: Thank you.

MR. DALE: Next slide. This slide shows a little more detail on the project schedule, and I won't go through this unless someone has a question. We just wanted to share this schedule with you, and it does break out the various segments of the project with detailed schedules of start dates and completion dates. We have briefed this all in the past, so unless you want a detailed run through, I will go on to the next slide. Thank you.

Next slide. This slide shows a few pictures of what is going on at the Charleroi construction site. The project is making some good progress. To be as transparent as possible, we do have two contractors on site, one working downstream and one working upstream. The downstream contractor has had some schedule challenges. The good news is he is not on the critical path of the project, so it is really not an issue at this point in time, but he has had some schedule problems. The team is working with him, and they think they have got him back moving in the right direction, so I am not really concerned about that, but I don't want to be less than transparent. We have had some challenges with that contractor and schedule. The one that is on the critical path, which is the upstream contractor, he is doing very well and making good progress.

Next slide. This is the Lower Monongahela River project time and cost scorecard. It is a similar slide to the one I showed on the Olmsted project earlier. I would draw your attention to the Schedule box in the upper right hand corner of the slide. Note the 2027 project completion next to the word "Operational". That assumes the zero funding in Fiscal Year 2017, so you see the impact of how that flows through.

CHAIRMAN HETTEL: David?

MR. DALE: Yes sir.

CHAIRMAN HETTEL: Similar to the TEP information that you show for the Olmsted project, is that something you could start showing us for the Lower Mon project as well?

MR. DALE: Yes sir, we can and we will.

CHAIRMAN HETTEL: Thank you.

MR. DALE: Yes sir. Next slide. I am now going to jump to the Kentucky Lock project. Again, I am going to move very quickly because you heard all this yesterday during the site visit.

Bottom line up front, the Kentucky Lock project is on schedule and the Critical Path Construction will resume with the award of the Downstream Cofferdam contract by the end of September. The project is looking pretty good. I think the challenge will be – and again, the President's budget has zero dollars for the Kentucky project in Fiscal Year 2017, and what happens with the Fiscal Year 2017 work plan will be a critical milestone for this project relative to what impact it will have. At the last Users Board meeting, we updated you on how those impacts work on the project schedule and budget.

CHAIRMAN HETTEL: David, I have a question on that, again. On the slide it says that a new risk based total project cost estimate will be developed this fall and that the project cost estimate will likely increase. Is there a way you can tell us -- when you say that the cost estimate will likely increase, is there any way you can tell us how much of that increase would be due to a delay in funding?

MR. DALE: Yes sir. I have got the answer. I can't answer you right now.

CHAIRMAN HETTEL: Understood.

MR. DALE: Yes sir. When we get there, we certainly – I will be able to tell you how much money we have factored in due to inefficient funding, although I will tell you, as we are going into these projects, we are assuming efficient funding --

CHAIRMAN HETTEL: Understood.

MR. DALE: -- capability funding, which is consistent with the way that we authorize projects and planning phases. Because if we get them out of whack, it really causes problems with your benefit to cost ratios, and it just doesn't work very well. But yes, we will make that a point to try to break out the cost increase and what it was cause of the cost increase.

CHAIRMAN HETTEL: Your new risk-based total project cost estimate this fall --

MR. DALE: Yes.

CHAIRMAN HETTEL: -- includes the delay -- does or does not include efficient funding?

MR. DALE: It assumes efficient funding.

CHAIRMAN HETTEL: Okay.

MR. DALE: Next slide. These are some pictures of the ongoing work at the project site. These are all things you saw yesterday during the site visit. I am not going to spend a lot of time on this slide unless someone has a question.

Next slide. The slide shows the project schedule and some of the key project features and milestones. If I draw your eye to the bottom of the slide, the total project cost estimate is due this November, we should be wrapping that up and be able to answer those questions very clearly. And then ultimately, something for the Board's situational awareness, and we have talked about this in the past, but there will be a PACR [Post Authorization Change Report] requirement for the project. The good news is when we do the economic updates that really gives you the bulk of the work for the PACR, and we will have to package it into a Post Authorization Change Report format, but you see at the very bottom the timeline for the PACR that we are working towards.

Next slide. Kentucky Lock Summaries and Challenges. Probably the biggest challenge is the 902 limit that is pending out there, and we will work to develop a PACR based on the economics update that we are developing.

Next slide. Chickamauga Lock replacement project. I am going to go through these slides is very quickly. We just visited Chickamauga Lock – not the last Users Board meeting, but I think not too long ago. [The Users Board visited the Chickamauga project site on August 11, 2015, the day before Users Board Meeting No. 76.]

Next slide. Bottom line up front. We are in the very final phases of our ongoing economics update. We have some not quite finished numbers, but the numbers that you see there, the current BCR, they are consistent with what Jeff reported in his numbers. What I will tell you is once we get this through the ATR [Agency Technical Review] process, we will have finalized numbers that we will share with you, but those numbers are going to go down. The benefit to cost ratios across the board are going to go down for Chickamauga Lock as a result of our economics update. More to come on that. By the end of July, we should have an ATR done that and be able to wrap that up and share the official numbers with everyone.

CHAIRMAN HETTEL: David. Those BCR figures that you state will likely decrease, that does not take into effect --, I am going to assume this, unless you can tell me if I am correct or not – does not take into effect that it is figuring in \$320 million and something that we would have to spend to keep the chamber we have now operational?

MR. DALE: I believe it does. When we do our economics, one of the factors they factor in is the “without project” condition, and you have to spend that Operation and Maintenance money in the “without project” condition, so I believe it is, in fact, part of that BCR analysis.

CHAIRMAN HETTEL: What is the determination on the original chamber if we get a new chamber built? Will that original chamber even still be in operation?

MR. DALE: Don Getty-- where is Don-- no.

MR. DON B. GETTY: No sir. The existing lock will be decommissioned.

MR. DALE: The existing lock will be decommissioned. Thank you, Don.

CHAIRMAN HETTEL: Okay. So if, in fact, the existing lock will be decommissioned, why are we including \$320 million to keep it operational?

MR. DALE: Well, because that is the “without project” condition. If we don't do this project, we believe we would have to maintain the existing structure, and in order to maintain the existing structure, we would have to spend the \$320 million to maintain it. So it's really a part of the analysis.

Certainly, and we would have to look at the timing of when we would finish the new lock chamber, but we wouldn't want to spend a lot of money if we are about to finish a project, but we have to spend enough to keep it operational until we do to bring the new lock chamber online. So the answer is part of the economic analysis has to assume what is the “without project” condition. That is a critical assumption that we compare the economics of the “with project” condition against the “without project” condition.

CHAIRMAN HETTEL: So if you did the “without project” condition and you did not take into account the \$320 million you would have to spend to keep the original lock chamber operational, would the BCR increase?

MR. DALE: I believe it would actually decrease. If you didn't factor in that you would have to spend that money -- because one of the benefits is you avoid that expenditure. So there is an Operation and Maintenance expenditure to keep the lock chamber operational without the project. If you assume that you are not going to spend that money, then the benefits of the new chamber will tend to go down because those are expenses that you are not incurring. So the BCR assumes certain expenses will be incurred, and you evaluate that against the benefits that you generate. If you don't incur those expenses, then the benefits will go down. It is a little confusing, but it is the economics.

CHAIRMAN HETTEL: Yeah. I mentioned I am not a lawyer. I guess I am not an economist either.

MAJOR GENERAL JACKSON: This is General Jackson.

MR. DALE: Yes, sir.

MAJOR GENERAL JACKSON: I am confused just a little bit, so I would like us to try to lay out where it is not confusing because I want the Board members to understand -- again, because it goes back to, gee why are we doing these environmental, these economic re-evaluation things? What is driving that? And then what are the considerations that we are placing into that, and what is driving those considerations. We will work offline on this, but this adds meat to the topic that I talked about earlier. I feel we need more of a holistic laydown of our inland navigation activities, and then drilling down on select projects, like this one, that we can answer these questions of why we are doing certain things.

MR. DALE: Yes sir. That should not be a problem. And just as an interesting point, we have had several engagements with the industry within the Great Lakes and Ohio River Division and one of the things that is obvious is there is certainly a need for a better understanding of the way we do economics for everybody involved, and I have my Chief of Planning putting the final touches on a three part series webinar, about a half hour each to try to share with whomever might want to see it, kind of a summary of Economics 101.

MAJOR GENERAL JACKSON: I think that would be helpful because there are Planning guidance and Principles and Guidelines documents and whatever that tells us what we can and can't use, how to prevent this and calculate benefits, and that kind of thing, and I think it is helpful to understand that. There are some limitations, and many knowledgeable economists will tell you that we may or may not be leaving benefits on the table. I don't know. I have my own opinions, but it would be helpful for folks to understand what constraints we are working under in order to do these economic analyses, so that everybody is looking at something that is at some point of time, it is clearly understood.

MR. DALE: That is certainly the goal that we have for this series of webinars. The challenge is the economics is really complex and, Mr. Chairman, I am not an economist either, and it is hard to follow sometimes. Once you do and you sit down with the economists and understand it, it starts to make sense. On the surface, if you don't have that general background – and that is what I am hoping to get is just a basic understanding of what drives this, why we make some of the assumptions we make, so that you can better understand what is driving us down certain paths. I think we are right in line with where you want to go, sir, and we will get there.

Next slide. This is an overview of the Chickamauga Lock Replacement project. The one thing I will draw our attention to on the slide is the activity that is pending. In September 2016, we have a contract that we are looking for an award for the Lock Excavation contract. That is a good news story, assuming things progress on schedule, and we think they will.

Next slide. This slide shows the schedule for the Chickamauga Lock Replacement project. This is a summary of the schedule. There has not been a lot of change in the project schedule.

Next slide. This slide show the Chickamauga Lock Replacement Summary and Challenges. Consistent with the President's Fiscal Year 2017 budget request, and the Kentucky Lock project and the Lower Monongahela River Locks and Dams 2, 3, and 4 project, the Chickamauga Lock Replacement project is not in the President's budget request. It will be a challenge if that doesn't happen, so it will have implications, and which we briefed you at the last Users Board meeting at your request.

Next slide. This slide show a summary of the Upper Ohio River Navigation Study. I am going to give you just a real quick project update. The good news is we are in the absolute final phases of the study. We went through a Civil Works Review Board. During the Civil Works Review Board, held roughly a year ago [Civil Works Review Board for the Upper Ohio River Navigation project was held on 21 October 2014], I think we had some unresolved IEPR

[Independent External Peer Review] comments relative to economics. We went back and adjusted the economics to account for those comments, to make sure that in the end, our objective here is to make sure that we share with the Congress accurate information. We went back and we took some time and have re-evaluated the economics. The Economic Re-evaluation Report is out for State and Agency Review. That should be finished up shortly, and then we will be on track for a Chief's report in the fall timeframe. So that one is moving along just fine. Yes sir.

CHAIRMAN HETTEL: David, you and I talked about this, and help the Board understand. Again, this probably gets back to the economics, but in the revised Upper Ohio – the final Upper Ohio Navigation Study out for public review [titled “Upper Ohio Navigation Study, Pennsylvania, Final Feasibility Report and Integrated Environmental Impact Statement, October 2014, Revised May 2016”], on page ES-20, it states the BCR equated to a 4.3, I'm sorry, in the Executive Summary section of the report, it stated the BCR equated to a 4.3 to 1 BCR at 3.125 percent. On page 4-97 of the same report, it states at an interest rate of seven percent, the BCR is 2.3 to 1, but yet you are telling us the BCR is 1.6 to 1 at seven percent on your slide. Why is there a discrepancy?

MR. DALE: There really is no discrepancy. You just need to understand the source of the data and then where it is coming from. So obviously, there is the 3.125 percent that we use for authorization purposes, and then we do an analysis on an alternate BCR at the seven percent interest rate. That is kind of in line with the OMB [Office of Management and Budget] guidance. Then on page 4-97, the paragraph you are talking about is the “Alternative Interest Rate” analysis that we did. The subtle difference is you have to look at is this report is based on 2014 data, those final two numbers, with the exception of that paragraph is based on 2009 cost data. So it is really about the year that the analysis is done on, and you might ask the question, well, why didn't you go back and fix it, and change 2009 to 2014 to be consistent? We didn't. In hindsight, that is probably something we should have done, but we didn't. But that is why there are different numbers there, and it is clear in the report, if you will read it carefully, in the title of that section. It is based on 2009 price levels versus 2014 price levels for the 2.3 BCR number that you are referencing.

CHAIRMAN HETTEL: And that 2.3 BCR number is based on 2009?

MR. DALE: 2009 price level.

CHAIRMAN HETTEL: So prior to the re-examination of the Upper Ohio Navigation Study, are you telling me that at a seven percent discount rate, the BCR was 1.0 to 1 and post-study, it is now 1.6 to 1?

MR. DALE: Yes.

CHAIRMAN HETTEL: At seven percent? Do you know what those numbers were at 3.125 percent?

MR. DALE: Do I know what those numbers are at 3.125 percent. 4.3.

CHAIRMAN HETTEL: Yes.

MR. DALE: Yes. 4.3 to 1 at 3.125 percent.

CHAIRMAN HETTEL: It kind of seems like we are comparing apples and oranges because we took this and said let's not use 2009 dollars and for this analysis let's use 2014 dollars, but --

MR. DALE: Well, in the end, the report has this one bit of inconsistency with the price levels. But that is really just looking at that one aspect of it. In the end, when you look at the summary data that the report produces, it produces two numbers, one at 3.125 percent and one at seven percent, and at 2014 price levels. In the body of the report, there is a little bit more in there that is confusing, but the end product is, at seven percent it is 1.6 to 1 as reported here.

CHAIRMAN HETTEL: So for simplicity, the 2.3 to 1 that I referenced in the summary was based on 2009 dollars is what you are telling me?

MR. DALE: That is correct. Absolutely correct. Yes, sir.

CHAIRMAN HETTEL: Thank you.

MR. DALE: You are quite welcome. Next slide. This slide identifies the next steps in the study process. A notice on the study should appear in the Federal Register in mid-June. We will receive comments, respond to them, and then ultimately schedule a Chief's report this fall. That all seems to be progressing very well. The good news is General Semonite was on site and he twisted everybody's arm pretty hard and made us commit with a lot of blood that we would make those dates, so I think we are on a very good track to meet all the Chief's goals. Any questions on that?

Next slide. This slide show the project cost data for the various Inland Waterways Trust Fund projects. I am not going to brief you in total. It is more for the record. This data is pretty consistent with what Jeff McKee presented earlier, so I am not going to go through that one in detail.

Next slide. This slide shows the capability funding for the Inland Waterways Trust Fund projects. I do want to draw your attention to the slide because there is an error on the slide, for the record, and I will pass back a corrected version of the slide through Mr. Pointon so that all the Board members receive a corrected version of the slide. If you look at the slide, this is an Inland Waterways Trust Fund projects capability funding summary through the end of the projects that you are looking at there.

What we did was we inadvertently put in numbers in Fiscal Year 2017. The assumption was we would get zero funding in Fiscal Year 2017 on all projects except the Olmsted project based on the President's budget request, and we projected out capability funding, which the numbers are all correct except for Fiscal Year 2017 for Chickamauga Lock, Kentucky Lock, and

the Lower Monongahela River project. Those should all be zeroes in Fiscal Year 2017. I will send out a correction to that. When you look this column right here, FY 2017, the \$225 million figure for Olmsted is correct. The \$82.7 million figure for the Lower Monongahela River project, the \$31 million figure for Kentucky Lock, and the \$37 million figure for Chickamauga Lock should all be zeroes, comparable to the President's budget and then the rest of the numbers are consistent.

The Chairman had asked also for us to give a capability funding cash flow analysis, assuming we got work plan funding, and that will be included in the materials when I send the revised slide to Mr. Pointon and share it with the Board.

That takes me to the end of my presentation. Are there any other questions for me? If not, thank you very much. As always, I appreciate the opportunity to come talk to you about all the great work we are doing in the Great Lakes and Ohio River Division, and I appreciate the your comments. It makes us better every time. Thank you very much.

MR. POINTON: Thanks, David. We are at the point in the meeting where we open the meeting for public comments. As I stated earlier, no one has indicated they would like to make a public comment, and we did not receive any written statements to be submitted to the Board, so this is your last opportunity. If anybody wishes to make a public comment, now is your time to speak or forever hold your tongue for this meeting.

Seeing no one, going once, going twice, I am turning the microphone over to General Jackson, for your closing comments and remarks, sir.

MAJOR GENERAL JACKSON: Okay. Thanks Mark. Again, just echo what I said up front. Thank you to everyone for being here. We had some really good discussion at today's meeting. There are a lot of do- outs, and one of the things for our staff here with the Corps of Engineers, I just want to make sure that we do a pretty quick job of following up on some of the information requirements that came out of the meeting. I thought there was a lot of good discussion on a lot of things.

I have offered up a couple of suggestions, Mr. Chairman, for your consideration. We talked in open forum and in our sidebar about a potential laydown of what we are doing concerning navigation in the Corps including General Investigations, Construction, and Operation and Maintenance, and major rehabilitation activities. I think it would be helpful for everyone to understand what the grand plan is that we are looking at because we do not always bring the people that have all the knowledge of each individual little piece of the bigger picture and part of what we do at these particular meetings, and so I think it would be helpful to see that, and then be able to drill down and answer some of these real tough questions that linger, like what are looking at and why do we look at these things, environmental, economics, over time, just to get everybody on the same frame of reference on what all this stuff means.

I think that is important, and we will work to do that, Mr. Chairman, if that meets with your guidance and the other Board members. Another couple of suggestions that I would like to throw out there for consideration, and we don't have to talk about them here, but I think

Administrator Jaenichen -- first of all, thanks for being here, and I think when we can, I think it would be a great opportunity for MARAD to lay out the National Maritime Strategy that MARAD is preparing to this group to help us all understand where the Department of Transportation believes we are going into the future because I think it will help us all sort of focus on where that is and assess where we are. I think that would be helpful. With your permission, we will work to schedule that in when the time is right.

I know that the Department of Energy, who is not represented here, is another interested party on the issues affecting the inland waterways system. They are conducting their Quadrennial Energy Review, which is in the process of final editing right now, and it does include some water transportation issues in it, and I think that might be -- and I will talk with Eddie Belk and Jeff McKee about opportunities to have the Department of Energy come in and talk about their needs on the inland waterways system in the years to come.

And also Nick [Mr. Nicholas Marathon], if there is something that we should know about issues that the USDA are working on concerning the inland waterways system -- we talked earlier about what USDA is also doing. I know there is a report due out later this year.

These are just some things I think would be helpful additions to our discussions to get us all thinking about what are some of the other Department level initiatives that we can kind of come back and address concerning the inland waterways system. I think that would be very interesting.

I would also like to even throw out the idea and ask the Department of Treasury to come in and talk to us about how they do their future projections on receipts and other things. I think that drives a lot of the calculations that goes into OMB's thinking. I don't know the answers to those questions, but I get questioned a lot on what the Department of Treasury is doing, so I don't think it would hurt to ask. I don't know if they would be able to do that, but I think it would be very interesting to see what their future projections of fuel tax receipts look like and have a conversation. It might be worth bringing them in to a meeting to discuss that.

I am now going to give each of the Federal observers an opportunity to say a few things in conclusion. Mr. Crook had to step out to catch a flight. Before I do that, though, if I could turn the microphone over to Colonel Beck. These meetings don't happen by themselves. There is a large supporting cast. We had a lot of great folks that took us around yesterday to show us these great, awesome projects that the Corps is working on in both the Nashville District and in the Louisville District. The folks who are working on those projects have done a tremendous job, and the folks who are part of the Louisville District team that helped us have this meeting today also, I just want to take an opportunity to recognize them if I could.

Colonel Beck, if I could have you call these folks up, talk a little bit about what they did, and then let me, on behalf of the Corps leadership, recognize them and say thanks, and then we will go to the Federal observers for their concluding remarks.

COLONEL BECK: Sir, I appreciate the opportunity to recognize four members of our staff of the Louisville District. These are four members of our Executive office who, except for

Rhiannon [Ms. Rhiannon Ryan], went completely out of their lane and their job, and did a great job, so we have four folks, starting with Michelle Rodrigue, Amanda Limer, Felicia Manley and finally, Rhiannon Ryan, who's my Executive liaison and led this entire effort.

MAJOR GENERAL JACKSON: Let's have a round of applause. And again, thank you to the team at the Great Lakes and Rivers Division for hosting us at a number of venues, and to the Louisville and Nashville districts for being a part of the very informative site visits yesterday and meeting today.

Let me turn the microphone over to our Federal observers. Administrator Jaenichen, if you would like to make any concluding comments?

MR. JAENICHEN: Well, first of all, Mr. Chairman, thank you for the opportunity to participate at today's meeting as a Federal observer. General Jackson, I appreciate that as well. Colonel Beck, thank you for coordinating all of the activities associated with conducting this meeting. I apologize, I was not able to get here in time to participate in the site visit yesterday but I heard it was great. Fortunately, I visited the Olmsted project site about eight months ago, so I have a pretty good idea of what is going on there.

I do want to talk briefly about a piece of legislation that I think is going to have a huge impact on the national freight system. It is a piece of legislation called FAST Act which is short for the "Fixing America's Surface Transportation" Act [Public Law 114-94, signed into law on December 4, 2015]. Part of that legislation includes funding for grant programs, but the one that I think is the most significant is called "FASTLANE" grants [Fostering Advancements in Shipping and Transportation for the Long-term Achievement of National Efficiencies]. The FAST Act authorizes \$800 million in funding for the FASTLANE program for Fiscal Year 2016. It was actually announced several months ago on March 14th. There is going to be an announcement in the coming weeks of how that funding will be granted to work on our freight system around the country. Fortunately, ports and rivers and waterways can participate in that program, and I am pleased at how well the maritime industry fared and continues to go in the direction it is going.

The one thing that I would ask the Inland Waterways Users Board to consider is to make sure that you are in contact with those ports and facilities which are located along the river system to be able to provide your support for those particular projects and how they might be able to support this investment that we have been talking about here going forward and to be able to increase the efficiency and productivity of the inland waterways system.

I would encourage you to do that because anytime we can get additional information -- and not just benefit to cost information, but also, return on investment, or "ROI" information, in terms of how it impacts a region, because sometimes, those things are difficult to determine, and if we have a body such as the Inland Waterways Users Board, that has a great deal of experience in determining the economic rate of return on an investment, it might be able to help us significantly to be able to make some of these projects that we know are so important to the inland waterways system, be able to push them through and receive grants and financial assistance. In this particular round, we have \$800 million in grants and financial assistance to

award. Proposals for two hundred and twelve (212) projects were submitted and, unfortunately, equaling \$9 billion in requests versus the \$800 million that was available. The only criteria we had is it is capped at \$500 million. Five hundred (\$500) million dollars is a significant amount of money that is available potentially to the marine transportation system, and I encourage you to take an active role in making sure it is spent in the right places.

MAJOR GENERAL JACKSON: Thank you Administrator Jaenichen. Mr. Magnuson?

MR. MAGNUSON: General Jackson and Mr. Chairman, as I indicated in my opening remarks, I look forward to providing information and materials on my colleagues at the National Weather Service's advancements and improving the reliability and accuracy of water levels on the inland waterway system, and following up with Mr. Haun and other Board members and interested staff who would like to tour the National Water Center in Tuscaloosa. Thank you again for having me here.

MAJOR GENERAL JACKSON: Thank you, sir. Mr. Marathon?

MR. MARATHON: Thank you, General and Mr. Chairman. As I said previously, the Department of Agriculture has some work in progress, and I am part of the team that is pulling that work together, and upon our review we will be able to report to you on the results of this research in due time. Until then that work is completed, I would like not to comment on our activities until we complete that review. Thank you sir.

MAJOR GENERAL JACKSON: I understand and appreciate that and respect that totally. I just wanted to make sure that you get the opportunity to talk about some of the great work that the Department of Agriculture has been doing when the time is appropriate.

Mr. Chairman, before I turn the microphone over to you, I would ask Mr. Pointon, if we could, at the adjournment of the meeting, if we could take two photographs there on the stage, one with the Board members and one with the Board members plus Federal observers.

MR. POINTON: Absolutely.

MAJOR GENERAL JACKSON: Can we do that before everybody takes off?

MR. POINTON: Is the photographer is still here?

PHOTOGRAPHER: Yes, sir.

MAJOR GENERAL JACKSON: If not, I am sure there's an iPhone in the audience. If you could help with that and not disappear at the end of the meeting. With that, Mr. Chairman, I turn the microphone over to you.

CHAIRMAN HETTEL: Thank you, General. Before I go into my brief closing comments, I want to go around the table to see if the Board members have any closing comments. Mr. Mecklenborg, would you like to offer any closing comments?

MR. MECKLENBORG: Thank you. It was an excellent tour and excellent meeting. Thank you.

CHAIRMAN HETTEL: Mr. Reed?

MR. BRUCE REED: No comment.

CHAIRMAN HETTEL: Mr. Innis?

MR. INNIS: No comment, thank you.

CHAIRMAN HETTEL: Mr. Keifer, I believe, is next.

MR. JEFFERY A. KEIFER: Thank you. Two good days. Thank you.

CHAIRMAN HETTEL: Okay. Mr. McCoy.

MR. ROBERT R. MCCOY: No comment. Thank you.

CHAIRMAN HETTEL: Mr. Haun.

MR. CHARLES A. HAUN: I just want to say what a great tour we had yesterday. Thank you.

MR. WOODRUFF: Mr. Chairman, I think it would probably be appropriate at this time to recognize that one of the members of this Board is ill and was unable to be with us today and you may want to speak to that.

CHAIRMAN HETTEL: Yes. Thank you for reminding me, Vice Chairman Woodruff. Our fellow Board member, Mr. David Choate, has had some more complications from his illness and hasn't been able to attend the last couple of Board meetings. I would just ask if you would keep David and his family in your thoughts and prayers going forward. He has had a tough time. We sent a card around to everybody. Rob [indicating Robert Innis], I think I still need you to sign that card, if you would, before we leave. Please keep David and his family in your prayers.

My closing statement. General Jackson and I were discussing my respectful agreement to disagree with him on this Brandon Road scenario, and I found out that there are some other laws that give the Corps the authority to possibly close Brandon Road in an emergency situations, so I was not aware of this other authorization. The General promised me he will get that to us, so even though we are in Kentucky, I am going to reference a Louisiana saying. I am going to do a little crawfishing here, General, and I am going to back off my statement that we agree to disagree because I did not have all the information for that. Thank you for updating me, and we will move forward from there.

MAJOR GENERAL JACKSON: Yes, sir.

CHAIRMAN HETTEL: Thank you. That is all I have. Thank you.

MR. POINTON: With the Chairman's final statement, do we have a motion to adjourn the meeting?

MR. MECKLENBORG: So moved.

MR. POINTON: Mr. Mecklenborg, thank you. Do I have a second?

MR. WOODRUFF: Second.

MR. POINTON: Mr. Woodruff, thank you. Can I have a vote by the members? All in favor, say "aye".

BOARD MEMBERS: Aye (unanimous).

MR. POINTON: Any nays? Hearing none, this meeting is adjourned. Gentlemen, thank you and have safe travels. We will see you at the next Board meeting.

(MEETING CONCLUDED AT 11:48 A.M.)

CERTIFICATE OF REPORTER
COMMONWEALTH OF KENTUCKY AT LARGE

I do hereby certify that the witness in the foregoing transcript was taken on the date, and at the time and place set out on the Title page here of by me after first being duly sworn to testify the truth, the whole truth, and nothing but the truth; and that the said matter was recorded stenographically and mechanically by me and then reduced to type written form under my direction, and constitutes a true record of the transcript as taken, all to the best of my skill and ability. I certify that I am not a relative or employee of either counsel, and that I am in no way interested financially, directly or indirectly, in this action.

JAMIE ROLL,
COURT REPORTER/ NOTARY
MY COMMISSION EXPIRES ON: 02/22/2023
SUBMITTED ON: 07/14/2016 JAMIE ROLL,
COURT REPORTER/ NOTARY
MY COMMISSION EXPIRES ON: 02/22/2023
SUBMITTED ON: 07/14/2016