

Minutes
Inland Waterways Users Board
Meeting No. 61
August 11, 2009
The Luther F. Carson Four Rivers Center
Paducah, Kentucky

[Note: The following minutes of the Inland Waterways Users Board meeting No. 61 were approved and adopted at Inland Waterways Users Board meeting No 62 held on December 15, 2009 in New Orleans, Louisiana.]

The following proceedings are of the Inland Waterways Users Board meeting held on the 11th day of August, 2009 at the Luther F. Carson Four Rivers Center, Paducah, Kentucky, Mr. Stephen D. Little, Chairman of the Inland Waterways Users Board presiding. Inland Waterways Users Board (Board) members present:

MR. RICHARD R. CALHOUN, Cargill Marine and Terminal, Inc.;

MR. LARRY R. DAILY, Alter Barge Line, Inc.;

MR. MICHAEL W. HENNESSEY, Consol Energy, Inc.;

MR. MARK K. KNOY, American Electric Power (AEP) River Operations;

MR. STEPHEN D. LITTLE, Crouse Corporation;

MR. DANIEL T. MARTIN, Ingram Barge Company;

MR. TIM PARKER, Parker Towing Company;

MR. JOHN PIGOTT, Tidewater Barge Lines;

MR. MICHAEL P. RYAN, American Commercial Lines, LLC;

MR. WILLIAM M. WOODRUFF, Kirby Corporation;

Also present at the meeting was MR. ROYCE C. WILKEN, American River Transportation Company, Chairman Emeritus of the Board.

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

MR. TERRENCE C. SALT, Acting Assistant Secretary of the Army (Civil Works);

MR. ROBERT G. GOODWIN, JR., U.S. Department of Transportation, Maritime Administration;

MR. NICHOLAS MARATHON, U.S. Department of Agriculture, Agricultural Marketing Service;

Note: There was no representative of the National Oceanic and Atmospheric Administration (NOAA) present at the meeting.

Official representatives of the Federal government responsible for the conduct of the meeting and administrative support of the Inland Waterways Users Board was the U.S. Army Corps of Engineers as follows:

MAJOR GENERAL MERDITH "BO" TEMPLE, Executive Director, Inland Waterways Users Board and Deputy Commanding General for Civil Works and Emergency Operations;

MR. MARK R. POINTON, Executive Secretary, Inland Waterways Users Board;

MR. KENNETH E. LICHTMAN, Executive Assistant, Inland Waterways Users Board.

Staff support provided by the U.S. Army Corps of Engineers was as follows:

MR. DAVID V. GRIER, U.S. Army Corps of Engineers, Institute for Water Resources;

MS. SANDRA L. GORE, U.S. Army Corps of Engineers, Headquarters, Programs Integration Division;

MR. MICHAEL F. KIDBY, U.S. Army Corps of Engineers, Headquarters, Operations Division, Navigation Branch.

Program speakers in scheduled order of appearance were as follows:

COLONEL KEITH A. LANDRY, Commander, U.S. Army Corps of Engineers, Louisville District;

MR. GARY A. LOEW, U.S. Army Corps of Engineers, Headquarters, Chief, Programs Integration Division;

MS. JEANINE HOEY, U.S. Army Corps of Engineers, Pittsburgh District;

MR. MICHAEL P. JACOBS, U.S. Army Corps of Engineers, Walla Walla District, Cost Engineering Directory of Expertise (DX) for Civil Works;

Other individuals called on to provide additional information in response to questions raised by Board members during the meeting included the following:

MR. RICHARD J. SCHIPP, U.S. Army Corps of Engineers, Louisville District,

MR. JAMES E. WALKER, JR., U.S. Army Corps of Engineers, Headquarters, Operations Division, Chief, Navigation Branch.

MR. MARK POINTON: Good morning, everybody. I'd like to welcome you to the 61st meeting of the Inland Waterways Users Board here in Paducah, Kentucky. I hope you all enjoyed yourselves on our tour of Olmsted Locks and Dam and Locks and Dam 52.

My name is Mark Pointon. I am the Executive Secretary and the Designated Federal Officer of the Inland Waterways Users Board.

Before we start the meeting, we're obligated to read for the record, the Users Board was created pursuant to Section 302 of the Water Resources Development Act of 1986. It provides for the Secretary of the Army and the Congress with recommendations on funding levels and priorities for modernization of the inland waterway system.

The Board is subject to the rules and regulations of the Federal Advisory Committee Act of 1972, as amended. This is a Sunshine in Government Act meeting, and as such is open to the public.

The U.S. Army Corps of Engineers is the sponsor of the Board and provides the executive director, the executive secretary, and all normal activities.

If anyone wishes to make a public comment at the appropriate time or submit a statement for the record, please let myself or the Chairman, Mr. Stephen Little, know during the meeting.

The proceedings are being recorded, and a transcript will be available shortly after the meeting.

I'd like to call on Colonel Landry from our Louisville District now to provide some welcoming comments. Thank you, sir.

COLONEL KEITH LANDRY: Please bear with me, since the podium has moved like four times since I came in here, so I'm going to try to do this quickly and then let you get on about your business.

But first, the command of the Louisville District, who I guess we're kind of quasi-hosting -- hosting you down here in Paducah, thanks for coming.

Mr. Salt, as I understand, will probably in another couple of hours -- you are still the Assistant Secretary of the Army (Civil Works), acting. Thank you.

Thank you for your leadership in the time as the Administration was working with the Congress to get the the ASA(CW) confirmed, and, again, thank you.

As a former -- or, as a fellow district engineer and you being a former, it's always nice to see people who have the experience --

MR. TERRENCE C. SALT: Thank you.

COLONEL LANDRY -- you can provide us.

If I could, if you'd just bear with me for a few minutes. I know I've been given just five to introduce everybody, but I will beg off since I'm now looking down here and not hiding behind the podium with my notes a little bit closer. But luckily we have great weather. We had a nice tour yesterday at Olmsted; a little hot, but it was good for us to be able to get out. Everybody got a chance to see 52.

As of 5:00 this morning, we started putting the dam up, so I think everybody sort of has an appreciation for what the men and women of the Louisville District do out there on 52 and 53 as we are trying to bring Olmsted to closure and get that done, so that you can immediately start receiving the economic benefits that are projected for that dam.

The -- we are standing here in a very historic city on a very historic river. The Louisville District, whether -- I'm not sure whether you're familiar with it, but the Louisville District is the first district in the U.S. Army Corps of Engineers to manage a lock. We did that in McAlpine when we finished the one that -- that was started by a private consortium at McAlpine at the confluence of the Great Falls of the -- the Ohio.

The Louisville District also completed the first lock built by the Corps of Engineers, which is now up in the Pittsburgh District area. The Louisville District commander spoke at that one, as well, so Louisville District has a long, proud tradition here on the Ohio, and I'm glad I could be here on behalf of the men and women of what I think is a great district in support what it is that you do.

We are close to the confluence of the Mississippi, the Ohio, the Tennessee, the Cumberland and the industries that you represent and the things that we're trying to do with the infrastructure on the Ohio to make sure that the navigation remains viable, I think, is crucial to the regional economy, to the national economy, and thus, obviously, it plays into the national security interests of this country. So what you do, I think, here -- and I'll step off my soapbox as commander of the district. As a concerned citizen, I admire you for what you're doing, because what you do has economic implications beyond local jobs here, and again, any way that the Louisville District can support you in that, we stand ready to do so.

Actually, I've been given an opportunity to put on my church clothes. I don't get to wear these very often, so I now get to introduce some new members of the Board, if I could, so please bear with me if I take full credit if I botch your name. My staff tried to prepare me. But if I could, I'd like to go and take a minute to recognize some of the personnel changes on the Board. Since General Peabody, my commander, the commander of the Great Lakes and the Ohio River Division couldn't be here today, because he's up in Chicago fighting the Asian carp, which I hear wants badly to get into the Great Lakes and we are trying desperately to keep it out of the Great Lakes. But if I could, I'd like to welcome the most recent newcomer, Mr. John Pigott, from Tidewater. Did I get that right?

MR. JOHN PIGOTT: Yeah.

COLONEL LANDRY: Okay.

MR. PIGOTT: Well done.

COLONEL LANDRY: And then to some other new members: Mr. Michael Ryan of American Commercial Lines; Mr. Michael Hennessey, who I met last night, of CONSOL Energy; and two returning new members that have served before, Mr. Mark Knoy, AEP River Operations; and Mr. Larry Daily of Alter Barge Line. And as a departure note, Mr. Royce Wilken left in March of '09 as the chairman.

So, again, gentleman, thank you for coming today.

Some good news, not particularly related to the Ohio River, but you now I have the good fortune to tell you that you're staring at the commander of the first district in the U.S. Army Corps of Engineers to tweet with the international space station. One of my West Point classmates is on the international space station. Now, I took some classes with Tim Copra, Colonel Tim Copra, and as of this morning we are tweeting away.

So that kind of leads me to the last thing before I welcome General Temple up here, and so he can say all the great things to you that I'm just not capable of saying, because he's much more adept about this stuff than I am. But some good things and some good news and some milestones sort of on the river, on the lower Ohio that the Louisville District has responsibility for.

On the 8th of April we commissioned and opened McAlpine Lock to industry. I believe Marathon Oil was the first tow to move through there, the first industry that had a fleet there. Just last week, on the 5th of August, I was fortunate enough to be up at Cannelton, where we did the groundbreaking for AMP Industries to put a new hydroelectric facility on the lock -- dam. Once that was complete -- is completed, we will have hydropower generation facilities on Markland, McAlpine, and Cannelton, and we're about ready to finish the regulatory permit process with Smithland, so we're doing good in helping with getting green power off of the river and taking energy out of the river, so I think that's a good thing.

What else do I have here. And, finally, please let me take note of the men and women of the Operations Division of the Louisville District. Under the great leadership of Rick Morgan and Jean -- well, Rick's back there. Is Jean here, too, Rick?

MR. RICK MORGAN: No, sir.

COLONEL LANDRY: Okay. As I mentioned, they're putting up 52 this morning. When I first took command I charged Rick with making sure we had no unscheduled closures of locks on the Ohio. His mission is to keep the Ohio River open to you so that it's constant, it's always available to industry, and he's done that marvelously. We have not had an unscheduled maintenance issue on the lower Ohio since I've been in command, and it's all due to Rick and the men and the women of the Operations Division, so please give him a pat on the back when you get a chance today.

Sir, if I could, the last thing, I would go ahead now and introduce General Temple, the Deputy Commanding General of Civil Works and Emergency Operations for the U.S. Army Corps of Engineers.

Sir, I'll walk around and I'll give you this instead of pulling you over since you have a seat, but you gave out some coins yesterday, and I've been asked to present you with a coin on behalf of the Olmsted project, and this is the Olmsted Dam Construction Project coin, and it's provided by URS, and the -- would you believe it, I can't do it. They -- they finally got me. I told my office I wanted to get to the end of my command with long enough arms that I wouldn't need reading glasses, and they did it to me. So I'm just going to give you the coin, sir. I'll walk around and give that to you.

And, finally, let's also -- please give thanks to the Paducah Chamber of Commerce and Susan Guess, chairman of the board, for hosting this great breakfast for everybody.

GENERAL TEMPLE: All right. Thanks, Keith.

Thanks. Mr. Salt, Mr. Little, Mr. Wilken, the City of Paducah, new members, welcome again, and, also, thanks for the support from Lakes and Rivers Division and the Louisville District for the tours that we were able to participate in yesterday and for the support to this important meeting, and a welcome also to all guests that are here present today.

As was stated earlier by Mark, our purpose as a Board is to act in an advisory capacity to the Secretary of the Army and the Congress with reference to the inland transportation, waterborne transportation issues.

I'd like to cover three areas quickly: current performance, future outlook, and the importance of collaboration in our business.

First, looking at our current performance. The overall Civil Works program has \$18 billion worth of work, and much of that work is on track based on some point-to-point feedback that I have gotten from all our divisions here week before last. I think better management and use of a variety of acquisition tools in this economic environment has helped us do that. By the end of this fiscal year, we'll have \$11 billion worth of civil works effort underway, and our normal year is about \$7 billion, so it's quite an historic time for us.

The stimulus work continues forward. We've already got about 21 percent, or almost a billion dollars of our \$4.6 billion, obligated and under contract to date, and we are on track to fully obligate all that money by the end of second quarter of Fiscal Year 10, or spring of next year.

Current economic conditions have been favorable in this regard for our work and, also, for the military program in that we're seeing that we're getting about 30 percent more bidders, more interest in our work, and that's resulted across the board in about a 20 percent reduction in the cost vice the independent government estimate. Now, that's not true in all places, in all functions, but overall, we're seeing our work come in at less than we originally estimated, which is a good value for the American people.

We're exceeding our overall small business goals of 32 percent prime, so we're working well in that regard with small business, and our inland waterways and harbors have been and will continue to be beneficiaries of these efforts.

In the stimulus package alone, over \$400 million was devoted to dredging. We just awarded a contract for the Tillamook North Jetty there in Oregon, repairs to the locks on the Columbia River system, Galveston Houston ship channel dredging work. As we saw yesterday, or heard about yesterday, for the Monongahela Locks 2, 3 and 4 and the Ohio River Locks and Dams 52, and 53 are all beneficiaries of the stimulus package, and bulkhead repairs on the Chesapeake and Delaware Canal. So we've got work going on all over the country. We'll continue to push that forward. Now, this early effort has been primarily focused on O&M work, and we'll see more of our construction projects come on board between now and next spring, so more to follow on that.

And I think with full funding of the stimulus package, our goal is to demonstrate that with an appropriate level of funding we can deliver safe, cost-effective, environmentally friendly projects on time. And I think it's critical that we do that because that has implications perhaps for the way that we'll be financed in the future, so we'll press forward in this regard.

And I can't go without saying in my role as the emergency management person that we've done a considerable amount of work already this year in response to the ice storms in Kentucky, the floods on the Red River of the North there in the vicinity of Fargo and Moorhead, and, of course, we don't know what Felicia is going to bring to Hawaii today. It's not quite there yet, but we'll know soon enough. And there's always the possibility that we'll have to respond in some way to assist Taiwan and China in

response to the cyclone that they were subjected to earlier this week. So that's kind of a current picture, a quick snapshot.

Future outlook. We're awaiting the conference of the Fiscal Year 10 bill to occur when Congress reconvenes here in September, but it appears that funding will remain about the same as it has for us in the past, about \$5 billion, and we will finish obligating the stimulus package dollars, as I said earlier, by next spring, completing all that work by or in Fiscal Year 11.

And speaking of Fiscal Year 11, we're also working closely with Board members, industry, ERDC, the ASA's office, and our cost center of expertise in Walla Walla to develop the Inland Marine Transportation System Recapitalization Plan that we'll hear more about today, and that, in turn, we hope will feed the development -- the further development in Fiscal Year 11 budget which we are working on as we speak. And we'll also try and take advantage of the opportunities that a WRDA '10 might present to us if indeed we have a WRDA '10. That's to be determined.

But a final note, though, in wrapping all this up is, we can't achieve any future progress without a more holistic systems and nationally integrated water resources management plan in collaboration with all of our partners, which include fellow Federal agencies, state, local, tribal, industry, academia and the like. Our collaboration with respect to the Inland Marine Transportation System Recapitalization Plan will I hope be a model for similar collaborative efforts nationwide in other areas.

So as our commanding general, Lieutenant General Robert Van Antwerp, likes to say, these are historic times for us, but I think more importantly these times present us with historic opportunities to get better together.

And with that, I'll turn the floor over to you, Mr. Chairman, Stephen Little.

MR. STEPHEN LITTLE: Thank you, General. Thank you very much for your commitment to this Board and your leadership in helping us to fashion an approach going forward to tackle these problems. And I also want to thank the Corps' Louisville District for the tour yesterday of Olmsted and Lock 52 and thank you to the Seaman's Church yesterday afternoon at their facilities, and for the river industry's hosting the reception at our office last night.

General, I know you haven't been to Paducah before, but I think you've gotten a pretty good snapshot here in the last day and a half of what a vibrant river city this is and how important the industry is to this community, and we really appreciate you taking the time to visit the facilities with us and to see the city with us. I think it's very educational for all of us, and we appreciate that very much.

Also, I want to thank the Paducah Chamber of Commerce for hosting the breakfast this morning and for all the support we've received within the community for this industry, as well. We appreciate that very much. And I also want to thank the new

members who I'm getting to know here very well in the last day and a half. We've got some new, strong members on the Board, and we really appreciate your willingness to commit your time for the next two years and help us fashion a better, stronger policy moving forward.

I also want to recognize the esteemed leader here to the left, Mr. Royce Wilken, Chairman Emeritus of the Board.

Royce, it's good to see you here. Royce's leadership in the last four years, particularly the last two years on the Board, have been very strong, setting the right direction and helping us establish some of the right themes that we need to be looking at. So, Royce, here again, I appreciate you being here and your past leadership. I appreciate that very much.

Okay. I know that we have some Federal Observers with us this morning, so Nick Marathon with the USDA is here, and, Nick, call on you for any comments you may want to make.

MR. NICHOLAS MARATHON: Thank you. I appreciate the opportunity to be here today. I'm getting a little feedback. I am here on behalf of the USDA's Agricultural Marketing Service. I'd like to say the USDA appreciates the importance of inland waterways to agriculture and are pleased to be part of this meeting.

Lately the transportation staff of the USDA has been busy on a transportation study of agricultural products. The study was directed by the 2008 Farm Bill, which requires us to look at the movement of agricultural products, including barge, rail and truck. The final draft of this report is about completed and it's going under internal clearance, and it goes through various agencies for final clearance. But once it's completed, I'd like to share this study with the group and members of the Board, and look forward to -- and when it is released, I'd like -- any comments the group can have on it, I'd appreciate, and, again, I appreciate being part of the group. Thank you.

MR. LITTLE: Thank you. And we also have with us today Mr. Bob Goodwin from Maritime Administration. Mr. Goodwin.

MR. ROBERT GOODWIN, JR.: Thank you, sir. It's a pleasure for us to be here today and to participate in the meeting. It's very important to the Maritime Administration to be a part of the Inland Waterways Users Board.

I have just a couple things for you. First of all, on July 30th, Mr. David T. Matsuda was sworn in as the new Assistant Secretary of Maritime Administration -- excuse me -- Deputy Maritime Administrator. His former jobs, he was an Assistant Secretary of the Transportation Policy and he was senior counsel in Senator Lautenberg's office, so he has a good background as far as transportation, and we welcome him to the Maritime Administration.

We have three different programs I'd like to just review with you very briefly. First of all, the Marine Highway Program that I referred to on previous meetings, the final rules have been drafted and they are currently in for legal review, so we anticipate those to be released in the near future.

The Small Shipyard Grant Program that I reviewed with you at the last meeting, the applications have been received and they are in final review also. Several have been awarded. We anticipate more in the very near future. This is an important program for us, because it helps us recognize the needs of the inland shipyards and the contribution they make to our national transportation system.

And, finally, we just completed the field review for the ARRA port security grants. Many of the people that were in this room have submitted applications to that also, and they are currently under review in Washington. The recommendations will, in turn, be sent to the Coast Guard commandant and to our Administrator, to be forwarded on to the Secretary of Homeland Security, so we expect those awards in the near future also. Thank you, sir.

MR. LITTLE: Thank you, Mr. Goodwin. We also have with us Mr. Rock Salt of the Secretary's office. He's acting assistant secretary as of yesterday, anyway. And, Mr. Salt, delighted to have you here this morning and recognize you for any comments you may have.

MR. SALT: Thank you, sir. Last Friday Jo-Ellen Darcy was confirmed by the Senate as the new Assistant Secretary of the Army for Civil Works. I didn't know the process. She's been working as a senior staff in the Senate. I first met her when she was on the EPW, the Environment and Public Works Committee, the Corps authorizing committee. More lately, she's been the senior environmental adviser on the Finance Committee. But she's got incredibly strong credentials in the Senate and with the Corps, and I'm thrilled to be able to work with Jo-Ellen as she comes aboard.

Turns out that she had left town to go to a wedding for the weekend when she was confirmed, and so the process says you have to resign from your Senate job, and then, after you resign, then that information is gone over to the White House, where they then process the warrant, the orders appointing her. They weren't able to get that done yesterday. They're expecting it to be done this morning. I'm told that she's at the Pentagon, meeting, sort of in processing, sorts of briefings, and then, as soon as they get the warrant, which they expect this morning, that she'll be sworn in and will become the assistant secretary.

We talked a little bit whether -- when that starts. I think it starts -- I think she'll be appointed as of today, so I think -- even though she may not be sworn in until later, I think she -- she will be then retroactively the assistant secretary for all of today, but at any rate, I'm here and glad to be here.

I wanted to mention two major policy documents that are coming out soon. One of them is the revised Principles and Guidelines for water resources development. The Corps published an earlier version a year or so ago. It's been worked and reworked. I expect them to come out within the next month or so. They will be expanded. They will be broadened to include all Federal agencies, not just the Corps. It will include all the water resource agencies. Among other things, they will focus on a system approach and a collaborative approach to dealing with these issues, the same things that we've been talking about. I would say it is the strong policy intent of the Administration that our government becomes more systems focused and more collaborative as it moves forward.

General Temple mentioned the Fiscal Year 11 budget. We are working closely with the Corps and with anyone that wants to work with us on how to shape our budget into this new -- to reflect these new priorities, this new way of looking at things.

General Temple also mentioned that we're considering an administration proposal for a Water Resources Development Act, a WRDA, a new authorizing bill, and certainly putting together what I just said about collaboration and systems, I would say to this advisory body, I would urge you to take advantage of the opportunity. Certainly I'm requesting that we will consider carefully and strongly whatever you provide for us as we move forward either on our budget or as we move forward on our WRDA, so I just -- I would say that.

My final comment is with the Recovery Act, the ARRA; a lot of fussing about whether that was good or bad. The one thing I have not heard anybody talk about, that it didn't do -- at least for the Corps that it's not supporting good projects. And as General Temple mentioned, I think it's important as we talk about whether that was a good thing or a bad thing, as he said, in some sense Congress and others are -- as they hear all this, particularly if they hear criticisms of it, that they not confuse whatever the criticisms are with the fact that, at least in the work that was given to the Corps, that it was important, needed work. And I think Gary and others will talk a little about that later.

General Temple talked about \$400 million, nearly \$400 million in O&M, and then another \$400 million in construction. I was hoping -- I apologize for getting on my BlackBerry here. I was trying to find -- I'd asked if I could announce sort of the -- we'd have to do a little bit of reshuffling, you know, if some of the projects have dropped off and we're ready to add some new projects to the list, and I was hoping we'd be able to announce that. Maybe I'll check my BlackBerry later in the meeting and I'll be able to do it later, but they haven't given me the go-ahead yet to announce anything. But I'll just say this, we're hopeful that we have more important work with respect to the inland navigation, soon. If not today.

MR. LITTLE: Thank you, Mr. Salt. Please feel free to check your BlackBerry as much as you need to and as often as you need to. We'll we take a recess if that's helpful. Thank you for those comments, and thank you for your attendance today.

Let's move on through the agenda now. The next order of business is to approve the minutes from the previous Board meeting, approval of minutes of Board meeting Number 60, and those were all -- and they're in your packets and you've had an opportunity to review those, and I open up the discussions with the motion to approve the minutes.

MR. WILLIAM WOODRUFF: Move approval of the minutes of Meeting 60.

MR. LITTLE: Thank you, Mr. Woodruff. And do I have a second?

MR. RICHARD CALHOUN: Second.

MR. LITTLE: Mr. Calhoun. Any discussion on those minutes? If not, then all in favor say aye.

(Board members respond aye).

MR. LITTLE: All opposed?

(No response).

MR. LITTLE: That motioned is carried. Moving on, next on the agenda is Ms. Sandy Gore with the financial report and status of major project investments. Ms. Gore, I think that appears at Tab Three and Four -- actually, your section, I think, is Tab Four. Could you just give us a brief --

MS. SANDRA GORE: The listing of the projects in the inland waterways is at Tab Four and we provided fact sheets in Tab Five with for all of our ongoing projects. So you heard a lot about the projects listed in here yesterday at the briefing, so if you have any questions about any of those projects, I'll be happy to answer them.

Just wanted to let you know that the revenue right now through July is \$69 million. You'll have a projection of \$85 million for the year, and we're probably going to be that, probably a little bit higher, maybe up to \$90 million, so it will be somewhere between \$85 and \$90 million for the year.

We got appropriated \$102.8 million from Congress, so when you heard the project manager yesterday in a briefing saying they're not getting all the money that Congress appropriated, it's because the revenue isn't as high as what Congress appropriated.

You heard a lot yesterday about how Olmsted is sucking up all the money and there's not enough for other projects. But you'll hear in Gary's presentation that we are doing other good things. We've completed five projects this year. So Gary will be talking about that in his presentation. So we are doing other things other than Olmsted, which you'll hear about in Gary's presentation. So if there's no other questions --

MR. LITTLE: Any questions from the Board for Ms. Gore? If not, thank you very much, Sandy, for that.

Next item on the agenda is the 2009 Board annual report and investment recommendations. I want to thank all the members of the Board for their work on this effort. This is an historic time in the Users Board's history as we work with the Corps to try to develop a better way of doing things in the future.

The Users Board report that we're considering today attempts to highlight some of those challenges that are before us, give some context within which the readers can understand we are facing with these challenges going back to the selected case studies that the Corps undertook a couple years ago at the request of the industry, highlighting some of the deficiencies in the old business model and how those might be addressed and how the Corps and the industry have -- and the Users Board as well as the industry are working together in guiding the IMTS process, also referred to sometimes as the White Paper process, to try to develop some solutions and some improvements to the process as we move forward.

It's been a collaborative effort by the industry and the Corps to try to fashion something that's workable and for the good of the country as we move forward, and this annual report describes that process and the need for it, as well as, frankly, some of the failings of the past in the ways that we've operated.

This Users Board report is a little different than other reports in that our work does not end with just this report. We know we have much work to continue to do through this IMTS team with the Corps, and so the report gives a snapshot of where we are today with the Corps of Engineers.

I open the floor up for discussion and comments from other Board members as to their thoughts on this subject. Everybody okay with the report?

MR. MARK KNOY: Yes.

MR. LITTLE: I will say this: I think it bears some note that as we continue to work with the Corps in the present effort to come up with a collaborative approach, it was not beneficial at about the same time we're working with the Corps that the Administration sent up a lockage fee proposal. That's counter to the team effort that we had been trying to fashion with the Corps, and that is something that is counter to the systems approach to the waterway system that we all operate on and we all see the benefits of, that we know the benefits of the system are not just local in nature, but they inure to the entire nation and benefits as well, and the lockage fee proposal, it runs counter to that systems-wide approach, so there's strong opposition to the lockage fee proposal. We take strong note of that in the Annual Report, but we also are ready to continue to work with the Corps on the team effort we have going because we think there's much good that can come out of that. Mr. Woodruff.

MR. WOODRUFF: I just want to add to that a comment that -- and perhaps this lockage fee proposal sharpens my focus, at least, on the issue that the industry and the Corps have worked very hard on this working group to try to come up with a comprehensive solution for the future of our waterways. And then, in the midst of it, another group within government comes up with a very contrary proposal that seemingly is out of touch with the work that we're doing. And what it highlighted for me is maybe the need for another seat at the table, and maybe we need more participation from within the Administration within our working group so that they can be a part of it, because it highlights to me that the industry and the Corps alone cannot comprehensively solve the problems that we're facing with the funding and the execution of the projects on our waterways. So we need the Administration to be a part of it, and ultimately Congress as well, if we're to execute the type of comprehensive reform that I think we all agree that we need. And so maybe this highlights the fact that there's an opportunity and a need to broaden our working group a bit, and I would hope that Mr. Salt and the new Administration would recognize that and perhaps become partners with us in this process so that we can fashion a solution that is acceptable to everyone sitting around the table and that's in the best interest of the nation.

MR. LITTLE: Thank you for those comments Mr. Woodruff. Mr. Salt.

MR. SALT: I mean, I think that's why I'm here, on behalf of the Administration. I think that's why all of us are here. I think that this body was created to advise us, and so they probably would say we shouldn't be on the group advising ourselves, but I'm certainly here to listen so I get to hear the full discussion. Your point about the Administration's proposal, I'm listening carefully to your comments and -- and your passion with respect to that, and so it's as much as what you're saying as how you're saying it that I will take back and convey that, so I appreciate that, but that's why we're here today to be able to hear that.

MR. WOODRUFF: And we welcome you and value it.

MR. LITTLE: Very much. Any other comments or observations on the report or on any of the themes within the report? General Temple.

GENERAL TEMPLE: Yeah. Steve, I guess the only thing I would say, and we talked about it earlier today, was the -- is that three legs of the stool that you talked about earlier, and that is that we need to work programmatic internal Corps improvements together with a rational recapitalization plan and, ultimately, together with some financial plan that will help us get from point A to point B. And if we can work all these things together in parallel with the right groups at the appropriate time, I think we'll make some progress.

MR. LITTLE: We appreciate those comments, General Temple and Mr. Salt. I know you both are committed to improving the process and making this better and

listening. I think that's been evident, so we appreciate that very much. Any other -- Chairman Emeritus, Mr. Wilken.

MR. ROYCE WILKEN: This is Royce Wilken. Just to provide some history to the group that hasn't been here, but I can tell you that the process that we've embarked upon over the last two years has involved collaboration between the Corps of Engineers and industry. I've personally been involved in running point for the industry, and at times that has been a pretty emblazoned job to do because there are a lot of differing opinions, and as we see a proposal of a lock fee come from the Administration, I guess we kind of look to the Corps to see who's going to run point at the Corps to share in that partnership and continue to forge ahead together to try and get the -- a construction model that, as General, you mentioned, we could use not only in this industry but in other sectors of our society. And I truly believe that we need that now. We need that person to be able to step forward and be able to represent this collaboration in good faith. Thank you.

MR. KNOY: Steve.

MR. LITTLE: Mr. Knoy.

MR. KNOY: Yeah. Mark Knoy here. I guess one final comment, Steve, as we talked about several times, was the visibility of the report, and understanding it's an advisory report, but the distribution and the content don't seem to be getting through to the people that maybe it should be getting through to, and maybe a brief discussion on how we can better disseminate the information.

MR. LITTLE: Yeah, I think that's a very good point. This is a Congressionally-authorized Federal advisory board, and we represent the users who pay the fuel tax, and I think that was the concept behind establishing the Board. So the effort we put into the report and the work we put into this deserves some serious consideration from the public and Congress as we finalize this report and get it in their hands. So we should be thinking of ways to enhance that exposure a little bit, and how do we best get this message conveyed to the decision-makers so that it actually carries some weight when it's finally issued.

So I echo your sentiment there, Mark. I think that's something that needs to be -- I don't know that we have to decide in this meeting right now how we're going to best do that, but we need to work with Mr. Pointon and make sure that we get maximum exposure to some of the ideas that we've conveyed in this report, and the good effort that's ongoing with the Corps to fashion a long-term solution.

I do need a motion to approve the report. I understand that that's my most important job today, make sure we approve this report, so I need a motion and a second.

MR. KNOY: I make a motion.

MR. MICHAEL HENNESSEY: (Indicates).

MR. LITTLE: Mr. Knoy makes the motion and Mr. Hennessey makes the second. Further discussion on the report? Hearing none, all in favor of approving the report, please signify by saying aye.

(Board members respond aye).

MR. LITTLE: All opposed?

(No response).

MR. LITTLE: Done. All right. Next on the agenda is a presentation by Mr. Loew, who will give us an update on the stimulus funding for the Corps of Engineers. I think the Power Point is set up for you, Mr. Loew. I want to thank Gary for his leadership within the Corps. I know Mr. Loew and his folks worked extremely hard to explain the need for infrastructure investment as Congress was considering legislation in the early part of the session and Gary and his folks did a great job; I mean, just a great, great job of explaining the facts, and I think gave us some extraordinary results in the funding. And, Gary, we thank you and your leadership on that very much.

MR. GARY LOEW: Thank you. Mr. Little, Mr. Wilken, welcome back. Mr. Salt, General Temple, members of the Board, it's a pleasure to speak to you today.

Between Jeanine Hoey, who will follow me with her presentation, and myself, we hope to give you a good sense of how the funding has been received by the Corps, has been put to use in the past, how it's currently being put to use, and our sense of how the investment team, the Corps-industry investment team working together can provide a sound vision for the waterways for the future.

And, also, I guess, just before I start to go into the numbers here, I'd like to remind everybody that in Washington, of course, we work on receiving the appropriations and putting them to work, but the people out in the field, a number of whom are sitting here today, are the ones who are responsible for executing that work, and I'd like to recognize just a couple. We have two deputy district engineers for programs and project management. David Dell from Louisville and Mike Wilson from Nashville are both here, and also Peggy O'Brien, who is Chief of Operations in the St. Louis District are here, and they're the ones who actually put the money to work and execute it efficiently, and so I'd just like to recognize them as the individuals who actually make things happen on the ground. If I could go to the next slide. (Applause).

This slide is to show you the Congressional direction that we received along with the Fiscal Year 09 appropriations. Typically in the Act language we receive direct orders. We are not given any option when we receive a piece of act language. With report language, we have some flexibility inside the Administration, but it is considered a very strong direction by the Administration.

And you can see in the first bullet in this slide, that the Fiscal Year 09 Omnibus Act prohibits the use of new continuing contracts for any Inland Waterways Trust Fund projects. The purpose of that language is that Congress is concerned that there are limited revenues in the trust funds at the current time, and they are sending a message to the Corps to not enter into any very large continuing contracts that would require large future revenues when the future funding is uncertain. Again, that does not apply in their thinking to the smaller contracts which we typically fully fund, but it is pointed towards those very large contracts where we would use a continuing contract as the execution vehicle.

You can also see in the report language a couple of more directions. They do list the projects that are to be cost-shared. They have told us to defer work on projects that are exempt from the Trust Fund until the revenue seems sufficient to manage them.

And there's also a point there that I would make with regard to future legislation. It says the Fiscal Year 10 budget should be based on expected Inland Waterway Trust Fund revenues, not projections predicated on a legislative fix. Now, that refers to Fiscal Year 08 appropriations bill, where the Administration proposed a lock user's fee, and we not only proposed the fee, but we anticipated that we would receive revenues from it; that is, that the law would be passed, that the revenues would start being received in the appropriations year and, therefore, that we could spend those projected revenues. That caused some -- basically for us to project in the budget -- to fund more projects in the budget than was possible with just appropriations.

Now, frankly, the Congress objects to that because it puts the burden on the two committee chairmen to defund those, which makes the members that they serve in Congress very unhappy. It appears that the chairman is cutting funds from their project. So that third bullet is very significant, and we took it to heart this year when we proposed the Fiscal Year 10 budget. While there was a lock user's fee proposal in the budget, we did not project those revenues out. We only projected the known revenues, which, as Sandy stated, are about \$85 to \$90 million this year.

And then the last and very important bullet which General Temple and Mr. Salt both referred to is when the Recovery Act was passed, it forgave funding -- or, cost sharing funding from the trust fund. And that was very important to us, because basically we are on a cost basis on the trust fund today, and so had the legislation required the projects to be trust-funded, we would not have been able to fund any additional projects from ARRA funds. American Recovery and Reinvestment Act funds had to be cost shared. So that was very understanding by the Congress, and I'll show you in the subsequent slides, we took advantage of it.

Next slide, please. This shows the funding for rehab projects in the trust fund. I've highlighted in green four projects which were funded to completion. That's why those are highlighted there. They include Illinois River Lockport, Lock and Dam 3, Lock and Dam 11, and Lock and Dam 27. So with a combination of Fiscal Year 09

appropriations and American Reinvestment and Recovery Act appropriations, we were able to fully fund those projects to completion.

I'll take this opportunity to comment also that one of the lessons learned from the report that we prepared from the Board a while ago was the need to more carefully program ahead of time how we are using available funds, and part of that is focus them on fewer projects and fund those projects through to completion as opposed to having a larger number of projects but inefficiently have funded. And you will see that in this and also in our '10 presentation, as well. So we have to the extent that we can do that, we are doing that.

Moving on to the next slide, it will also show Fiscal Year 09 funding, but this time for construction. You'll see again in the green that there are five projects essentially funded to completion. Those were funded to completion in the Fiscal Year 09 appropriations, so there was no need for Recovery Act funds -- additional Recovery Act Funds for any of those except for Robert C. Byrd Locks down there at the last one.

So you can see that the next -- the ones down below the green, you can see where we have sought to apply additional significant ARRA funding to our construction projects. We have Kentucky Lock and Dam, Locks and Dams 2, 3, and 4 on the Monongahela, and Chickamauga Lock receiving substantial amounts of ARRA funds there.

Next slide. And this slide just summarizes the funding as we have applied it; that is, the Fiscal Year 09 funding from both sources, from the Fiscal Year 09 appropriations and from Recovery Act funds. You can see that they total \$686 million, very substantial, with over \$400 million came from ARRA funding when you look at both rehabilitation projects and construction projects, so a very significant benefit.

And as Mr. Salt stated a little earlier, the process is continuing. As we have awarded contracts, we've had significant cost savings and confident enough -- making us confident enough that we have basically taken all the contingency that we held back in case awards were going to be higher than the district's original projected plus savings from past awards and applied them to a new list of contracts and projects, and that list is currently being under consideration by the Administration.

Next slide. Now, I guess, before I go on, do I have any questions from anybody about what we funded in Fiscal Year 09? Yes.

MR. KNOY: I just have one, Gary. If more ARRA dollars do come along, can any more money be put toward Olmsted other than the \$4.9 million that was initially?

MR. LOEW: More money could be put towards Olmsted, but it would probably not fare well in the way that we prioritize, and I'll explain that. The American Reinvestment and Recovery Act, known as the Recovery or sometimes the Stimulus Act, its basic purpose is to stimulate the economy as rapidly as possible, and so our process

for selecting process -- for selecting projects to be funded favors those projects where the award can be made quickly and the funds supplied immediately, and Olmsted is completely funded through Fiscal Year 09 and, actually, a little bit into Fiscal Year 10. And so there would be projects on the list ahead of Olmsted which, if we awarded them basically tomorrow, if the lists were approved tomorrow, we have projects ready to go to award tomorrow that could be put immediately to work in the economy as new work. So yes, it's possible, but it probably wouldn't be likely.

Okay. Thank you. Moving on to Fiscal Year 10. Again, taking a look at the Senate bill language, at this point, of course, we do not have a bill. I misstated that. So we do have a Senate bill and a House bill. Our process, once funds are appropriated, is to, of course, read the act language first, and, second, read the conference report language, and then go ahead and look at language that's in either the Senate or the House bills if it supplements that, but if there's any contradiction between conference report language and either House or Senate language, then the conference report language takes precedence. And I say that because some of this language will clearly be modified in the conference report as they combine the language from the Senate and the House.

Again we see the language prohibiting new continuing contracts in that first bullet there. They also again tell us that the Fiscal Year 11 budget should be based on real revenues and not projected revenues from proposed legislation that hasn't passed yet.

There's also a fourth bullet there that I would make note of that said the solution to the trust fund problem must be developed with the users, the Corps, and the authorizing committees. And the Senate is clearly sending a strong message to all of us in this room that they expect a future solution to be a partnership with regard to funding and, also, that the-- it needs to be -- any solution needs to be properly proposed and authorizing legislation. It is not something that they intend to take up in appropriations legislation. That makes, again, Mr. Salt's earlier comment about working on a Water Resources Development Act, or a WRDA '11, to be very important, because if there were a solution, that would be probably the first opportunity to realize it.

The House language again recognizes that this revenue solution needs to be implemented as soon as possible, and, again, as in the previous years, keeps us from funding any large continuing contracts until such time as they're convinced that there's sufficient funding between the trust fund and appropriations in order to fund those through efficiently to completion.

So you can see a -- a trend in these -- in the language that the Congress is sending a strong message, we need work on this revenue problem together. And they also have taken a look at the case studies report that we furnished to this Board under Mr. Wilken's leadership about a year and a half ago, I guess, and they've taken it to heart, too; that is, they do not want to see any funding put inefficiently on projects and they are supporting that, and that's why you see that continuing contract language.

Okay. Now, moving on to the next slide in the budget. There's no funding in the top green projects. It's just a reminder to you all that we're not funding them in Fiscal Year 10 because basically we funded those to completion in Fiscal Year 09. And you can see how the funding available for rehabilitation projects is allocated, with the major funding going to Emsworth and only minor amounts going to Markland and to Lock and Dam 25.

And then, on the next page, looking at construction, again, I repeated at the top -- just a reminder those projects are not receiving funds in Fiscal Year 10 because they were funded to completion in Fiscal Year 09. You can see the spread of money against -- of construction funds against the projects available, and clearly Olmsted is our priority to move on and finish.

You can also see that there is a difference between the House and the Senate in this slide on Chickamauga Lock, with the President's budget and the Senate funding of a million dollars and the House funding in the \$15 million, so we'll just have to watch conference to see how that comes out.

I should note that it is significant that both the House and the Senate passed bills prior to going on August recess. That hasn't happened for maybe ten years, and we believe they are on schedule to pass appropriations bills by the end of the year or very early in the next year, which will be welcome news to the Corps of Engineers and other Federal agencies. It may be the first time in a long time we'll have actually had an entire fiscal year to execute the appropriation.

Okay. And the next slide also just totals up the total amount of money that we have budgeted and that the House and Senate have proposed in their bills. Any questions about Fiscal Year 10?

Okay. Seeing none, I'd like to move on to just three slides to wrap this up. This one shows our accomplishments since 2002. I made a point of listing. 2002 is about the time that the Inland Waterways Trust Fund had its peak surplus at about \$400 million, and so if you think that we spent down that \$400 million plus \$400 million matching funds and wonder what has happened to these, this slide sort of summarizes what's happened, and you can see that we do have a substantial number of completions, either completed prior to this year or that will be happening in Fiscal Year 09 and 10. And then you can see down at the bottom for those that are continuing to go forward, such as Emsworth, Locks and Dams 2, 3, 4 on the Monongahela, Chickamauga, Olmsted and so forth. You know, we -- due to limited funding we actually work on those in pieces, and this -- the bullets on the right-hand side of the slide give you a sense of what we accomplished as we receive funds for each those.

So the one lesson that came out from the case studies report, which is repeated in this, and you'll see it in the next couple of slides, too, is when the -- as Mr. Little has commented, we do need to do -- make some very serious efforts inside the Corps of Engineers to make sure that we can deliver projects on time and within the budgets that

we have recommended, and so we need to -- there's a little proof in the pudding that we need to carry these out efficiently and not lose money to inflation, changed conditions or other things that we haven't anticipated.

One of the lessons that came out for me as we did the report and then as we looked at what we've been doing since then is, generally speaking, the Corps of Engineers does a pretty good job when we receive adequate funds, which we do on these smaller projects that are anywhere in the 10 to 50, \$60 million range. It's the mega projects where both we and the Board need to pay real attention to make sure that we have the funding lined up for those very large projects that cost \$300 million plus and take multiple years to complete. Those are the kinds of recommendations that this Board will look for as it looks to match revenues and plans out into the future and we decide what to fund through future appropriations. So -- and it's appropriate that we do look at those large projects because that is where a lot of the money has gone, really since 2002 and projected out into the future, a lot of money on about five major projects. And so in the next slide --

MR. KNOY: Hey, Gary.

MR. LOEW: Yes.

MR. KNOY: I'd like to go back to that slide. It's really more of a comment maybe for Steve as we move forward on the White Paper. I just wanted to point out, quick math that's in the program here. I really appreciate the fact that we have those seven projects done, but they were all initially below this \$300 million level, and while they're all done now, they're \$511 million more than originally approved, and that number might be arguable by a few dollars one way or the other. But in looking back at the history of even these smaller projects, to try to help us identify issues that we can try to correct going forward, Steve, I'd like to make sure we do that with the working group.

MR. LITTLE: We absolutely will, Mark, and we look forward to you helping us with that, too.

MR. KNOY: Thank you, Gary.

MR. LOEW: Yeah. Thank you. Good comment. I appreciate it.

Next slide. The next three slides here give you a sense of what will happen if nothing changes, which is what this slide shows. It says future program with current revenues, so current revenues being about \$85 to \$90 million a year, matching revenues would make about \$170 million a year available to the Corps of Engineers to basically rehabilitate the entire inland waterway system.

Now, as Jeanine will talk in the next presentation, you all -- industry, and we, the Corps of Engineers -- have been working to get a handle on how big that problem is and how much money that it will take, and what you can see on this slide is that basically

three projects take almost all the revenues available -- Olmsted, Emsworth, and Markland -- out into the foreseeable future. I think they go to about 2018 on this slide. So you can see in the lower half of this slide the other ongoing projects: Locks and Dams 2, 3, 4 on the Monongahela, the Inner Harbor Navigation Canal, and then Chickamauga Lock. Now, please don't put too much emphasis on the priorities or the order that these are listed in, but it just shows you how long it would take to even start a project such as the Lower Mon or the Inner Harbor, for instance. They're pretty far out into the future; Chickamauga, you can see, which is way, way out there. And, again, we have one mega project in here, Olmsted, which is basically using all of our revenues. And if we funded it less; that is, if you took the option of trying to fund Olmsted, say, half of that amount and apply more to a couple of these other projects, the lesson that we've learned in the past is that would only have the outcome of extending Olmsted even further and making it cost even more, and since there's so much money tied up into it, the inflation and other costs associated with that would be very, very serious. So a pretty bleak view there if you take a look at that slide.

Now take a look at the next two slides. First, this one. This shows -- and I used a very round number here based on the work that the investment team is doing to say, well, suppose we increased our total revenues from \$170 million a year to \$500 million a year, a little more than double, maybe two and a half times, what would happen, and then we've laid out the projects out through 2028. 2029 is the last column over there. And you can see that when we move past a couple of very large projects, then we have money to move into the next group of projects, and they're all smaller. They're almost all smaller. We begin to complete them very quickly.

An moving on, you can see the four dots at the bottom. Those dots indicate, well, there's still more projects out there. I think there were approximately 85 to 90 on the team's list, and this only shows about 25 of those. So if we go past the four dots into the next slide, you can see there's an arrow in the middle of this next slide which represents most of the projects that were on the previous slide. And as we take a look and move out into the future, you can see that with adequate amounts of money, we basically rehabilitate and reclaim and modernize most of the inland waterways system in a fairly reasonable and timely way.

Now, one last note: Please do not put any -- attach any significance to the order on the list there. This is simply a blue-sky projection to say, if we get the revenues right sized, what is possible; I mean, is a future of an efficient inland waterways transportation that serves the industry, the industry's clients and this nation well possible, and, yes, you know, we believe it certainly is if we right-size the revenues. So I simply encourage the team to continue doing its work, and we will work with you together. And, as Mr. Salt said, as the results come out of this, we will value the industry's recommendations as we look forward to solving this revenue problem in the future. That's all I have.

MR. LITTLE: All right. Thank you, Mr. Loew. Let me ask a couple of questions and open it up to the rest of the Board members to also ask their questions.

Going back in the presentation a little bit, I think you mentioned a contingency fund regarding the Recovery Act budgeting that you were doing. You mentioned considering the size of that contingency fund and, also, the size of some savings that you saw. Can you give us some order of magnitude of -- on what size pot, of money we're talking about there?

MR. LOEW: Yes, I can. I don't have the exact numbers in front of me, but when we initially received \$4.6 billion, the huge majority of those funds were in the construction and the operations and maintenance accounts. Two-point one billion dollars of the \$4.6 billion was in O&M, \$2.0 billion was in the construction account, so about \$4.1 billion were in those two accounts. We withheld \$100 million in each of those two accounts, \$200 million total for contingencies.

The districts were required to give us work packages and estimates very, very quickly and knew they hadn't had an opportunity to engineer those estimates, so we held that contingency until we had a chance to see how the awards were going. As we got that experience and we looked towards allocating those funds out, during the process some projects dropped completely out. For instance, we had a number of projects that we were forecasting to move forward on that had to be cost-shared, where our cost-share partners had originally recommended or stated that they would have those funds, and then, as it turned out, they didn't, so those were examples of the projects that dropped out.

When we did all of the puts and takes, we ended up with a little more than \$100 million in the operation and Maintenance account; I think right at about \$100 million in the Construction account. We had projects drop out. Some cost estimates went up in construction, and so we actually -- well, it doesn't matter. We ended up with about \$200 million between the two accounts. And so then we used exactly the same decision process as we had for the first list to find those projects that could be -- if they were operations, could be awarded most quickly, and if they were construction, those high-value projects that could be awarded most quickly.

MR. LITTLE: And so where are we on that process then? Has that decision been made?

MR. LOEW: Mr. Salt has approved the list --

MR. SALT: My BlackBerry.

MR. LITTLE: That's right. So that gets back to Mr. Salt's BlackBerry.

MR. LOEW: Yes, it does. Exactly.

MR. LITTLE: Okay. I'm with you on that now.

MR. SALT: Like an oracle.

MR. LITTLE: And I understand the criteria that you've walked us through, but is there another criteria that you also used as a factor, that is the impact these dollars could have on advancing a project's completion date or somewhere along the time line? In other words, there's no reason not to consider that as a factor; is there?

MR. LOEW: That's correct. It was one of the criteria. Once the districts -- early on when we developed the list, neither we nor the districts knew exactly what the law was going -- how the law was going to read in terms of what criteria we should use and we also didn't know the limitations of the law; that is, if it would have expiring appropriations or whatnot. Once all that was clear and we were able to go back to the districts a second time and say here's the rules by which we're going to select, districts did a very nice job of -- the reason that you -- there are so many inland waterways projects in there is once they understood the rules, they constructed packages to fit those rules and then competed them.

And so a lot of credit goes to your districts here, that they created projects that would meet those criteria. And I say that because, if there was a -- let's say a project that was \$60 million design - build initially submitted, and then the districts learned the rules - - it had to be less than \$50 million, it was compete by award date, it -- projects with high BCRs were favored, completions were favored -- then they reworked the packages to fit within that rule set and make it as competitive as possible.

MR. LITTLE: And, again, I commend all the work to get us to the number that we got to. It's very much appreciated and it's a very positive step in the right direction. Mr. Knoy.

MR. KNOY: Gary, I have a question. After our tour at 52 yesterday, it looks like there might be an opportunity to put some money into that facility. Basis, the Olmsted completion out to 2018, nine more years. What's the level of concern of 52, and 53 for that matter, when it does come up, will last through that time period, and could any stimulus dollars be spent towards providing some assurance for lock 52's operation until Olmsted is complete?

MR. LOEW: I think, when you take a system wide view of the work that needs to be accomplished, and you can see how that -- those couple of slides lay out a hypothetical future, the first thing that I would say is I am probably the person in the room with the least influence of any of us sitting around this table about how those funds are applied.

It's my job to see that we have a process that allows for quality decisions, and you all are a part of that process. As we've indicated, we value your input from the Board, so if there are recommendations like that, we would take them into account.

The second half of the answer is stimulus funds are pretty much set. Again, the criteria there is not what the Corps of Engineers needs or even what our project needs. The criteria -- the emphasis by the Administration has been clearly put people to work as quickly as possible, and so we favor those projects.

Now, with regard to the future -- and 52, 53, that is really -- we rely on the districts and the divisions to basically make recommendations about how to use their operations and maintenance funds to maintain those projects as necessary in order to keep them operable before the replacement is in place. And the advantage they have with a systems view is that they now can estimate the sense of the length of the problem, so they can estimate whether it's going to take five years or ten years. So if they make a fix, they can size -- they can size that fix, if you will, to fit the length of the problem until they see or the length of time until they see the replacement coming in, so it tells us more accurately what we need to do with our operations and maintenance funding.

MR. LITTLE: Mr. Hennessey.

MR. HENNESSEY: Yes, thank you. Gary, I'm looking at the slide, the future program with current revenues --

MR. LOEW: Uh-huh.

MR. HENNESSEY: -- specifically with the projects completed with constrained schedule, with the Locks 2, 3, 4 on the Mon completed in 2022.

MR. LOEW: Uh-huh.

MR. HENNESSEY: And then we go to the next page with the future program where there's \$500 million. Locks 2, 3, 4, on the Monongahela River will finish in 2021, one year earlier. I'm wondering, if you have that extra revenue coming in -- and considering the state of the dam at Lock 3 and the safety issue on the Monongahela River, if you had that extra revenues for that \$500 million, is there any way that more money could go to the Monongahela River projects and would it be completed quicker?

MR. LOEW: I am appreciative that you're having that kind of thinking, because when you lay it out like that, that's exactly the kind of thinking I think the team who's preparing those recommendations are going through. So this is by no means considered a finished project. It's just to give us a sense of what happens and the choices that are in front of us.

MR. HENNESSEY: Okay.

MR. LOEW: And, again, that's something that I think is an industry/Corps partnership to receive; I mean, basically, as engineers, we're dealing with the risk and reliability of the system, but I think as the primary system users, we're looking at your input particularly with regard to what might -- how that would affect you; a system failure, for instance. So absolutely the right kind of question to ask and one that we need to decide as we move forward.

MR. HENNESSEY: But intuitively you would think with more money things could be done quicker.

MR. LOEW: Yes, that's possible. It's quite possible. We could go to -- right now the -- one of the things that I guess I would point out as we've discussed with our districts how they make their decisions, it's important to appreciate that they do their schedules and cost estimates based on a certain anticipated revenue stream, and if we go to them with different parameters, then it's a different revenue stream, and, say, suppose you have this much money, could you do it quicker; they would probably come up with a different schedule.

MR. HENNESSEY: Thank you.

MR. LITTLE: General Temple.

GENERAL TEMPLE: Yeah. I think it's important to reemphasize what Gary said earlier about these charts. They are notions in order to give everyone a sense of the order of magnitude of the requirement and how that requirement might be bought down if we have additional revenues. What Jeanine Hoey will talk about a bit later this morning is how are we trying to balance the priorities and requirements against what the need is as we know it today.

I guarantee you if we have a situation anywhere in the system where imminent failure or failure actually occurs, it will immediately rise to the top because it becomes an emergency at that point in time. So just bear in mind that this is notional and at least gives you an idea of what's involved in the process. Thank you.

MR. LITTLE: Mr. Calhoun.

MR. CALHOUN: Mr. Loew and General, I appreciate this is, you know, for illustrative purposes. One concern I have is when you look at this a little better, as somebody else would look at this, perhaps Congress, when you see the word "enhanced" revenues, that to me means an incremental, a small enhancement, if you will. And this -- and by quick -- my quick math, if you use the \$170 million, it's really closer to triple the current amount of money that's being generated.

I also have concern whether or not the amount of money that is currently going into the fund by industry will even continue with the current fuel tax. We have -- I think if you look around this table, there's an awful lot of vessels that are laid up with the economy the way it is and with traffic down. So I'm pleased to see we think it's going to be 85 to 90 million this year. That number would actually surprise me a little bit.

So to my point, you know, this is really talking about tripling the amount of money that's there today, and I don't think anybody around this table, at least on the Board, can swallow that type of an increase if it has to come from tax-type revenues.

And if you talk about any segment of our society, we're talking about tripling the taxes, that's a pretty big pill to swallow.

MR. LITTLE: I don't want to ignore this side. Mr. Parker.

MR. TIM PARKER: Thank you, Mr. Chairman. Gary, following up on Mr. Calhoun's question, and specifically the future programs' enhanced revenue, and you acknowledge the \$500 million was a plug number, was a hypothetical number. But as we see that flashed up live, I want to make sure it doesn't get tenured, and I just wonder if there could be also some different slides with different, other round numbers just so we got some more, maybe \$400, \$300 million, but just put the whole gauntlet of options out there so everybody can see the different scenarios and the impact of different numbers.

MR. LOEW: Sure. Actually, I anticipate that this will be the last time that I would show a slide like this, because -- no, really, because -- the team you all are working on with Jeanine -- will work out these options in the future, but as I was preparing for this meeting, I guess I would explain the chart in a slightly different context by saying it's important for me to understand, is what we're doing going to lead us towards a better future; that is, can we have a sense of the three steps that we're working through in terms of project management, prioritization of projects, and then eventually revenues. And I think we all understand that there are a world of choices in front of us about how much we do, what we do, how fast we do it, but I was seeking for a personal sense of are we ever going to get through this.

This is a big system. Are we taking an approach that is identifying everything in that system and do we have some reasonable possibility of -- as the Corps of Engineers, the agency responsible to maintain this system for you, do we have some reasonable shot at making that happen, and it's not just the next project or the next one, it's the entire system, and I would say -- and, again, I fully appreciate Rick's comments about, you know, how much money we could come up with, that, you know, it appears like we got a shot, and I think that gives -- makes all of us inside the agency feel much more positive about where we're headed in the future as opposed to some endless treadmill that's never going to get us there. So -- and it was really to give you all that same sense that, look, we can -- together we can get this done.

MR. LITTLE: Mr. Martin.

MR. DANIEL MARTIN: Yes. Thank you. Gary, following yesterday's tour of Olmsted and Lock and Dam 52, I was reflecting on a comment that General Peabody made to us when we met up in Pittsburgh, the working group, the investment group, and he made the comment to us that he has greater concern as to failure at Lock and Dam 52 and 53 than Chickamauga, as an example. And what I believe I learned yesterday, which was a little bit surprising to me, is that even with unconstrained funding or unlimited money, I think somebody might have used -- put onto Olmsted that there really wasn't anything that we could do to accelerate the completion of Olmsted. And kind of matching up what General Peabody's comment was and seeing the condition of 52, and I

assume 53 to be comparable, I just wonder if I heard yesterday correctly and whether we are at some unacceptable level of risk, that we may have a failure given the constraints that we have here of a seven- or eight-year completion at Olmsted.

MR. LOEW: Well, I think we all see the same problem, but what we do see is an end to it; that is, we see with continued efficient funding of Olmsted, we can finish that in about eight years.

The district did do a study to say could more funding make it happen faster, and their best guess was that if we poured in absolutely unlimited funding, we might -- and I put a capital M on the might -- be able to pick up a year. So there doesn't seem to be much point in trying to rush them further than their current schedule; that is, they and the contractor are working their way through.

That leaves the job up to the Corps of Engineers to maintain 52 and 53 for eight more years, and the district's got it. You know, the division's got it. They will apply the resources they think they need to keep that operating, and I guess I'm not sure what you would expect other than that; that is, there really is no other alternative at this point. Suppose we wanted to take \$200 million and put it against 52 and 53; what would you do with it for the next eight years?

So I think we have a plan. It may take more or less maintenance money than the district has programmed now, but they're currently committed to maintaining it until we finish Olmsted.

MR. LITTLE: Mr. Knoy. I'm sorry. Go ahead.

MR. LOEW: I was going to say, but if anybody has any suggestions, I mean, certainly we're open.

MR. KNOY: This may be just kind of a wrap-up comment. I mentioned Olmsted and Chickamauga numerous times. I first sat on this Board six years ago when Chickamauga got some legs, and it certainly didn't come from the advice of this group, but I just asked to refer to the report when we talk about seeking advice from this Board that Chickamauga moves two million tons and about \$500 million worth of value to the nation, and Olmsted is 97 million tons, 50 times more, and a \$20 billion benefit to the nation, and for the life of me I can't understand how we continue to put dollars towards Chickamauga at the expense of the capstone projects that this Board recommends. Just wanted to put that on the record one more time.

MR. LITTLE: So noted.

MR. LOEW: I'm not sure I understand the question. We're not putting --

MR. KNOY: No, it's just a statement. I just --

MR. LOEW: Okay.

MR. KNOY: -- on the record. You know, as we look for money, there's \$46 or \$50 million that, you know, I don't understand why we spend on Chickamauga if we have other things that need money worse.

MR. LOEW: Thank you.

MR. LITTLE: What I'd like to do at this point is take a break. Gary, you can consider yourself still on the witness stand, so to speak. We are going to take a short break, and let's take -- how long a time, 15 minutes? Take 15 minutes.

(OFF THE RECORD)

MR. LITTLE: Thank you. I wanted to make one housekeeping comment. If you signed in this morning, I think the annual report from last year was passed out, the 2008 annual report, so I think the Board members, and anyone at the table up here understands that, but anyone attending the public session today, that's last year's report. That's not the report that's for distribution today. The report for you today will be available in two to three weeks, so I just want to make that point here this morning.

Also, we had another question -- Gary, just hold on just a second -- regarding a tour of Olmsted yesterday. John, you asked.

MR. PIGOTT: Gary, when we were out there yesterday, it seemed like there wasn't a lot of activity going on. I wonder if you could speak to the -- to that particular observation, and maybe comment on the structuring of the workforce that's out there.

MR. LITTLE: Or perhaps someone from the Olmsted project could address that for us, maybe Mr. Bibelhauser if he's here.

MR. RICHARD SCHIPP: Morning.

MR. LITTLE: Okay, Rick. Rick Schipp from the Olmsted project.

MR. SCHIPP: Good morning. My name is Rick Schipp.

GENERAL TEMPLE: You need to come up to a mic.

MR. SCHIPP: That comment has come up from several other folks around the audience, and you need to understand that the work schedule at Olmsted is obviously predicated on the funds that are provided each year. We determine what activities we can do to stay within the schedule that we have allocated to finish certain elements of the project at the end of each fiscal year.

Yesterday the timing was such that one of our major activities wasn't going on, and that was river activities, basically. If you're not familiar, the river had a big spike in it last week which shutdown our river activities from all the rains in Louisville, so there wasn't much going on in the river other than maintenance of equipment.

The precast yard activities that you've seen, they're not on the critical path. The critical path goes through the river, so we're focusing our efforts on that. So we're building the shells based on, you know, the funding that's provided and how many of those we need to build just to stay within the schedule. And so you don't see a lot of activity going on in the shells, because like I said, we can finish them in three or four months and let them sit there.

But there's another activity that you didn't see, and there's quite a bit of off-site fabrication going on. The 15 frames were being built. All the piling for the first year's river season was being fabricated off-site to be shipped to the job, and that -- it really was a timing thing what you seen yesterday, and, again, we're working the schedule to execute the plan as it was funded and to maintain the schedules that you all have been briefed on.

MR. LITTLE: Yes, General.

GENERAL TEMPLE: It's my understanding, we're also going to be in a position here relatively soon to hire an additional shift; is that not correct?

MR. SCHIPP: That is correct. We are looking at bringing on a second crew up in the precast yard later this year to begin working on all five positions, and our goal there is -- we believe that is more economical to beat the river season -- or, excuse me -- beat the winter season and have most of the concrete work done, because if you place concrete in the winter, you've got to heat things, you've got to cover it. You've got a lot of other activities. So if we can get a lot of that work done by going to the second shift, we think that will help defray costs later on also. But, again, those shells will then begin to be set next August, September. Thank you.

MR. LITTLE: Thank you, Mr. Schipp. Mr. Ryan.

MR. MICHAEL RYAN: Thank you, Steve. I had one question, or a couple of questions, actually, and hopefully, maybe the first answer will eliminate the others. But on the pages where you refer to an efficient schedule, what exactly are you referring to? Is that -- is the definition of an efficient schedule fully funded with continuing contracts, or is it fewer events, or what exactly is the efficient schedule?

MR. LOEW: The efficient schedule means, regardless of the acquisition method, we would fund the project to its most efficient construction schedule. So that might be a fully up-front funded contract or it could be a continuing contract, but in the case of a continuing contract, we would be sure to provide the funds to meet that most efficient construction rate.

MR. RYAN: Okay. So it could assume that there are still those restrictions from House and Senate bills that survive and still have a funding restriction in that scenario?

MR. LOEW: No. No, sir. For purposes of this, we are figuring that funds are unrestricted, so the districts should simply design the most efficient schedule to complete the work.

MR. RYAN: Okay. Okay. Is there a factor or a multiple that you to look at or think about when you take \$85 million from industry and matching funds that come out to \$170? When you look at the restrictions that are on the use of those funds, is there some multiple? Is that worth \$340 million if you don't have the restrictions on it? Is it worth \$250 million if you don't have the restrictions on it? Is there a way that you look at that, that -- you know, to kind of apply an inefficiency component because of the restrictions?

MR. LOEW: I guess I'll draw a line between the current situation and the past. I think in past years, the practice in the Corps of Engineers was to state a capability. So if asked -- that is, regardless of what was in our budget, if asked how much fund -- funds could we use to execute a project in that year, and as often as not, the capability is greater than the amount of money appropriated.

Starting with really two years ago or -- and moving forward, we're taking a different approach. We are basically saying for those projects that we choose to fund, we are going to budget efficiently to accomplish those, so there, we are not looking for a big difference between our capability number and our appropriated number.

Now, to give you a current example, Olmsted, I think, we funded at \$109 million. I think their capability was maybe \$10 million, \$15 million higher, but we just couldn't reach it. But if the actual funding were to be 80 million, it sounds like a lot, but it would be a significant -- it would create a significant inefficiency on the project.

So for those projects that we are funding, we are seeking to budget them efficiently right from the outset.

MR. RYAN: Okay. And the reason I ask these questions is because on recent visits to the Hill, while we're talking with representatives, the discussion flips to, you know, well, what will the industry pay as far as additional funds. And our discussion comes back to, you know, will we have fully-funded continuing contracts, will we have that opportunity to apply that, because we think it's an inefficient use of the funds, and I was curious if you had some percentage factor that you apply to the dollar degradation when you have those restrictions.

MR. LOEW: No, it's rarely -- it not possible to compute. It happens year to year, but with efficient funding, I believe that we can fully fund most everything, including the very, very large contracts with proper foresight in our programming, and that would be

the ideal, because even when we advertise a contract, like we did with Olmsted, if we tell the contractor to expect a certain funds rate, he will give us one proposal. If we just advertise the amount with unrestricted funding and your contract will be fully funded up-front, we will get a very different proposal. So that would be our choice. And even with a project like Olmsted, even though it costs so much -- more than \$2 billion now -- the individual contracts are much less than that. And so, again, we think a more optimal funding stream opens up a world of possibilities to make some of these projects happen faster than we would have planned in the past.

MR LITTLE: Thank you. Just to follow up on Mr. Ryan's question a little bit, and he's talked a lot about funding since the break here, and certainly some of us, we spend a lot of time talk about funding. You referred to the select case studies earlier and the recognition that, in fact, in the case studies that funding was an issue there, which we all understand. I would just point out that there's also the other factors that the selected case studies point out, as well, which were are looking to the Corps to help us address and to understand, because even though in the pie chart the funding accounted for maybe about 33 percent as an inefficiency, there are a lot of other omissions and estimates and things like that that need to be addressed, and that's a critical part as far as the Board is concerned and we also addressed as well.

MR. LOEW: We agree entirely, and just to maybe -- I'll give an illustration there. In the selected case studies report, there are three pie charts for three different projects that illustrate why cost growth occurred and why schedule growth occurred. And as he said, about 30, 35 percent of that was due to inflation caused by schedule growth, but there's another, say, 60, 65 percent which is due to standard engineering problems: changes of scope after the project started, changed ground conditions that the engineers didn't anticipate. So there's a whole wealth of these, and that caused it to grow, which we've come to accept as a cost of -- as a natural thing with projects.

However, we also know that if we do an appropriate risk-based cost estimate where we have examined the risk of these things -- what is the risk if you have to change the scope on some sort of uncertainty in the design? What is the risk that the -- you -- some areas, the ground may be different, particularly if you don't have sufficient borings? And you add those contingencies into the cost estimate, we should in the future be giving ourselves, you, the administration and Congress much more accurate estimates with contingencies built in, so you wouldn't see that same pie chart problem, absolutely.

MR. LITTLE: Okay. Thank you. One other question for you, Gary, and I have on -- I think it's Page 7 of your presentation, it's the FY '10 funding of the rehabs, Markland Lock and Emsworth Lock, there's a notation there that those are 100 percent trust fund, 100-percent trust fund numbers there. Can you comment on that as to why that is?

MR. LOEW: Yes. Thank you. I probably should have said when I first presented it, the trust fund projects are required to be cost-shared 50/50. From time to time that gets out of balance. We may have more appropriations or more trust fund

revenues. And in these two projects, it's gotten out of balance with appropriations, and to date we have funded the project with more than 50/50. More than 50 percent of the funding has been with appropriated funds from the general appropriations, so we just need to balance the account with the trust fund appropriations.

MR. LITTLE: All right. Any other questions for Mr. Loew? If not, we appreciate your presentation today and your presence here today. Gary, thank you very much. Next on the agenda is Jeanine Hoey. Jeanine will be briefing the Board on the IMTS effort that's ongoing. Jeanine.

MS. JEANINE HOEY: Thank you.

MR. LITTLE: Thanks for being here.

MS. HOEY: Thank you, Steve. Mr. Little, General Temple, Mr. Salt. As Steve said, I'm going to be talking about the investment strategy this morning.

We can go on to the next slide. Since we have five new members, I've organized the presentation to give you a little bit of the history of why this team was formed and then talk about the status of what we've done so far, and then what we still have left to do.

Next slide. So getting into the history, I think everybody is familiar with the aging infrastructure that we have.

You can go to the next slide. And this graphic just shows how our unscheduled maintenance has grown throughout the years and is growing because of our aging infrastructure, that we've had more unscheduled closures lately.

Next slide. And then in the Inland Waterways Trust Fund, we've been talking about that, that since about 2003 -- you can go to the next slide -- we've begun spending the surplus that we had in the trust fund, and we are now in a pay-as-you-go mode. You know, we can only afford what is actually going into the trust fund.

Next slide. We've also talked a little bit about the cost increases. You've heard Larry Bibelhauser and Steve Fritz yesterday on the tour talk about the cost increases on both the Lower Mon and the Olmsted project have both seen significant cost increases, and because of those cost increases, that led to the case study report that has been talked about this morning.

Next slide, and the next slide. The case study report, which looked at three different projects in the Great Lakes and Ohio River Division, we looked at Olmsted, Lower Mon and Marmet and analyzed the reasons for those cost increases. Gary just talked a little bit about this. And it showed that the inefficient funding was between about 30 and 40 percent of the cost increases, but that there were other reasons for those cost increases. One of the benefits we will get out of the ARRA projects is to see if, with efficient funding, those projects that have been funded efficiently. We can monitor those

and see what our execution is on those projects to see if that helps us out with efficient funding.

Next slide. And then we talked a little bit about the user-fee proposal, which was included in the Fiscal Year (FY) 09 President's Budget but was not acted upon, and then was included again in the FY 10 President's Budget, and this basically leads you to the broken business model. With the aging infrastructure, with the status of the trust fund, with the cost increases that we've seen, with the other issues of those cost increases, not just efficient funding, we basically have a broken business model, and that's why this team was created.

Next slide. Right now we're at a pay-as-you-go mode, and we already talked about that means we're getting about \$170 million a year available for new construction, and that's funding major rehab and new construction, so that means there's no immediate new construction on any new projects.

And next slide. And you've already seen this slide that Gary showed that the top three projects would be funded efficiently according to the schedule that the districts can construct them if we have to go with the current revenues in the program, and that the remaining four projects that are already under construction would be severely impacted if we don't do anything with the current business model. And, really, that's why the team was created, to try and come up with a solution to that issue.

Next slide. This shows the members of our team. We are made up of some experts from headquarters. Our point of contact with the Users Board, we started out with Royce Wilken, when he was the chairman. Now Steve Little is our point of contact, but we have many Users Board representatives that we've been working with at our different meetings. We have a member from the cost engineering center of expertise, a member from each division that has Inland Marine Transportation System projects, and economists from the navigation center of expertise.

Next slide. These goals basically came from the case study and these are the goals of our team -- is to prioritize our work, manage and plan our projects as a system, fund the priority work efficiently, and maximize our system benefits within the funds provided. In the past model, we always went with the first come, first serve basis, and now we want to make sure that the dollars that we have go to the highest need in the system. And then once we start a project, that we should fund it efficiently until it's completed, and that we do need to have realistic risk-based cost estimates and schedules at the completion of feasibility reports so that we can put them into the schedule and complete them and ensure that we have the money to complete them efficiently.

Next slide. I kind of anticipated having control of the clicker so I would be able to go through this quickly.

One of the first things that the group -- our team did was develop the White Paper. We worked very closely with Royce Wilken on the White Paper.

Next slide. And that was organized based on our past business model, how we're doing things now and how we look to do things in the future. And this is just a very busy slide that shows you how we kind of look at things into the future, and I really just want to point out two things here that we talked about at the last meeting. One is the life cycle asset management analysis. That's another effort that's undergoing -- being undertaken with the Corps where we are looking at the life cycle assets. We're looking at the condition of our assets. And those data, the risk and reliability data, the condition analysis data, that information is going to be an input into the capital projects business model. We're going to be using that information as criteria in our prioritization.

And then the next box in red, where you see the capital decision and Congress appropriates the dollars, that's where -- you know, at that point we're going to have a realistic risk-based cost estimate and we're going to fit that project into the schedule where it needs to go, where it can be funded efficiently. And at that point, that's where we would make the decision to go ahead with that project jointly. Both the Corps and the Users Board would make those decisions. This would be different from how our past model is, first come, first serve.

Next slide. The next thing we did was begin developing a project list. That project list is probably about 95 percent complete. It's organized into three phases. The first phase is those projects that are already under construction, the second phase is projects that have already been authorized, and the third phase is projects that are planned.

This list is undergoing review right now, a quality review from each of the districts and the divisions with all the projects on the list. I anticipate that will be done probably sometime this week, and I'll be incorporating those review comments, corrections, any kind of changes that need to be made into that project list, so that the team can then look at that.

Next slide. Based on what we have right now, though -- this is what our -- the need is, and what I've done here is, on this chart I have escalated the cost three percent per year so that you can see what the actual funding would be required during the year of construction. Right now this is about 90 projects, about \$17 billion in construction over the next 20 years. That would amount to a need of \$870 million a year. We know we can't do that. We know we can't do that. So we need to prioritize our work and put the dollars to the highest priority.

We also know that we're making, you know, estimates of what the needs are going to be at year zero in year 20, and so things aren't always going to go as we think they're going to go. We may have projects that are performing very well, that we think are going to have to be either newly constructed or undergo a major rehab in year 15, and they may perform very well in the next five to ten years, and they can be pushed out to 30 years. We may also have projects that we think are going to be okay for the next 15 years and something happens, and we may have to pull them in.

So this is definitely a living document. This is not something that we're going to do right now and walk away from and do it again in the next 20 years. This is something that has to be continually updated based on the asset management data, that group, that they're working on the condition assessments. That's going to continually feed into this, and we're going to be continually updating this as we move forward, but we know that we can't do everything on this list right now.

Next page. And so we are developing criteria. We spent a lot of time looking at different criteria and how to rank our priorities.

Next slide. We started out with a criteria workshop in March, and we had six Users Board representatives attend that workshop. And the table on the left is the criteria that we more or less brainstormed at that meeting. We came up with any criteria that we might think we could use to prioritize our projects, what kind of data we needed to support that criteria, and came up with a couple different options on how we would weight that information.

We then had another meeting in Louisville at the end of May where we took the results of our criteria workshop and further refined that criteria down. What our decision in -- within the team was that we wanted only measurable criteria. We didn't want to work with subjective information. That would be a little bit too hard to deal with -- who was making the call, how do you weight that information -- so we would just work with measurable criteria, and that the major categories would be the risk and reliability, economic return, and then we had an other category where we -- we looked to have physical completion. We wanted to start those projects that we already -- that we've already started construction. Let's finish those, get them off the books, and then start working with the priority list. So we give some weight to physical completion.

At that meeting we also decided that we wanted to use the information that we had now, that was available now to develop a list, and so we had an interim option, but there's probably a better way. There's probably other data that we would have to collect to do this more -- the analysis that really needs to be done, and so we would develop a final option: What data do we need for all the projects to be able to rank them versus what we have right now available today.

So, again, we have risk and reliability, and the risk and reliability data is really the condition assessments from the asset management team or the dam safety action classification rating for dams. And then the economic return was net benefits and the economic impact of a 30-day closure. What's missing there is kind of the link between having economic impact of a 30-day closure, but you don't know what's the probability of that actually occurring. So that's kind of the link that we need to move into the final criteria.

Okay. Next slide. Then we met again in Pittsburgh in July right before the PIANC conference, and we moved from what we had developed in Louisville and

discussed that a little bit further. We came up with a couple different interim options and weightings and what we can do with that. We added BCR and RBRCR to the criteria. We thought that the RBRCR criteria would take care of those projects that had already been under construction and so we didn't need that physical completion criteria. It would be taken care of under the RBRCR.

MR. KNOY: What is the RBRCR?

MS. HOEY: RBRCR is the remaining benefit and remaining cost ratio, so only the projects that are already under construction would have an RBRCR. Only projects that have been authorized and have gone through the study process are going to have net benefits and benefit cost ratios, so those projects that are planned right now are only going to have a risk and reliability, a condition assessment, and an economic impact for their weighting at this point in time. And, again, that's why we want to move to some more final criteria with different data that would more evenly weight all these projects on a more even scale. Right now those that are already authorized are going to have a little bit more weight than those that haven't gone through that process yet.

The other thing we looked at in Pittsburgh was decision analysis tools. We had a presentation from a contractor. We've hired a contractor to help us write the report, to gather all this information that we're pulling together and write our final report for us. He also gave us a presentation on decision analysis tools such as Expert Choice. Some of you may be familiar with that. That's something we had decided to pursue in parallel. We're going to go forward with what we have here and we're going to look at Expert Choice or a similar decision analysis tool. That will help us focus in on the weights in a more rigid kind of analysis form than just, you know, what do we think the weight should be and how much weight should be put on the net benefits versus the BCRs, that kind of thing, and go with the different interim options. The decision analysis tool will help us focus in on those weights a little quickly and give us the background to be able to be explain how we got to those decisions.

Next slide. Okay. And then the other thing we've been focusing on -- and the criteria is, you know, to be determined. We're not done with that yet. We have some more meetings to settle in on that and come up with some final recommendations.

The other thing we've been focusing on is the project delivery process. Over the last three meetings that we've had with the group, we've gone through risk-based cost engineering, we've talked about project management certification, we've talked about the different acquisition options that we have: design-build, early contractor involvement, things like that. We've talked about how we typically handle scope changes within our construction contracts, how we go about that, just to familiarize and get everybody on the same understanding of how we go through the project delivery process.

Our next meeting we're going to -- and in the process of that, we have come up with some suggestions for improvements already. Our next meeting, we're going to devote a big chunk of time to brainstorming some more of that.

Next slide. Some of the things that we've already talked about and some of the things that the Corps is already doing. The first three things are things that the Corps has already started, the risk cost-based estimates. At this point in time there are three projects that have those cost-based estimates that are in our suite of projects right now. The Lower Mon, Olmsted and Emsworth rehab projects have all gone through that process, but we have regulations now that identify how that's supposed to happen now.

Independent external peer reviews, that is something also that the Corps' already doing, and the project management certification, that's something the Corps is already undertaking that basically gives project managers the same level of training to be able to manage projects efficiently.

Some of the things that have come up within our discussions. When we have other projects, when we do local flood protection projects, when we do environmental infrastructure projects, we sign a project partnering agreement with our cost sharing partners, and that came up in our last meeting, that that's something that looks promising for us here. Should we enter into a project partnering agreement with the Users Board before we start a project but before we begin construction, to set a time line and a budget for that project, and that would -- that would give, one, the project managers some -- you know, more authority to stick to a budget and a schedule and would give the Board the comfort that we are going to execute that project within the parameters of that agreement. So that's something that we see as very promising. Need to work out the details of something like at that.

We talked about the military construction model where, you know, the military has to live within a budget, and what would they typically do on a construction project is they will identify some things towards the end of the project that will still give them an operating project, but if the costs begin to grow, they can delete those from the scope. That's something that we can pursue in the Civil side also.

We had a couple presentations on acquisition. Early contractor involvement seems to be a very promising acquisition strategy, especially for our larger projects, something like a Charleroi, where we had issues with how we were going to construct that. It may have been very helpful to have an early contractor involvement contract on that project.

We talked about design centers. If we are limited in what we're doing, do we need to put all the experts in one area so that we -- you know, the people that have gone and designed Olmsted are the same people that are going to design the next large project. Whether those designs would be physically located or virtual centers, or how we link that together, that's something we talked about.

Lessons learned, that would kind of link -- go hand in hand with design centers, that we make sure that we're capturing lessons learned from some of the projects that we've already done.

The Users Board concurrence on new starts and also status briefings that you see each month, or at each Users Board meeting we would have milestones that we expect to meet, and then the next meeting you would get a report on whether we met those or what happened since the last briefing.

And, again, our next meeting is scheduled 1 to 2 September in Nashville, and a large chunk of our time will be to expanding this list and kind of fleshing out some of these ideas into a little bit more detail in how we see them moving forward.

Next slide. These are the milestones that we laid out at the beginning of our project. We're now at Users Board Meeting 61, and I've been a little bit generous in saying that we've accomplished all these. The cost engineering confidence levels, Mike Jacobs is going to come up here after me and give you a little briefing on that. We have established those confidence levels and timing for those.

We do have the preliminary priority list, and then, as I said, that's undergoing a quality review right now, so that's going to change. We have done -- I have done some preliminary lists based on the criteria that we have. The weightings that we've given, that's also going under a quality review because I'm not so sure we're yet consistent with the ratings that we have, and so that will also lead to a final list, but we do have the -- some preliminary lists. And, again, the weightings are going to change a little bit depending on the decision analysis tools and our next meeting on the 1st and 2nd of September.

And then we said we'd have a draft outline of the investment strategy. I have draft outline of the investment strategy. I haven't shared it with anybody, so I've generously said that I completed that. That is something -- Steve, but that is something I think we'll add to the agenda for the next meeting, is going over that outline.

And then for Board Meeting Number 62, this is what we said we'd have. We'd have some revenue alternatives, legislative language and a draft investment strategy, and then we'd have some discussion and agreement about what we are proposing at the next meeting.

Next slide. And these are really the next steps that I see to us getting to that point, with the entire process being completed by the end of the calendar year to include the report and everything. So right now we need to incorporate the revisions from our review. We need to continue to analyze and determine our interim option weight. IMTS BOD input, that is the board of directors for the Inland Marine Transportation System, is the division commanders for each division that have inland marine transportation projects. We need to bring them into the loop and let them know how that criteria has been developed and get them to buy into what we're doing.

We need to develop the final prioritized project list based on the criteria that we recommend. And here, review construction program funding level options, and that's

where you have already asked -- you know, we showed the illustrative example of the \$500 million dollar program. You know, I see us looking at our project list and saying what do we get with the \$300 million program, what do we get with a \$400 million program, and what do we get with the \$500 million program, and what is the acceptable risk level at each of those. You know, is it, if we do a \$300 million program, do we have an acceptable risk level with 300 million? Do we have to move to 400 million? You know, what is the risk we are buying into with each of those programs? And then we're going to have to decide what is the right level of investment and then come up with different options to get to that level of investment, whether it's, you know, sticking with the gas tax or coming up with different ways that we can pay for this. We have done a little bit of brainstorming with our group on different revenue options, and we'll continue that at the next meeting.

And then we'll come up with the recommendation for what the team feels is the correct program level and revenue plan, and then roll this all up into a document that shows the long-term investment plan, the revenue plan, and the implementation plan, and that would include -- the implementation plan would include any changes we expect under the project delivery process. It would include how we move forward from this point on.

We have this team together. This is not -- as I said, this is not a one-shot deal. This is something that has to continue on into the future. Each year we're going to have to reevaluate what the prioritized lists are, what the projects are on that list, what projects remain, do some of them come off.

We may have to make some hard decisions on do we -- are there some projects that no longer are in the Federal interest to maintain and to operate. You know, we may have to make some hard decisions, and how are we going to go about that, and that's part of what this team is going to be recommending, and so those are the next steps to get to the final report.

And my last slide is -- we've already talked about this. Go ahead. So we're just going to move on right past this.

This was Gary's illustrative example of the \$500 million program, again, just to illustrate the difference between where we are now with our \$170 million program and what that does to us, where we cannot start one new project until after the year 2040 as opposed to, you know, if -- when we make the changes and we've come up with the solution, we're going to be able to have a reliable Inland Marine Transportation System.

I think I have one more slide. That's it.

I would like to thank first Royce and Steve Little for their participation in bringing the Users Board members to this team, and I think our first meeting, it was a little bit of us and they, and I think we've worked into a "we" team, and we know this is our problem and we need to solve it, and I think we're getting there. We're in the home

stretch. There is a lot of work to be done between now and then, and I think everybody's committed to getting there. Any questions?

MR. LITTLE: Thank you, Jeanine. That's a good overview, and it's particularly important at this Board meeting to have a presentation like that, because we have ten members on the Board right now, and five of them are new, and there's been a lot of hard work done by the five members that's been on the Board. It's very important that we get everyone involved. This is still very much a work in progress and still a lot of work to be done, but that's a very good presentation. Questions for Jeanine? Mr. Woodruff.

MR. WOODRUFF: Well, one thing -- and I think it was a very good summary of what we've done. The one thing that concerned me perhaps a little bit was the -- I think there was a comment that the list of projects was perhaps 95 percent complete, and if there was one thing there that caused me concern, it was that, because, from my perspective, having been an active participant in this, my understanding is that the list of projects was an unconstrained list pushed up from the division level, and the numbers that we saw there in that graph that showed some pretty breathtakingly high cost numbers on it. That is just a sum of this unconstrained list from the divisions before we have eliminated a single project that we don't think merits --

MS. HOEY: Yes.

MR. WOODRUFF: -- being on the list. So we still have, from my perspective, scrubbing. One of the things that we're hoping to have at the next meeting is a one-page summary on some of these projects, because at our prior meetings we've sat there and looked at this line and none of us have known even what that project is or why it's on the list. So I think that there's some projects that will go by the wayside. Those numbers will come down. And before we even begin to start prioritizing projects, I think we'll probably have the opportunity to try to eliminate a few of them, as well.

MS. HOEY: That's correct, Matt, and by 95 percent, I meant 95 percent of the unconstrained project list is complete, and I don't anticipate more projects being added. I think some projects will be taken off, and the numbers, the requirements of funding will be scrubbed and they may be a little bit different, so by 95 percent, that's what I was talking about.

We are going to have the facts sheets for the next meeting, which basically gives the basic information on each of the projects and what the project is, so that we can do some scrubbing on if they need to remain on the list or not.

MR. WOODRUFF: I appreciate that clarification. That sounds fine.

MR. LITTLE: General Temple.

GENERAL TEMPLE: Yeah. I think what Jeanine just said illustrates the continuous nature for what we're doing here. And, you know, the chart that shows the

model there, Jeanine, might bear a feedback loop, so to speak, just to reemphasize the continuous nature of this work.

With that said, the group will continue to look at the list because there may be opportunities such as what we saw yesterday, where Olmsted will replace two facilities ultimately, and there may be other facilities that are currently on the list that, at some point in time, if not relatively soon, we can decide may or may not be needed any longer, and/or could be replaced by some new or different facility or operational scheme. And then, even within the projects themselves, there will be opportunities in the future to look at construction techniques, materials, technologies and the like that will make the system more efficient, and we'll work that as part of this continuous process on the path, but it's a great point. Thank you.

MR. LITTLE: Any further questions for Jeanine?

MR. SALT: Can I make.

MR. LITTLE: Yes, Mr. Salt.

MR. SALT: Earlier Mr. Knoy made the statement or even asked the question of why Chickamauga -- Chickamauga instead of Olmsted, just given the raw economic numbers, and that's an excellent question. The model they had was based on the economic benefits, and I'm not sure that's the only criteria; in fact, the new Principles and Guidelines will say there are other reasons why a project has benefits.

Mr. Knoy's question is still the question. You know, if you're not going to -- if you're going to use a criteria other than the economic benefits of it, you need to understand what that is, and that needs to be there. So I just caution that we just need to be clear about what the benefit suite is, and it might be economic, it might be other factors that we would weigh in there as you do the prioritization.

GENERAL TEMPLE: And what we mean by that is, as the planning guidance is changed, you'll see the opportunity to glean other benefits beyond just economic alone.

MS. HOEY: Right. Right.

GENERAL TEMPLE: That is environmental, safety, social and other benefits. So, again, they will be all cranked in over time, and that will cause a re-racking and stacking on the list over time as we proceed forward.

MR. LITTLE: That might also lead us to ask the question about how the funding addresses some of those, too. If there are other interests beyond economic or navigation interests, if there are potentially other beneficiaries --

MR. SALT: Amen.

MR. LITTLE: -- then we may -- that may lead us down a road with the revenue part of it.

MR. SALT: Amen.

MR. LITTLE: Other questions? None? Thank you, Jeanine. Good presentation. Next on the agenda, a presentation from Mr. Mike Jacobs, of the Corps of Engineers, on risk-based cost engineering. Mr. Jacobs. Thank you for being here.

MR. MICHAEL JACOBS: All right. Mr. Salt, General Temple, chairman of the Board and Board members, I appreciate the opportunity to come here and present on the risk-based cost estimating to the Board. We've had one previous discussion with our working group. We talked a little bit about risk-based cost estimating, some of the changes in cost.

Next slide, please. As I said, I'm Mike Jacobs. I'm from the cost engineering DX. I have been in Walla Walla for about four years. Our chief is Kim Callan. I appreciate the support that we received from the Secretary's office in the past for our cost estimating -- some of the cost-estimating improvements over the years.

Next slide. The real issue when we come back from the whole purpose why I'm here, actually, and when we look back at projects, and Corps-wide is not only -- and also in the general construction industry has had a history of busted budgets, schedules, contingency levels that maybe were not accurate, and overall, also, the way our process works where we have -- we request in the President's Budget. The House and Senate subcommittees have the ability to change what's actually funded over what may have been requested can create some challenges, and we also have some bottleneck issues with these processes and projects as we go along through their life.

Next slide, please. About three years ago, because of some of these issues, there was a group put together who worked on a cost estimating improvement initiative. As part of this, we commissioned San Francisco District to do a study and see where costs had gone wrong in the past, what the issues with these projects were, what was really causing the issues. And what's interesting to find is not necessarily the actual details of the estimate and the quantities were causing the issues. We go back to that we may have to -- the initial definition of the product, what the product was that was presented at the early budget stages, maybe versus what was actually advertised for contract award were different; i.e., what had happened is the scope of the work from conception to the actual issuing of the contract had changed, and that was not captured.

Another issue: accurate contingency levels. The Corps is a little bit unique in that we have two distinct sides of construction. We have the military side, we have the civil work side. The guidance for contingency levels on the military side is pretty straightforward. We have 10 percent for new construction, 15 percent for remodels.

The guidance on contingency level for civil work has been a little more nebulous, the guidance in the past said you asked for the contingency level you deem appropriate.

So what is an appropriate contingency level? We didn't really have a defining mechanism to how you determine that contingency level. So many times maybe a project was put forward with an inadequate level of contingency based on its level of design and scope.

So -- and as we get back in, when we really look at the details, the actual estimate that was done back at the budget probably for what was given was not that inaccurate. It was these other issues that were causing the problem. Slide please.

So as part of that initiative, what's come out is basically the cost initiative of the Corps of Engineers, we revamped all of our guidance, our regulations, based on some of the lessons learned from the study. So we go through -- the big issue -- the biggest thing that came out of this was Major General Riley instituted risk-based cost for the determination of contingencies. He said we're going to use cost-risk analysis to determine contingencies.

We reinforce that in our -- in a couple of E&C bulletins. We've worked with the reg writers on the planning guidance notebook. Also in Engineering Design for Civil Works to actually further define what level of design you need to have before you actually push the product forward. So we revamped these regs to fix some of the current problems that we've seen from our past.

Next slide. Now, the three big things that came out on this are the agency technical review. And this may be confusing because we changed it. It was initially called independent technical review, but basically the agency technical review, in a nutshell, if we're sending a product up to Congress for a decision, it's going to go through a single point review, one entity at a time. Kim Callan, my chief, he reviews the final review of the estimate and sends it on back to headquarters saying that it's been looked at to a certain standard using our checklist and meets the rules, regulations and criteria. Big impact on the process. So now we have standardization of how all these products are going to Congress, so they're all at the same level.

The next thing we've also done, cost and schedule risk analysis. We've implemented a policy that anything greater than \$40 million, we're going to do a formal cost and schedule risk analysis on and that goes all the way back to the feasibility level. The process starts and continues on through planning, engineering and design stage.

So to get through this cost risk -- pardon me -- this risk analysis for the development of the contingencies is going to be used on all projects also, but for the big ones, formal -- a formal process.

Next slide. The other thing we've also instituted is a total project cost summary sheet. Basically what this sheet shows, it shows basically all of your cost estimates,

brings all the costs to a program year price level which is used for budgeting purposes, and it also shows a estimate of the fully-funded cost of the project.

So the implications of the regulations on this also state that now these estimates can be used every year, cannot be more than two years old. So what this creates is it solves the problem where we may have more of a process issue, we may have a project authorized. It may be 10, 15 years before it ever actually receives funding, and over the course of that, things may change. The design criteria may change. Rules and regulations on how it's designed may change.

We have seen projects that those things were not accounted for in adjusting the current cost of the project, so we're still carrying forward that authorization amount with escalation forward. So what this has done is, on a two-year basis, we're going to look at each of these projects and actually say, hey, has anything changed, are our costs still valid, has the scope changed and our costs real. So that will key management that there may be issues with the project sooner. When we actually get to contract award, we find the price may have doubled or tripled.

Next slide. So we go through this slide basically dictates over the life of a project what happens to the cost. When we start off back at the initial plan formulation, we have a relatively high risk, and all the alternatives probably comes out to about the same cost. And as we go through the life of a project, we start defining our criteria, nailing down the scope, selecting the alternative impacted. We see that the cost of changes grows with time. And ideally -- you know, once the contract is awarded, a change afterward can be very expensive in relation.

So we go back and we look at this process. The changes we've implemented in our process now we hope to get back and actually capture the degree of risk early on, nail down the project, so that we don't have changes after we've started we've gone into the design process and further into the contract award.

Next slide, please. Ideally as we go into this, this representing the price of a project over its lifetime, what we want to do is back at the early budget. Through a cost schedule risk analysis, we're going to accurately capture that contingency value all the way back at the feasibility level so that once the project is awarded, we can then manage the project within the contingency we started off with, so ideally we can finish off with the project cost on budget, on time.

And essentially this comes out to it's -- really, it's just a risk management process and through -- in a roundabout way, through the cost and schedule risk analysis, this is how we're actually working on implementing risk-management-type processes into the project management processes of the Corps.

And as we go through -- similar to the previous slide, which states it real simple something you start out right at the beginning of the project, you identify the risks, the

issues you have, and then set your contingency, actually, and manage within the bounds of that design and deliver to cost and schedule.

Next slide, please. I'm going to talk a little bit briefly about our actual cost and schedule risk analysis process. So, and I said, our implementation cost and schedule risk analysis at this point is our technique to develop our contingency level for the cost and the schedule, and so we're going to formal analysis full report. Everything will be done on projects \$40 million or more. We're currently in the phase right now where we're actually training and developing this capability within the Corps. I would expect within a year or two the formal cost and schedule risk analysis requirement, that level will probably be lowered, below \$40 million a year, and applied to all projects.

The one issue I want to bring up also is this is a qualitative and a quantitative process, and the quality of your output is only as good as your input. So it still relies on a good, solid cost estimate and schedule before you enter into the process of examining the risks. You have to have a good estimate to begin with, because no risk analysis will fix a bad estimate.

Basic process. Using our product delivery team, the processes we've already developed is the team actually develops the risk registry and also develops the cost and schedule model. Then they go through -- once we've developed the model, we start looking at these risks -- the risk elements that are defined, figure out what their impacts are.

And then we also look want to -- emphasize, you want to look at ways to mitigate the risk, and then we -- one of the most important things, we develop the confidence level, the contingency level for the project, and we also have to communicate that to the leadership. The team members, the leadership at all levels and also the sponsor.

And then the other key factor is you have to monitor and act on this, you have to continually actively manage the project, because this risk analysis in reality is a snapshot in time. If you don't continue to manage and ride herd on the process, you will -- you can have problems.

The real emphasis I want to place on this is that it is a brainstorming process as we go through this by the team and go through and develop it, and want to make sure we stay focused on the project and identify the real specific risks on the specific items that we can call problems. And we also want to make sure we use it as a communication tool for project managers, district, division and headquarters management at all levels.

Basically, when we look at our risk assumptions we go through, we've got our known knowns, and those are things that we know are going to happen. We want to work in our estimating, to put the known knowns, the cost of those, actually into the cost estimate. If you know it's going to happen; it should be in there.

We also have the unknown knowns. These may be models with more of the risk, events that may happen such as weather, flooding. We want to try to quantify those and see what those do for the cost and our schedule if they happen.

The other issue we have, we also have the known unknowns, and this is part of where the process is just as important as the output, because through this process, brainstorming, getting together and working with the team, we want to make sure that all these little issues that somebody knows about are brought to the table and communicated.

And we also have the unknowns. There are always going to be things that come out that you never dreamed would ever happen, and those can still happen, but hopefully we've gone through this process and the team has a better knowledge of how the processes work, what can impact the job. When the unknown does happen, we're in a better position to manage that and cope with it and recover.

This is an example basically of a risk analysis spreadsheet. This is a risk register. It starts off, basically going through this process, we're going to identify what the actual risk item is. So -- and then once we've identified what the risk elements are, we try to determine what is the likelihood of it happening. Is it a great likelihood? A small likelihood? And then, we also then look at, if it does happen, what are its impacts, will it be small, large. And then we go through and we also try to identify mitigation strategy or follow-on events that may occur: If this does happen, what then also may happen. This is the qualitative part of the risk analysis.

We can go on to the next slide. Then the quantitative part comes. Basically this risk analysis, we've identified these risk items. We try to go through and develop a model where we actually assign cost and schedule deltas to each risk factor. So -- and what happens with these, once we developed a model for each of the risk elements, we go through them and we run a Monte Carlo simulation, running through thousands and thousands of iterations to determine what the actual average output is of the risk.

So, slide. So we get done with the process. We end up, we have a risk register, we have our most likely estimate, our most likely schedule. We have our worst case, best case scenarios for cost, and we also have our model and our output.

Slide. As the next phase, once it's complete, we go through and we want to look at -- this is the sensitivity chart. This is probably one of the most important things of the risk analysis, especially from the management perspective. This sensitivity report tells you the things that should keep you awake at night. We've got all these risks on the project, but when you look at this, the items that fall off on the highest on the chart -- it's also known as the tornado chart -- are the items that are causing issues with the risk analysis and the contingency level. So that gives you an area to focus on where you should be spending your resources. The items that show up with the highest sensitivity, should probably dedicate the most resources to trying to come up with a mitigation plan.

Next slide. The other issue that comes out of this product is actually the communication of the cost and contingency level of a product. This graph is actually a plot of our most likely cost estimate, which is the red line. Then we've also got basically the output of our model, the cost at each confidence level starting from zero to 100 percent.

This area in the center represents the contingency level at each confidence percentage. So, for example, at 80 percent confidence level, the contingency that we would recommend would be based on this value. Here on this slide, it's about \$700 million -- sorry I can't even read my own slide -- it's about \$80 million in this -- in this area, which equates to about 35 percent for this -- for the math in this.

And then the development of -- sorry, you can go on. But one of the most critical aspects on this we have to go through is we actually have to continue to monitor, update this process through the life of the project and go on.

And then we'll go back to the slide. But the real emphasis on this, when you look at the summary, we place a lot of emphasis on getting an accurate costing schedule up-front, make sure the products are well-defined. We have to have a well-defined scope, make sure we capture all the items that we're actually doing this process.

And we go through a formal process on these large costs -- these greater than \$40 million projects. We're going to go through a full, formal analysis, write a detailed report of what's going on. And we're also recommending using this on new, experimental, one-of-a-kind projects, also even at any level just so that we actually capture an accurate contingency level.

And we're also working -- there is an issue -- there's an imperative going on in the Corps, actually. They're going to put more emphasis on the overall risk management process, and that is actually coming. We've already started the process with the cost and schedule risk analysis.

We're out of time? I think we're a little ahead of schedule, but I'm looking forward to any questions if anyone has questions at this time.

MR. LITTLE: Thank you, Mr. Jacobs. That's a very informative presentation. Let me ask a couple questions to start with. I think you referred to earlier in your presentation here a study that took place about three years ago, 2006?

MR. JACOBS: Yes, sir.

MR. LITTLE: Was that across all Corps business lines?

MR. JACOBS: What we initiated, then we used San Francisco District, and they did an informal study through all of the cost departments across the Corps and asked

some basic issues on what were causing the problems, and these were the top issues that came out.

One thing to note, interesting, there was also a report by the American Association of Cost Estimators from private industry that the results, very closely mirrored our results.

MR. LITTLE: Okay.

MR. JACOBS: So the Corps issues are also out there in the business world.

MR. LITTLE: Right. But this is not just navigation?

MR. JACOBS: This is Corps-wide.

MR. LITTLE: And obviously something prompted the study, not only by the Corps, but by the outside group. Because when the estimates are varying from estimates with actually costing in the projects. Gotcha. Now, did you participate in the selective case studies?

MR. JACOBS: No, sir.

MR. LITTLE: Okay. But someone from Walla Walla did?

MR. JACOBS: Jim Neubauer reviewed the report. He didn't participate in the development of the document.

MR. LITTLE: So there wasn't anyone from Walla Walla who participated in the selective case studies?

MR. JACOBS: I do not believe so, sir.

MR. LITTLE: Okay. So they didn't do -- or did they do any kind of sensitivity report? That was one of your slides up there about the sensitivity report.

MR. JACOBS: Not that I'm aware of.

MR. LITTLE: Could one be done? I mean, what's involved in creating a sensitivity report?

MR. JACOBS: I believe at the -- on the case studies after -- on some of the reauthorizations for some of the projects that did do risk analysis, those were reviewed. However, I want to make sure to clarify that the risk analysis for the projects did come through and were reviewed. I believe the case studies report may have been written prior to some of this guidance on risk analysis.

MR. LITTLE: I'm not sure I follow all that. Let's try that again.

MR. JACOBS: On the projects we have, we have three of the projects now that have a cost and schedule-based risk analysis for the contingency. We have -- I believe that may have been working in parallel with the development of that -- of that report you're referring to. So I believe that we did review the cost of the risk analysis, but the actual report, we didn't participate in the writing of the report.

MR. LITTLE: You did not participate in the writing of the report?

MR. JACOBS: Not in the writing of the report, yes.

MR. LITTLE: But you reviewed the report; someone from Walla Walla reviewed the report, and who was that?

MR. JACOBS: It was Jim Neubauer.

MR. LITTLE: And so Mr. Neubauer is kind of where in the pecking order in Walla Walla?

MR. JACOBS: Jim Neubauer, actually, he's the ATR coordinator. He coordinates all the work with us for ATR. He schedules them and he also assigns the reviewers to the project that comes through then and ensures that they're completed.

MR. LITTLE: General Temple.

GENERAL TEMPLE: Yeah. I think we may be talking past each other here because we're not talking about the same thing. You're talking about the case studies that were done, "The Good, The Bad, and The Ugly", as it has been informally referred to -- that -- and I think that's what you're talking about. You're talking about a different set of case studies. So to get after the answer to your question, I'll ask Jim Walker here to just tell us succinctly were the case studies subjected to a risk analysis or sensitivity analysis as a part of this work.

MR. LITTLE: Thank you, General. And, Jim, I know we all know you, but you need to identify yourself again.

MR. JAMES WALKER: Okay. I'm Jim Walker with the Navigation Branch of Headquarters. My understanding is, during the course of the development of the case studies, we were looking at in hindsight of what the cost was to have been. Independent of that, we were also looking at the ongoing construction work that's underway and doing the risk-based cost-engineering analysis for those projects. So we've got the case studies report looking in the past and then an ongoing effort with the risk-based cost estimates for the projected future final costs of the work that's currently underway. Does that help clarify it?

MR. LITTLE: That helps clarify it somewhat. Now, during the development of the selected case studies that the General referred to -- I don't refer to it that way, but the way the General referred to it, was there participation from Walla Walla on that team that wrote the selected case studies was my question.

MR. WALKER: Okay. And as the case studies were developed, I believe that late in the process is when Jim Neubauer actually came on board to do this.

MR. LITTLE: Right.

MR. WALKER: So there was -- the ground work was done by the folks of the Great Lakes and Ohio River Division, those three that were actually different districts, then were assembled into a single report, and at that stage, Jim Neubauer participated in the review of that just prior to it being finalized.

MR. LITTLE: Right. So he reviewed the study before the release of the study; is that --

MR. WALKER: Yes.

MR. LITTLE: Okay.

MR. WALKER: Yes, sir.

MR. LITTLE: I think I understand that. Now, on the question of the sensitivity report, Mr. Jacobs or Mr. Walker, either one, what's involved with doing that? Can you explain to me a little bit more about the sensitivity report?

MR. JACOBS: Sure. When you run the analysis, basically what the Crystal Ball software will do is it will identify the largest contributors by percentage to the actual overall risk at a confidence level, and then, essentially, as you look at your overall risk percentage at each level, when you go through that, you determine based on the confidence level you want to have on some of that management at the district level determination of what confidence level they want to report on a request for contingency, and as they look at the level, at, say, 50-percent confidence level, you may be risk neutral -- it could go either way. It may cost more, it may cost less.

At 100-percent confidence level, you're starting to look -- you're entering into the situation where all these bad things happen, which is highly unlikely. So at a 100-percent confidence level, you may have too high of a contingency. So what -- looking through the development, we're recommending at this time using about an 80-percent confidence level to cover contingencies. Because at 80 percent, some of the bad things probably happen. Some of the good things probably happen also, too, you may identify, and that gives us a little higher confidence that we actually delivered the project on budget.

And part of this comes from other agencies that are actually also recommending 80-percent confidence level. The Department of Energy has been spearheading the use of risk-analysis techniques for a few years before the Corps started. They use 80- percent confidence level.

Also, you know, it is a new process. In an ideal world, theoretically, you know in a risk averse -- a risk-neutral 50 percent may be adequate, we want to take a little more conservative stance, especially with some of the issues we have with the criticality of, having the right amount of funding at the beginning of the project, because if you run into an issue with funding problems, with our overall process where we budget two years in advance, we have to coordinate with OMB to actually get the money. They're on a five-year cycle.

If you look at the implications on our process, not having enough money going into a project, you create a substantial delay, because it could be three to five years before OMB can reshift the funding to actually get you the amount of funding you need.

MR. LITTLE: Thank you. Thank you, General for that explanation, too. Anyone else, questions for Mr. Jacobs? Thank you.

MR. JACOBS: Thank you, sir.

MR. LITTLE: All right. Thank you, everyone. At this place on the agenda, we have a public comment period. If there's anyone who wishes to make a comment on the record. This is a public meeting, please approach the microphone and identify yourself.

If not, then moving on, closing comments and summary. I just want to thank all the new Users Board members again, as well as the Corps staff and everyone who helped put together this meeting in Paducah today. It's been a very informative one and a half days here.

There's a great deal of work that remains to be done, a lot of heavy lifting, and I think this has been a good, informative outline of some of the challenges that are ahead of us.

I appreciate Mr. Loew's presentation and general commitment to this process, his leadership, and we look forward to working with you all in the weeks and months ahead. General.

Yeah. No. Yeah. No. Rick is still with us for a while. Yeah. We're in good shape.

General Temple, closing comments?

GENERAL TEMPLE: Well, again, I just want to thank everyone here in Paducah for supporting the conference, the folks in the district and division that did, as well.

I think we had a good overview of the way forward here. But as Jeanine said, we've got a lot of work to do to get to the point where we can lay out a number of scenarios for the Board to consider before the end of this calendar year, but our commitment to you is we're going to stay after it and to get it done. So thanks very much.

MR. LITTLE: Thank you, General. And, Mr. Salt, any closing comments?

MR. SALT: No, sir. Thank you.

MR. LITTLE: All right. Thank you again for being here, Mr. Salt. If not, then this meeting adjourned. Thank you.

(Thereupon, the proceedings of the 61st meeting of the Inland Waterways Users Board, held on August 11, 2009, were concluded at 12:19 p.m.)