

**The Port Authority of New York and New Jersey
Committee on Capital Programs/Agency Planning Meeting Transcripts
April 28, 2011**

[Chair H. Homes] I'm going to get started. Today's meeting of the Committee on Capital Programs Agency Planning is being held in Public Session in its entirety. In addition, this meeting is being broadcast live on the Port Authority's website for those interested in viewing today's proceedings via the Internet. The only topic on the agenda today is the Holland Tunnel replacement of supervisory control system with a presentation by Mr. Fulton.

[C. Fulton] Thank you Commissioner. Good morning, Commissioners. I'm here today to discuss the planning authorization for projects evaluating the replacement of the supervisory control system at the Holland Tunnel. The existing supervisory control system monitors and controls a total of 31 sub-systems. Most notable of these include fire protection, tunnel traffic control, electrical service ventilation, and plumbing sub-systems. The system is over 25 years old, has exceeded its design life, is technologically obsolete, and requires excessive maintenance to provide operational maintenance. The age of the equipment also makes it difficult to obtain parts. The supervisory control system is not computerized. The photograph at the left is a close-up of part of the system's control board located in the control room. The board provides control and indication for electrical and mechanical sub-systems. Indicator lights along the middle of the board are used to monitor the status of the sub-system while pistol-handle and push-button switches along the bottom of the board are used for control. The tunnel operator must press buttons manually and move switches in order to provide proper operation. The control board is to be replaced by a computerized workstation. The photograph at the right is a view of the copper wiring inside a typical system relay panel. The wiring used for the supervisory control system communication network is obsolete, requires frequent repairs, and should be replaced by a fiber optic network. A new supervisory control system will improve reliability by replacing the existing deteriorating copper wire communication network with a fiber optic network. A computerized system will increase operational effectiveness, allowing improved control and monitoring of the sub-systems by the tunnel operators. Since the system will be new, the maintenance and operating costs will be reduced. The replacement system will also allow for the inclusion of additional equipment in sub-system control and monitoring function as the future needs of the facilities dictate. Today we are seeking Planning Authorization for \$1.3 million to develop a comprehensive program to replace the existing supervisory control system at the Holland Tunnel. Work performed under this Planning Authorization includes evaluating the condition of the existing system equipment, developing strategies for integrating the replacement system onto the existing fiber optic network, and preparing preliminary design drawings including construction cost estimates. The plan is expected to be completed by the first quarter of 2012. At that time, we expect to return for project authorization. Commissioners, we request your approval to advance this to the full Board. Thank you.

[Chair H. Holmes] Any questions?

[Comm. D. Steiner] Yeah. I think what you're doing is long overdue. Do you have any idea how much this system will cost us?

[C. Fulton] The total project cost estimate right now is approximately \$24 million, sir.

[Comm. D. Steiner] Do we have that included in our budget--in our Capital Budget? Has that already been placed in the Capital Budget?

[C. Fulton] The amount for the current planning year--

[Comm. D. Steiner] I'm not talking about the planning of actually doing the work. Do we have the money in the budget--has it been put in the Capital Budget?

[C. Fulton] It's in the plan. Once the full budget is approved, it will be provided for.

[D. Tweedy] It would be in the 10-year plan.

[Comm. D. Steiner] It is included, that's what I wanted to know.

[D. Tweedy] We are about to undertake a whole reprioritization of the 10-year plan, it will definitely be included.

[Comm. D. Steiner] Well, I think this essential because you are dealing with life safety issues where we're depending on people to do things instead of machines to watch it, and we all know what happens when people-- we've seen the extreme in the FAA with people falling asleep at the switch. And I hope that with this control center that there'll be a remote system somewhere in case something happens to where you have the control center placed in case there's a tragedy, at least it would be replicated in controls at a remote location. Which I think we should--

[Comm. V. Bauer] We should have a backup.

[C. Fulton] There are.

[Comm. D. Steiner] Which we should be doing with all our things that have a major control center.

[C. Fulton] The main center is in the Maintenance Garage at the Holland Tunnel on the New Jersey side. There is also auxiliary workstations in the vent buildings as well as in the toll house. So we have the redundancy today.

[Comm. D. Steiner] I meant the supervision to oversee it--I think that's something you ought to be thinking about with this and all our other controls that we have a command center somewhere that replicates everything in case there's the disaster like 9/11 or who knows what else is gonna happen. I just think you ought to put that in. Who is going to be doing this study? Are we hiring outsiders to do it?

[P. Zipf] Commissioner, it's mostly in-house staff. We will have an electronics engineer from one of our call in firms who will be working with us, but the electrical work, the architectural work, the structural work would be in-house, and we'll have an electronics expert work with us as part of our team.

[Comm. D. Steiner] I'm sure they are people who have done this, though.

[P. Zipf] Yes.

[Comm. D. Steiner] I presume with people who are recognized, so we don't have to go to school with them.

[P. Zipf] Absolutely. We actually have done early work on this, and now what we need to do is basically refine that.

[Comm. V. Bauer] This would not be a difficult undertaking. To me, our system seems to be very antiquated right now if we don't even have a computerized system. Is that correct?

[P. Zipf] The difficulty, Commissioner, with these systems is the integration part, as we know. Many times we roll out systems and the software changes by the time we're done--

[Comm. V. Bauer] Exactly.

[P. Zipf] is outdated.

[Comm. V. Bauer] But updating software is not difficult.

[P. Zipf] Exactly and what we're hoping to do here is that the integrator will be a key player, and the integrator will insist that there will be open architecture software. So should we have to change one of the ancillary systems, we'll be able to plug it in and get it to work. So we're hoping that's gonna relieve some of that system changes in the future.

[Comm. V. Bauer] Exatly.

[C. Fulton] As we think about it today, there are 35 different systems that we contemplate being controlled by this supervisory control center.

[Comm. V. Bauer] And there must be a way to uniform that a little bit more fluidly and as Commissioner Steiner says, then there's a better opportunity to oversee and God forbid something happens, everything can be connected. Okay, thank you.

[Comm. D. Steiner] I just want to add a couple more things. I'm glad that you're doing this, and I think it's going to be a worthwhile project. There won't be any problem doing this work in parallel keeping our system in operation while the new work is going on so get all the new work and switch over. I think that someone should be looking, and I don't know if this is the right Committee, should be looking at other systems that we have and seeing that we have the most modern up-to-date things that are automatic as possible, and that they're overseen, and I commend you for the work you're doing. I ask you to look-- whoever's in charge--to look at other things that we do so we can get many of these fail safe things. Thank you, and I think that I move for approval.

[Chair H. Holmes] Any other comments?

[Comm Pocino] I have one other question that Commissioner Steiner pointed out. Is there any way that your--maybe you already know--that you can give us an indication of how many copper wire old type systems we have here that can be transferred over to this kind of technology? And we should.

[P. Zipf] Just to point out, we've changed to fiber optics already, and that was part of the Holland Tunnel Vent Rehab Program, so a lot of the fiber is already in. Now it's going to be a matter of bringing that all into a control center-- really building that control center, bringing the computers in, bringing the servers in, and having and having it all to talk.

[Comm Pocino] So in this Capital--when you included it in the long-term Capital Plan, you're gonna have all this in to it?

[P. Zipf] Yes.

[Comm Pocino] All the others that have to be in it?

[D. Tweedy] There is a lot of asset management work being done on this Commissioners, looking at these kinds of infrastructure and figuring out over time how to replace it. The other thing I would say is there's a technology steering committee for Kirby King, who is the newly appointed head of our technology area. He's developed very nice strategic plan looking at things like redundant systems, and we will talk to him about making a presentation as appropriate. Either to audit or to construction, because--

[Comm. V. Bauer] That was gonna be my question.

[Comm. D. Steiner] Full speed ahead.

[Comm. V. Bauer] Do we have an IT person who oversees all of our technology, and if so, would there ever be an opportunity for someone like that to give us a report on all of our systems?

[D. Tweedy] Yes.

[Comm. V. Bauer] Okay.

[Comm. D. Steiner] Do we have the same situation at the Lincoln Tunnel? We have an antiquated system at the--

[P. Zipf] About 10 years ago we replaced the Lincoln Tunnel already. So that's already been--

[Comm. D. Steiner] With fiber optics?

[P. Zipf] Yes. That's already been updated. We delayed this program because we wanted to see the Vent Program in place, and that Vent Program added the fiber optics, so we piggybacked--

[Comm. D. Steiner] What's a Vent Program?

[P. Zipf] We're rehabbing the ventilation system at the tunnel which is--that's the one we talked about a

couple months ago. It's a complicated job--we're still working--it's in construction now.

[Comm. D. Steiner] Thank you very much.

[Chair H. Holmes] Any other questions or comments? Then I give the motion to move this through approval.

[Comm. V. Bauer] Second.

[Chair H. Holmes] Any abstentions, objections, recusals? Hearing none, all in favor. Aye. Okay. Is that it? Motion to adjourn the meeting.

[Comm. D. Steiner] No, but you have to say your closing.

[Chair H. Holmes] It is not being closed.

[Chair H. Holmes] Motion to adjourn.

[Comm. V. Baer] So moved.