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PUBLIC HEARING - PENNSYLVANIA HIGH-SPEED MAGLEV PROJECT

BEFORE:

Representative Joseph Markosek, Majority Chair

Representative Richard Geist, Minority Chair

Representative Paul Costa

Representative Dick Hess

Representative Mark Keller

Representative Mark Longietti

Representative Chelsa Wagner

ALSO PRESENT:

Stacia Ritter, Executive Director of the Majority Staff

Eric Bugaile, Executive Director of the Minority Staff

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CHAIRMAN MARKOSEK: Good morning, everybody. The meeting will come to order, please. First order of business, I would like to recognize an old -- I shouldn't say old -- a friend of mine, especially from my Port Authority days, Henry Brown. I would like to ask that Henry lead us in the Pledge of Allegiance.

(The Pledge of Allegiance was recited.)

CHAIRMAN MARKOSEK: Thank you very much. I also want to, first of all, thank the folks from CMU for their wonderful hospitality here today in allowing us to use this very beautiful room for our hearing. Also, PCN, I would like to thank them for their efforts in being here as well. I don't have a whole lot to say. I'd like to get started.

I just want to say that we're having this hearing to get a little more information on Maglev. Chairman Geist and I had the opportunity to ride the demonstration Maglev Project over in Germany back in 2001, and it was a very interesting experience. As we know, a lot of these big projects, the devil is always in detail, and that is part of what our committee is all about, is trying to figure out the details and try to move transportation projects along.

With that, I would like to recognize Chairman Geist for some remarks.

CHAIRMAN GEIST: Thank you very much, Chairman Markosek.

It has been a long, long time for me in this business of high-speed rail. That trip in 2001 when we were in Bremen, the Chinese signed a contract that very day that we were there to build a Transrapid in China. As this movement all over the world keeps progressing, we in the United States, I think, are finally going to get a start. I am just pleased to be here today, and have the members of our committee hear some existing news coming out of Western Pennsylvania.

CHAIRMAN MARKOSEK: Thank you very much, Chairman Geist.

With that, we'll get started. We have a panel of folks that we're going to start out with. First of all, we have Mr. Toby Fauver who is the Deputy Secretary for Local Area and Transportation with PennDOT. We have Mr. Mark Yachmetz who is Associate Administrator for Railroad Development of the Federal Railroad Administration. Also, Jackie Erikson who is the Southwest Pennsylvania Regional Director for U.S. Senator Bob Casey, who could not be here, and she will read a statement from him.

With that, we will start with Mr. Fauver.

MR. FAUVER: Thank you, Chairman Markosek,

Chairman Geist and other members.

Pennsylvania has been involved in the development of this Maglev Project in Pittsburgh for quite some time. I wanted to focus my remarks on the status of the project, and the status of some of the applications that have been submitted for funding. This high-speed Maglev Project is approximately 54 miles in length. It would include five stations running from the airport, Pittsburgh International Airport, Greensburg, through Downtown Pittsburgh. It's projected to reach or exceed speeds of 240-miles-per-hour. The cost of the project when it would be constructed based on 2003 cost estimates is about 4.5 billion dollars. The ridership of the project was estimated to be about 41,000 riders per day. The annual operating and maintenance costs of the project is about 31 to 32 million dollars, of which fare revenue from passengers, and advertising, and other revenue coming in for the project are projected to cover 100% of the costs for operating the project.

To date, there has been about 30 million dollars committed and expended on the project, including almost 7 million dollars in state funding to match federal funding that has been committed to complete the Environmental Impact Statement, the planning work, and 10 to 15% conceptual design of the project. Most of the

work has been conducted through the Port Authority of Allegheny County. PennDOT has issued grants to the Port Authority of Allegheny County, and Port Authority has proceeded with the project from there.

In 2005, safety moved, included 90 million dollars of funding, additional funding eligible for Maglev projects to continue development work. 45 million dollars was designated for projects east of the Mississippi River. Pennsylvania submitted an application upon notice of funding availability on February 10th of 2009 for 45 million dollars. Of that funding, the entire amount available for the eastern part of the country. That funding was to be focused on finishing environmental work, revising, updating the financial plan, cost estimates and putting together, basically, a 30% design-build package to have this project ready to go to Alfred Design and Build Construction.

We were awarded 28 million dollars a little bit earlier this year from the Federal Railroad Administration, and we're currently in the process of working with the Federal Railroad Administration on the revised scope of work for that funding. We also received an earmark of close to a million dollars of federal funding from 2009 procreations. That earmark, we do have an application into the Federal Railroad

Administration, working on getting a grant agreement with the Federal Railroad Administration for that funding. That funding is intended to continue for the environmental activities to prepare the final Environmental Impact Statement for publication. The majority of that funding is to design and extend a fit-up table for the Maglev guideway beam construction.

We're currently working with local and federal partners, Port Authority of Allegheny County, and other local partners, as well as, the Federal Railroad Administration to get this grant funds under agreement. In addition, we submitted earlier this year an application for 2.3 billion dollars of stimulus funds for the first leg of construction of this project. It would go from the airport to downtown. That 2.3 billion is intended to quickly follow on the completion of the design-build package, that that project could go to construction.

That concludes my remarks.

CHAIRMAN MARKOSEK: Okay. Thank you. Mr. Yachmetz -- pardon me if I didn't pronounce that correctly -- from the Federal Railroad Administration.

MR. YACHMETZ: I am happy to appear here today to discuss initiatives of President Obama, Vice President Biden and Secretary of Transportation Ray

LaHood, and that is to develop high-speed rail transportation in America. My name is Mark Yachmetz. I am Associate Administrator for Railroad Development. In that role, I oversee FRA's investment programs for the rail industry. This includes a direct and complex relationship with the National Railroad Passenger Corporation, better known as Amtrax, Railroad Research and Development, the Railroad Rehabilitation and Improvement Program, loans and loan guarantees to the industry. Several programs of discretionary grants, including the new presidential high-speed rail initiative, and projects specifically identified by congress, including the Maglev Employment Program authorized recent service transportation.

Before I begin, I wish to note that the guys from the White House on these limitations of the American Recovery and Reinvestment Act of 2009, which some people call Recovery Act or the stimulus bill, prevents me from discussing any application for financial assistance pending before the Federal Railroad Administration, or the Department of Transportation.

So with that as, sort of, the lead-in, the discussion of high-speed rail tend to begin with the fundamental question: What is high-speed rail? Some prefer to confine high speed by peak speed, and, say, 200 miles

per hour. Some say high speed is average speed, or trip time. FRA in a 1997 report, High-Speed Rail Transportation for America, used the more market-oriented definition, that is, service that could cost effectively be a preferred avenue for intercity travelers in the specific transportation market. Using that definition, high-speed rail is service that is superior from the time we have it as a standpoint to air and/or auto on a door-to-door basis. In other words, if my boss -- and I have three -- leaves his home in Chicago and travels to a meeting in St. Louis and the total trip time by rail is better than flying or driving, then that rail service is high-speed. What that means is peak speeds and average speeds of high-speed rail are not one set numbered and shouldn't vary by market served. The speeds needed to effectively serve Los Angles and San Francisco, a distance of 450 miles, is different from speeds needed to serve the market between Washington and Richmond, which is a distance of 90 miles.

In our vision for High-Speed Rail America, we would require to publish under the Recovery Act. We used four definitions to talk about the different options of high-speed rail. Conventional rail, which is, sort of, what you see out there today. Services up to 100 miles.

Peak speeds in the 79 up to the 90-mile-an-hour range. The merging high-speed rail, 100 to 500 miles in lengths with top speeds of 90 to 110. Regional, high-speed regional, which would be speeds 110 to 150 that could serve 100 to 500 mile ranges in terms of market. And then express, where major population centers are between 200 and 600 miles apart, and with few intermediate stops at speeds in excess of 150-miles-per-hour.

So in discussing high-speed rail, we need keep in mind that we're talking about range of technologies and range of investment options. They each have their own sets of opportunities and challenges. One of the reasons why we're doing high-speed rail is high-speed rail aligns very closely with this administration's overall strategic transportation bills. High-speed rail is very compatible with our transportation choices, promoting energy efficiency and environmental quality, and building a foundation for economic competitiveness and supporting the inner-connected livable communities.

However, with high-speed rail developing, we have great opportunities, but we also have great challenges. The first is safety. FRA's first and foremost mission is safety. If high-speed rail is to be successful, it must be safe. Newton's Second Law of Motion was not revealed by high-speed rail. That is, that force equals

mass X acceleration. It has significant implications for high-speed rail. When things go wrong at high speed, a derailment as an example, repercussions can be significant. Then you point to the strong safety record of foreign systems, operating purpose-built infrastructure, draw the conclusion that high-speed rail is inherently safe. That is just not the case. Then it becomes from superior design, and factoring superior operating requisites, superior maintenance and above all, superior vigilance. At FRA, we call this a strong safety culture.

We have recently made available for comment at high-speed rail safety strategies. The goal of this strategy is to address how we will establish safety standards and program guidance for high-speed rail, and how we will apply system safety approach to address safety concerns on specific rail lines, and how we can effectively manage trains and emergencies. This strategy endeavors that we achieve uniformly safe rail passenger service, regardless of the speed, and regardless of the technology.

Another challenge we have is the capability of the states. There are a handful of states that have been actively engaged in railroad issues for many years. Unfortunately, Pennsylvania is one of those.

Unfortunately, states with strong and experienced rail-oriented institution structures are actually the exception rather than the rule. This is understandable, because for the last 50 years, the Federal Investment Rail, to the extent that it has existed, has been really a bipolar relationship between the Department of Transportation and Amtrak. So now there is a significant pressing need to help states develop and maintain internal staff resources and capabilities that oversee the management of planning and programing of high-speed rail.

Again, one of the other issues that we are really pressing on is the status of planning. A few states have been actively planning. Many states have not. We need to bring them up through the planning process, the environmental process, much the same way as the highway and transit programs have been developed over the years. One of the things people don't focus on, but it's very important, is the intellectual infrastructure. For years, for decades, rail industry was a major driving force in our economy. But beginning with the decline of the railroads in the 60's and 70's, and then the slimming down of the railroads in the 80's and the 90's, the demand for experienced engineers and planners with rail operations plummeted. Those that are on the job, a

significant percentage of them are approaching retirement. So a major challenge we face today is how do we rebuild the intellectual infrastructure.

Finally, one of the other biggest challenges we face is establishing a sustainable program. There have been many efforts to develop high-speed rail in this country. In fact, in 1967 when the Department of Transportation was created and the Federal Railroad Administration was created, we were formed from the Bureau of Safety and the Interstate Commerce Commission, and something called the Office of High-Speed Ground Transportation in the Department of Commerce. That is 1967, 40 years ago. To date, with a few notable exceptions, high-speed rail has not been successful. If we spend 8 billion dollars of the Recovery Act funds on terrific projects that produce real results, and then our program is done, then we have not been successful. So our challenge, and the challenge for the administration, the congress and our state partners is how do we find a way to make this sustainable? Much in the same way that in the mid-1950's, the administration, congress and the states found a way to make the interstate highway system sustainable. An integral part of that will be managing expectations. Not everybody is going to get their high-speed rail project, per se, program, or the first

dollars of the program.

In fact, the interest that we have seen by states exceeds the funds available today, the funds available next year, or over five years. But that was the story with the interstate program in the 1950's. And that is, we need to find a mechanism to address those concerns.

As I discussed earlier, the future high-speed rail might deal with a number of different technologies. We frequently say at FRA we are technology neutral. I know one specific technology of interest in Pittsburgh is Maglev. To date, with the exception of an airport shuttle in China, Maglev technology resides in test facilities awaiting commercial applications. This has been the case for at least a decade. A legitimate question that could be asked is, what must be done to determine whether Maglev will have a role in the future of our high-speed rail system, and if so, what is the nature of that role?

In the Maglev Deployment Program, authorized by recent Federal Service Transportation, Congress has been clear that the next steps in the future of high-speed Maglev, just as the next steps in the future of high-speed rail, will involve a partnership between the U.S. Department of Transportation and state departments of transportation, as opposed to localized advocates of

a particular technology. I believe this was done by Congress, in part, to rest concerns by some, the need to apply to the cost and the planning the same discipline, the same perspectives that states provide highway projects and transit projects. The State of Transportation regularly undertake major infracture projects and have an intimate knowledge of the challenges, including cost estimation of developing infracture. It's better to take a hard look at the ridership estimates through the same agencies that also develop and take a hard look at potentials for ridership of transit projects.

So FRA looks forward to working with PennDOT and Mr. Fauver in developing the strategy for the next steps in reviewing the proposed Maglev Project to be funded by the grants authorized by safety and technical amendments.

In closing, these are truly exciting times to be involved in the railroad industry and the Federal Railroad Administration, and I'd be happy to discuss these matters with you after Jackie.

CHAIRMAN MARKOSEK: Thank you very much, sir. Very good testimony. Before we go on, I just want to recognize members. Our new mom has arrived, Representative Chelsa Wagner, Allegheny County.

Representative Mark Longietti, sitting next to her, from Mercer County. Representative Paul Costa, my neighbor here in Allegheny County as well. We have Stacia Ritter, Executive Director of the Majority Committee Staff. Of course, Chairman Geist. Mr. Eric Bugaile, who is the Executive Director of the Minority Staff. Representative Mark Keller from Perry County, and Representative Dick Hess from Bedford County. So they have traveled a ways to be here today.

With that, Ms. Erickson. Jackie Erickson, Southwest Pennsylvania Regional Director for U.S. Senator Bob Casey. The microphone is yours.

MS. ERICKSON: Thank you, Chairman, and thank you for allowing me to speak on behalf of Senator Casey today.

Chairman Markosek, Chairman Geist and distinguished Members of the Committee, thank you for the opportunity to share my views on high-speed rail and its potential for Pennsylvania. I regret that my official duties preclude me from attending today's hearing. Let me also take this opportunity to specifically thank you, Mr. Chairman, for your leadership on this issue.

Development of an efficient and reliable passenger rail system across the Commonwealth is one of my top transportation priorities. That is one of the reasons

that I was proud to support the American Recovery and Reinvestment Act. This legislation represents the first real commitment to the development of a nationwide high-speed rail system. The 8 billion dollars provided to this legislation is a good first start, but we all know that we are going to need to sustain the federal commitment and foster a strong partnership with the states if the vision of a high-speed passenger rail network is to come into fruition. I am confident that the Obama Administration's commitment to this vision is firm, and I look forward to working with the President to further develop this policy.

As the Committee may know, Congress will soon finalize the bill that will fund our nation's transportation programs for fiscal 2010, and I remain hopeful that this bill will include additional funding for high-speed rail. When the Senate begins consideration of this bill that will reauthorize federal surface transportation programs for the next several years, I am confident that we will strengthen this commitment even further.

Part of the reason I strongly support the development of a high-speed rail network is because Pennsylvania is well-positioned to reap the benefits of such a system. Communities across the Commonwealth have strenuously

advocated for rail projects that will encourage economic growth and improve the quality of life for area residents. In addition to the economic development opportunities that these projects will open, the environmental benefits of high-speed passenger rail are beyond dispute.

As community leaders and local officials move forward with passenger rail initiatives, I stand ready to support their efforts. Since coming to the Senate, I have been strongly supportive of several passenger rail projects. Specifically, I have been strongly involved with: Establishing a magnetic levitation line between Pittsburgh International Airport, which was just awarded 28 million in federal funding; improving rail infrastructure on the existing Amtrak line connecting Pittsburgh to Harrisburg. For the record, I strongly believe that we need to find an effective way to connect this line to State College; ensuring that passenger rail service connecting Cleveland to Buffalo, via Erie, is included in our nation's high-speed rail network; improving Keystone Corridor rail service connecting Harrisburg to Lancaster and onto Philadelphia and beyond; in my home county of Lackawanna, I have been strongly engaged in the effort to restore passenger rail service between Scranton and the New York metropolitan

area; and I continue to work with advocates of other projects in the Lehigh Valley and Philadelphia suburbs.

While I have the opportunity, I'd like to make clear to the Committee that I'm committed to working with you on these projects and other efforts.

In my view, we need to take a "multi-modal" approach to our nation's transportation policy. That means that we need to better understand how our highway programs integrate with our nation's transit, rail and aviation policies. We need to focus on the most effective way to reduce congestion and improve the ability of our citizens to move from Point A to Point B. Congestion is not only frustrating for commuters; it also brings with it significant economic costs in the form of lost time and wasted fuel. We also need to be conscious of the environmental consequences of congestion that result from increased carbon emissions. Improving our transportation system is a national imperative that is vital to our economic health, and the federal government needs to forge a strong partnership with the states in order to address our transportation needs. Simply stated, we need to increase the transportation options available to commuters and strengthen the connectivity of the various modes of transportation. High-speed rail is an important part of our transportation puzzle.

Creating a high-speed rail system is not without challenges. I think that we all have to be honest about the costs involved, particularly in an era of national deficits and strained budgets on the state level. These realities require us to identify creative ways to finance these projects and to entice the private sector to team with the public sector on key projects. The fact that we are having this conversation on a national level is a testament to the President's leadership on this issue, and I will work as your United States Senator to encourage a robust federal commitment to this effort.

Thank you very much for the opportunity to share my views.

CHAIRMAN MARKOSEK: Thank you very much. Before we get to questions of the two gentlemen, I also want to, for the record, mention that Congressman Jason Altmire could not be here, but he has submitted testimony for the record. Senator Arlen Specter also could not be here, but his staffperson, Stan Caldwell, is here today and will submit written testimony for the record. And also, Congressman Tim Murphy could not be here, but his staffperson, Nate Availa (phonetic), is also here, and Congressman Murphy has also submitted written testimony for the record.

I wanted to make sure that we recognize those folks and their efforts here today.

Do any of the Members of the Committee have any questions for the gentlemen?

Representative Paul Costa.

REPRESENTATIVE COSTA: Thank you, Mr. Chairman.

Actually, I have a comment first that will lead into my question. In 2001, September 11th, I thought for sure when all of the airplanes were grounded that that was going to be the government's move to some other form of rapid transportation. I'm surprised it took this long, but we are finally moving forward. I just thought that was the right way to go.

Having said that, we have, in this area, as you mentioned, we have Maglev. Maglev, obviously, has been pushing for -- Clinton Administration they were narrowed down, and then under the Bush Administration, it kind of was delayed. Now, under the Obama Administration, we're back on track again.

Toby, you had mentioned that there was money that was earmarked in June of 2008, and still no money has been released. You also mentioned that you have 28 million dollars of federal money. Is that on-hand, or is that just a promissory that you're going to get it?

MR. FAUVER: It has been awarded, and we're in the process of working on a grant agreement with the Federal Railroad.

REPRESENTATIVE COSTA: But you actually don't have the money?

MR. FAUVER: Right.

REPRESENTATIVE COSTA: The federal government still has the money?

MR. FAUVER: Right.

REPRESENTATIVE COSTA: That leads me to you, Mr. Yachmetz. Thank you for testifying.

Why such a delay? June of '08, the money became available. It's over a year-and-four-months, almost five months now, and we still don't have the money. Also, my other concern is, Senator Specter, in February put an earmark in for close to a million dollars for, what I believe it was for Maglev. I'm afraid -- and nothing has been done about that. We have not been able to receive -- and when I say "we," our area for Maglev -- because it does create a lot of jobs in our region. There is a million dollars that is sitting there, and my fear is -- and I want you to address both questions, why does it take so long -- and my fear is, what happens to that million dollars if we don't act on it soon? If a new cycle comes up, does Senator Specter have to put in

another application? And if he does have to put it in, what are the chances of getting that million dollars again?

MR. YACHMETZ: With regard to the funding for projects east of the Mississippi River, which is a June of '08 effort, first off, it was a competitive design, a competitive effort, a competitive selection. The outgoing administration decided that they wanted the applicants to have a robust period of time to prepare their applications. So the applications were not due until mid-February of 2009. A number of things happen when you have new administrations. Just normal, new administrations. Among other things, the leadership for the Department of Transportation goes away. So we have to have new leadership come in. On top of that, another thing that happened was the American Recovery and Reinvestment Act, which created a whole lot of new work.

One of the interesting aspects of the Recovery Act was that the only people provided in the Recovery Act were Inspector Generals and the Government Accountability Office to oversee implications of the Recovery Act. But no people were provided to actually implicate the act. In my particular area in 2008, we put out 50 million dollars worth of discretionary rights. This year, we have 8 billion to put out with no

new people, no new resources. So you have the combination of getting the new management team on, and also the competing priorities for the attention of limited staff, and that is one of the reasons why that particular -- it took a while to get the final decisions made by the new political leadership in the department.

With regard to the million dollars, the million dollars was earmarked in the Federal Highway Administration, not the Federal Railroad Administration budget. It is very much an inside baseball-type of issue. Not only is it earmarked the Federal Highway Administration, it's a different color of money, too. It's highway trust fund dollars. So these folks had to be transferred to a number of budgetary processes, and once they were, we notified PennDOT. One of the issues that we had was that the prior grant entity that we had dealt with in the past at Port Authority actually wanted to bow out of the role of being the grantee of the funds. So PennDOT is picking up that part, too, so we're working with them on developing the scope of the work for that. The money doesn't go away. It's not like once we have a procreation cycle, the funds won't be available. Once we wrap up the scope, we are exchanging grafts and discuss the work once we wrap that up.

REPRESENTATIVE COSTA: You mentioned about the stimulus, and again, maybe because Maglev is from my area and I see a future of large employment, a lot of jobs being created. I'm really excited about this project and we're close. We were always told when the stimulus bill was coming out that it was projects that are ready to go within so many months. Maglev has been ready to go for years. They did all of their environmental impact studies. They did everything that they had to do, I think, with the exception of maybe acquiring property, everything is ready to go. So whether there was one person in the office, in my mind, I think that would be a no-brainer for them to look at and say, "Okay, this is ready. Here is the money. Let's keep moving."

You mentioned before about quality work, and superior design, and superior manufacturing. You may or may not know this, but Maglev has contracts with the United States Navy, so they must have pretty high standards that they can have the safety requirements and the manufacturing requirements. Again, I mean, living in this area and knowing the impact that this could have, I would like to see this project start forward in my lifetime. I'd like to be able to take Maglev to Harrisburg, which is pretty far off.

CHAIRMAN GEIST: Or at least Altoona.

REPRESENTATIVE COSTA: I do want to see this move forward. Again, I don't understand why there are all of these delays when the project is ready to go, they have met every requirement that they have to meet, and we still can't get the money that seems that everyone agrees and everyone has approved. That is my issue.

MR. YACHMETZ: Well, I'll trying to avoid discussing pending applications by discussing where we are on the 28 million dollars. The project is not ready to go. It's not designed. We don't even have 30% design yet, so there is still a substantial amount of design and research that needs to be done -- not research, but basic, hard engineering. I guess I, kind of, have the perspective of a civil engineer. There is a lot that needs to be done before you can actually get the contracts to start construction.

The other thing, talking generically about the Recovery Act, is the high-speed rail part in the Recovery Act is treated differently than other parts of the Recovery Act. Most funds on the Recovery Act had to be obligated before -- within a matter of a few months, and the projects that had to be finished within two years of the sign of the bill, which was February 2011.

We underlaid the high-speed rail 8 billion dollars. Our obligation, we do not even have to obligate funds until September 30, 2012, which isn't to say that we are going to take that long circle -- that reflected a different view, which is, we're trying to stand up a program on a national basis, and we want to hear from all of the folks from high-speed rail and take a hard look and find the most meritorious projects and get the money.

So, yes, we would like to get projects underway, and we actually did go out with the solicitation early on in the Recovery Act to see who actually could put shovels in the ground, in very short order, and we're hoping to have that underway this coming work season.

REPRESENTATIVE COSTA: Thank you very much. Thank you, Mr. Chairman.

CHAIRMAN MARKOSEK: Thank you.

Representative Mark Longietti.

REPRESENTATIVE LONGIETTI: Thank you, Mr. Chairman. Thank you for your testimony.

Mr. Yachmetz, are you able to tell us approximately how many applications that have been submitted under the Recovery Act, and approximately how much the total dollar figure is that is available?

MR. YACHMETZ: I actually don't have the numbers in front of me, but I can come pretty close. If

you add those projects, which we said we would look at individual projects, adding a siding somewhere that could provide improved passenger rail service, but could be done very -- under construction within a matter of a few months. There were 214 of those applications with 7 billion dollars. And those were the applications we received in August. Applications we received about a month ago was for the larger commitment to -- I run the risk by just identifying and using an example -- but a project proposed by a state, overall a program improvement between two cities. Those came in about a month ago, as I said, and there were 45 applications and the total was 50 billion dollars. So we effectively have about 270 applications, in rough numbers, from 38 states, for 57 billion dollars, for the 8 billion dollars we have right now.

REPRESENTATIVE LONGIETTI: Are you able to point to any current high-speed rail systems in the country that have been successful projects that are out there and operating?

MR. YACHMETZ: If you use a trip time definition of high-speed rail, because lots of people look at high-speed rail differently. One of the things that we find, if you go between major urban areas in less than three hours, you're serving a market. So if

you want to take Washington to New York, which is a 2 hour and 40 minute trip on the Acela Express. It carries between 60 and 65% of the combined air rail market between Washington and New York. I think you can point that as a success. It also covers Amtrak's operating costs.

REPRESENTATIVE LONGIETTI: Question for Toby. I know the Pittsburgh project is something that is still in some early stages, but you had mentioned that it's anticipated that fare revenue and the advertising revenue would be able to handle the operational maintenance costs. Right now, as we sit here today, does anybody have a projection on what the fare would be? For example, from downtown to the airport, and vice versa.

MR. FAUVER: If I remember the facts from the project correctly, I think the fare was estimated to be $5 per leg. So I think it was $5 between each station.

REPRESENTATIVE LONGIETTI: Which, obviously, is significantly less than what you would currently spend today to take a courtesy van or bus, or something of that nature.

MR. FAUVER: Oh, absolutely.

REPRESENTATIVE LONGIETTI: Thank you, Mr.

Chairman.

CHAIRMAN MARKOSEK: Thank you.

Representative Chelsa Wagner.

REPRESENTATIVE WAGNER: Thank you, Mr. Chairman. I thank all three of you for your testimony. I apologize that I arrived a little bit late. I hope I didn't miss this and I'm being redundant.

The question is for both of you, Mr. Yachmetz and also Mr. Fauver. With respect to the different applications, or different potential projects within the Commonwealth of Pennsylvania, and if I could first pose the question to Mr. Yachmetz. From your perspective, how those different projects stack up against one another, particularly, in terms of their readiness. Where they are, whether it's just a conceptual phase, or if they are further along, having some engineering, and so forth.

MR. YACHMETZ: I apologize. I have to defer to Mr. Fauver, because the president has directed that we not talk about any pending applications.

MR. FAUVER: We submitted three applications for three corridors. The corridor between Scranton and New York, the existing Keystone Corridor between Harrisburg and Philadelphia, additional upgrades remained there, and then the Maglev Project with

Pittsburgh.

All three projects have a completed environmental document that has been submitted to the Federal Railroad Administration. The Maglev Project has an FEIS in. The Keystone Corridor between Harrisburg and Philadelphia, we rapidly completed one and submitted it to the Federal Railroad Administration. The Scranton to New York project, we actually have received a Record of Decision from the Federal Transit Administration. That project was being pursued by New Jersey Transit through the Federal Transit Administration, and the environmental document has been re-submitted to the Federal Railroad Administration for their consideration.

In terms of design, all three projects, I think, have conceptual design completed. The Keystone Corridor between Harrisburg and Philadelphia has more than conceptual design. The Scranton to New York line, large area is completed in support of the environmental document.

REPRESENTATIVE WAGNER: So practically speaking, it seems to me there is going to be some deference to whether it's the governor, or the senators, in terms of which projects, or which among those projects are more of a priority. I don't know how much you can answer that. I have asked this question to

Secretary Biehler, but it has been about six months since I've had any discussion with him. At that time, it was my understanding that the Pittsburgh Maglev Project was significantly ahead of any other applications in this state, and also with respect to other potential high-speed rail projects throughout the country, was pretty far ahead.

MR. FAUVER: I don't want to speak for Secretary Biehler here. From my perspective, I think all three projects were submitted independent of each other based on their merits, and based upon the status of each project. Each project runs different features of the stimulus funding. So the Scranton to New York project, we could achieve high-speed rail initially, but it certainly would restore the passenger rail line to New York City from Pennsylvania, and would set us up to build high-speed rail in the future.

The Keystone Corridor has long been rebuilding. Currently, it meets the federal definition of high-speed rail as of 2006 improvements, and we're operating at 110 miles per hour currently. The Keystone Corridor operates through New York City. Many of the projects there would further decrease travel time, and increase the speed of that line. The Maglev Project certainly demonstrates true high-speed rail, or true high-speed

fixed guideway service, exceeding 240-miles-per-hour. Constructed, would probably be the fastest rail service in the country.

REPRESENTATIVE WAGNER: Just a final question for Mr. Yachmetz. I understand that you can't comment specifically on certain applications, but if you could provide a little bit of insight into how you might be soliciting, or you will be evaluating the state's input. Because I can't imagine that three different projects in the state are just going to be viewed in isolation of any kind of input from higher ranking elected officials from the state, or that one state is going to get three projects, where other states that have decent high-speed rail projects are going to be left behind.

MR. YACHMETZ: The projects are all going to be evaluated based upon their merits, based upon the criteria we published in our grant guidance. We, right now, have everything we need to do the evaluations. And are looking at each of the projects individually, both within states and across the 38 states. We published our grant guidance on June 16th, and laid out the criteria we can use, and how we can evaluate them. To the extent that states indicated when they did multiple applications, "don't give us any money if you don't give

us this one," and quite frankly, I don't believe we got that statement from any state. But recognize that there are a number of ways that you can slice and dice 8 billion against 38 states and 270 applications.

Some applications that may rate very high might consume all 8 billion dollars. We actually have one application for 11 billion dollars, which would be very difficult to fund with 8 billion dollars. We'll have to see how that plays out, but if the states made some statement in their applications about their relative priorities, we can certainly consider that.

REPRESENTATIVE WAGNER: One final question. Since you said Pennsylvania really hadn't submitted any kind of preference among the three different projects, I understood that six to eight months ago, that the governor did meet with the congressional delegation. By memory, I believe it was Congressman Doyle who indicated to me that Governor Rendell was pushing for Pennsylvania to submit one application, or at least for there to be a clear preference towards one project within the Commonwealth. So did that not happen, or Mr. Fauver, your understanding of where that is, politically?

MR. FAUVER: Let me briefly try to answer that question, and briefly describe the process we went

through to determine what applications could be submitted. When the notice came out from the Federal Railroad Administration, criteria came out from the Federal Railroad Administration, and they announced they were going to be accepting pre-applications for projects on July 10th. We very quickly did a scan of the state and looked at every potential rail project that has been talked about, that has been studied, that has been evaluated, and we identified all of those projects and we looked at all of those projects against the criteria. Really, initially, looking at readiness, looking at job creation, and then we looked at operating funding, we looked at serious criteria.

We narrowed it down, with the help of the governor's office, to the three applications that were submitted, and all three of those applications demonstrate different -- have different strengths related to the criteria that is being considered. So the governor's office supported submitting all three at that time. I know there has been different advocates, different advocates from congress that have been supporting one project over another. As far as PennDOT is concerned, we submitted all three projects. All three are in competition, and we'll be happy to have one, or all three, funded.

MR. YACHMETZ: Without talking about any specific project in any specific state, some states did an all-or-nothing application. Give us a big part of all your money, or don't bother to give us any. Some said, well, you only have 100 million for us, here is our 100 million dollar project. If you have 1 billion for us, here is our 1 billion project, and if you've got 2 billion, well, geez, we've got a 2 billion dollar project, too. Perhaps, in belief, that they have a better chance of getting something from that scenario.

MR. FAUVER: Maybe I'll mention one other thing. We're in the process of trying to get a statewide rail plan completed in intercity and freight. That's under the guidance that has been issued, the federal law that has been passed, guidance has been issued by the Federal Railroad Administration to establish priorities for a net worth for high-speed and intercity rail for Pennsylvania. All three of the applications that have been submitted are all components of that state-wide plan. This administration, the governor, has been very supportive of achieving true high-speed rail, making it competitive, but also has been talking actively, not just about Pennsylvania, about the county needs to build a network because it's the only way that rail is going to be effective. So I

think the three applications are part of that network of Pennsylvania, and certainly isn't the end, but is the beginning of the stimulus bill.

CHAIRMAN MARKOSEK: Thank you very much, Mr. Fauver, Mr. Yachmetz and also Ms. Erickson for your very valuable testimony. Thank you for traveling here today, and the Committee appreciates it very much.

Next, we have Mr. Fred Gurney and Mr. Walter Buss. Fred is President of Maglev, Inc., and Mr. Buss is the President of Transrapid International.

Thank you both for traveling here today. Mr. Gurney, we'll recognize you first. I notice that we have your testimony here. If you could, perhaps, summarize some of it for us, as opposed to a verbatim reading. It would help the Committee time-wise. Certainly, we do want to hear what you have to say. We're very interested. And also, Mr. Buss, the same thing. Mr. Gurney, you may proceed when you're ready.

MR. GURNEY: Chairman Markosek, Chairman Geist, Members of the Committee, I am very pleased to be here to talk to you about high-speed Maglev, and particularly, about Maglev activities here in Southwestern Pennsylvania. I know many of you already know about what we're trying to do, and know a lot about high-speed Maglev, but for the sake of completing this,

let me at least give, kind of, a summary of it and bring you right back in to where we are, and kind of reinstate itself. I will not go over that in detail, Mr. Chairman.

Anyway, high-speed Maglev is a true intercity high-speed passenger service. It has got speeds capable of, in excess of, 300-miles-per-hour. It's ideal for traveling distances of up to 600 miles. So it's just beautiful to be able to connect the large cities of the Midwest with the large cities of the Atlantic Coast. It's just a wonderful type of a transportation system, which would be very competitive in that distance range of up to 600 miles. I would point out that in that range of 600 miles -- and I notice that we're having an individual here from the Chamber talking, and the Chamber provides good numbers for us to talk about. Within 500 miles, you have half the population of the United States from this region right here, so it's really an ideal kind of transportation system for us.

I did have, Mr. Chairman, a handout with some figures in it so I could refer to some of this, and maybe that would help to summarize a lot of what is going on. A lot of that detail is already in these handouts. It's in the back of the packet that I gave as my testimony.

The system which I have described, as I said, is

ideal for large intercity passenger activities. But we, with Maglev activities here in Southwestern Pennsylvania, our goal is to start right here in Southwestern Pennsylvania. Specifically, right in the Pittsburgh area with a line that would link the Pittsburgh International Airport with downtown and continue on with the Monroeville/Penn Hills area, and then on out to the City of Greensburg. Those distances are about 19 miles apart. A total distance of about 54 miles with stations at each of those locations. Actually, there would be two stations at the airport. One just outside the airport, and one at the air terminal portion of the airport. The features that are on this handout, I think really show those areas. It also shows what a conceptual design of the station, which we call Magports, at the downtown area. Just how nicely it leads into the distance area of the compact city of Pittsburgh.

I would like to just continue on -- I know we're going to have other information from other individuals -- but just let me talk a little bit about where we are with the project. We have been on the project for a number of years. Chairman Geist mentioned a number of years that he has been associated with the project. Recently, and I would say recently beginning with the

EEA21, really started a tremendous amount of activity towards putting high-speed Maglev into a forum that we could bring something together. In that funding activity there, a considerable portion of that was focused on getting an Environmental Impact Statement done. We, ourselves, don't do that statement, that Environmental Impact Statement. That was done by a separate consortium known as MSM of the group of environmental specialists who did that, and that is independent of where we were, and they report to the Port Authority on that activity.

Just to talk about that. That process began, really, in 2001. It's now 2009, and it has been an eight-year event. The Environmental Impact Statement, I think, is now accepted and ready to be signed. It's sitting on the administrator's desk. A lawmaker said it's just a formality now, and all things have been cleared up. However, again, it's not one of the activities that we've done, specifically, but however, it is very, very important that the Environmental Impact Statement be completed prior to being able to do anything in construction. So with that Environmental Impact Statement being there, that puts this project as no other project, for sure, in the country.

So without going into any further detail on that, I

want to just go ahead and talk a little bit about some of the related aspects, which we have also been pursuing to bring this project together. The organization which I represent, Maglev, Inc., has had a dual objective from the beginning. One was to bring high-speed Maglev to Southwestern Pennsylvania. Bring it to the United States starting in Southwestern Pennsylvania. Another of those was to capture economic benefits from that technology. In doing that, we looked at what is involved in the cost associated with the technology itself.

If you break those down to give you, kind of, a simple grade on analysis, you would find that about 65 to 70% of the cost is associated with the guideway infrastructure. That's the guiderails themselves which the vehicle will run. About 5 to 7% of the cost is associated with that glitzy portion, the train itself. It gets all of the attention, but it's really only about 5 to 7% of the total cost. The real cost is in that guideway infrastructure. The other 25 to 30% of the cost is in the electronics and the electrical systems it takes to make the system run.

Now, high-speed Maglev -- and I have Mr. Buss here with me who will give you more information about the technology, so I won't go into that any further. I do

want to tell you that on the guideway infrastructure, we have devoted a space, a certain amount of efforts. Let me just tell you, in a nutshell, why. If we were to build a high-speed Maglev between the airport and Greensburg, and use only the longest beams that we anticipate using, only the longest ones, those would be 62 meters in length. That's about 204 feet. They weigh about 120 tons. They're big structures. Only the longest one -- and there will be a lot shorter ones, too -- but only the longest, we would build more than 3,000 of those beams. Each one of those beams has a slight curvature either left or right, or up or down, or compound, and it also would have some sort of twist, which we would call canter or superelevation. What it amounts to in building those, of those 3,000 beams, if you are building in lots of 100, it's highly improbable that any two of those guiderail structures has the exact same geometry.

So if you are building them in a sequential way, what that really means is that you would be building, essentially, 3,000 one-of-a-kind structures. That's a real challenge if you're doing it by the conventional process of construction and fabrication in shops. We took on that challenge very early on in the game, and we said that the only way we're going to be able to do this

-- and to build it to the accuracy and the close tolerances that are necessary -- is to develop the technology for computerized fabrication. We have done that, and we have devoted a lot of effort to that. There is some information on the second and third of the handouts that we show you there. Particularly, on the second one, had we show some equipment there in orange. That's the computerized application table that we put together.

Let me go back and just, kind of, give you a feel for where we are here. High-speed Maglev is designed for passenger comfort. It's designed to allow you to sit in your chairs, as you are right now, as comfortably as you are, and not really experience any jerk of your head to the left or to the right, or forward or back. We know how to do that from the space program. Taking that information and be able to set up in any one of those specific location -- we know exactly what the geometry of a guideway has to be at that particular place. It's a matter of stretching that over the full 54 miles. We've done that. We've done the mathematics. It's not complicated mathematics. It does require a little bit of effort. When you computerize that, and then use that same sort of information -- I'm giving it to you in a simplistic sort of way -- use that same sort of

information to try the equipment to go into allowing you to build these guiderails, and that's the process which would allow you to be able to, basically, push a button, and certain equipment would go into a certain configuration, and then with robotic welders, you can weld that down and be able to do that very, very precisely and very, very quickly.

In my estimation, we're lucky enough to reduce the cost of guiderails by at least 20%. Not only that, in fact, that same type of technology is applicable to bridge structures, applicable to elevated highway structures, on ramps and off ramps from highways, and offshore structures. It's a very interesting and very cost-saving sort of technology. We have devoted a lot of effort to that. The two that I have shown you actually address that. There is a third picture in there, a third sketching, which shows this different sort of funding. We actually built a beam of the kind that PennDOT uses to show you that. They're all small, and they're all not curved, but we will be able to have that and do that with curves, so we want to continue that, because we think that is an exciting area going forward.

One other aspect of doing all of these things is the workforce. The workforce, to be able to operate

computerized -- computer integrated fabrication systems, robotic welding systems, just does not exist in this country. So we took on that challenge along with Penn State University at the regional campus in McKeesport, the Greater Allegheny Campus, and along with the Community College of Allegheny County and developed a two-year associate's degree program. I will show you one more picture in here in the back to show what that's all about. We took on that to develop a two-year curriculum, and to get a degree in this kind of technology. To allow advanced technology. We were talking about capturing businesses that have fallen short, this is one of the best ways of being able to do that.

So Mr. Chairman, I want to continue on just a little bit more and just tell you about one more area that we were concerned about that, I think, Deputy Secretary Fauver mentioned and that is self-sustainability. This project has that potential for doing that. It operates -- again, Mr. Buss will be talking to us a little bit more about that -- it operates with no moving mechanical parts and no contact with the guideway when it's in operation. What that means is there is almost no wear. Almost no wear. And because there is no mechanical touching of the guideway, there is no friction, so

again, it operates with lower energy. So those kinds of things, added together, and the control systems are all electronic. Electronics today have a very, very high reliability. So this system has almost no -- very low O&M, operational and maintenance cost. Very, very low cost. That is where the self-sustainability comes from. We're pushing towards that, and that's the area I want to really make a strong point on.

We will continue with some of the monies that were mentioned by Deputy Secretary Fauver and Mr. Yachmetz to develop the environmental -- to continue to complete the environmental process, and take that onto a Record of Decision, and they will also continue with the other activities to bring preliminary engineering from the level where it is right now, which was sufficient to get the Environment Impact Statement in, but to carry it onto another -- closer to a 30% level, and then move those out to design-build contracts, and get people to put this program together and get it built.

I'm excited about it. It has been a long haul. I am really delighted to be here to tell you about it, and I certainly respect the effort that all of you have done. Chairman Geist, you have been a long time advocate, and been a promoter of these kinds of technologies. Chairman Markosek, in your position, I greatly

appreciate the support that you have given the program.

With that, I'll conclude and be able to respond to questions.

CHAIRMAN MARKOSEK: Thank you.

We'll have Mr. Buss testify first, if that's okay, and then we'll open it up to questions to both of you.

Mr. Buss.

MR. BUSS: Thank you very much. Chairman Markosek, Chairman Geist, Members of the Committee, I am very pleased and honored to speak to you this morning on behalf of Transrapid. The technology that is proposed for the Pittsburgh project is the Transrapid technology. It has been developed in Germany over the last 30 years. (Inaudible.)

Again, in the end of 1970, a thorough review of the available technologies and developments in Germany was undertaken. The result was a decision to look at the Transrapid as the technology of chase. So this technology has been further developed since. In 1980, the government, together with the industries and universities in Germany, decided to build a 19-mile test track in Northern Germany. Some of you have been at the test track. It has been in operation since 1980, and developed the vehicles from TR-06. To date, TR-09 that is in operation now, is really from development of the

vehicles that are in full revenue operation in China. The TR-09, which took advantage of the lessons learned from China, and really is, today, the state-of-the-art of the Transrapid Maglev technology. It received its safety certification in June of last year. It's a rigorous European safety certification, this was met, and we have an excellent opportunity next week to showcase this technology to the administrator of the FRA, Mr. Joe Sazbo, who is going to be in Europe looking at -- be in contact with the European Governments and the European companies for high-speed rail. He will spend a day with us at the test track, and we look forward to again having this extreme discussion.

Based on the experiences in China, the Germany Government decided to fund a further development program in the extent of 100,000 million dollars that was completed last year with the safety certification of the TR-09 vehicles. Again, it was a huge undertaking by all parties involved. This was mainly to focus on further technology developments that have taken place since China. Also, to focus on finding ways and means to reduce overall costs of the system, and that has successfully been concluded.

We are now in a position that the Transrapid technology, that is proposed for Pittsburgh, competes

very well with a similar high-speed steel rail technology. The vehicles are of significant lighter weight. The payload is higher. The guideway infrastructure has been reviewed carefully and developed to a lesser cost required technology.

Coming back to China for a minute, the Chinese Government moved very fast. They came to the test facility, and I think only three months later, the president of China signed a contract with our German Government and the industry leaders. And only within two years, the first VIP test run in Shanghai occurred. The system has been in operation and fully accepted since April of 2004, I believe. About 22 million people have used it since. It has traveled, as I point out here, about 4 million miles. To put this into perspective, that is about 150 times around the globe, around the equator. This was done at a -- has been done at a schedule of about 99.95%. So that is really an unheard of experience in any transportation system. Chinese are very satisfied with the overall operation. We have been able, from the German technology side, been able to gain significant information with regards to longevity of system components, guideways, et cetera.

Let me talk about the system characteristics. I mean, outstanding. Here are the lower energy

consumption. This, again, is very important when we look at these statistics that we really compare efforts. So if we compare a steel rail operation at 150-miles-per-hour with the same speed operating Maglev, the Maglev will consume about 15 to 20% less energy. The noise emission at given speeds at the same speeds are also significantly lower. Safety is a very, very high feature of this transportation system. The design is such that it wraps around the guideway and it makes it impossible for a system to derail. The system itself has an inherent part in the automation configuration is such that only certain miles of the guideway are energized at a given time. Meaning, that there is no possibility for either head-on or tail-end collisions.

This, pretty much, goes along with the requirements in America to look at EEC, to integrate positive train control. Positive train control is an inherent part of the Transrapid Maglev design. Fred already mentioned the operating and maintenance costs and long lifecycle. This is just a mere outcome result of the fact that we don't have any friction in the system. In upstate -- the technology is such that we visualize that an electric motor comes open and extended, the stator becomes embedded in the guideway system, and an onboard levitation system guides the train. Through changes in

the frequency we are able to change the velocity of the train, accelerate and decelerate.

The system is designed to allow for much larger timing purposes. Again, no friction. The Transrapid can go up to 10% grades, while a steel rail about 5%. Also, another very important ethic is the ability to go to a higher -- of up to 12%. A comparison of steel rail, a steel rail has to stay within 6% because of the danger to be slowed down, stopping, a curve, and then fall over. This is not possible with the Transrapid because it is guided within the guideway. The higher speed of the overall system allows for a faster circulation and for a given ridership, fewer vehicles. Fewer vehicles means fewer length of train. Less long trains coming into a station. That means for a downtown operation, the overall operation of the station is much lower, smaller.

These are all really advantages of the Transrapid system. Given the fact that it has been in operation in Shanghai for such a long time, of five years now, without any major flaws, interruptions, speaks for itself.

Let me now talk about potential enhancements in the future. Maglev, by itself, holds a potential for future increase for economical attractiveness. Being a system

based on electronics, Transrapid will be able to utilize all benefits from the continuous evolution and progress of electronics. While the conventional rail system will continue to be constrained by physical limitations of friction between wheel and rail and power transmission. Also, the progress of the new lighter materials and manufacturing techniques will positively impact Maglev down the road.

Let me go to my last point, which is really technology transfer. Much as we have discussed in the past, the German Government after the earlier on program in Germany was concluded, together with the system industry, have come to the conclusion to make, or wanted to make this technology available to the United States, find 45 companies here to integrate into a full technology transfer to learn the system. Our idea is not to build vehicles in Germany and export these into the United States. This distinguishes Transrapid as a business concept involved from all other steel rail technologies.

The technology has been advanced, such that, an industry couldn't be developed here from day one on with a first project in Pittsburgh. I mean, it could not be feasible to build those vehicles right away here, but, I mean, we would still build a number of vehicles in

Germany and have American engineers and businessmen come over, be trained, educated, and so on, and take over this technology. The idea of the concept is to bring this over to the United States. (Inaudible.) This is the real intent, and I am very glad that we have had a chance to -- in Germany, and we will definitely have those kind of discussions with the FRA team next as well.

CHAIRMAN MARKOSEK: Thank you.

Chairman Geist has a question.

CHAIRMAN GEIST: Fred, wonderful testimony from both of you. I'd like to go back to something that was said earlier concerning the ability of the projects under the stimulus monies to get underway. The clearances that you have under the design-build contract, it seems to me that you could be up and going as rapidly as we can be in a lot of projects that are highway-oriented that need a lot of engineering before they actually get into construction, and your project is able to be fast-tracked, engineering, construction, all at one time; is that correct?

MR. GURNEY: Yes. Let me comment on that, if I could, please, Chairman Geist. The engineering that had been developed at this point has been primarily focused on the preliminary engineering that is needed

for the Environmental Impact Statement, and that varies depending upon which aspect of the project we're talking about. But it's not in the 30% level. It's more in the 5 to 15%. What we would propose to do -- and let me go back, first of all -- after you complete your Environmental Impact Statement and get your final Environmental Impact Statement signed off, you still have to go through another process in the DEPA law activity, and that's getting the Record of Decision. And that process, the fastest would be about six months, and more likely, more reasonably, in the nine-month level.

In that period of time and what we would do with the funding from the safety loop, 28 million, is we would begin with a real serious effort to bring those other areas up. Bring those to a 30% engineering level, or approximately that level so then we could immediately begin with a design-build contract. So the response to your question is, yes, we would be set up to begin, to go into a construction mode very quickly, but we would like to do some more preliminary.

CHAIRMAN GEIST: Let me ask that differently. If FRA, and the feds, and the state were to waive the requirement to allow you to start this as the other process goes forward, how soon could you be in

construction?

MR. GURNEY: I think the answer to that would be that as soon as the Record of Decision is rendered and there is funding there. We would need to bring the certain parts of the engineering up to about 30% level. It's a matter of, if there is plenty of the funding, you can do that pretty quickly. If the funding is really dragged out, of course, that takes a long time. But to answer how quickly, we would believe that if you follow the Chinese model, which they went -- they didn't do it the same way. They actually built the entire project in two years, and they had sufficient funding and everything was out of the way. So if everything would be out of the way here, we don't think we're going to be as fast as that, but pretty close. We think we could get the first section in two-and-a-half years.

CHAIRMAN GEIST: I want to go back to the word "stimulus" for a moment. How much steel would be made here in the United States to build this in this section?

MR. GURNEY: The amount of plate steel that we calculate would be needed for the entire route, from the airport all the way to Greensburg, would be about 330,000 tons.

CHAIRMAN GEIST: And that would be made here?

MR. GURNEY: The previous activity for that, 70% of the cost had to be U.S. And as you just heard from Mr. Buss, transfer all of the technologies. So all of that would be U.S. manufactured material.

CHAIRMAN GEIST: Products-wise, you used to say that 90% of everything can be made here in Pennsylvania. Is that still correct?

MR. GURNEY: I truly believe that, yes.

CHAIRMAN GEIST: So that stimulus would create an awful lot of jobs in the manufacturing sector of Pennsylvania that has been hit pretty hard, correct?

MR. GURNEY: It would do a tremendous amount to that. Not only that, Chairman Geist, it would also allow you to have that spinoff capability to apply that same kind of technology to other areas.

CHAIRMAN GEIST: Let me keep going a little bit.

How many pounds of rebar would be used?

MR. GURNEY: I think I did have that number, if you'll allow me to look through this very quickly.

CHAIRMAN GEIST: Don't spend time --

MR. GURNEY: It's in the testimony here.

CHAIRMAN GEIST: What I am trying to say is,

that would be manufactured here also?

MR. GURNEY: Yes, indeed.

CHAIRMAN GEIST: It would likely be made by the United Steelworkers; is that correct?

MR. GURNEY: It would be made by -- we would likely, to support all of the local areas that we can, so the steelworkers, I think, have the bulk of all of those kinds of jobs, yes.

CHAIRMAN GEIST: Let's go into the electronics. The linear position control systems, all of that would create jobs in industries that have been hard hit in Western Pennsylvania and other parts of Pennsylvania, correct?

MR. GURNEY: That is correct.

CHAIRMAN GEIST: So stimulus-wise, the effect of it would be to create a tremendous surge of jobs upfront as you move into construction, which would employ many, many people in Western Pennsylvania in the trades; is that correct?

MR. GURNEY: That is correct

CHAIRMAN GEIST: More than likely, we would use the trades; is that right?

MR. GURNEY: I would think so, yes. Yes, that would be most likely the case.

CHAIRMAN GEIST: So the statement, then,

that was made before about design-ready really doesn't hold water if you're saying "go," and you're creating thousands and thousands of jobs, and high paying jobs, upfront to meet the needs until you get into construction.

MR. GURNEY: I think so, and I think that what the criteria, as I am remembering, was to go for the stimulus activities. For the AARA, is for final design and construction, and I think that's where we are.

CHAIRMAN GEIST: I would really hope that the federal government and the state government would work with you to expedite the paperwork, a lot of which is designed to delay projects, I believe, rather than build them. We have instances right now where we have worked on HOP's at PennDOT for five years. Never in my life have I seen that happen. So I would hope that Chairman Markosek uses all of his power. We get about the business of finally building this.

One mistake in your testimony. It really is not Greensburg, it's Altoona.

MR. GURNEY: I stand corrected.

We would be delighted to work with both of you. Certainly, Chairman Markosek, we appreciate your leadership in doing all of these transportation issues

that you have on your platter. But certainly, we want to work with you on high-speed Maglev. Chairman Geist, as you always have been associated with this activity, and continue that. We are really thankful for your assistance and helping pull together the right kind of meeting, the right kind of activity to make this all happen.

CHAIRMAN MARKOSEK: Thank you.

Representative Chelsa Wagner.

REPRESENTATIVE WAGNER: Thank you, Chairman. Also, thank you, Mr. Buss and Mr. Gurney.

I'd like to ask two questions specific to what I believe are some misconceptions that I hear from the public, and also from some of our colleagues in Harrisburg about the project. I was hoping that either or both of you could just address those.

The first is on the operating cost. I was happy to hear both of you address that, and also the previous persons who were testifying. What we hear from colleagues sometimes is, okay, great, we can look for the funding to build this, but then our region would not have the ability to sustain it. Partially, folks talk about concern in our declining population. So I'm wondering if you can address that. I was happy to hear that the amount quantified to be $5 per leg, because I

think that helps me in talking to them to give them a figure. But if there is anything that you might be able to add to that concern.

MR. GURNEY: Certainly. Thank you. The overall activity for the ridership was done by a peer panel, a peer-review group who put together the ridership numbers. We also had some investment bankers put together the whole financial plan, which has been submitted and it has been an integral part of the draft of the Environmental Impact Statement. Certainly, it has been in other transcripts that we have made to the FRA. The overall plan for working with that $5 rate, that was all based on the studies at the time, which were 2003 studies, and that system works, and that system works well. The business of being able to take and, how do we go about determining the O&M costs, they're based on the historical information that we have available that we got from Germany, from the Germans.

What we understand from the Chinese now -- we're cautious in the information that we get from the Chinese because it's the way that the information comes out. But certainly, everything that we've seen, it corroborates the information. So the O&M costs, the O&M costs are very low for this kind of transportation system, Representative Wagner, because of the fact that

it is based on high reliability electronics. Not on improving parts, and not on any contact with the guiderail system. This kind of transportation system, not only can give you that 300+ miles per hour, but it can do it almost 24/7. There is very little downtime. So in those dark shifts where you're not really carrying passengers, it's available to carry live freight.

So instead of going out there and doing some maintenance -- what I understand from the Japanese rail system -- they have a tremendous crew of people who help on the dark shifts. Just going out and maintaining the line, and again, you don't have to do that with Maglev. So O&M costs go way down. Because instead of doing maintenance on those back shifts if you can carry live freight on those back shifts, it continues to help with the revenues.

One more aspect, if you'll allow me, there is one more portion of this, and that is that we had a patent -- I think that is also the handout material. There is a patent on being able to convey communication cables or even power cables through the guideway system itself, or associated with the guideway system. So there is another -- by releasing that out, or renting that out -- there is another revenue stream, that, again, further reduces the costs and reduces the O&M burden, the

overall burden there.

REPRESENTATIVE WAGNER: The second question I have along the same lines to address some concerns that I hear from colleagues and others is with respect to the EIS. I believe there are some folks who wrongly believe that there is going to be more of an impact than your studies show. So could you address the number of structures that would be impacted per mile in thinking of the actual route from the Pittsburgh Airport to downtown, talk about what would need to happen, and how many structures, or where the structures might be impacted.

MR. GURNEY: Representative Wagner, I would be glad to at least attempt to address that point.

First of all, I want to make sure that you understand that we, ourselves, do not do the Environmental Impact Statement. Because of what is required for that, it was done by another group of people. That group is a collaboration of three environmental groups under the acronym, or the title of MSM. I believe I looked behind me in my chair, and I thought I saw a gentleman here who knows those numbers probably better than I, and if you would allow me to defer that to that person, perhaps, I could maybe get a more accurate answer.

Could I do that?

CHAIRMAN MARKOSEK: Perhaps we can get that information later.

MR. GURNEY: They're remarkably small. I can tell you, the numbers are very small, the number of impacts.

CHAIRMAN MARKOSEK: If you could get that information and submit it to the Committee we'll distribute it.

MR. GURNEY: We will do that.

CHAIRMAN MARKOSEK: Thank you, gentleman. Thank you very much. We appreciate that. Very good testimony.

I'd like to switch the batting order here slightly. Our next group, I'd like to call Mr. Bill George, President of the Pennsylvania AFL-CIO; Sally Haas, President of the Pittsburgh Airport Chamber of Commerce; Mr. Don Dunlevy, Pennsylvania State Legislative Director and Chairman United Transportation Union.

I apologize to Mr. Paul and Mr. Babson. We'll have you on next.

Thank you. We'll start with you, Mr. George. Welcome. Thank you for coming.

MR. GEORGE: I thought Sally would go first, but that is fine. Obviously, you recognize the AFL-CIO before the Chamber of Commerce. It's about time.

One of the comments earlier, I just told Representative Geist, it's not Greensburg, it's not Altoona, it's Aliquippa.

First of all, let me thank all of you for taking this really controversial task, and most of all, a tremendous, tremendous economic subject that is so, so important. I look around the room here and the testimony that has taken place this morning, and I had to smile a little bit. Because I could remember first time I went to Harrisburg in 1982 and downstairs in the cellar of the Main Capitol, there was a guy named Eric, and they were talking and having trains run 90 miles an hour or something across the state, and how exciting it was about that, and the fight was how we were going to make that route and capture 2/3 of the entire General Assembly. The original route went from way up in the State of New York, back down to the southern part of Maryland, and back up to across the state so we could get a project growing.

So Eric, it's good to see you, and Richard here. I can't say enough about you, Chairman Markosek. You have just been fantastic about this subject. You have reached out not only to the president administration, but the federal administration. I have to thank, most of all, earlier testimony this morning, because I feel

good about all of this conversation. I've got to tell you, a chill went up my back. I guess Don called me about a month ago and said, Guess what? They're recreating. They're putting new spirit and money, and putting the money where their mouth is at the federal level. Obama Administration is saying, we're going to do something here, and we're going to start moving it. I can't think of a better time.

I have written testimony here, but let me not -- based on the testimony that was already given this morning and the testimony that you'll hear the rest of the morning that I have read already -- but we all understand the economic rewards that come out of this particular project. People sometimes forget -- when you get as old as me, I guess I'm doing a little bit of labor history, but you can remember these crazy things that we did in this country to create jobs. It's about jobs, jobs, jobs, jobs, our economy. The fact of the matter, I go back and I think, geez, they created the Hoover Dam, and the railroad across this country and jobs that were created to boost our economy.

I mean, here we are in Western Pennsylvania -- and as far as I'm concerned, I think Paul mentioned it earlier, that the fact of the matter is that we are advanced so far above everybody else. To have an opportunity, not

just for the State of Pennsylvania, but to create an industry for this whole hemisphere. Think about this. Nobody from all the way up north of Canada, to all the way down to the tip of South America. If we could grab this thing and run with it, we could become a centralized industry, not for this country, but for the entire hemisphere. Everybody that is going to do anything in mag-levitation, whether it's the Navy department projects that move forward and the Department of Defense, whether it's the transportation side, or even new ideas that we're hearing about, it's done here in the Pittsburgh area.

So the challenge here is to recreate this spirit of enthusiasm, which you all have been involved in over the years when you created Maglev, Inc. when you've got labor, you've got business, you have financial institutions, and the excitement that we started 20-some years ago to really recreate that intensity again. To supplement the project that we're dealing with. All of us carry this fight to public relations, whether it be Wall Street, special TV opportunities, or whether it be in Washington, D.C., moving forward with our congressional delegation, moving forward with the president administration here in Harrisburg, or the feature administration, understanding that Pennsylvania,

the Keystone State, has an opportunity in the front of this parade to create these type of jobs. Create an industry that will stay here and be here for centuries. That your grandchildren will have jobs and opportunities to be able to do a mag-levitation.

The dream of this concept is way beyond just the rail systems. I mean, you're talking about things that we see on space shuttles, et cetera, that they're experimenting with that is here. So in this university system that we have here in Western Pennsylvania is just a tremendous, tremendous opportunity to be world recognized. I tell you, if we can move quick and move fast here. The great entrepreneur, the citizen from Germany that spoke this morning, a great engineer, a great scientist, a great advocate is something that we could pass anybody in the world in the matter of three to five years. Just think about that. This industry being located here.

I think Secretary Allen Biehler said it clearly is that their studies show for every one billion dollars spent on transportation projects, especially Maglev, there are 35,000 jobs created. That would be direct jobs to about 60,000. Probably talking about a job project here indirectly and in a particular area in the tri-state area of probably close to over 100,000 jobs

that could possibly be in this industry. I just dream about that, because so many of us in this room have seen the industry that we once grew up in. We have everything going for us. You've heard the discussion, you've heard the energy. I say to you guys that it is so important that we do this, and do it quick.

I got up this morning and I was excited about coming here -- but then the job report was done and a lot of people thought that Wall Street is doing great, and Ford is now showing a profit, Goldman Sachs wants to pay the money back, so and so wants to do this, and then they announced the job picture, and it's worse now than it has been in the last 50 years. 10.2%. In reality, for those who have fallen out of a tree and looking for jobs, there are probably, in reality, about 17% across this nation of unemployment. Only 4%, 5% short of the Depression in the 1930's. In Pennsylvania, you're at 8.9%. Really, the unemployed is about 13%. People need to understand, not that it's the subject here, but the fact of the matter is, that in our state, 38% of the people unemployed are the only people that get unemployment checks. The other don't meet the standards. So it's tough times here. What a great, great opportunity here for every reason facing the stimulus idea, the stimulus package to say that this is

the opportunity. This door doesn't have a little crack in it. It has got the door wide open here in the last six months.

In addition to the testimony from what you'll hear from our colleagues, the national AFL-CIO, the state AFL-CIO are industries in which we're part of that is prepared through our new leadership in Washington, D.C., Richard Trumka, and in the team that is put together there to really go out and put their money where their mouth is in reference to backing up this project in a lot of ways with our pension funds. I see people willing to do things with pension funds, investments, that they don't want to give to Goldman Sachs anymore because of what happened in the markets in the last few years. They see a stabilization. They see rebuilding America here. I think you've got an opportunity here, not only in the engineering, and the structure, and the job creation, but the entire financial institutions.

What an opportunity that you can grab onto if you are head of a major, major financial institution and say, wow, this is something I would really, really like to get. How many financial people are so mad because they didn't jump on the Hoover Dam and the electric, the whole early electronic systems that were put in by FDR

for profit, and was run by the federal government. This is one that gets a tremendous return in every aspect. This is what America is about.

I plead with you, after today's testimony, perhaps we have a -- and I'll pay for the dinner -- we have a sit down and bring some people in from all of these categories and say, let's make this the number one priority for Pennsylvania. Republicans, Democrats, East and West, let's move into Washington, D.C., and let's really push every second of our society in creating this opportunity for us, and make sure that it's done in Western Pennsylvania.

It's not about only the project. It's about the industry. The transportation mileage is not the issue, at least from our perspective. It's locating the industry. All of the steel industry in Western Pennsylvania here wasn't about just building steel here in Western PA. It was about building steel in the whole Northern Hemisphere. Again, here we are in 2009, like in 1890 and 1898 and the entrepreneurship had the mentality to understand they were going to create an industry for a whole hemisphere. That is what we're dealing with here. It's an opportunity.

Thank you very much this morning. I hope I saved a little bit of time in not reading my full testimony. I

want to complement all of you for the great things. I understand, Paul, in yelling at people this morning that it was taking so long. But I think we got this door wide open, and I wish that both sides bring together and let's move forward and not nitpick about the little things. Let's go and get it done. Thank you very much.

CHAIRMAN MARKOSEK: Thank you very much, President George. I would just recommend to you to use a little more enthusiasm. You did a great job. Thanks. It was a great testimony.

Ms. Hass, why don't you go next.

MS. HASS: Thank you, Mr. Chairman, and thank you, Members of the Committee for allowing me just to come in and talk a little bit about the experience of Maglev, the opportunity of Maglev, the reality of Maglev.

I was very fortunate about ten years ago -- and I can't believe it's ten years ago, but this is how quickly time is going by with this opportunity -- to have an opportunity to go over and test ride the project that was over in Germany. Now, that I said was about ten years ago. And at that point in time, it was pretty amazing just to see a project that fits so beautifully into the environment. Now, I know some of you have ridden it. For those of you who have not, perhaps I can

give them a virtual experience for a moment.

To go onto the platform and to step into a comfortable space where you could easily sit down, ample legroom, ample headroom in a conversational fashion if you so choose, next to bright windows in a spacious car, and to wait for the experience. I can point to use the word "experience," because it really is an experience. I know the experiences up to that date that I've only had in transportation have been with rail, with aircraft, with cars, with taxis -- I can assure you I never got out of them and said, wow, let's do that again unless it was for, perhaps, a whole other reason of sarcasm.

Now, when the car began, it's very much like being out at Kennywood. Where the car elevates, and suddenly you begin to move. Now, you only realize that you're moving because you see things going by out the window. You are watching. You are looking. You are seeing it's going faster and faster and faster. In the background, there is no noise other than the chatter among everybody going, "Look how fast we must be going." You're sitting there comfortably. And I want to add, unlike an aircraft where suddenly you are pushed back in your seats after you have strapped yourself in and prepare for take-off, you're sitting there just very

comfortably, looking, observing, hearing other people just easily in conversation. And then, because you can't believe you are going this fast, because it's like you are flying, but you are flying next to the ground.

You look up, there is little box up there in your car that is telling you how fast you're going. Now, you've got to convert this, so you are multiplying x6 I think it is. We're going 100, 150, a few minutes later we're now at 200. Now, we're at 270 miles per hour. I am not suddenly being pushed back in my seat. I am still sitting there very relaxed, watching, observing out the window. What am I seeing? In a blurred fashion, but still able to clearly see out the window, there are animals out there, obviously, people that are walking underneath the tracks. We are now coming around the track and we're done. We're done. At 235 miles per hour, I think, on the the track in Germany, we were suddenly done with going 20 miles. That was it. Wow. We get off. Wow.

We stood outside, because we wanted to hear, what is this like outside? I'm out in the airport area, and you want to run the Maglev from the airport to downtown, which mean it's going to impact our communities. What is this going to be like? So having had the opportunity to stand outside on a platform to observe, okay,

apparently the train is coming, we're waiting for it, waiting for it, it's close, suddenly it's there, you see it, you hear it for a moment, it's gone. That was it. It sounds similar to a train, but only for a moment and then gone. It's more of a whooshing sound, and it's gone. That's it. Being outside, again, you can see that there are -- at least in Germany we had -- there were animals grazing out there. Suddenly, they didn't storm off or anything like that. It was just very environmentally friendly. Ten years ago, Maglev was probably one of the greenest projects, and today, it remains one of the most green projects because of its environmental friendliness.

Now, having had the opportunity to go over to China, eight years later and enjoy the experience again. Now it has evolved because it's in a practical application. Comfortably, you go up a set of escalators into a Magport. The Magport is very nicely appointed. It is a very comfortable place to be waiting. You are sheltered from the weather conditions. The train is now out on the platform. With ease, you walk out onto the platform. Now, I do want to mention here, there was an area where they were selling souvenirs in China. Of course, you'll see that. It's all about Maglev stuff. And you're thinking eh, so you go ahead, we'll get back

to that later.

Let's walk out now onto the platform. Again, very comfortably into a car. In Shanghai, people are already using the Maglev. This is part of their day-to-day life. They are getting on, they are carrying things. This is nothing new for them. They are walking on with ease. We, again, sit down. Same experience again. Seamless, no pushback, car rises, you take off. Again, it's a similar length and speed. We achieved 275 miles per hour there. You're easily talking to people. You can actually get up and walk, comfortably, if you wanted right across the aisle, talk to the people there, go to the back, easily. It's not the jerking sensation. No noise, no distractions in the background.

We completed the ride. We got off. I was very intrigued by how many people were over at the souvenir stand because, simply, you want to get something. You just had a "wow" experience. In both of these places, in Germany, also in Shanghai, this is tourist attraction. Quite honestly, I lead groups of folks from the Pittsburgh region over into this area. This is one of the places that they want to go. They want to experience the Maglev, because they want to understand the technology. They want to see what this is like. I can assure you when we get off of the Maglev, people are

like, "How do we get this?" "Well, you want this?" "Yeah, we really want this. It would be great." This is the kind of experience you want to have. Where do you want to have this experience? We want to have this experience in our own backyard.

For one thing, we have the space. We have the plan in place. Pittsburgh International Airport is the second largest land area airport in the U.S. This has already been included, Maglev facilities, in their master plan. So it's all there. To have personally seen how well these Magports are executed, how seamlessly the ride occurs, and to think about how this experience would connect us. We've heard about the opportunity with jobs. Yes. That's a no-brainer. We know that is going to create new opportunities, new industries, spinoffs. This is all going to happen. The green component must be aware, especially after G-20, how that our image in Pittsburgh is about being green. This will be a showcase for us. This will attract people to the region.

If you're thinking about our declining population, and we all acknowledge that, this is one way that we can derail, so to speak, that problem. People are attracted to innovation. They're attracted to new technology. This type of convenience, this type of opportunity, will

probably help turn that situation around. Our tourism opportunities are significant. I've seen this first-hand by the response of people who go, by the response of people who participate, and by the response of people who want to go back and do it again. So I would say that you're going to see these as terrific opportunities for the Pittsburgh region.

I guess lastly, because I do want to pass it along for other more technical comments. We have an opportunity and it's now. This is now a proven technology. What would be unique about Pittsburgh is that we would truly be able to demonstrate it with a challenging incline, with our weather conditions, year round, in a way that other areas can't. When you're demonstrating some of those things, again, you're educating people, you're inspiring industries. You are really growing understanding of the technology and the opportunity within a region. I think these are all things that you know, so I'll end my comments there.

I thank you for allowing me to share with you a little bit of a virtual Maglev ride. For those of you who would really like to experience the Maglev, I'd invite you to come with me again next April, because I'll be headed back to China and be taking a group there to ride the Maglev, along with seeing other things. I

hope in our lifetime, we will be able to actually do that here in Pittsburgh.

One final thing, I do think it's very exciting when I hear Aliquippa or Altoona, or all of those different places saying, "No. It's coming here." You know what? I think you're all right. I think it should be in all of those places. I think it should not only be from the airport to Downtown Pittsburgh, and to your cities, but connecting between cities here throughout the State of Pennsylvania. Can we think bigger? Can we think bigger about connecting us up and down the East Coast? This is not competition for the airline industry, or for LRT, or for any of these things. This is an industry of its own that provides new opportunity, new ways that we will begin thinking about where and how we do business, where we work, and where we play. Thank you so much.

CHAIRMAN MARKOSEK: Thank you. Enthusiasm is the whole of the day here. Chairman Geist has a comment.

CHAIRMAN GEIST: I just wanted to tell you. If you want to drive and ride in a train that lurches and does all that kind of stuff, Don can teach you.

CHAIRMAN MARKOSEK: Speaking of Don, you have a tough job, Don.

MR. DUNLEVY: Yes, I do.

CHAIRMAN MARKOSEK: You've had a couple of pretty good -- a lot of enthusiasm there, so this better not be boring.

MR. DUNLEVY: I'll give it my best shot.

CHAIRMAN MARKOSEK: Just kidding. Don Dunlevy.

MR. DUNLEVY: First, real quick, a couple of housekeeping things. Bill, you said you'd pay for dinner. I want you to know that's on tape. We're going to hold you to it. Listening to Sally and some of her comments made me think back of one of my first trips riding on the Maglev. The one description of that thing that I think of often is the most remarkable thing about it is that it's unremarkable. You don't realize anything is happening. It's like sitting in this room. It's a pretty fascinating piece of equipment.

My testimony has attached to it some documents. I'm going to go through this pretty quickly, breeze through, and reference some of those. But I do want to thank both Mr. Chairman, the Committee members for holding this hearing to look at and consider the high-speed Maglev Project in Pennsylvania. I also want to thank the Pennsylvania General Assembly as a body for the long and hardened support that we've had over the years in trying to bring this project to fruition. I also want

to recognize and acknowledge the support from our Congressional Delegation over the years.

The first attachment in this packet is a letter from the Congressional Delegation of Pennsylvania just last year after the 45 million for projects east of the Mississippi was released. It was a letter from the entire Pennsylvania Delegation -- and I've been involved in doing this various issues trying to get members to sign letters -- this is the only one, in my memory, that ever had both senators and the entire 19 member Congressional Delegation support one issue. That says a lot itself right there. But that was to encourage Secretary Peters at the time to move forward and release the money. It has now been since June of '08, and we still don't have the money. There is some frustration there, I will admit.

Chairman Geist asked Fred briefly about materials. Let me run through, quickly. 54 miles is 330,000 tons of domestic plate steel. 143,000 tons of rebar. 41,000 tons of electrical steel. 1,250 miles of 3/4-inch diameter aluminum cable wound into the guideway, and over 700,000 cubic yards of concrete. That is for the 54-mile project. That translates into jobs, jobs, and more jobs. Something we need desperately. The project here has national significance. We're the only project,

that I know of, that has fully committed to use steel. The Chinese track is made out of concrete. The majority of the German test track was made out of concrete. What they did out of steel is about 1/3 of the track.

The reason they shied away from it is because you can shape concrete much easier into very close dimensions. We think, in the long haul, you have other issues when you attach metal to it in our freeze/thaw cycles, we're going to get spalling, and we're going to have some long-term residual effects from doing that. Steel is going to stay where you put it. It doesn't hurt that we're all in Pittsburgh, which is a steel town to begin with. We have longevity in this. It's lighter. The steel is 1/3 the weight of concrete. If you look at the deployment along Mount Washington, above Carson Street coming into the City of Pittsburgh, the hillside that nobody has ever been able to figure out what to do with yet, except the college kids who get drunk and fall down at night off that hill, nobody else has found a good use for that hillside yet. We think we have one.

As through impacts, Representative Wagner asked about impacts. At the end of my testimony, there is a website that has the entire draft Environmental Impact Statement on the Web. That includes aerial geographical maps. It has all of the impacts. It spells out how many of each

type. If you look on there, it comes out from behind McKees Rocks and through Sheridan around where the Corliss Tunnel is, where the busway starts up the hill in that area across from Brunot Island. From there into the City of Pittsburgh, I know of one and there might be a second, but that's the only two impacts coming along that shelf from that distance all the way into the heart of the City of Pittsburgh between the USX Tower and the Mellon Arena over top of the Crosstown Boulevard and the Interstate 576. That is an incredible feat for something that is going to travel over 100-miles-per-hour and wind down in a very short distance to make that stop.

The technology is remarkable. The layout, the elevated layout allows this thing to enter cities and urban locations where a traditional on-the-ground highway, rail, whatever, can't do it without raising a lot of buildings. If you look at the end of my testimony, there is a website that has that. The next piece shows a couple of maps. One is the vision. Bill mentioned the vision when we put Maglev together, and Maglev, Inc. together years ago, and one of those people was Paul Wilhelm who was the President of U.S. Steel. I remember meeting a lot of high-level players. He made the comment, as we were just sitting here talking about

50-some miles, 54 miles from the airport to Greensburg. The vision was, this is a multi-state, intercity, large, large project. It has to start somewhere, and that was us. We developed the technology. We developed the fabrication. We developed the idea. But this thing is intended to grow.

So if you look at that second attachment, it will show a map with a circle. That is a 500-mile radius emanating from the City of Pittsburgh where this project starts. That encompasses 1/2 of the population of the United States. It also encompasses half the population in Canada. If you look at the map above as an example of where that intercity system would go. This project has an actual significance. Our topography, our climate, we're able to demonstrate extremes. Heat, cold, snow, ice, weather, rain, all of it. The hills and the way we're going to travel, traverse the ground from the airport into town, if we can build it here, it will demonstrate we can build it anywhere in the country. Again, the use of steel enables us to do that. Doing that with concrete would be a much more difficult task.

The equipment, I think Walter mentioned, Maglev is able -- Transrapid's Maglev is able to climb a 10% grade. At a couple points, we're actually going to hit

about 7%, which is more than twice what a traditional steel wheel train can do. We're at a crossroads, I guess. It's kind of, like, this century, go back to the previous century when everybody was driving horse and buggy. The decision had to be made, I can build an improvement to these buggies. I can do something good, but then something says, we got this horseless carriage thing we've got to be looking at. Well, that's where we are today. We have traditional steel wheel on rail that has reached its peak of capability, of the technology. This system can go 310-miles-per-hour. It can accelerate and decelerate 4 times faster than any steel wheel, which enables you to add station stops and have a very small impact on the schedule.

Traditional steel wheel on rail, eight miles out, you're starting to slow down. If you took the steel wheel from the airport to town that was straight as an arrow and wound it up, you could never reach the 250-miles-an-hour that we're going to make coming through Robinson Town Center, let alone stop when you go by the station. That is the difference in technology and capability that Maglev has.

I mentioned about the steel guideway. A couple of things about that. Fred has -- and it's in his testimony, and it's in the attachment. It's significant

to the big picture for what we want to do, and that is the fabrication. There is an attachment in there that refers to a Federal Highway Administration scan tool. In 2001, I believe it was, they toured Japan, Italy, Germany, Great Britain, to investigate the various methods that other countries use to today fabricate bridges. Along with that is a letter in there from Ralph Gilbert, who is an engineer with HDR. He and one of his co-workers describe the technology that Maglev, Inc. is using, which they found on that trip. I urge you to read that. It's pretty enlightening. Mr. Gilbert happens to be in the room today. I saw him earlier, so I encourage you to quiz him on it. He is the engineer and the expert.

But using this technology, and very quickly, submerged arc welding is the standard in this country. It's horizontal, on the ground, you weld, and there is a flux that covers the weld to keep the air away so you don't violate the integrity of the weld. Then when you want to weld a flange on the other side, you have to invert the entire piece. We don't use that. With this standing torch, we should use more gas metal arc welding. Which, in the wire, is a gas that as you weld, releases the gas, the gas keeps the air away, and when you go down the bottom, up the side, underneath, around

the back, and we don't have to invert the piece. It's one of the ways when Fred told you to save 20% of construction, that's one of the ways it gets done. So I encourage you to look at that attachment on Fred's testimony. That is applicable to highway bridges, that is applicable to ship building, and that is applicable to our industry in Pennsylvania and the use of steel. We need to look at that.

There is another piece in here about cost. Everybody wants to know about cost. It's expensive to build Maglev. It's expensive to maintain it. Fred also has in his testimony, in much greater detail -- Representative Wagner asked about O&M cost, I think. There is much more detail, and there is also a chart that came out of the draft Environmental Impact Statement that will describe how you're not going to have to use annual O&M budgetary money, which we don't have. And how this thing, in about 30 years time, will actually have -- based on the draft Environmental Impact Statement, the numbers that were developed then -- close to a billion dollars. That surplus, that is to be used to expand or replace some of the equipment. That is something that is in no other technology.

There is one other document in here I want to call your attention to, and that's from the American

Association of Railroads. Everybody has the idea that they want to put a fast train on the freight railroads. Somebody has got to pay attention to the fact that freight railroads own that track. That is their property. When you invade it, they're going to want to get paid for it. They tell you straight up front, "At low speeds, track generally can be shared between freight and passenger. At higher speeds, tracks should be separated and dedicated as they are in the overwhelming majority of high-sped rail systems around the world." There is a geometry issue here.

We have the best freight railroad system in the world that we don't want to jeopardize. But to carry freight, heavy freight, takes a toll on the track. If you want to try and maintain that to haul high-speed trains, you're getting into different geometries. Elevation, superelevation, the outside rail, banking curves. You can't take that kind of curve and then come along with a 17,000-ton coal train and go around that curve. Particularly, if you come to a stop. You can't have your cake and eat it too, and that's why France, Japan, and all of those places, they have separate and dedicated right-of-ways. That will work in the long haul. We're going to spend more money on maintenance. I urge you to look at this document. They are very

specific about they want paid, they want release from liability, they want upgrades. We're going to spend a lot of money upgrading our freight railroad system just so we can run a few passenger trains. The truth of the matter is, we need to have a separate and dedicated true high-speed system that will serve the traveling public.

The last thing, there is a document that at your leisure you can look at. It's an analysis of this project against the criteria that the Federal Railroad Administration put out as to how they're going to make the decision on which projects to fund. It's step-by-step. It addresses every question. It will explain to you how our system can match up against the criteria for them to make a decision on funding.

With that, I thank you for your time and I appreciate the hearing and the opportunity to testify.

CHAIRMAN MARKOSEK: Don, you did it. You were great up there. You had to follow a couple of tough acts. All three of you did very well.

Representative Costa.

REPRESENTATIVE COSTA: Thank you, Mr. Chairman. I thank the three of you for testifying. It was very exciting. I did enjoy listening to it, especially your virtual tour. That was pretty cool.

Billy, I didn't realize that I was yelling at the guy

from the Federal Rail Association, or at least to give that impression. Like you, I am very passionate about this. The potential that we have for our region for jobs. Like you mentioned, years ago we were the steel capital of the world. We could be the Maglev capital of the world. The jobs and the new technology that we could provide, not only for labor, but for the high-end engineering and technology. Just a potential and such a great opportunity. I get frustrated when we're not taking advantage of it. I almost assume this is what President Obama was talking about when we need to find new industries. So hopefully they're going to start listening to us, or at least that passion that you and I share. Thank you.

CHAIRMAN MARKOSEK: Representative Wagner.

REPRESENTATIVE WAGNER: Thank you, Chairman. I'll second Representative Costa's comments. This is a fantastic opportunity, and I would really like to see it happen. With that, I would like to thank all of you. Not just for your enthusiasm, but for your advocacy. Particularly Mr. Dunlevy, who has been very, very helpful in educating me on any questions I've had on this.

Two quick questions. First, could you just quantify the investment made so far in the Pittsburgh Maglev

Project, and the portion of that that has been public-funded.

MR. DUNLEVY: I can get you a breakdown that we have by federal, state and private investments. I don't have that with me. Our Environmental Impact Statement has cost about 18 million dollars just from the environmental work. I think it totaled about 30-some million dollars has been spent on the entire project and the development of the fabrication technology, development of the right-of-ways, and that kind of thing, in addition to the environmental work. That is over 21 years. Time flies.

REPRESENTATIVE WAGNER: I think it's important to point out beyond job creation and so forth, the invested interest that we have in terms of the investments made so far.

MR. DUNLEVY: Let me say this: I share Mr. Costa's frustration. The funding that's out there right now, we need to move that somehow around. Some to state, some to this federal. It took three years from the passage of safety included 90 million dollars from Maglev, half of which went to Las Vegas, and the other half went to the eastern half of the United States east of the Mississippi. That took three years because there was an error in the drafting. They had to get a

technical correction. Politics being what they are, that took three years. When they finally passed the technical correction in June of '08, the notice that the funding was available didn't come out until October. Projects were allowed to bid on it. Only three projects were eligible, and they had until February of '09 to file the applications for just those three projects. Then the decision wasn't made until September.

If we move -- we're trying to build high-speed rail and we've got slow-moving paper. That's the biggest obstacle that we have is overcoming those delays. I spoke to the governor a couple of weeks ago. The House of Democratic Caucus gave the legislative an issue grant through the Department of Community and Economic Development. Of course, through the budget process, we know what happened. But I've asked them to release that. That is something we need to get moving. When Deputy Secretary Fauver talked about -- and I guess also Associate Administrator Yachmetz mentioned -- that we're not at that design or that engineering end yet, because the money is laying there and we could be doing that work now. We could be in position when they make this decision in January.

But I asked the governor about another grant that we got from Allegheny County. They've gone through all of

the processes. Senator Specter's $950,000 will match that. There has to be a one-to-one match with federal and state money. The paperwork went down to the Redevelopment Authority of Allegheny County for the signature on October the 1st. It was sent back October the 2nd. When they followed up on it, they said it's going to take two to three months to get five signatures. So I asked the governor about it and he said "no way," and I saw him two weeks later and I said, "Well, Governor, it's going to be four weeks on Monday." He said, "See. I told you," and I said, "No, Governor, it's going to be four weeks and we don't have any signatures." It's going to be five weeks this Monday.

Now, I gave him the document, and he wants to take care of it. Look, I know everybody has the weight of the world coming down on them. Our budget process didn't go too smoothly. This is a major, major project. More jobs. It's wall-to-wall jobs. Somehow, we need to move that. That is just a couple of examples. I don't really mean to attack them, but I am so frustrated with 21 years of involvement in this project knowing that we're within arm's reach of this, creating an industry and creating jobs, and it's just over the brink and we can't get it. So anything you folks can do to help on behalf of all the citizens of Pennsylvania, we greatly

appreciate it.

REPRESENTATIVE WAGNER: Just one more quick question. I asked this earlier, but I'd like to hear it from your perspective, how Pittsburgh Maglev compares to the other two applications in Pennsylvania, and where you see any prioritization at the state level, if, in fact, there is any.

MR. DUNLEVY: Referring to the Atlanta, Chatanooga, and the Baltimore --

REPRESENTATIVE WAGNER: Within the Commonwealth of Pennsylvania. Keystone --

MR. DUNLEVY: Oh, the other two high-speed projects?

REPRESENTATIVE WAGNER: Right.

MR. DUNLEVY: The Keystone service between Harrisburg and Philadelphia is currently operating at 110-miles-per-hour. They've had plans for years to eliminate those three grade crossing to get it up to 125. They're also going to do some other changes in concrete, putting some electrical connection signaling systems in. It's a very good system, but when we talk about O&M, that little section, 100 miles, costs about 8 million dollars a year in O&M to keep it running. That is owned by a passenger company, not by a freight company. So very little freight actually runs on that

line. The other thing about it is Amtrak has given notice that they want a 15% increase. So the O&M cost next year is about to go up to 9.3 million.

If you look at coming west of Harrisburg, over the mountains, I mean, we're talking Harrisburg to Philadelphia is pretty flat. It's river grade, and you don't have the curves and the hills. Just interpolate 250 miles at the same cost, it's going to be a few bucks. Now, we've got hills to deal, grade separation, water runoff. We've got a lot of other elements, and we're going to spend a lot of money to do it.

The Scranton to New York project actually, at one point, we were asked to give -- full complement of engineers -- to give a quick evaluation of what would happen, because they wanted to do high-speed. They went to one of the congressman, he referred it to us at Maglev because they were looking for 140-miles-an-hour. Our engineers actually did a very quick right-of-way. Rather than following the existing old right-of-way, which has a lot of track missing, followed Interstate 380 down to the Delaware water gap, and over the Jersey transit into New York. That trip from Scranton to Penn Station in New York would be about 40 minutes.

If we were to ever do that, my recommendation would be by land in Scranton, because it's going to be pretty

valuable. That is doable. That is not a pipe dream. The question is: How long do we wait to do it? We've got to get a project built somewhere on Maglev just to get it moving. I guarantee when one is up, and the people in this country have an opportunity to see it, it's going to go like wildfire.

The Scranton project I know has some other work to do. The Harrisburg to Philadelphia project is very easily doable. They are going to do it in two or three stages. It's almost a billion dollars. I don't know how you walk away from that. I think it's a very effective service and a lot of people use it. I would recommend maintaining that. Traversing the Allegheny mountains and getting across the hard part of Pennsylvania makes more sense to me in that regard.

CHAIRMAN MARKOSEK: There are no more questions. Thank you. Thank the three of you.

Mr. Scott Paul, Executive Director of the Alliance for American Manufacturing, and Mr. Torrey Babson, Economic Architect for GSP Consulting are here next. Gentlemen, we thank you for letting us change the schedule there slightly.

Mr. Scott Paul, you may begin, sir, and after you, Mr. Babson.

MR. PAUL: Thank you, Mr. Chairman and

Chairman Geist, and Members of the Cabinet. I appreciate your patience this morning as well. Chairman Geist, essentially, delivered my testimony for me about the opportunities for manufacturing jobs. I think what I might do is hit some of the highlights.

First, I will tell you about the organization that I represent. The Alliance for American Manufacturing is a unique partnership. It's the United Steelworkers Union, and a number of Pennsylvania-based employers, including United States Steel, ArcelorMittal, Allegheny Technologies, and many others. We work on issues of common concern. One of those being job creation and structure, development. This is why Maglev, in particular, is such an interesting issue to us. I'm going to talk briefly about some of the manufacturing gains, some of the clean energy implications, and then also offer a couple of different ideas on financing. Because it goes without saying, that this is not an inexpensive proposition to move forward, but what some of the benefits to the community would be to pursue such a path.

You've already heard the estimates of the raw materials that it would take to build 54 miles of this same, just anecdotally, from the Pittsburgh Airport to Greensburg, and the amount of steel plate and other

types of material that would create extraordinary demand. To put it into perspective, if you were to build 200 miles of Maglev, it would keep the largest steel mill in the United States in operation year-round. It would probably boost overall domestic demand for steel by 12%. That's just 200 miles of track, so you can see the gains for the steel industry would be extraordinary. Both for the manufactures of steel for this particular project, but also for other steel manufactures who would then be soaking up the rest of the demand.

I would point out that all work is important, and Billy George mentioned the job figures, which nationwide, are 10.2%. But the importance of revitalizing manufacturing cannot be understated, because that is usually the framework for other jobs in the community. A manufacturing job is not a temporary job, or a construction job. It's there for the long haul. It's going to be there with some investment for 10, 20, 30 years. It also has a higher multiplier effect. It will support four or five other jobs in the community, and it tends to pay better wages. So in particular, investment, such as, an investment in Maglev is going to provide a greater return in the community than other types of spending.

The other piece that I was saying is that the importance of investing some money in this project right now is important for a couple of reasons, internationally and domestically. The United States is a generation behind in our advanced infrastructure, especially with regard to high-speed rail. If there were a gold metal stand in the Olympics for high-speed rail, we wouldn't even make the metal platform at this point. In fact, we would probably be dropped out after the first round. We don't even make it into the top ten in a lot of categories in high-speed rail. This is a portion of our infrastructure that has been grossly neglected.

The other piece of this, and this has important implications for manufacturing, is how manufacturing clusters get started. Manufacturing jobs generally go where the investments are made, especially if you have some domestic content requirements attached to that, like, a lot of federal highway transit money does. It results in spinoff industries, and you heard Maglev, Inc. talk about some of those. Not only can this capacity be developed to construct Maglev, it can also be applied to other uses, such as, ship building, other types of welding and materials handling. So the types of technologies that you're going to spawn in McKeesport

are going to have applications to other industries, and it's going to have the opportunity to create an entire cluster of manufacturing industries in the area.

You see this in other areas. You see where the biotech corridors are in the country and you can identify them. You can see with semiconductors and high tech. You can see a generation or two ago with steel and automobiles. This same thing applies to this type of technology, so making this investment here and now is going to pay dividends. Otherwise, somebody is going to make the investment and these jobs are going to be produced to the customer. A professor here at Carnegie Mellon, Dr. David Bourne, who is at the Robotics Lab has done a lot of work with us. One of the things that he likes to talk about is how we have sacrificed almost an entire generation of advanced welding and machine tooling because of the decline of our manufacturing base, and the fact that much of our research and development has been focused on other sets of skills rather than developing this.

As a result, you see this type of advanced manufacturing robotics in Korea, you see it in Japan, you certainly see it in Germany, in China, but it has yet to flourish in the United States, and a significant investment in Maglev through the federal government

would give us the opportunity. Governor Rendell said at a conference he hosted last week in Washington called Building The New Economy, and he made reference to a point that I think is important. One way or another, high-speed rail is going to come through Pennsylvania just through an act of geography. We have to connect the Northeast Corridor with the Midwest somehow if there is going to be an intercity passenger rail service. It's much better to do that on your own terms than to have the terms dictated to you. Getting the community behind this investment in Maglev is the absolute best way to do that, so that you have the opportunity to develop that. I want to talk about financing for a second, because I think this is a major challenge. The number of applications that the U.S. Department of Transportation has received, the amount that is being requested and the total that I have is actually 102 billion dollars from all of these projects. Obviously, we're going to have unmet needs, so we have to look at other ways to try to also finance or provide supplemental financing for these types of projects. One thing that I would urge you to consider embracing is support on both a state and a federal level in infrastructure bank. It is proved to pay dividends in other parts of the world. John Surma, the Chairman of

U.S. Steel, was just telling me about infrastructure bank in a Serbia, that it has financed a large amount of infrastructure development. What it would essentially do is leverage the issuance of bonds, and it would have an independent board that would weigh the relative merits of the projects based on their efficiency, their job creation, and other sorts of factors. But in addition to the pay-as-you-go financing that is available from the federal government right now, which is very limited, it would leverage tens of billions of dollars in additional resources.

The good new is, is that it's something that is in the Obama Administration's budget. But I think it's going to take political will to get this done, because as you know, there is calls for focus on different kinds of spending and tax relief. But this is the type of investment that is going to return dividends for generations to come.

The last point that I would make about this is that one thing we believe very strongly in, in something that I suspect you all support, is the notion that this should be made in Pennsylvania, or made in the United States. The real value out of it in terms of jobs that comes with a project like Maglev is the manufacturing. You know the construction jobs are going to be created

here just because they can't be created anywhere else if you're going to build it, but what you don't know is the manufacturing. We certainly don't have the capability to make all of the rail cars now, but as you heard, the gentleman from Transrapid mention, bring that capability to the United States. One thing that we feel very strongly is that any tax dollars that are leveraged be used to create jobs in the United States, so strong domestic content requirements should be attached to any funding moving forward.

We're excited about this opportunity, because we really do think that this position, the Pittsburgh area, is a model for the rest of the country. Not only in terms of the development for transportation in intercity rail, or high-speed rail from the airport to the city, but also as a manufacturing corridor as well.

The last piece that I would mention is just about the clean energy, or the green impact of this. Per passenger mile for a 400-mile trip in a car, you are emitting well over one pound per passenger mile of carbon dioxide emissions. For an airplane ride that is 400 miles, it's about 3/4 of a pound per passenger mile that is being emitted. For something like Maglev, it's well under half a pound of carbon dioxide emissions per passenger mile. So it's a much cleaner way to do this,

and as we develop a more diverse set of energy options for the electricity as well, including clean coal and natural gas and wind energy, that's going to come down significantly. Where it's not going to come down for airplane transportation. It's only going to come down modestly for automobile transportation. So this is really an investment in energy economy as well.

Thank you for your attention. We will do whatever we can to support Maglev. Thanks for the opportunity to testify.

CHAIRMAN MARKOSEK: Thank you.

Mr. Babson.

MR. BABSON: Chairman Markosek, Chairman Geist and Members of the Committee, I want to thank you for affording me the opportunity here to speak before you. Much of what I wanted to talk about has been stated, so I don't want to restate some of the obvious. There has been so many great comments. I do want to touch upon some of the policy implications of a Maglev system.

Really briefly about GSP Consulting. I work in their economic architecture practice, and we conduct a lot of economic analysis, work on transportation projects, and a lot of various types of economic develop projects in both this region and throughout the United States.

Additionally, our staff has been working, has had experience with the Maglev Project since the original Intermodal Service Transportation Act of 1991. Specifically, Stephen McKnight on our team has been very involved.

First, I want to say that Maglev will address a number of different issues in things that we're trying to accomplish here in the region, and that ladies and gentlemen on the panel, I know you have been very involved in. There is economic, environmental, and a lot of social equity implications of this project. Firstly, Maglev represents a nice shift towards smart growth development. It really will help connect the region, especially between various counties around the Pittsburgh area. More so, with various jobs with possible employees.

There is often a real difficulty for low-income workers to be able to access jobs. There are a lot of facilities, they often get built on green space, unfortunately, out more in the countryside where it's often land is cheaper, but the employment supply is less. This will be able to provide a nice connection between folks, maybe in the city, with jobs in Westmoreland County, for instance.

Secondly, there are definite harms in terms of

automobile traffic, and this has been discussed. There is congestion, there is pollution, and there is cost of gas. We have seen huge fluctuations in the price of gasoline based upon our dependance on foreign oil. Maglev will help to mitigate some of those harms. I want to get into a couple of these just really quick.

Firstly, linking back to the jobs discussion, we have been very involved with a lot of the green jobs work that has been going on in the Pittsburgh region, as well as, in a couple of other states, including the State of Minnesota. One of the things that Maglev can do is entrain informational projects. We have seen, and according to our research, there is actually efficiency of many jobs that have green applications in the region. These aren't just going to be biotech engineers, environmental scientists, these folks are welders, metal fabricators, construction workers. There is a role within the green economy for many, many types of jobs and employees.

What we're seeing is a lack of people going into these roles, along with the older retirement workforce that we're experiencing in the region. We've got really great community college and apprenticeship programs with our unions. I think a transformational project, like Maglev, will really help to ignite interests in some of

these traditional blue-collar jobs, and show them that there is a very real green impact that they can have both on the economy, their environment, and it also helps in terms of social equity. It can connect people who may not have an interest, or the ability to go to a four-year college or university, or onto graduate school, where some of these high-tech jobs lie and be able to connect them with what is going on in the region, what is going on in the environment.

I also want to second a lot of what has been said about the early adoption. It's so important. It has been mentioned a number of times that this is going to be done somewhere. I think it's very important that we mention and talk about early adoption. It's consistent with economic development projects around this country, that early adopters, they really get a good splice of the eventual benefits. There is definitely a lot of spinout opportunity. One of the great examples, I think, is actually HP. They located a facility back in the mid-70's in Boise, Idaho of all places. It actually worked really well with the economics and the strengths of that region, and they have seen spinouts over the years of at least, probably, 60 to 80 different companies with related technology, but helping to build that regional economy. It has national implications --

I mean, there are HP printers all over the United States, all over the world, and they have seen a lot of success in terms of the economics of that region.

Finally, I just want to speak really briefly about the environmental benefits. In terms of our air quality here. In 2007, we were rated as having the second worst air quality in the United States. There is definite manufacturing, but a lot of pollution caused by automobiles and traffic. Going through and just doing a little bit of calculation, if you took 10% of the daily commuters who travel from Westmoreland County to Pittsburgh and we took them off the road, we would see an annual decrease in carbon emissions from those vehicles in over 84,000 pounds. This is not withstanding all of the other areas that Maglev could connect and help take daily commuters and other travelers off the road, which would really enhance the environmental picture here and the overall air quality.

Finally, I want to second what has been said in terms of the overall environmental impact, because it's so limited. It really is something that not only is positive for the region, but again, United States and the world can look to the Pittsburgh region as we build off the success of events like the G-20, and the number of buildings and other projects we have going on here to

really be a leader in environmental and economics, and connecting all of those three for the overall uplifting of our entire economy and everybody who lives in this region.

With that, I want to thank for the opportunity to speak before you. I strongly support what you are doing here. Thank you.

CHAIRMAN MARKOSEK: Thank you very much.

Representative Longietti.

REPRESENTATIVE LONGIETTI: Thank you, Mr. Chairman. Thank you for your testimony.

I want to particularly recognize the Alliance for American Manufacturing, Mr. Paul's organization and the important work that you do to protect American manufacturing. In my district, Mickey Bolt works for the Alliance on the steelworkers side and does an excellent job. We had some cases that went through the International Trade Commission, as you know, Mike Duncan and Type II of Chinese and some success there. There has been a lot of talk of the steel beams that would be needed for the Maglev Project. We, too, in my district, makes a Type II of conduit for electronic wire components. If you could just speak a little bit of the need or the demand for a conduit piping project like this.

MR. PAUL: It's a good question. I will be the first to admit that on the technical aspects of the project, you'll probably get a better answer from the Maglev folks. But I am happy to talk about some of the opportunities. In talking with people from within the steel industry, they are particularly excited about this, because it represents -- it could potentially represent a large increase in aggregate demand. The other thing that the steel industry excels at, I think this is something that is forgotten -- certainly not written about enough -- is the high-tech nature and the adaptability of it.

Leo Gerard, the President of the Steelworkers, likes to remind people that the steel that's in an automobile today didn't even exist ten years ago. It wasn't even thought of ten years ago. The way they're able to change the formulation. And there are some companies around here who do a very good job of that. It's the hub of the steel technology in a lot of ways in the entire country, or at least the world.

The other thing to point out is I think that this area will be well-positioned because it's a highly efficient steel industry. Even though the workers are well compensated, the amount of production they're able to do in a man-hour compared to their overseas

competitors is unlike even the most efficient steel mills in the entire world. The piece of this that is so important is that on a level playing field, these manufactures can compete with anyone and can grow their workforces. The thing about procurement and public investment is important is that it has an invested content requirement attached to it, so we're guaranteeing that this work is going to the most efficient producers in the United States.

I appreciate your advocacy on our issues. I know Mickey Bolt is one of our outstanding employees and I know he enjoys working with you immensely.

REPRESENTATIVE LONGIETTI: Thank you very much. I certainly will follow-up with the folks from Maglev. I noted from earlier testimony that a lot of electronic components are used for this type of project. I envision the need for conduit type of pipe that we can produce. Thank you.

CHAIRMAN MARKOSEK: Thank you, Representative.

Before we adjourn, I do want to say the Committee did reach out to some other groups. Some of which are not as enthusiastic about the Maglev Project as what we have heard here today. We reached out to the Commonwealth Foundation, the Allegheny Institute, as well as the CATO

Institute. Out of the Allegheny Institute and the Commonwealth, did not provide any input. The CATO Institute did provide written testimony, so we will have that distributed as well. Also, we got an e-mail letter from Representative Hancotti (phonetic), Allegheny County, who had some concerns as well. We got that late last night, so we didn't have it here to distribute, but we will distribute that to the Committee as well.

With that, I know we have people who have to get on the road. I want to thank everybody here for their testimony, and for being here today. Particularly, CMU for allowing us to use this beautiful room. And the folks at PCN who always do such a great job, and their efforts as well.

One other announcement, the Transportation Committee will meet on Tuesday, November 10th at 9:00 a.m. in Harrisburg at the Capitol, Room G-50. We have several pieces of legislation would like to move. Other than that, there is no other business, so meeting adjourned.

Thank you.

C E R T I F I C A T E

I hereby certify that the proceedings and evidence are contained fully and accurately in the stenographic notes taken by me on the hearing of the within cause and that this is a correct transcript of the same.

COURTNEY E. KROPELAK