TESTIMONY OF SCOTT N. PAUL EXECUTIVE DIRECTOR ALLIANCE FOR AMERICAN MANUFACTURING BEFORE THE PENNSYLVANIA HOUSE OF REPRESENTATIVES TRANSPORTATION COMMITTEE HEARING ON HIGH SPEED RAIL AND MAGLEV IN PENNSYLVANIA PITTSBURGH, PENNSYLVANIA FRIDAY, NOVEMBER 6, 2009

Mr. Chairman and members of the committee, I want to thank you for taking the time to study the importance of high speed rail, especially magnetic levitation technology (or maglev), and implications for manufacturing, industry, and green growth, and for inviting me to testify on behalf of the Alliance for American Manufacturing.

First, I would like to introduce the Alliance for American Manufacturing. We are a partnership formed in 2007 by some of America's leading manufacturers—including companies like United States Steel, ArcelorMittal, Allegheny Technologies with a significant presence in Pennsylvania—and the Pittsburgh-based United Steelworkers union to explore challenging public policy topics such as job creation, infrastructure investment, international trade, health and retirement security, and global competitiveness. AAM works in a cooperative, non-partisan way, bringing together labor and management, Democrats, Republicans and independents, to work for one goal: strengthening American manufacturing and therefore our nation's economic and national security. Our mission is to provide policymakers like you with useful analysis of the issues, as well as innovative policy ideas to move us toward effective solutions.

We're excited about the possibility of a significant investment in high speed rail infrastructure and maglev in particular. Other witnesses have been and will be discussing the relative merits for transportation efficiency and construction jobs; I will focus my remarks on the implications for manufacturing and make a few recommendations.

First, you may be already familiar with the jobs estimates for building 54 miles of high speed maglev from the Pittsburgh International Airport to downtown Pittsburgh and Greensburg. For manufacturing, the opportunities are extraordinary. The sheer scope of materials needed would boost demand at the following estimated levels:

- 330,000 tons of domestic plate steel;
- 143,000 tons of steel rebar;
- 41,000 tons of electrical steel;
- 1,250 miles of 34" diameter aluminum cable; and
- 712,000 cubic yards of concrete.

At a time when manufacturing and the steel industry in particular have been hard hit by dumped imported steel, foreign subsidies, and the economic downturn, a significant investment in maglev would put people back to work. A high speed maglev system of 200 miles would keep the largest steel mill in the U.S. operating full time for a year, according to some industry estimates. Such an investment would also boost the demand for domestic steel plate production alone by up to 12 percent. All work is important, but manufacturing jobs are essential to Pennsylvania's economic future because they tend to be longer term in nature, have a higher multiplier effect, and pay better wages than most

other jobs. While I'm not in the best position to tell you whether or not local maglev manufacturing capabilities can be leveraged nationwide for high speed passenger service, I can tell you that not sustaining such an investment will disqualify the region from any potential work on a nationwide scale.

Second, maglev is exciting because it can apply state of the art manufacturing capabilities which are being developed in McKeesport to other industries. These capabilities will not only help fabricate the infrastructure necessary for maglev high speed rail lines, but they also can be adapted to other processes that require robotic welding and precision manufacturing. These applications include highway bridge components, ships, and other large scale metal structures. Dr. David Bourne, a professor at the Robotics Lab here at Carnegie Mellon University, has told me that we've nearly lost an entire generation of advanced manufacturing because of the lack of production opportunities, reduced research and development, and competition from the massive public investment that nations in Asia and Europe are pouring into their own industries and universities.

Maglev gives us another opportunity to compete in this critical sector of the economy—a lifeline that we have lacked for the past two decades.

Third, as Governor Rendell said at a conference on "Building the New Economy" cohosted by AAM in Washington, DC last week, high speed rail will need to come through Pennsylvania one way or another because of geography and the need to connect the Northeast Corridor with the Midwest, so it's better to mount a campaign to control its development as much as possible. Working to expand out from Pittsburgh makes geographic and strategic sense in this regard. This requires a push now, not later.

But all of this will take public investment on a large scale. High speed rail requires significant resources to develop and a long term commitment to sustain. The investment is well worth it. The Obama Administration has made a down payment on high speed rail, but the \$8 billion in the stimulus bill will not finance even one major intercity project. I participated in a high speed rail roundtable at the U.S. House of Representatives Committee on Transportation and Infrastructure in July, at which time it was reported that the U.S. Department of Transportation had already received 278 preapplications for funding totaling \$102 billion.

As legislators, I know you are concerned about revenues and spending. You should know that sustained investment in advanced infrastructure like this pays dividends. Improving our infrastructure provides a greater return on investment for taxpayers than tax cuts and virtually every other form of spending. In the process, it boosts construction jobs, stimulates demand for manufactured goods, and improves productivity and economic growth by making transportation more efficient. According to a recent study by economists at the University of Massachusetts at Amherst, ensuring that the materials purchased with tax dollars for infrastructure projects are sourced domestically creates 33 percent more manufacturing jobs, which is why we urge you to ensure that the steel, concrete, and other materials used in the maglev are sourced in the U.S.—and hopefully right here in Pennsylvania.

There may also be other financing options available, such as through an infrastructure bank, which I know has the strong support of Governor Rendell and the Obama Administration. The bank, which would be seeded with federal money, would allow the federal government to float long-term bonds to help finance large projects such as magley. It would supplement the current pay-as-you-go infrastructure spending and would allow the federal government to tap into private money to attack the nation's huge infrastructure needs, which amount to at least \$2.2 trillion dollars, according to the American Society of Civil Engineers. We hope Pennsylvania's congressional delegation will support the creation and financing of such a lending facility.

In conclusion, I would like to make a strategic point. Maglev and steel wheel high speed rail have been a fact of life for years in Europe, Japan, Singapore, and China. The innovation, knowledge, and experience of building and maintaining these systems are embedded in the nations that have developed and deployed the technology over the past generation. When it comes to the next generation of high speed rail, the U.S. has exactly one firm that had led the way, and that is Maglev, Inc. But we've lacked the capability to fully develop and deploy this technology because long term, stable investments have yet to be made. We have the best technology right here in the Pittsburgh area. We have the capacity to manufacture a maglev system. I urge to you to work to make it all right here, and thank you for the support you've provided to the efforts so far.

Thank you.