TESTIMONY OF
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UNITED TRANSPORTATION UNION
BEFORE
THE PENNSYLVANIA HOUSE OF REPRESENTATIVES
JOINT COMMITTEE ON TRANSPORTATION AND POLICY
HEARING ON
TRANSPORTATION POLICY AND FUNDING IN PENNSYLVANIA
GATEWAY HIGH SCHOOL
MONROEVILLE, PENNSYLVANIA
FRIDAY, JUNE 18, 2010

Good afternoon. My name is Don Dunlevy and I am the Pennsylvania State Legislative Director for the United Transportation Union. I thank you for the opportunity to provide comments on Pennsylvania's current transportation infrastructure needs.

While my comments today are directed specifically toward intercity passenger rail service in Pennsylvania, be assured that the United Transportation Union fully recognizes the need for developing and maintaining a comprehensive transportation system.

A fully integrated, quality transportation system is the life-blood of commerce. The development of our economy is directly related to the complete quality of our total transportation system. It is one of the primary reasons that both families and business and industry choose to put down roots in a particular location or otherwise look elsewhere.

Whether it be for the transport and delivery of goods, to providing the mobility for the young, the old or those physically unable to transport themselves, to creating walkways and riding paths for personal health and recreation, transportation is a key element in our daily lives. These are the necessities of life and the extent to which our commonwealth adequately provides them will have a great impact on the quality of the daily lives of all Pennsylvanians.

All transportation modes must be evaluated and their individual needs established. Only then can we determine the full cost of bringing our current transportation network into a state of good repair, maintaining that complete system and developing future needs. These are the necessary elements to developing a comprehensive solution to the problem.

Many varied funding options are available for consideration after the comprehensive need has been established. It is only at that point that recommendations and decisions can be made regarding what specific funding sources are needed and to what degree they are required. Trying to determine the amount and source of funding without analyzing the overall need will assuredly result in an approach that only addresses a portion of the problem. Deferring a comprehensive resolution will only lead to greater issues in the future

while jeopardizing Pennsylvania's commerce and economy and we look to the General Assembly to address the total, comprehensive need now.

Regarding intercity passenger rail service, Pennsylvania has two extreme operations. The Keystone Service between Harrisburg and Philadelphia, owned and operated by Amtrak, currently operates 14 trains per day in each direction. The basic infrastructure was built decades ago with electrification of the line to Paoli in 1910, followed by the electrification to Harrisburg being completed in the 1930's and we are still benefiting today from the significant infrastructure investment that was made so many years ago.

In 2004, Amtrak and PennDOT partnered to invest $145 million to improve the Keystone Corridor. Electrified service was restored, train speeds rose to 110 mph, trip times between Harrisburg and Philadelphia were cut to 1 hour and 35 minutes and Amtrak was able to get more trips out of the same equipment.

Since those improvements in 2004, annual ridership on the corridor has steadily increased from 640,000 to over 1.2 million riders in 2009. Even in a recession year when nearly all forms of transportation experienced a decline, ridership on this portion of Amtrak continued to increase by nearly 3%.

SEPTA's Regional Rail service also operates on the Keystone Corridor between Paoli and Philadelphia and last year over 6.3 million riders rode SEPTA trains on this corridor for a total of over 7.5 million riders in 2009, most of whom would otherwise be on the highways if this service was not available.

Passengers using this service come from all walks of life – from medical providers and staff to lawyers, accountants and other business people to secretaries, service workers and state and local government workers. Many students also use these trains regularly to attend the various universities located along the Keystone Corridor. It carries the handicapped, the elderly, those who cannot drive and vacationers and visitors to Pennsylvania's tourist attractions. Late evening service provides the opportunity for people along the entire corridor as far as Harrisburg to attend major sporting events, theater, dinner and other venues in Philadelphia and avoid a tiring, late night drive home.

These millions of riders have come to depend on this reliable and convenient service, and it has significantly improved their quality of life. Many of them have bought homes and relocated along this corridor just to avoid the highway congestion and take advantage of the frequent and dependable service that we provide.

The current $9 million annual subsidy that Pennsylvania contributes to operate this service is small in comparison to the benefit received. In addition to significantly helping to reduce highway congestion, improve air quality and reducing dependence on oil, Amtrak provides a substantial economic benefit to Pennsylvania.

Amtrak procurements in Pennsylvania for the Keystone Service in 2009 totaled nearly $110 million from over 270 Pennsylvania businesses extending to all parts of the Commonwealth.

For example, last year Amtrak spent nearly $20 million at the General Electric locomotive facility in Erie, over $3 million to businesses in Hazelton, over $1.5 million in Reading, over $2.25 million in the Pittsburgh area, over $1 million in Lancaster and nearly $1 million in Johnstown, PA. Amtrak also made other significant purchases in the Lehigh Valley, Harrisburg, York, Mechanicsburg, Camp Hill and other central PA communities and, of course, tens of millions of dollars in the five-county southwestern region of Pennsylvania.

Amtrak was also responsible for bringing over $43 million in federal stimulus funds to Pennsylvania last year and the total expenditures for all service in Pennsylvania, including the Northeast Corridor, was over $192 million. Amtrak employs over 2,700 people throughout Pennsylvania and pays them wages in excess of $184 million annually. These earnings generate wage taxes, sales taxes and represent significant purchasing power to businesses and communities throughout the state.

Continued funding for this service is critical and reducing financial support and cutting service to a transportation resource such as this would not only result in severing one of Pennsylvania's economic generators, it would also result in adding to our ever increasing highway congestion, increase pollution and have a negative impact on the quality of life for the 7.5 million annual riders who depend on the Keystone Corridor.

On the remainder of the Keystone Corridor west of Harrisburg, rail passenger service is limited to only one train in each direction per day. Two other intercity trains still make stops in Pennsylvania as they pass through Erie and Connellsville and one of them makes a connection in Pittsburgh with the cross-state service for riders continuing on toward Chicago. None of these trains receive financial support from the Pennsylvania. For the several million Pennsylvanians who live and travel west of Harrisburg, there is no other option except the highway. Even air service has been discontinued.

West of Harrisburg the terrain is difficult as the route crosses over the Allegheny Mountains. It contains steep grades, many curves and it is the main line of one of the most heavily trafficked freight corridors in the country. The total trip time from Harrisburg to Pittsburgh is currently five and one-half hours. When this route was built over 150 years ago, such an extended travel time was acceptable; in fact it was remarkable. However, that is not the case today.

The recent adoption of our federal government's policy to support high-speed rail is long overdue and it is now creating a timely opportunity for Pennsylvania. Nearly all of the high-speed rail projects across the country are "incremental", in that they only plan to reach speeds of 110 MPH while sharing tracks with freight traffic on right-of-way owned by the freight railroads. But this approach has already received serious warnings against its long-term feasibility. The first warning was delivered over fifty years ago when the freight railroads began eliminating passenger service because it interfered with the more lucrative freight business. This was followed by the creation of Amtrak in 1970 with the freight railroads divesting themselves of all their passenger equipment.

Last year, the Association of American Railroads (AAR) submitted comments to the Federal Railroad Administration regarding their position relating to passenger train operations on the tracks which are privately owned by the freight railroads. Among their concerns was the safety factor related to intermingled passenger and freight operations and they concluded that, in general, passenger trains operating in excess of 90 MPH will not be permitted to share tracks with freight trains. Passenger service must not interfere with freight operations nor impede the freight railroad's ability to handle anticipated growing freight volumes. Freight railroads must be adequately compensated with a reasonable rate of return on their investment, including costs associated with providing information and participating in studies necessary to develop any high-speed rail proposals. This compensation also includes significantly higher maintenance costs and enhanced track infrastructure for passenger service, which is beyond the needs of freight operations. Finally, the freight railroads insist that they be protected against all liability risks associated with high-speed passenger operations. A copy of the AAR document is attached as Appendix 1.

On June 10, 2010, *Progressive Railroading* published an insightful article that questioned whether the host freight railroads were onboard with high-speed rail. The comments from the Class 1 freight railroads should be carefully considered as they expand on the AAR document and clearly lay out their policies for accepting limited passenger operations on their properties. Anyone with the slightest interest in rail passenger service should read this article carefully. Freight rail managers insist that there is little financial benefit to the freight railroads for facilitating passenger service as they only need to maintain their tracks to Class 4 standards, not Class 6 standards for 110 MPH operations. Capacity is the primary concern when it comes to mixed-operations and the higher the operating speed, the greater the capacity that is needed. It all comes down to the same issues – capacity, liability, safety, cost and compensation. Regarding one proposal in New York to operate passenger service in excess of 90 MPH, the railroad's response was "We have profound safety (and capacity) concerns with that." A copy of this article is attached as Appendix 2.

Alternatively, we should move to build true high-speed rail on dedicated passenger rights-of-way and avoid interaction with the freight railroads to every extent possible; in reality, the two are not truly compatible. In doing so, we should utilize high-speed magnetic levitation (maglev) technology.

The Pennsylvania High-Speed Maglev Project has been under development for over twenty years. It is a 54-mile long route that is the core of a planned multi-state, intercity operation that will reach from the major northeast cities to those in the Midwest. It is centered within a 500-mile radius of one-half the population of the U.S. and Canada as identified in the map of Appendix 3. This initial route is divided into three sections that connect the Pittsburgh International Airport (PIA) with downtown Pittsburgh and the eastern suburbs of Penn Hills and Monroeville at the Pennsylvania Turnpike and then to the City of Greensburg.

The Project has further national significance, as the topography and climate variations of the Pittsburgh region will verify maglev's adaptability to all regions of the U.S. In the initial section from the airport to downtown, it will climb up to a 7.5% grade (more than twice the ability of steel-wheel systems, although the technology being used is capable of climbing

10% grades). The technology has the ability of overcome the barrier created by the Allegheny Mountains and deliver true high-speed rail service at speeds up to 300 MPH where steel-wheel technology cannot.

The initial deployment will Americanize and certify the German Transrapid technology for adaptation and public use throughout the entire United States. This is the same technology that has been operating in Shanghai, China since 2004 where it routinely operates at speeds in excess of 260 MPH and maintains a 99.99% on-time performance record within one-minute of schedule.

In 2001, the Pennsylvania Project was one of the two projects down-selected by the Federal Railroad Administration (FRA) under the National Maglev Deployment Program and funded to complete the Environmental Impact Statement (EIS). In 2005 the Draft Environmental Impact Statement (DEIS) was completed and just last Friday the Project Final Environmental Impact Statement (FEIS) was released by the Federal Railroad Administration (FRA) and published in the Federal Register. This is a thorough evaluation required by the National Environmental Policy Act (NEPA) at a cost of more than $18 million. The document can be reviewed via links on the Allegheny County Port Authority's website and the MAGLEV, Inc. website and it is available in hard copy at libraries and other public locations throughout the region. It is the only true high-speed rail project (in excess of 240 MPH) in the country that has attained this level of development.

With the federal government providing 80% of the capital cost of construction under the newly established high-speed rail policy, Pennsylvania finds itself in the position of being at the doorstep of delivering true high-speed rail operations and creating a new industry with unlimited potential. The overall cost of deploying high-speed maglev is a relative measure. High-speed maglev has a projected 80-year life-cycle with extraordinarily low annual maintenance costs. In the long term, the actual overall cost of high-speed maglev will be significantly less than that of steel-wheel operations and the benefits will be far greater.

Because of its low maintenance requirements, high-speed maglev will not need annual operating and maintenance subsidies. Steel-wheel systems require substantial annual operating and maintenance subsidies and the higher the operating speed and the more challenging the terrain, the required subsidy will be commensurately higher. A more detailed explanation of why subsidies are not required for maglev is attached as Appendix 4.

Recently enacted legislation mandates that Positive Train Control (PTC) be installed by December 30, 2015 on all Class 1 railroads and passenger railroad main lines where intercity passenger and commuter rail operates. Its purpose is to prevent train-to-train collisions, over-speed and unauthorized entry into certain areas under specific conditions. The FRA has estimated the cost could range from $7 billion to $24 billion and the American Public Transit Association estimates that it will cost more than $2 billion for commuter agencies to comply with the rules. Amtrak has told the FRA that the cost of installing collision-avoidance systems in at least twelve states "may be so high as to not be undertaken and therefore result in the elimination of Amtrak service." By comparison, positive train control technology is built into the high-speed maglev system and it does not represent an

additional required cost that must be added to the cost of steel-wheel operations.

Another major cost-saving factor of the Pennsylvania Project is the computer integrated precision fabrication technology that enables timely production of over 3,000 geometrically unique sections of maglev guideway using an automated rapid reconfiguration fit-up table and robotic welding system. This system economically expedites the production of the steel guideway and integrates very high precision capability into the fabricating process at a very high standard of quality.

In addition to its application to the maglev guideway, there is national significance in the application of the manufacturing technology through an estimated 20% reduction in the cost of fabricating highway bridge components, and in reducing the cost and improving the quality of ship construction and other large scale steel products. The development of this technology can be utilized to create jobs across Pennsylvania and recapture some of the manufacturing that has been transferred to other countries, resulting in our current importing of their products.

The Pennsylvania High-Speed Maglev Project is also an economic generator that will create many thousands of jobs. The first 19-mile segment from the airport to downtown will utilize 132,000 tons of plate steel, 16,400 tons of electrical steel, 47,670 tons of rebar, 500 miles of ¾-inch diameter aluminum conducting wire, 237,000 cubic yards of concrete and other materials associated with the electrical stations and related facilities. Based on standard job projection formulas used in the transportation industry, the first segment will create nearly 57,000 overall jobs, including approximately 2,500 construction jobs for the first segment's 2½ year construction period. The entire 54-mile project will use 330,000 tons of plate steel, 41,000 tons of electrical steel, 143,000 tons of rebar, 1,250 miles of ¾-inch diameter aluminum cable and 712,000 cubic yards of concrete.

When factoring in the number of jobs created in the mining of iron ore and the mining of coal to make coke for the steelmaking process, the transportation of these materials, the steel making process itself, the transportation of the steel, the fabrication of the guideway and the installation, the magnitude of the project and its job creation cannot be understated.

Although the Pennsylvania Project is the core of an ultimate intercity network, it will have an immediate impact on alleviating highway congestion in the Pittsburgh region. The high-speed maglev train will deliver and pick up passengers in the heart of downtown Pittsburgh, a major metropolitan center that is restricted in its transportation options and being bound by its three major rivers, surrounding hills and saturated urban development. Downtown Pittsburgh and the other outlying stations will be served at 10-minute intervals from 6:00 AM until 12:00 AM on weekdays and from 7:00 AM until 1:00 AM on weekends. Shorter service intervals (headways) provide riders with the utmost flexibility and can vary from 8½ to 12 minutes during peak hours and 10 to 15 minutes during off-peak hours.

The 54-mile project, particularly in the first two segments, will reduce the ever-increasing highway congestion on the Parkway West and Parkway East and provide a frequent, safe and reliable travel alternative throughout the most extreme weather conditions of rain, snow

and ice. This will offset the need to build additional lanes of highway in a corridor that is constrained by development adjacent to the existing highway. Additionally, both the Parkway East and West are each channeled through two-lane tunnels that are the approximately one-mile long. Both tunnels are already the cause of frequent and unpredictable delays. Any highway lane expansion will necessitate the boring of additional tunnels to maintain traffic flow. The Fort Pitt Tunnel at the end of the Parkway West empties onto the Fort Pitt Bridge at the convergence of the rivers at the Point of Pittsburgh. Constructing additional tunnels would also necessitate construction of an additional bridge to span the river but with further complications relating to establishing additional traffic patterns in an already saturated dense urban center as the new bridge reaches the downtown side of the river. These costs and their limited benefit, when weighed against the cost and benefits of constructing high-speed maglev, should be carefully considered.

Ridership projections as detailed in the Final Environmental Impact Statement are based on two investment grade ridership studies, including a Federal Railroad Administration appointed peer review panel of national experts. The planned project will provide a financially self-sustaining east-west transportation artery through the City of Pittsburgh that will reduce congestion and lower existing transportation costs. It will deliver the equivalent of a ten-lane highway through downtown Pittsburgh while having only a very slight impact on the existing infrastructure.

Failure to address the increasing highway congestion is tantamount to implementing a "congestion tax" on those finding themselves mired in traffic and burning gas at near $3 per gallon but going nowhere. As cars sit in traffic with their engines wasting fuel, it is an insidious form of transportation taxation as there is no transportation benefit being derived. Money spend on alleviating these serious congestion problems would actually accrue as a savings to those now forced to pay the "congestion tax" and it would also improve air quality and mitigate associated health care problems and costs.

These conditions are also making our cities less desirable as a place to live and work. If we fail to address this problem now, it will only be exacerbated in the future while our quality of life continues to erode and our economy suffers.

What is needed now is the following:

1. Provide $3.5 million per year for two years to match $28 million in federal funds that have been designated for the Pennsylvania High-Speed Maglev Project to be used primarily to complete pre-engineering work to obtain a Record of Decision (ROD) authorizing construction of the project;

2. Create a high-speed passenger rail authority to focus on moving the project to completion and overseeing the expansion of high-speed passenger rail service throughout Pennsylvania. The three states that captured approximately $2 billion each in federal stimulus funding all made a concerted effort through such agencies that were created to move their projects forward and they were highly successful in

their effort. As the federal government continues to advocate high-speed passenger rail, Pennsylvania should aggressively pursue that funding;

3. Work at all levels of state and local government in concert with Pennsylvania's Congressional Delegation to take advantage of our existing opportunity before other states seize it from us.

Thank you for the opportunity to present our views on the future of passenger rail transportation in Pennsylvania. I encourage all members of the General Assembly, and the Transportation Committee in particular, to visit the facilities of MAGLEV, Inc. in McKeesport, PA for a demonstration of the technology developments that have been achieved and a detailed discussion of the status of the project.

I would be pleased to answer any questions you may have.