# Select Committee on Energy Independence and Global Warming U.S. House of Representatives

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Testimony from Peter Varga Chief Executive Officer Interurban Transit Partnership Grand Rapids, Michigan

Good Morning Chairman Markey, Ranking Member Sensenbrenner, and Members of the Select Committee. Thank you for the opportunity to testify today on "Constructing a Green Transportation Policy". I am Peter Varga, the Chief Executive Officer of the Interurban Transit Partnership, (*The Rapid* as it is known locally). *The Rapid* operates 26 fixed bus routes and a variety of other mobility options, including paratransit service to people with disabilities and seniors, a vanpool program and manages a rideshare matching program for the six counties in the Grand Rapids metropolitan area. We transported 9.1 million rides in fiscal year 2008, which is 11% more than the previous year. We have doubled our ridership in the last ten years.

The Grand Rapids region is quite well known for its efforts in greening. A Community Sustainability Partnership has been formed that includes the major universities, the City of Grand Rapids and several corporate partners, to which *The Rapid* also belongs. Grand Rapids has been called by Fast Company Magazine as one of the "greenest" cities in the United States. Eighteen percent of LEED projects in the United States are in the greater Grand Rapids region. The first rectory, the first church, the first public museum and the first LEED certified hospital are among such projects. *The Rapid's* Central Station is the first LEED certified public transportation facility in the United States.

The Rapid is nationally known for following sustainable practices. Central Station's innovative design incorporates energy efficient technology, a living green roof, recycled materials, storm water retention and returning clean water into the storm sewer system, among other environmental elements. We have five hybrid electric buses in our fleet and are proposing to purchase 10 hybrid electric buses as part of the Bus Rapid Transit project that has been approved by the Federal Transit Administration to go into "project development". Using American Recovery and Reinvestment (ARRA) funds, we are beginning the design work on an expansion to our Wealthy Operations Center, the operations and maintenance facility. This too is intended to be a LEED certified facility. The facility is also being designed with sustainable management practices honed from the manufacturing community. Because of our leadership in public transportation sustainable practices, we were designated by the Sierra Club in 2008 as a "cool city" along with Denver and Minneapolis.

#### What are the public and environmental benefits of a public transit system?

Transportation is one of the largest and fastest growing elements of the United State's dependence on foreign oil and is also the largest contributor to carbon emissions. Currently foreign oil consumption is more than 58% of all U.S. consumption. Vehicle miles travelled is fast outpacing population growth on a four to one ratio. According to a 2006 report from the U.S. Department of Transportation, Bureau of

Transportation Statistics, since 1973 Americans are travelling 250% more miles per capita each year, and using over 36 percent more oil for transportation purposes. All efforts to reduce the oil consumed by transportation (68 to 70 percent of all oil in the United States) and the carbon footprint (33 percent of all carbon emissions) must include offering real choices in transportation that dramatically reduce vehicle miles travelled by cars. One course of action that can significantly change this pattern is the transfer of trips to public transportation. Each public transportation passenger mile added results into two vehicle miles less traveled. So let us assume that there can be an accelerated growth in public transportation annually in the United States. Currently, there are more than 10 billion trips taken yearly on public transportation. With every additional billion trips taken, oil consumption can be reduced by 420 million gallons, and our carbon footprint reduced by 3.7 million metric tons. Establishing a national goal to double ridership by 2020 could have significant effects. With an average "modest" growth rate of 5.5 percent, the United States could save another 4.5 billion gallons of fuel per year and an additional 46 million metric tons of carbon emissions per year. With a ten percent growth rate in public transportation trips, the United states could save 141.9 million metric tons of carbon emissions annually (equal to eight percent of total carbon emissions from transportation today) and also save 15.2 billion gallons of fuel per year. How much do we import from the Persian Gulf? If it is equivalent, would that not be worth it?

More and more people are aware of how their individual actions impact the environment and are taking steps to reduce their carbon footprint. A study, *Public Transportation's Contribution to U.S. Greenhouse Gas Reduction*, was prepared for the American Public Transportation Association by Science Applications International Corporation. The research shows that when compared to other household actions that limit carbon dioxide (CO<sub>2</sub>), taking public transportation can be more than ten times greater in reducing this harmful greenhouse gas. For comparison:

- Home weatherizing and adjusting the thermostat for heating and cooling saves 2,847 pounds of carbon per year. Transit use saves almost twice the carbon.
- Replacing five incandescent bulbs to lower wattage compact fluorescent lamps saves 445 pounds of CO<sub>2</sub> per year. Transit use saves more than ten times the CO<sub>2</sub>.
- Replacing an older refrigerator freezer with a high efficient one saves 335 pounds of CO<sub>2</sub> per year. Taking public transportation saves more than fourteen times the carbon.

Another public benefit of public transportation is the creation of jobs. According to a Federal Highway commissioned study of public transportation's economic impact, an annual capital and operating investment in transit of 1 percent of our Gross Domestic Product could maintain a 5.5 percent growth rate in public transit. Coming from a combination of federal, state and local resources and the private sector, to maintain an average growth rate of ten percent an investment of 1.6 percent of our GDP would be required. It could transform fuel consuming sectors, as well as create jobs. With an average return of 6:1, such an investment would create millions of American jobs, generate enormous public and private revenue and make the country more economically and environmentally efficient. At a time when our country has been calling for "stimulus", sustaining a 5.5 percent growth in public transportation could support 5.3 million jobs and a 10 percent growth rate could support 8.9 million jobs.

#### How has Grand Rapids specifically benefitted from its public transit system?

Until 2000, the Grand Rapids region was served by the Grand Rapids Area Transit Authority. In 1999, a new transit authority, the Interurban Transit Partnership, was formed by the six cities in the metro region and a property tax millage was passed for the first time to expand services and work to fulfill the elements of an approved long range plan called Metro Mobile 2020. This was the first regional authority

for the area and it assumed the responsibility for improving expanded transit services in the area. Also known as *The Rapid*, this authority then passed two additional property tax millages in 2003 and in 2007, in response to increasing service demands from the community. We are now preparing to pass a fourth millage to implement a 9.8 mile Bus Rapid Transit project called the "Silver Line" that has been approved for project development by the Federal Transit Administration under the New Starts Very Small Starts program. We have also completed a streetcar feasibility study that has shown that a downtown streetcar project would lead to economic development in Downtown Grand Rapids. We are proceeding with an effort to raise private funds for a public-private partnership to develop an initial 2-mile streetcar system. As I stated earlier, we have constructed the first LEED certified public transit facility in the United States, which has led to various new transit oriented developments in what used to be a largely abandoned industrial area. These include student apartments called Hopson Flats, Founders microbrewery and pub, and a dance studio and performance hall for the Grand Rapids Ballet, among other developments.

We have significantly improved transit services in the last decade and we have doubled our ridership in the period. As a consequence, from 1998 to 2009 ridership in the region has grown an average of 10% each year. I am here to tell you that transit growth of 10% in the United States is quite feasible; it has happened in Grand Rapids. Ridership growth in the United States was approximately 4% last year, and if we are to make an impact on reducing vehicle miles travelled and creating a successful mode shift to transit in the United States, additional investment and a federal policy change needs to occur.

## How can Congress support local and regional public transit?

Congress can support local and regional public transit. Some of this has already occurred with the increase of investment in public transportation as evidenced by the American Recovery and Reinvestment Act and the Omnibus Bill that were recently passed by Congress. Congress can also develop other things to supplement current investment efforts. First, Congress can develop climate change legislation that helps to expand transit services in the nation. One example could be the auction or sale of emission allowances under a "cap and trade" system. Another could be an emission reduction program that would raise new revenues to fund operating and capital funds to help systems grow. A third could be passage of a bill that would raise revenues by a user fee on vehicle miles travelled that would create additional investment in public transportation infrastructure.

Congress could also increase the availability of funds for fixed guideway transit projects like our proposed Bus Rapid Transit project, and other modes like light rail, commuter rail, or streetcar systems. These fixed guideway projects create energy efficient land use patterns that reduce green house gas emissions, as well as provide for economic development with the growth of transit oriented development around stations. Transit oriented development creates new housing patterns that eliminate the need for cars for some people, resulting in an increased modal shift from car to bus.

Congress can also increase the availability of such funds for non-motorized options such as walking and bicycling. Most people walk to transit stops and some use bicycles to access public transportation. Any non-motorized form of transportation by virtue is a reduction of carbon emissions and an opportunity for public transit growth at the same time. Efficient land use has the potential to significantly change the way we live. Higher densities allow for closer proximity for housing, retail and employment, reduced driving distances and enable communities to plan for and support alternative travel plans. In many urban core areas, trips taken for shopping, dining or other purposes are often made on foot. Congress can, therefore, prioritize integrated transit modes that support the development of non-motorized

options while enhancing public transportation. Depending on several factors, including integrated land use and pedestrian-friendly design, compact development can reduce driving by 20 to 40 percent, according to the forthcoming book by the Urban Land Institute, *Growing Cooler: The Evidence on Urban Development and Climate Change*. Typically, Americans living in compact urban neighborhoods where cars are not the only transportation option drive a third fewer miles than those in automobile-oriented suburbs, the researchers found.

Congress could also reduce the transportation costs for Americans through an investment of public transportation. I invite Congress to look at two reports that are most helpful for identifying how much Americans are spending on transportation, depending on where they live.

Realizing the Potential: Expanding Housing Opportunities Near Transit, by Reconnecting America's Center for Transit-Oriented Development for FTA and HUD - This new national study funded by the Federal Transit Administration and the U.S. Department of Housing and Urban Development shows that location matters a great deal when it comes to reducing household costs. While families who live in auto-dependent neighborhoods spend an average of 25 percent of their household budget on transportation, families who live in transit-rich neighborhoods spend just 9 percent, the study says. The report examines five case study regions - Boston, Charlotte, Denver, Minneapolis, and Portland - to better understand the proactive strategies being undertaken to create and preserve affordable housing near transit.

A Heavy Load: The Combined Housing & Transportation Burdens of Working Families, Center for Housing Policy, 2006 – This is an excellent report that looks in particular at families making \$20-50,000 annually. On average, the study found that working families in the 28 metropolitan areas spend about 57 percent of their incomes on the combined costs of housing and transportation, with roughly 28 percent of income going for housing and 29 percent going for transportation. While the share of income devoted to housing or transportation varies from area to area, the combined costs of the two expenses are surprisingly constant. In areas where families spend more on housing, they tend to spend less on transportation, and vice-versa. The report found that families spend even more on transportation than they do on housing in areas with no or few transportation options besides driving.

Congress can also provide 100% funding for the acquisition of alternatively fueled vehicles, or at least provide for the extra cost that it takes to provide such vehicles. It costs approximately \$200,000 more for us to purchase hybrid electric vehicles compared to standard buses. Why not provide 100% of the funding for the upgrade. It will also stimulate the development of the manufacture of cleaner, greener public transportation vehicles.

Congress can also look at streamlining the funding for Very Small Starts projects. We started our BRT study more than five years ago. When and if we implement a Bus Rapid Transit Project in our area, it will take nine years. I am not advocating for the elimination of such things as environmental analysis, but I am advocating for looking at Very Small Starts as an effort to speed up development for projects that cost anywhere from \$40 million to \$75 million in investment, as long as the transit systems demonstrate a capacity for technical and financial capability to operate these smaller systems.

Lastly, I would encourage Congress to insure that smaller growing cities such as Grand Rapids can fairly compete in the development of fixed guideway transportation, and may get additional support if necessary to support the intensive transit growth in such communities.

## How can public transit reduce overall greenhouse gas emissions from the transportation system?

Public transportation can help reduce greenhouse gas emissions – it can do it now, and it can do it by expanding America's mobility choices. Public transportation investment, as I have described, and energy efficient land use policies and other strategies that promote transportation choices, are proven ways to reduce emissions from the transportation sector. According to ICF International, in their 2008 study "The Broader Connection between Public Transportation, Energy Conservation and Greenhouse Gas Reductions", public transportation use currently reduces  $CO_2$  emissions by more than 37 million metric tons every year in the United States by reducing travel and congestion and supporting more efficient land use patterns. Those who choose to ride public transit reduce their carbon footprint and conserve energy by eliminating travel that would occur in a car. People living near transit also have shorter trips when they drive to transit. In fact, households within close proximity to public transit drive an average of 4,400 fewer miles annually than those who have no access to public transportation. According to U.S. census data, however, only 54 percent of American households have access to any public transportation services.

This power of public transit to reduce greenhouse gases can only begin with a federal policy that expands transit availability and promotes efficient land use patterns and transit oriented development. Efficient land use combined with increased investment in improved and effective public transit service, especially fixed guideway projects, provides results that are far beyond the increased use of public transportation.

To sum, I have indicated in my testimony several ways in which federal climate and transportation legislation can effect positive change to promote energy independence and the reduction of greenhouse gases. These include increased support for regional efforts for transit such as demonstrated by the Interurban Transit Partnership, increase the investment in public transit, increase the availability of fixed guideway projects in the United States, increase the availability of funds for non-motorized transportation, promote transit oriented development strategies, encourage or incentivize the acquisition of alternatively fueled vehicles, streamline the Very Small Starts process, and assure that major transit investments promote energy efficient land use patterns and promote concentrated economic development or smart growth. Lastly, I encourage the promotion of climate change legislation that includes and expands funding for public transit apart from the traditional funding sources.