

**STATEMENT OF  
THE HONORABLE RAY LAHOOD  
SECRETARY OF TRANSPORTATION**

**BEFORE THE  
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS  
UNITED STATES SENATE**

**HEARING ON  
TRANSPORTATION'S ROLE IN CLIMATE CHANGE  
AND GREENHOUSE GASES**

**JULY 14, 2009**

Chairman Boxer, Ranking Member Inhofe, and Members of the Committee:

Thank you for inviting me to appear before you today to discuss transportation's role in climate change and reducing greenhouse gases.

Reducing dependence on foreign oil and reducing greenhouse gases (GHGs) are high priorities for the Obama Administration. The President is committed to action that will end our dependence on oil, create millions of clean energy jobs, and protect our children from dangerous pollution. President Obama has also made it clear that the United States will be a leader in the global effort to reduce greenhouse gas emissions. In fact, the G8 Leaders just last week expressed their support for a goal among developed nations of reducing their emissions by 80 percent by 2050 as part of a goal to be shared by all nations of achieving at least a 50 percent reduction of global emissions by that date. This acknowledges the broad scientific view that warming should be limited to no more than two degrees Celsius. This is a critical first step.

While there is much to do, the Department is taking steps to address transportation-related emissions and to target the most effective actions to reduce the sector's greenhouse gas emissions.

Virtually all human activities have an impact on our environment, and transportation is no exception. Transportation is crucial to our economy and our personal lives. It is also, however, a significant source of greenhouse gas emissions. In 2007, transportation accounted for 29 percent of total United States GHG emissions. About 60 percent of transportation emissions were from passenger cars and light-duty trucks, about 20 percent from medium- and heavy-duty trucks, and about 12 percent from aviation. As a consequence, it is imperative that the transportation sector be part of the solution.

The Department is working aggressively to implement forward-thinking policies and other measures that will reduce our dependence on fossil fuels, spur clean energy technologies and infrastructure developments, create jobs, and reduce emissions of

greenhouse gases to improve the lives of Americans. I want to take a few minutes to describe some of our efforts.

In 2007, when the Energy Independence and Security Act was enacted, the fuel economy standard for cars was still 27.5 miles per gallon, the same level established by Congress in 1975. The standard for light trucks, such as minivans, sport utility vehicles, and pickups, was 22.2 miles per gallon. DOT recently issued new fuel economy standards for passenger cars and light trucks for model year 2011. Under those standards, the Corporate Average Fuel Economy (CAFE) level for the industry as a whole is expected to be 30.2 miles per gallon for new cars and 24.1 miles per gallon for new light trucks.

In May, President Obama announced a new National Policy to establish the first-ever national greenhouse gas and fuel economy program for cars and light-duty trucks. DOT and the Environmental Protection Agency in coordination with the Department of Energy are working to develop proposed CAFE and GHG standards for 2012-2016. These standards would encourage the auto industry to use more fuel-efficient technologies that will save billions of gallons of fuel and ultimately save American consumers money. The proposed new rules would increase CAFE standards and adopt new GHG standards such that, by 2016, if the automotive industry achieves the CO<sub>2</sub> level all through fuel economy improvements, the new cars and light trucks sold each year deliver a combined industry-wide fleet average of 35.5 miles per gallon. Preliminary analysis indicates cumulative greenhouse gas reductions of approximately 900 million metric tons (CO<sub>2</sub> equivalent) and fuel savings of approximately 1.8 billion barrels of oil. DOT also is implementing new statutory authority to issue fuel economy standards for medium and heavy duty trucks.

Additionally, DOT is focusing on improving the operational efficiency of the transportation system. Improving system operations can decrease traffic congestion and delay, reduce fuel consumption, and decrease greenhouse gas emissions from the transportation sector. Currently, the Department conducts research, performs field tests, and disseminates information on traffic signal systems, freeway management, traffic incident management, and traveler information. The Department also works to enhance the design and implementation of work zones, provide information on different modes of transport and trip timing, and is researching ways to implement congestion pricing where appropriate.

All of these efforts reinforce DOT's commitment to tackling the climate change challenge, achieving America's energy security, and improving the lives of Americans.

However, as I mentioned before, passenger cars and light trucks account for 60 percent of all transportation emissions, and therefore reducing surface transportation related emissions should be a primary focus. Enhancing system efficiency, increasing fuel efficiency and introducing low carbon fuels such as biodiesel, ethanol, electricity, and hydrogen are important steps to reducing transportation related greenhouse gas emissions, but these measures cannot stand alone. Even if vehicle fuel efficiency were to

reach 55 mpg by 2030, we would still see only modest decreases in transportation CO2 emissions without a decrease in vehicle miles traveled (VMT).

Addressing VMT growth plays a key role in decreasing transportation related GHG emissions and should be included in overall efforts to prevent climate change. One way to achieve significant reductions in VMT is to develop more livable communities.

The effects of reduced VMT on greenhouse gas emissions have repeatedly been demonstrated. A report aired on National Public Radio evaluated the carbon footprint of two families living in Atlanta. One family moved from a walkable, transit-served community to a car dependent one and another family moved from a car dependent area to a livable community. The greatest difference in CO2 emissions between the families was in transportation related emissions. The carbon footprint for the family that moved to a car dependent area was 40 percent higher, and transportation accounted for almost 85 percent of the difference. This report, among others, indicates the relevance of VMT to greenhouse gas emissions and indicates that we should accelerate our efforts to identify ways to reduce VMT growth in order to meet our climate goals.

There are several steps that can be taken to spur the development of more livable communities and reduce VMT:

First, we can provide more transportation choices in more communities across the country. Single occupancy vehicles should be only one of many transportation options available to Americans to reach their destinations. Walking, bicycling, light rail and buses can be made available in more places.

Second, we can promote development of housing in close proximity to transit. In addition to reducing VMT and greenhouse gas emissions from cars driven by commuters, such planning would have the added benefits of decreasing transportation costs for families and reducing traffic congestion.

Third, we can promote mixed-use development, which incorporates residential and commercial buildings, allowing individuals the choice to walk, drive a shorter distance or easily use public transportation to reach their destination. Residents should have the option to live in an area with services and goods that are easily accessible. In addition to reducing greenhouse gas emissions, this would also reduce travel times involved in driving to and from grocery and department stores, medical service providers or even entertainment centers such as movie theaters.

While many view community planning and multi-modal transportation as affecting only urban or larger suburban areas, there are many ways in which such provisions would benefit smaller towns and rural areas as well. A strong, well planned town center could provide smaller towns or rural communities with easy access to jobs and services in one centralized location and increase foot traffic around locally owned small businesses. These town centers will also protect open spaces and valuable farmland. Additionally, all people, whether in urban or rural areas, need access to job centers, medical services and

schools. In urban settings this access might take the form of sidewalks and bike lanes. In rural areas, it might look more like intercity rail and bus service. But, especially as populations age, non-driving access to essential services is increasingly central to making towns more livable for 21st century populations. This poses a particular challenge for rural areas.

All of these factors will be critical elements of our livability initiative. Our work will not be easy, but it offers great promise for improving the lives of all Americans and reducing our use of energy and greenhouse gas emissions. The Department of Transportation and other agencies are already working closely to determine the best means to support sustainable, livable communities.

On June 16, Housing and Urban Development Secretary Shaun Donovan, Environmental Protection Agency Administrator Lisa Jackson, and I announced a new partnership to help American families in all communities - rural, suburban and urban - develop sustainable communities. Over the course of our collective work, we have defined six guiding principles. We are committed to

- providing more transportation choices,
- promoting equitable, affordable housing,
- enhancing economic competitiveness,
- supporting existing communities,
- coordinating policies and leverage investment, and
- valuing the uniqueness of communities and neighborhoods.

These principles will guide the interagency working group as we continue our efforts.

As we consider surface transportation reauthorization -- both in the short and longer-term -- the Department will prioritize creating a livability program that measurably works to reduce VMT, greenhouse gas emissions, and also provide added economic benefits to Americans in all geographic locations. Multi-modal transportation combined with mixed-use development and smart community planning are important issues to address when we consider transportation's role in climate change. Combined with more efficient vehicles and cleaner burning fuels, these strategies will be important to reaching our GHG reduction goals. They will also reduce our reliance on foreign oil

The Senate now has the opportunity, for the first time, to create a system of clean energy incentives designed to jumpstart a clean energy economy and confront the threat of carbon pollution. As the President has said, it is important that we accomplish these goals while protecting consumers, and helping sensitive industries transition.

I have outlined in my testimony today some of the ways in which the Department of Transportation can contribute to this effort. We would be particularly pleased if the final legislation gave the Department better tools to integrate climate change considerations into the transportation planning, financing, and implementation process and to facilitate

system improvements. Failing to recognize the connection between transportation and climate change will likely jeopardize our ability to achieve our GHG reduction goals.

Livable communities obviously have many benefits, but we should also take note that such planning will also have a large long-run impact on greenhouse gas emissions. For this reason, I hope to work with members of Congress to address these issues and find ways to decrease transportation's contributions to climate change.

Before closing, I would like to mention that while the focus of this hearing is surface transportation, the Department's climate change efforts go beyond highways and transit. In aviation, we have begun to modernize the U.S. air traffic system, called the Next Generation Air Transportation System (NextGen), and have put energy and environmental concerns at the heart of the effort. NextGen will result in the more efficient movement of planes in the air and on the ground. We are in the process of setting up a research consortium this year focused on accelerating the maturation of lower energy, emissions, and noise technologies for aircraft and engines and advancing cleaner alternative fuels. FAA has also partnered with manufacturers, airlines, and airports in the Commercial Aviation Alternative Fuel Initiative to develop and certify alternative fuels.

Likewise, the Maritime Administration is focused on the potential of new technologies to reduce the harmful emissions from marine diesel engines through cooperative efforts with the Environmental Protection Agency and the maritime industry on alternative fuels and reduced ship stack emissions.

We are engaged internationally through the International Civil Aviation Organization and the International Maritime Organization to help achieve global agreement on how best to reduce greenhouse gas emissions from international aviation and international shipping and we are beginning to see the results of our new level of engagement. In the coming months and years we will accelerate our efforts to help minimize the impacts from these international emissions.

While transportation emissions contribute to climate change, transportation infrastructure will also face climate impacts such as rising sea levels, changing precipitation patterns, and temperature fluctuations. The need for adaptation is unavoidable. To ensure the continued integrity of the nation's transportation system, transportation infrastructure decisions must adequately consider forecasted effects and impacts from climate change. The Department will undertake activities to assist state and local transportation decision-makers in assessing vulnerability and risk of transportation infrastructure to climate change effects, and planning and implementing strategies to adapt to climate change impacts.

Thank you again for the opportunity to discuss these important matters. I look forward to future collaboration and would be pleased to answer any questions you may have.