U.S. House of Representatives
Committee on Transportation and Infrastructure
Washington, DC 20515

James L. Oberstar
Chairman

John L. Mica
Ranking Republican Member

David Heymsfeld, Chief of Staff
Ward W. McCarragher, Chief Counsel

James W. Coon II, Republican Chief of Staff

April 7, 2008

SUMMARY OF SUBJECT MATTER

TO: Members of the Subcommittee on Highways and Transit

FROM: Subcommittee on Highways and Transit Staff

SUBJECT: Hearing on "Transportation Challenges of Metropolitan Areas"

PURPOSE OF HEARING

The Subcommittee on Highways and Transit is scheduled to meet on Wednesday, April 9, 2008, at 10:00 a.m., in room 2167 of the Rayburn House Office Building to receive testimony on the transportation challenges of metropolitan areas. The Subcommittee will hear from a transportation expert from the Metropolitan Policy Program at The Brookings Institution, the President of the Regional Plan Association in New York, the County Executive from King County, Washington, the Assistant Director of the Ohio Department of Transportation, the Executive Director of Sacramento Regional Transit District, and the Transportation Director of the Metropolitan Washington Council of Governments.

This hearing is the first in a series of hearings exploring emerging themes in transportation policy and practice, the needs of our national surface transportation system, and the reauthorization of our surface transportation laws. The Subcommittee will continue this series by holding hearings in the near future on the issues surrounding freight access and goods movement, infrastructure preservation and modernization, highway safety, mobility and connectivity of rural areas, and other issues.

BACKGROUND

Our world has reached a momentous milestone: for the first time in history, more than one-half of the human population is living in metropolitan areas. The United States Census Bureau defines a metropolitan area as a large population nucleus, together with adjacent communities having a high degree of social and economic integration with that core. Metropolitan areas are most often

comprised of several counties, cities, suburbs and towns which have commuting ties to an urban core. Metro areas can also cross state lines, and can vary in population size from 50,000 inhabitants to several million.

According to the National Surface Transportation Policy and Revenue Study Commission ("Commission"), which Congress created to analyze and provide recommendations regarding the transformation of the surface transportation system, roughly 60 percent of the population of the U.S. lives in metropolitan areas of more than one million people and another 20 percent live in smaller metro areas. The Commission's report states that the majority of our nation's economic activity is occurring within metro areas, with 60 percent of the value of all U.S. goods and services being generated in urban areas. Further, over 85 percent of our nation's market share of critical transportation infrastructure exists in metro areas. The report makes clear that our economic and social well being depends on the investments that we have made in our metropolitan area transportation infrastructure and services.

These findings by the Commission comport with recent studies undertaken by the Brookings Institution Metropolitan Policy Program ("Brookings"). In its 2007 report, "MetroNation", Brookings defines metro areas in terms of their employment figures, and finds that fully 65 percent of the United States population lives in the 100 largest metropolitan employment areas. Brookings states that transportation infrastructure in metro areas is of vital concern to the Federal Government because most national economic activity is generated therein. Although the largest metro areas comprise only 12 percent of the nation's land, these areas generate 75 percent of total U.S. gross domestic product ("GDP"), thereby yielding large economic returns to the nation. Reliable and predictable transportation networks in our metro areas form a critical part of our just-in-time economy. Because our nation – and our economy – is increasingly metropolitan, the U.S. has a vital interest in guaranteeing the success of our metropolitan areas.

Metropolitan areas face enormous transportation challenges, such as increasing infrastructure maintenance and investment needs, increasing traffic congestion, meeting environmental compliance goals, planning transportation projects in a coordinated manner, land use and growth issues, and diverse traveler needs. High-quality, multi-modal transportation infrastructure – particularly systems that mitigate congestion, are in a state of good repair, comply with environmental standards, and are well coordinated and planned – is essential to providing the public with reliable travel options to and within metropolitan areas. As such, this hearing will explore the transportation challenges of metropolitan areas and the Federal role in partnering with metro area to address these challenges.

Infrastructure Maintenance and Investment Needs in Metropolitan Areas

As DOT's *2006 Status of the Nation's Highways, Bridges, and Transit: Conditions and Performance* ("C&P report") shows, transportation infrastructure in our metropolitan areas is in poor physical condition. According to the most recent figures (drawn primarily from 2004 data), only 72.4 percent of urban Interstate vehicle miles traveled ("VMT") was on pavement with acceptable ride quality, while 26.7 percent of urban bridges are deficient. The average age of urban light rail cars is 14.8 years, commuter rail passenger coaches have an average age of 20.1 years, and 48 percent of urban buses maintenance facilities are more than 21 years old.

At the same time that metropolitan transportation facilities are aging, the demand for transportation services in our metro areas continues to rise. Brookings has calculated that the 100 largest metro areas account for 95 percent of public transit passenger miles, while the American Public Transportation Association documented that Americans took 10.3 billion trips on public transportation in 2007, the highest level in 50 years. According to the Federal Highway Administration ("FHWA"), VMT has grown three times faster than the U.S. population, and almost twice as fast as vehicle registrations. Given that the Census Bureau Population Estimates Program data show that the 100 largest metropolitan areas captured 76 percent of national population growth from 2000 to 2005, we can expect increases in transit ridership and VMT to continue to grow at record levels in our metropolitan areas, further straining those transportation systems.

The Commission report states that, over the course of our nation's history, all levels of government and the private sector have contributed to transportation investment, but that it is the Federal Government that should be a "full partner" in meeting the significant investment needs of our systems. The Commission report also states that increased private sector investment, tolling, and pricing mechanisms must be a part of the overall solution. The Commission identifies a significant surface transportation investment gap, and calls for an annual investment level of between $225 and $340 billion – by all levels of government and the private sector – over the next 50 years to upgrade all modes of surface transportation (highways, bridges, public transit, freight rail and intercity passenger rail) to a state of good repair. The current the annual capital investment from all sources in all modes of transportation is $85 billion.

The Commission recommends that Congress create a new national asset management program to keep America's existing infrastructure properly maintained. The Commission expects that metropolitan areas will increase emphasis on public transportation, especially electrified railways, to meet this growing demand for transit services, and suggested that maintenance be focused on the Interstate system, the National Highway System, transit assets, intercity passenger and freight rail, and intermodal connectors – all areas that the Commission identifies as having a strong Federal interest.

Traffic Congestion in Metropolitan Areas

Ensuring the success of our metropolitan areas requires a reliable means of public access to the important employment, medical, educational, and recreational opportunities within our metropolitan areas. Unfortunately, traffic congestion is highly concentrated in the largest metro areas. According to the Texas Transportation Institute's ("TTI") 2007 Urban Mobility Report, congestion in large metro areas has risen to an all-time high of 4.2 billion hours of travel delay resulting in 2.9 billion gallons of additional fuel used per year. This wasted time and fuel was computed into a total congestion cost of $78.2 billion for 2005. The Commission finds that if no additional investment in our nation's highways is made, congestion would be more acute in urban areas where delays are projected to grow by more than one-half by 2020, more than double by 2035, and quadruple by 2055. In an attempt to address traffic congestion in metropolitan areas, state and local governments have taken a variety of approaches including adding highway capacity, employing tolls and congestion pricing, and making additional investments in public transportation.

Most urban areas with populations of more than 3 million people have significant public transportation ridership, very large bus systems, and extensive rail systems with reliable service provided by underground and overhead rail lines that are not affected by roadway traffic congestion.

However, if these public transportation services were discontinued in our large metro areas, TTI found that commuters would have suffered an additional 541 million hours of delay, consumed 340 million more gallons of fuel, and borne an additional $10.2 billion in congestion costs. Because public transportation provides such measurable congestion mitigation, a failure to increase investment in our metropolitan transit systems would impact not only transit riders, but road users as well.

To provide congestion relief, the Commission recommends that Congress establish a new Federal program to improve metropolitan mobility. The program would include substantially increased capital investment and require comprehensive local strategies. Projects would include demand management initiatives such as congestion pricing, improved operations, increased transit capacity and ridership, and expanded highway capacity.

Environmental Issues in Metropolitan Areas

As the world's largest energy consumer and largest greenhouse gas ("GHG") emitter, the United States – particularly its metropolitan areas – face numerous environmental challenges. According to the Department of Energy's Energy Information Administration, transportation represents 33 percent of all U.S. GHG emissions. The Commission report notes that the relationship between transportation and the environment has been a source of national concern for more than a half-century as we continue to better understand how vehicle operations can have adverse effects on air and water quality, noise, undeveloped land, community structures, and other resources that influence our quality of life.

At the same time, some transportation choices can have a beneficial impact on our environment. A February 2008 report by ICF International found that a person, commuting alone by car, who switches a 20-mile round trip commute to existing public transportation, can reduce his or her annual carbon dioxide emissions by 4,800 pounds per year, equal to a 10 percent reduction in all GHG produced by a typical two-adult, two-car household.. Recently, several groups including the American Association of State Highway and Transportation Officials has called for the annual growth in VMT to be cut in one-half to lower emissions and address air quality concerns.

According to a Department of Transportation ("DOT") evaluation of the MOBILE Vehicle Emission Model used by the Environmental Protection Agency, emission factors are very sensitive to the average speed that is assumed. In general, emissions tend to increase as average vehicle speed decreases. As such, some groups have argued that road-based congestion pricing strategies and targeted capacity increases that keep car traffic moving at higher speeds also helps reduce GHG emissions and improve air quality.

Surface transportation laws contain programs designed to relieve both congestion and increase air quality at specific targeted areas. For example, the Congestion Mitigation and Air Quality Improvement Program ("CMAQ") ties transportation funding to the Clean Air Act. Funding is available for areas that do not meet the National Ambient Air Quality Standards (nonattainment areas) as well as former nonattainment areas that are now in compliance (maintenance areas). CMAQ funds are largely spent on Transportation Control Measures ("TCMs") such as improving public transit service, traffic signalization and other traffic flow improvements, trip reduction and ride-sharing initiatives, and bicycle and pedestrian facilities.

Transportation and Land Use Planning in Metropolitan Areas

The current surface transportation program requires state and local governments to undertake a comprehensive public planning process, which considers land use, development, safety, and security issues, to develop a plan to meet the region's transportation goals. Transportation planning should be a cooperative process involving all users of the system, such as the business community, community groups, environmental organizations, the traveling public, freight operators, transit operators, employee representatives, private providers of public transportation services, and the general public. State Departments of Transportation and, in metro areas, metropolitan planning organizations ("MPOs") conduct the transportation planning process.

According to DOT, land use and transportation are symbiotic: development density and location influence regional travel patterns and, in turn, the degree of access provided by the transportation system can influence land use and development trends. Choosing a land-use strategy that complements a region's transportation goals is an important part of the planning process.

Urban or "community design" can facilitate alternative travel modes. For example, a connected system of streets with higher residential densities and a mix of land uses can facilitate travel by foot, bicycle, and public transportation, in addition to the automobile. Conversely, dispersed land development patterns may facilitate vehicular travel and reduce the viability of other travel modes. The Commission notes that a number of factors will affect any trends toward increasing urban development densities in the future, including stabilization in household sizes, consumer reactions to increasing energy costs and land prices, consumer choice of independence from the automobile, national economic growth generated by and concentrated in large urban areas, and government policies to promote dense development. On the other hand, the Commission points out that real income growth, ubiquitous transportation and communications networks, an aging population less tied to workplace access in their housing location decisions, and the high costs of living in dense urban areas may counterbalance the motivations for increased population density.

The Commission recommends that future regional plans be developed to meet specific performance standards, and major projects would have to be shown to be cost-beneficial. The Commission recommends that planning activities continue to be funded through a percentage of the total authorized funding for the Federal surface transportation program.

PREVIOUS COMMITTEE ACTION

On January 17, 2008, and February 13, 2008, the Committee on Transportation and Infrastructure met to hear testimony on the Commission Report, which focuses in part on congestion relief and mobility within metropolitan areas. On June 7, 2007, the Subcommittee on Highways and Transit held a hearing regarding congestion and mobility on our nation's surface transportation system. The Subcommittee also held a January 24, 2007 hearing regarding the nation's surface transportation system and the challenges it will face in the future, as well as to examine how the system will need to adapt to support the changing and expanding economy.

WITNESS LIST

Mr. Robert Puentes
Fellow
The Brookings Institution Metropolitan Policy Program
Washington, DC

Mr. Robert D. Yaro
President
Regional Plan Association
New York, NY

The Honorable Ron Sims
King County Executive
Seattle, WA

Ms. Jolene Molitoris
Assistant Director
Ohio Department of Transportation

Mr. Michael R. Wiley
General Manager/CEO
Sacramento Regional Transit District
Sacramento, CA

Mr. Ron Kirby
Transportation Director
Metropolitan Washington Council of Governments
Washington, DC