WELCOME TO
SALT LAKE CITY

Transportation and Greenhouse Gas Emissions:
Opportunities for Reduction

Statement of

The Honorable Ralph Becker,
Mayor of Salt Lake City

Before the

Committee on Environment and Public Works
United States Senate

July 14, 2009

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

Thank you for the opportunity to meet with you this afternoon to discuss efforts to reduce pollution and greenhouse gas emissions in the Salt Lake City region. I appear before you today not only as Mayor of Salt Lake City but also previously as founder and partner of an environmental planning and policy development firm where I was frequently a consultant to local government, community groups and stakeholders throughout Utah and the Rocky Mountain West in formulating sustainable land management and development policies, as a professional planner and adjunct professor at the University of Utah's College of Architecture and Planning where I taught courses on land use, community planning and environmental problem solving, and as an elected official where I served for over 10 years in the Utah House of Representatives, much of this time as the House Democratic Leader, and currently as the Mayor of Salt Lake City.

Before I begin my remarks, I would like to gratefully acknowledge the strong leadership that Senator Robert Bennett, formerly a member of this committee, has provided to our region. His leadership has been a decisive factor in the willingness of our community to embrace mass transit and in the rapid pace of development of our mass transit system in Utah. We are grateful as well for the fine contributions made in this regard by Senator Orrin Hatch and Congressman Jim Matheson.

Introduction

We know our physical climate is experiencing unprecedented warming, as illustrated by rising average air and ocean temperatures, accelerated snow and ice melts, and rising average sea levels.

Several months ago, I was backcountry skiing in the Utah's Wasatch Mountains with a good friend, Jeff Niermeyer, who is responsible for Salt Lake City watersheds. (More than 60 percent of Salt Lake City's water comes from the Wasatch Canyons draining into the Salt Lake Valley.) Jeff and I often discuss what is happening in our Rocky Mountains and the best projections for our future.

As we skied, Jeff and I considered the Salt Lake Valley's future: With less winter snowpack and the timing of our precipitation changing, our water system built off the snowpack and storing the runoff will be greatly reduced. Our ski industry will be dramatically reduced. Greater, longer beetle infestations will not only result in more dying off of our mountain forests and changing vegetation, but will result in more sedimentation of our streams and rivers. Already we are seeing winter rain at elevations of 9,000 feet on a relatively frequent basis, and lower elevation snowpack so greatly reduced that it is no longer a factor in our water storage around Salt Lake City.

We have no choice but to adapt to these radical changes. In Salt Lake City, we must adapt not only the ways in which we manage our water resources, but we must adapt many of our individual lifestyle patterns in order to improve not only our local air quality, which gets significantly worse each year, but to reduce the amount of greenhouse gas we contribute to the much bigger problem of global climate change, which requires a national response.

Overall Perspective

I applaud the U.S. House of Representatives for their leadership in passing the American Clean Energy and Security Act last month. This is commendable legislation and a bold step toward achieving energy independence, reducing global warming pollution and transitioning to a clean energy economy.

However, encouraged as I am by the leap forward taken in the House, I believe that a major component of efforts to reduce global warming pollution is not addressed in the bill. The United States is responsible for nearly a quarter of worldwide greenhouse gas emissions. The transportation sector accounts for 28% of such emissions in the United States. National efforts to reduce global warming pollution must address the impact of individual vehicle emissions.

Reduction of these emissions are a function of improving vehicle fuel efficiency, reducing fuel carbon content and reducing vehicle miles traveled, or VMT. Since 1980, the number of miles Americans drive has grown three times faster than the U.S. population, and almost twice as fast as vehicle registrations. The U.S. Department of Energy's Energy Information Administration forecasts a 48% increase in driving between 2005 and 2030. Energy and climate policy initiatives at the federal and state levels have focused almost exclusively on technological advances in vehicles and fuels. Yet, there is a growing recognition that managing VMT has to be part of reducing global warming pollution.[1]

We must formulate a comprehensive federal transportation policy that seeks to reduce greenhouse gas emissions by reducing VMTs through (i) a greater federal commitment and incentives to expand mass transit networks in our cities, (ii) encourage smarter land-use planning, development of complete communities and higher density development by shifting a portion of our federal commitment of resources away from expenditures that subsidize urban sprawl to a more balanced program of federal investment, and (iii) a greater commitment to alternative modes of transportation including the development of bikeways, reducing VMTs by shifting commuting habits to include carpooling, vanpooling and trip chaining. *Our observations in these areas are highlighted below.*

I. Mass Transit Investments

Over the past 60 years, urban sprawl and population growth have dictated our need for more and more personal automobiles, greater highway capacity and miles of additional roadways. For many years, auto-centric development spurred highway and road construction and discouraged mass transit. Salt Lake City had a 115-mile streetcar system that was eliminated in 1941.

American Public Transportation Association (APTA) research recently showed that households with access to transit drive an average of 4,440 fewer miles annually than

[1] Growing Cooler: The Evidence on Urban Development and Climate Change By Reid Ewing, Keith Bartholomew, Steve Winkelman, Jerry Walters, and Don Chen· Washington D.C. (2008)

those in similar households without access to public transit. APTA also reports that a two-adult household that gives up one car to use public transit saves $9,596 annually. Science Applications International Corporation found that it takes just one commuter switching from daily driving to public transit use to reduce the carbon footprint of that household by 10%. Statistically, public transit is 25 times safer than using a car, improves public health, fostering an active lifestyle, encouraging more people to walk, job and bicycle to transit stops.

Today we are responding with sustainable planning strategies, transit-oriented developments, light rail lines and re-implementation of streetcars. Salt Lake City has emerged as a national leader in transit development. After two successful light rail lines and a new, 40-mile commuter rail line built in the last eight years; Utah voters have approved ballot initiatives taxing themselves to build an additional 70 miles of rail in the next seven years. This rapid build-out of light rail and commuter rail in the Salt Lake metropolitan area is moving ahead at an aggressive pace, including construction currently underway on 4 light rail spurs connecting Salt Lake City to its suburban developments and a commuter rail extension between Salt Lake City and Provo.

In addition to expanding our transit connections to surrounding suburbs and adjacent metropolitan areas, we are also seeking to improve mass transit options within Salt Lake City with the development of several additional streetcar lines. Many cities in the United States have built modern streetcar systems in recent years, and have experienced incredible success with these projects. As slower-moving, neighborhood-scale forms of public transportation, streetcars entice thousands of riders who might otherwise drive for short- or medium-length trips within the city.

Sugar House Streetcar

Together with the Utah Transit Authority, or UTA and the City of South Salt Lake, we are progressing with plans to build a streetcar line in an abandoned Union Pacific Railroad corridor. The line is located in a heavily traveled east/west transportation corridor and will cross two major north/south automobile arterials, passing through residential, light industrial and commercial zones of both cities. Based on preliminary design elements, we believe we can complete this project for roughly $45 million and anticipate that up to half of this amount can be funded through tax increment financing or other private resources. The benefits to our communities will be enormous.

Downtown Streetcar

We are seeing a growing number of downtown residents and expect to see many more. Streetcars can enable many downtown residents to own fewer cars, or forgo auto ownership entirely, saving thousands of dollars a year in living expenses. Streetcars also provide an attractive, reliable transit option for the last segment of many commuters' trips to downtown, as streetcars provide access to areas of the city that may not be served by commuter rail or light rail systems.

Streetcars have also proven to be an extremely effective development tool. Little Rock, Tacoma, Tampa, and Portland, among others, have seen hundreds of millions, or even billions of dollars in private investment take place adjacent to their streetcar projects, which cost those communities a small fraction of those amounts to build. In

Portland, Oregon, for example, their $55 million investment in their first streetcar line yielded over $2 billion in new investment within a few blocks of the line (a 4200% return on investment).

The development community there has indicated that the City's "permanent transportation investment" has given them the confidence to invest their own dollars in the streetcar neighborhoods, creating vibrant, safe, and active urban communities. Those who live in those communities make a large number of their trips on foot, bike, streetcar, or a combination of those modes, thereby reducing traffic and parking congestion, vehicle miles traveled, and air pollution.

I believe all of these benefits warrant the development of a downtown streetcar in Salt Lake City. The line I have proposed would connect our downtown with a commercial center and commuter rail hub immediately adjacent to downtown. While this project is in its early stages of planning, we are in the process of engaging a consulting team to help us advance the project quickly through design to construction.

South Davis Streetcar

Finally, we are working closely with neighboring communities to develop an additional streetcar line that would serve commuter and traveler needs between downtown Salt Lake City and cities to our north that are underserved by mass transit. This project will provide a transit alternative to driving between Salt Lake City and southern Davis County. The current roadway system is congested due to rapid suburban growth despite continual projects expanding its capacity.

II. Better Land-Use and Development Planning and Balanced Transportation Investments

We are here today at a point in our history where we are faced by numerous challenges and a pressing need to address significant infrastructure issues that are critical to our future including energy needs, water management and expensive transportation investments. Demand-side management is forefront in any discussion or analysis of energy or water needs. However, we rarely discuss demand management as it relates to transportation needs. This is a critical component of transportation planning.

We can reduce VMTs through transportation demand management strategies. One such strategy is our land use decisions. Providing our citizens with the real option of being able to live, work, shop and recreate in the near where they live would reduce VMT, improve air quality, improve public health, strengthen neighborhoods, reduce public infrastructure expenditures and significantly reduce global warming pollution.

In January 1997, I was involved in the founding of Envision Utah, a public/private partnership formed to guide the development of a quality growth strategy to protect Utah's environment, economic vitality and quality of life for future generations. The Quality Growth Strategy, developed with the input of thousands of Utah residents, sought to preserve critical lands, promote water conservation and clean air and improve our region-wide transportation systems. Through the exhaustive involvement of the public, local and state elected officials, the business, civic, and religious communities, and other

key stakeholders, the process was an enormous success in raising public awareness and building consensus needed to implement the strategy.

Utah is among the fastest growing states in the nation. Envision Utah is currently involved in a project where it is exploring land use and transportation relationships in the context of developing our region's long-range transportation plan. Envision Utah tells me that two-thirds the buildings that will exist in our region in 2040 have not yet been built. We have an opportunity to change the course of our future and strike a better balance for the development of our future. Nearly 1.9 billion square feet of new and rebuilt space will be needed to accommodate the projected 2.9 million jobs we'll have by 2040. If we continue current patterns of development, municipalities will soon find that growth-related expenses exceed expected revenues. The Wasatch Front has limited land available for development, and building roads to serve widely dispersed populations will become increasingly impractical.2

This explosion of development in our region's future gives us the opportunity to create more vibrant urban environments and improve the efficiency of our transportation investments. Envision Utah has developed what they are calling the "3% Strategy", which is to strategically accommodate one-third of our future development on 3% of available land, near key transit stops and existing road corridors. The regional benefits of embracing this strategy are significant. In addition to creating neighborhoods that reflect consumer preferences and minimize expensive public infrastructure investments, lower per capita water use and more active neighborhoods supporting improved public health, our region would see 10% less driving, resulting in cleaner air, less traffic congestion and a $6.4 to $8.8 billion in savings in roadway investments.

We cannot achieve our goals under the 3% strategy without federal participation in a balanced funding solution of roads and public transportation. While much of our travel will continue to be by automobile, other transportation choices are crucial to our pursuit of balanced and sustainable land use planning. At the federal level, at the current time federal support for surface transportation is 80% to highways and 20% to transit. Since those are matching funds, the level of state and local expenditures on federally-aided projects is similar. Local and state capital expenditures on non-federally-aided highways and transit in most communities is even more unbalanced, closer to 90% -10%.

In almost all European cities, the average percentage of total household income devoted to transportation is between 8% and 12%. In Canada, it ranges between 10% and 15%, even in cities like Calgary, which are western, and have higher automobile ownership rates. In the United States, it generally ranges between 15% and 25%. That's about double the European percentage. And while those are averages, the percentage spent by low income families is typically much, much higher. The lower the transportation costs, the more families have to spend on housing. The Brookings Institute and Urban Land Institute have done a great deal of research on the combined cost of housing and transportation to families in U.S. cities, and note that while moneys spent on housing retain some long-term value to families, expenditures on transportation are short-lived.

[2] Source: Arthur C. Nelson, Presidential Professor & Director of Metropolitan Research, University of Utah (2009)

Federal transportation policy must be aligned to encourage balanced transportation investment along the Wasatch Front if we are to build a transportation system that will reinforce the 3% Strategy and allow us to redevelop our urban corridors, bringing new life to our cities, lower public infrastructure costs and preserving our recreational areas and open space and reducing our global warming pollution.

The key to making substantial greenhouse gas reductions is to coordinate federal, state and local policies and practices, funding, and spending, incentives, and rules and regulations pointing in the same direction, toward smart growth and away from sprawl. Currently, policies at most levels are pointed toward sprawl, creating conditions that lead to ever increasing greenhouse gas emissions.

III. Alternative Modes of Transportation and Shifting Commuting Habits

A final, but important component to reducing greenhouse gas emissions is encouraging individuals to make responsible choices and lifestyle changes that will result in sustainable communities.

In Salt Lake City we have worked with employers to provide commuters with transportation options. In truly public-private partnerships we are working with businesses to implement trip reduction programs which include vanpools, carpools, and bicycle commute programs. Through this effort we have been able to increase transit ridership, get more people to carpool and vanpool, and ultimately get more people out of their solo commutes. We have found that employers want to do more to help the environment, reduce congestion, and provide transportation options for their employees.

Clear the Air Challenge

In the Salt Lake valley, vehicle emissions represent about 50% of the total emissions that create our air quality problems. Changing individual behaviors is critical to solving this problem. In an effort to encourage emission reducing behavior, I invited Governor John Huntsman and our county Mayor Peter Coroon to join me in issuing the *Clear the Air Challenge.* This was a six-week effort to reduce VMTs and single driver car trips. The challenge rewarded individuals for driving less and driving smarter with a competition for weekly and grand prizes. A website was provided for participants to log their daily efforts to drive less including trips eliminated, miles saved and alternative modes of transportation taken (including mass transit, active transportation, and trip chaining).

The challenge has been very successful. We set extremely ambitious goals including 10,000 participants, 300,000 trips eliminated, 1 million miles saved, and 1.8 million pounds of emissions reduced. In reality we had 3500 registered participants, and realized about 100,000 trips saved. Even with the lower participation and trips saved, we have nearly met our goals of 1 million miles saved and 1.8 million pounds of emission reductions. Imagine what an impact we can have as more and more people hear and respond to this message.

Bikeways

In Salt Lake City we are actively working on the planning, design and implementation of bike trials throughout the City and surrounding communities.

The 900 South Trail Project will design and construct a linear pedestrian/bicycle trail with ancillary improvements on a former Union Pacific Railroad right-of-way in a developing part of Salt Lake City. The former railroad line runs approximately along 900 South between 500 West and the Surplus Canal. This project will provide an off-road connection for a residential neighborhood to the Jordan River Parkway which provides recreational and commuter connection from Davis County to the north to Utah County to the south, eventually connecting the Great Salt Lake and Utah Lake. This trail will also connect to the 800 south bike lane which is a major east-west bike lane through all of the Salt Lake City, connecting to Emigration Canyon and the Bonneville Shoreline Trail.

We are also working to complete the PRATT Trail, an 8 mile trail that will connect the Bonneville Shoreline Trail on the east with the Jordan River Parkway Trail on the west.

These projects help the region move one step closer to meeting the goals of developing alternative transportation, mobility and recreation needs of the state and the nation.

U.S. Conference of Mayors Priorities

Finally, I am pleased to serve as a member of the Advisory Board of the U.S. Conference of Mayors, very ably led by its President, Mayor Greg Nickels of Seattle. The Conference recently held its Annual Meeting in Providence, and adopted a great number of resolutions, which I know will make very useful contributions to this Committee's work in the areas of transportation and greenhouse gas reduction. Those policy resolutions can be found at http://usmayors.org/resolutions/77th_conference/. I would like to highlight the resolution entitled "Calling on Congress to Pass Meaningful Climate Protection Legislation." A copy of this resolution is attached. Not only does it support the American Clean Energy and Security Act of 2009, it also highlights several modifications to the bill that would be of benefit to local governments. These include:

- Support for enforcement as well as adoption of local energy and land use codes;
- Eliminate federal and state barriers to local financing programs that use property tax mechanisms to finance efficiency upgrades;
- Allocate federal transportation dollars directly to local governments to support increased investment in transit as well as bicycle and pedestrian infrastructure;
- Direct allocation of credits or auction revenues to cities for investment in climate mitigation, through such initiatives as the Energy Efficiency and Conservation Block Grant program, as well as adaptation initiatives, consumer protection and workforce development programs.
- Direct some funding achieved through a cap and trade system toward assisting high greenhouse gas emitting generators of electricity and research and development firms, dedicated toward finding cleaner energy solutions;
- Include tax exempt financing for Investor Owned Utilities to finance utility plant retrofits for clean energy.

We hope you will give very strong consideration in forthcoming climate change legislation to not only including very comprehensive transportation provisions, but also making the above modifications which could also have a substantial impact in reducing greenhouse gases from the transportation sector.

Conclusion

I believe that a comprehensive effort to reduce global warming pollution must encompass transportation demand management strategies through a commitment to mass transit options, balanced funding approaches to transportation infrastructure investments and a commitment to support development of alternative forms of transportation and encouraging habit changes that reduce VMT. Incentives for systemic change must begin at the federal level.

I appreciate the opportunity to provide this testimony to the Committee and look forward to your questions.