

TESTIMONY OF
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AMERICAN PUBLIC TRANSPORTATION ASSOCIATION
BEFORE THE
NATIONAL SURFACE TRANSPORTATION POLICY
AND REVENUE STUDY COMMISSION

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APTA is a nonprofit international association of more than 1,500 public and private member organizations including transit systems and commuter rail operators; planning, design, construction and finance firms; product and service providers; academic institutions; transit associations and state departments of transportation. APTA members serve the public interest by providing safe, efficient and economical transit services and products. More than ninety percent of persons using public transportation in the United States and Canada are served by APTA members.

Introduction

Members of the Commission, over the past year I have had the opportunity on three previous occasions to appear before you and present ideas and recommendations on behalf of the public transportation industry and its riders. I have also had the opportunity to get to know many of you on a personal level, and very much appreciate your sense of commitment and the open process you have used. I also know that the toughest part still lies ahead as you craft your recommendations.

APTA was privileged to co-sponsor the initial field hearing of the Commission, September 20-21, 2006 in Dallas, Texas. At that hearing I spoke of public transportation as a central strategy for key issues such as reduced dependence on foreign oil, mobility benefits for an aging society, and congestion relief. In December 2006, I was asked to speak specifically about the economic benefits of rail investments. At the hearing, I distributed copies of the USA Today cover story which posed the provocative question “Where will everybody live?” in discussing how to accommodate the 100 million more Americans expected to arrive by 2040, the vast majority of whom will live in metropolitan areas. My third appearance before the Commission was in March 2007, I spoke of policy priorities, transportation investment needs, the importance of guaranteed funding, and the importance of the federal role as a catalyst.

Now, it is time to take our discussion down to specifics. If Americans are to have a true transportation choice, a long term investment and policy strategy is needed to provide that choice.

Knowing something about your timetable, I appreciate being able to be with you today. APTA is working on a comprehensive 50 year vision which unfortunately will not be finished until after you have completed your work, but I would like to share some thoughts and data I believe you will find useful. The data presented here are illustrative of the scale we are working with and will be refined over time. It is rooted public transportation’s contribution to the following overarching vision, one that is both desirable and attainable, and one that should provide a guiding light to America’s surface transportation policy for the next five decades:

In 2050 America is a thriving nation whose multi-modal, environmentally-responsive transportation system is the envy of the world.

America’s Public Transportation System in 2050

Public transportation today plays a vital role in providing congestion relief, mobility and choice and has become a more significant part of the nation’s transportation system over the past decade. In 2006, America’s transit ridership exceeded 10 billion trips for the first time in 49 years. Transit ridership growth of 30 percent since 1995 is outpacing both the growth of our population, at 12 percent, and the growth in the use of the nation's highways at 24 percent. Each

weekday, some 34 million trips are made on public transportation in our nation. Across America, public transportation is providing choice, freedom and opportunity. Rider surveys show that a high percentage of the new riders are “choice” riders, most likely attracted by improved public transportation services that are the result of recent investments.

As we look to the future, high quality public transportation service is available to more Americans. In 2050, travel by personal automobile continues to be a prime method of travel, but the overall transportation network is more balanced, and functions better as a significantly higher percentage of passenger trips are made via public transportation. Services have improved and become more prominent as a result of increased investment. The increased share of trips via public transportation is the result of people making daily choices that offer them the most convenience which make the most economic sense. Through this balanced system, the American public and the American economy are better served.

Defining the National Policy and Vision for Public Transportation

Simply stated, it should be a national goal that, by 2050, every urban area is served by a high-quality, high-capacity, energy-efficient, environmentally-responsible public transportation system, and that persons living in rural areas have an opportunity to use public transportation appropriate to the needs of their area. Implementation of such a policy would result in choice, opportunity, and freedom of mobility for all Americans. Freight movements and people who choose not to use public transportation would benefit from this investment through reduced congestion, reduced reliance on foreign energy sources, and reduced greenhouse gas emissions.

The challenge is to make high quality public transportation options available to a greater portion of the population. Americans base their daily travel decisions on the choices that are available to them. But Americans need more and better public transportation options. According to a 2005 Bureau of the Census survey, only 54 percent of American households have access to public transportation of any kind as they plan their daily travel. These statistics are much worse in rural areas and other areas where the transit services that are provided lack the level of service and amenities that can attract choice riders. I will talk more specifically about what our investments will accomplish, beginning with the very largest urban areas.

In our 12 largest urbanized areas, including places like New York, Chicago, San Francisco and Los Angeles, transit should continue to serve a prominent role in the overall transportation system, providing access to some of the most significant economic centers in the world. In most of these regions, public transportation is already vital to regional mobility. Many of these systems are carrying a large share of travel demand, particularly in markets such as center city work trips. Public transportation systems in these urbanized areas should include a major heavy rail system, an extensive light rail network, or other high-capacity transit service on dedicated rights of way. In most cases, systems also include commuter rail service, and all of these systems have an extensive bus network with frequent service. In many of these regions, public transportation has long provided critical access to central business districts, but as we look to the future, public transportation must respond to changing employment patterns with improved connections into and between growing suburban centers.

In our 50 large urbanized areas, with populations between half a million and three million, including places like Phoenix, Portland, Charlotte and Denver, public transportation systems should include light rail, commuter rail streetcar and other services on dedicated rights of way. These systems should also include an extensive and integrated bus and paratransit network able to provide connections across the region. In many of these urbanized areas, public transportation will provide necessary relief to growing levels of congestion and play a key role in serving additional demand for travel given constraints on the potential expansions of the highway system.

In our 400 smaller urbanized areas, places like Eugene, Oregon and Ithaca, New York - areas with populations between 50,000 and half a million people – public transportation systems will primarily consist of a high-quality bus and paratransit system with reliable service provided on a frequent basis. Service should provide a real choice, connecting residents to key employment centers, schools, shopping and other activities. In some cases, systems might include service on dedicated rights of way, with an emphasis on bus rapid transit, particularly along corridors with significant travel demands.

Finally, in our rural and small urban communities, transit should provide, at a minimum, some basic level of access and mobility. Some two-thirds of residents in rural communities do not have access to any transit service today, and in many places where it does exist, service is quite limited. We envision a national investment in transit that closes this gap in service to make these important connections. Rural service will usually be based on a paratransit model, while many small urban communities have fixed-route bus service as well.

New Systems and Expansion of the Existing System

While it is impossible to predict which regions or communities will implement the many potential public transportation projects and modes based on history and our vision of public transportation's future role in our national transportation system, we do have some overall expectations of our national public transportation system by 2050. We estimate that the number of urbanized areas with commuter rail systems will expand from 29 today to 55 in 2050, with total miles of track increasing from 7,900 to 22,000. (Note that a number of the 22 commuter rail systems currently in operation serve more than one urbanized area.) The number of urbanized areas with heavy rail will increase from 12 to 15 with total track miles increasing from 2,300 to 6,200. Urbanized areas with light rail will increase from 27 to 71 with track miles increasing from 1,400 to 16,700. Finally, the number of urbanized areas with bus service or BRT will increase from 443 to 465 with route miles increasing from 230,000 to 625,000. These estimates compare to a similar period since 1970, during which the number of heavy rail systems has grown from 8 to 15, commuter rail systems from 14 to 22 and light rail systems from 9 to 33.

Public Transportation will Take on an Expanded Role

With a growing population and economy, the demand for travel continues to increase. In 2006, the U.S. population exceeded the 300 million mark. By 2040, our population is expected to surpass 400 million, and may reach more than 430 million by 2050. Much of this growth will occur in our nation's metro areas. At the same time, many of our highways are running at capacity and our ability to expand existing facilities is limited. If we are to preserve our nation's growth and to provide a level of mobility that allows our country to operate efficiently, we must invest heavily in public transportation to carry the expected increase in demand for travel. As many of you are aware, this reliance on transit to carry our growing travel demand is already occurring.

As we look to expand our existing system, we must not forget that we also face the challenge of maintaining the investments we have already made across the country, from the nation's largest subway system in New York City to rural transit services providing critical connections to those without access to an automobile. Maintaining quality systems requires a continued investment in assets to maintain system reliability and protect the quality of service. In some cases, investments in rehabilitation and maintenance are simply a routine part of maintaining a quality system. But in others, substantial increases in ridership have placed a strain on existing assets, requiring a more aggressive investment strategy.

A number of the larger transit systems now face capacity constraints similar to those found on the nation's highways. Systems are aggressively seeking ways to maximize capacity on the existing system, but absent significant investments, a number of systems are beginning to approach capacity and will not be able to meet growing demand. As some of you may be aware, right here in Washington, some Metro lines are running close to capacity and Metro will struggle to meet expected increases in demand over the coming decades without significant new investment. The same story can be told in other parts of the country. Our vision for transit must accommodate the growing economies of our largest cities by providing mobility to our economic centers.

An Expanded Public Transportation Network will Provide the Nation Many Benefits

Investing in this vision for public transportation will come with numerous benefits including improved mobility and decreased congestion, reduced energy use, reduced greenhouse gas emissions, and improved global competitiveness. Among its many benefits, public transportation:

- Improves our economy – for every \$1 billion in federal investment, transit creates 47,500 jobs;
- Reduces our dependence on insecure and expensive foreign oil – transit currently saves more than 1.4 billion gallons of gasoline annually;
- Improves public health – public transportation produces 95 percent less carbon monoxide, 90 percent less in volatile organic compounds, and about half as much carbon dioxide as private vehicles;

- Improves safety – fatality rates for travel on public transportation vehicles are about 1/25th that of private passenger vehicles;
- Improves security – public transportation provides a critical backup in our largest cities with the potential to move millions in a relatively short period of time;
- Promotes affordable travel – a two adult household using public transportation saves \$6,251 annually as compared to a similar household with no access to transit.

The Synergies of an Interconnected Transportation System

Growing congestion has the effect of decreasing the quality of life and reducing our economic competitiveness. Public transportation's role in reducing congestion has the added benefit of keeping highways less congested in urban areas. The same can be said for intercity rail passengers whose travel decisions may be influenced by their ability to get to their ultimate destinations once they step off the train. Good public transportation service enables them to complete their trip quickly and efficiently. In short, we must view the entire transportation network as a single system, one that can be planned, managed and financed with a broad view to the overall good.

Holes in the network through underinvestment result in degradation of performance. For example, to address traffic congestion when it matters most – at the peak of the peak in key hubs – quality public transportation takes vehicles off the road and makes the highway network function more efficiently for truckers and other users. Utilizing the economic efficiencies inherent in public transportation will become more critical as more people need to travel in ever-tightening spaces. As the strain on road and air capacity increases, policy and investment should encourage trips of 300 miles or less to be made via intercity rail and bus.

According to the Texas Transportation Institute there were 3.7 billion hours of travel delay caused by congestion in 2003, costing Americans \$63.1 billion. An additional 1.1 billion hours of delay costing \$18.2 billion would have occurred without current transit service. With additional investment in public transportation, still greater potential exists to reduce travel delay.

An extensive multimodal transportation infrastructure is the foundation of our economy and American way of life. Therefore, the federal government must continue to play a key investment role in our nation's transportation infrastructure – as it has done since the early days of the nation. Public transportation is an essential part of that system. Maintaining a quality transportation system, including transit, is essential to preserving the quality of life in these regions. In our intensively competitive global economy, we must ensure that America's cities are attractive destinations. We must also provide accessibility to those working in important economic centers to allow these companies to grow and thrive.

Integration of Energy, Environmental, Climate Change and Transportation Policies

As we are all aware, public transportation is viewed as an important part of an overall strategy to reduce greenhouse gas emissions generated by our transportation system. Today, this issue is

becoming even more apparent as we are facing the issue of global warming. It is our belief that transit must be part of the national solution to reduce greenhouse gas emissions. Transportation policies must also be consistent with other national goals such as energy independence, improved air quality, reduction of greenhouse gases, and housing with efficient and affordable access. Today, transit saves more than 1.4 billion gallons of gasoline annually. APTA is currently supporting a study that will estimate the overall benefit of public transportation in reducing CO² and other greenhouse gases. Based on early drafts of this research, we expect that we can reduce CO² emissions by between 30 and 40 million tons annually by 2050. More details will be coming as we complete the study in early September, but our research suggests that with an aggressive investment in transit, we have the opportunity to make a real difference.

These estimates of CO² emissions reduction only begin to scratch the surface of public transportation's potential. Our study evaluates the direct effect of replacing vehicle trips with transit service and the added value of congestion reduction. This initial stage of the study did not measure the effect of more efficient land use patterns made possible by public transportation which many suggest are far more significant. Efficient land use patterns allow more walking and bicycling, reduce the distances individuals must travel to reach activities, and fundamentally change the way people live their everyday life. Studies have attempted to measure the "leverage effect" of transit, estimating that for every additional transit passenger mile of travel, total vehicle miles of travel go down between 1.4 miles and nine miles. Changes in lifestyle, more accessible land use patterns and reduced automobile ownership, all made possible by public transportation, contribute to fewer vehicle miles of travel.

These differences are reflected in comparisons among cities in average transportation related energy use per capita. Comparisons to our international peers highlight the potential effect of building our cities around public transportation. One study has shown that our transportation related fuel consumption in U.S. cities is 60 percent higher per capita than in Australian or Canadian cities, two and a half times consumption levels in European cities, and five times more per capita than in Asian cities. Fuel consumption per capita varies within the U.S. with lower levels of transportation related energy use in transit rich cities like New York and Chicago.

We must show our citizens that we are committed to providing real choices that allow households to reduce their vehicle miles of travel. The public is ready to do its part to reduce greenhouse gas emissions. We must embrace this support with our investment decisions. If public transportation offers a convenient, comfortable, reliable and affordable transportation option, the traveler is likely to make this choice.

Investment Strategies to Facilitate an Expanded Role for Public Transportation

We believe that with appropriate investments in public transportation, we can more than double transit ridership within the next 20 years to more than 20 billion annually and approach 50 billion by 2050. While this change in ridership may sound extraordinary, it is certainly within the realm of expectations. Remember that our ridership has increased more than 30 percent since just 1995, much of it the result of a steady and predictable level of investment in public transportation. Given the rapid increases in fuel costs and a new emphasis on reducing

greenhouse gas emissions, we should expect an even greater national interest and emphasis on transit. We believe we can and should expand the number of cities with light rail and streetcar service, with commuter rail, with bus rapid transit, with fixed route bus service and with paratransit. We can improve the quality of rail systems struggling with system delay due to aging infrastructure and heavy passenger loads, and we can enhance the quality of bus systems in numerous cities across the country. We can also ensure that some level of public transportation service is available in rural communities to provide key lifelines to those without access to an automobile. We can provide the public with a quality system that allows for a real choice.

We must address the question of how much it will cost to have a top-notch public transportation system in every urban region. APTA has evaluated the potential investment needs to achieve our vision. In our assumptions, we grouped metropolitan areas into a number of categories based on the metropolitan size and existing transit services. Based on these groupings, we assumed that systems could improve service to attract a similar level of ridership to the high-performing systems. For example, in the Portland, Oregon metropolitan area, investments have been made to make a high-quality public transportation option available to a great number of people. As a result, Portlanders per capita use of public transportation today is over 50% higher since the investments began 25 years ago with approximately 70 transit trips / year per capita while comparable sized areas elsewhere serve an average of about 34 rides per capita. Analyses were conducted for other areas throughout America. We also factored in the need to provide a basic level of service for the two-thirds of rural residents that currently have no access to public transportation.

Based on this analysis, we conclude that through the year 2050 to expand public transportation we should invest some \$1 trillion more (in current dollars) from a combination of federal, state, local and private funds than we would expect from current funding levels of more than \$1.3 trillion during this same period. For this incremental investment of \$1 trillion we would expect a return on investment of at least \$6 trillion of public and private benefits.

Conclusion

We have the opportunity ahead of us to invest in the mobility of our citizens, to maintain the global competitiveness of our economy and protect our quality of life. The required investments seem daunting, but through a partnership of federal, state, local and private sources they are doable. New approaches such as pricing and private-sector participation will continue to increase as economic benefits become better understood, but accomplishing the ultimate vision will not happen without strong, active leadership from all levels of government. None of the four partners, federal-state-local-private, can take a hands-off role and expect other partners to shoulder their financial duty for them. Support from all sectors must grow, but the federal government needs to be the catalyst for the other partners. Prior success stories such as the interstate highway system and the renaissance of public transportation absolutely would not have happened without federal leadership.

While we face a number of fiscal challenges in our nation, we believe that investing in our nation's transportation infrastructure is vital to maintain our mobility, our quality of life and our

economic competitiveness. With these investments, our cities will continue to thrive and we will protect the mobility of our citizens. Given expected increases in population, limited availability of land, an already overburdened highway system and potential further increases in gasoline prices, it is critical that we make the necessary strategic investments. The decisions we make about our transportation system should be bold and forward thinking, very much like those 50 years ago that led to the national interstate system. With the right leadership and vision, the generations ahead of us should be able to look back at this effort as a bold step in the right direction.