TESTIMONY

Regarding
The Future Federal Role for Surface Transportation
by

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before the

UNITED STATES SENATE

Committee on Environment and Public Works

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"Sustaining our high levels of mobility as a society in an energy scarce environment will be the key issue of the decade."

Alan E. Pisarski,

Annals of the American Academy of Political and Social Science,
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Madame Chairman, Ranking Member and Distinguished members of the Committee, ladies and gentlemen, my name is Alan E. Pisarski, and I am honored to be invited to testify before you once again to address policy issues in transportation. I recall with great pride that I participated in the first hearing held for ISTEA, again in 1997 in the advent to TEA-21, and in 2002 regarding SAFTEA-LU. It is a responsibility that I take very seriously.

I recall in that first hearing that Senator Moynihan spoke of seeing the New York World's Fair in 1937 as a youngster and how it had a life-time effect on his sense of the future of transportation. I related then that I had been there also, my parents had wheeled me thru that fair as a newborn, and I must have acquired some of the same flavor he did.

We need to look at the next reauthorization period through the lens of the changes likely to occur between now and the end of the cycle. As the next reauthorized period concludes, delivering us midway through the second decade of the century 2015, we will have seen dramatic changes in the first years of the new century. In many respects our world and the transportation system that serves it will be a different place in the future.

In reviewing travel trends and their social and economic determinants I like to use the following list of eight elements of transportation. Now more than ever it is critical to keep them in mind.

1. **•COMMUTING**
2. **•OTHER LOCAL TRAVEL**
3. **•TOURISM**
4. **•SERVICE VEHICLES**
5. **•PUBLIC VEHICLES**
6. **•URBAN GOODS MOVEMENT**
7. **•THRU PASSENGER TRAVEL**
8. **•THRU FREIGHT TRAVEL**

Too often we say we are going to talk about transportation and then we forget freight and talk only about passenger travel; then we say we will talk about passenger travel and end up talking about metropolitan commuting. Then we get into an argument about highways versus transit and get lost in the thickets of advocacy.

We must consider both freight and passenger travel, in both their metropolitan and non-metropolitan forms as the list indicates. Many of our issues of the future will be centered in freight-passenger conflicts; and intercity-local interactions.

My focus today will be on taking the long view on the nation's travel activity trends and demographic future and its implications for future travel as context for an assessment of the federal role in surface transportation.

Today we face great challenges – Massive energy costs, a housing market in severe distress, and a poorly performing economy. But, taking the longer view, perhaps our greatest challenge will be demographic in nature – comparable to the astonishing first decades of the 1900's when massive immigration transformed America. Senator Moynihan often quoted Auguste Comte in saying "Demography is Destiny." This was never more true than today. What the federal role might be here and how it might be manifested is a great challenge.

The demographic hallmark of SAFTEA-LU occurred in November of 2006 when the US population passed the 300 million mark. Today we have reached a resident population of almost 305 million and it is climbing at a rate of 50,000 to 55,000 per week. While that seems prodigious, and is, in terms of the economic, social and transportation impacts of adding almost three million persons per year, we need to realize that this still represents a growth rate below one percent a year; just above half that of the fifties. The challenges we face are substantial, but even greater challenges have been met successfully by this society in the recent past. One part of that success will be to recognize we are a growing society, expanding in many ways – in population, in workers, in households, in wealth – and not one that has "arrived" and that can afford to rest. We are a nation that adds a Canada each decade and our necessary responses to growth are never done. If we look at the nations losing population in the world today we realize that our challenges of growth are far preferable to challenges of stasis and decline, which are formidable indeed.

The Demographic Challenge

The hallmark of the next reauthorization period will be the arrival of the first of the baby-boomers at age 65 as this decade witnesses the inception of the phasing out of the working years of the baby boom generation that has dominated American population patterns for 60 years. We have often failed to recognize what a dramatic challenge we have faced over that period and how successfully we have managed it. The coming years may equal the challenges of the great immigration era of the 1900's compounded with the need to address the concerns of an aging workforce population. There will be three dominant demographic challenges:

Serving a New Work Force With the major surge of boomers into the retirement years the working age population will be perhaps less dominant in transportation terms than in the past but will present key challenges nonetheless, most importantly including the need to access skilled workers to serve a growing economy. Comprising that work force will be immigrants, retained older workers, greater numbers of working women and others –

diverse in traditional ways – age, sex, race, ethnicity, and skills; – and in less traditional ways – the locations and time patterns of work – traveling in new patterns of geography and schedules.

Serving an Aging Population As the first of the boomers reach 65 during this reauthorization period the nation will change and so will the transportation demands placed upon it. Half of all the population over 55 in America today is between the ages of 55 and 65. As they age it will dramatically change travel demands and patterns. Non-work trip purposes will likely become even more significant than they are today.

Serving and Creating an Affluent Society With population growing at less than one percent annually and real GDP expected to grow in a range from 2.5 to 3.5 percent the wealth of our society should continue to grow, with the accompanying desire for more travel and the means to afford it. Transportation will not only be called on to better serve an increasingly wealthy society with its greater and different travel demands, but more significantly it will have to be a major contributing factor in the enhanced productivity that will make a wealthier society possible and sustainable. Although certainly facing many economic challenges from an increasingly competitive global economy as well as energy threats America will continue to be a highly affluent society propelled by tremendous technological advantages. These advantages will lead to a "high-value society;" one in which people with high values of time interact in a transportation system with a freight system moving high-value products. Both people and the goods they consume will demand and be able to pay for high levels of safety, mobility, service, and reliability.

Geographic Distributions

For 100 years America has been truly unique in the world with a large land area, a large population, and a society which is both technologically advanced and wealthy. No other nation on earth combines these four attributes, although over the coming 50 years at least two (China and India) will be approaching it. These four attributes will define largely how the population will be distributed in the future, as three of these attributes continue to grow and land area remains stable. It will further define how the nation will serve its people, how it will interact nationally and in the world economy. Its defining characteristics will be:

- A highly dispersed, high-value, globally-engaged, high-mobility society must be envisioned, with some sharp growth differences between regions and within metropolitan complexes.
- The critical interactions will be between skills-seeking employers in search of replacements for the retiring baby-boomer generation and amenities-seeking workers and their families, taking place in a context of greater logistical freedom for both workers and employers to locate where they prefer to be. Connecting distant workers with jobs will be a critical productivity function of transportation.

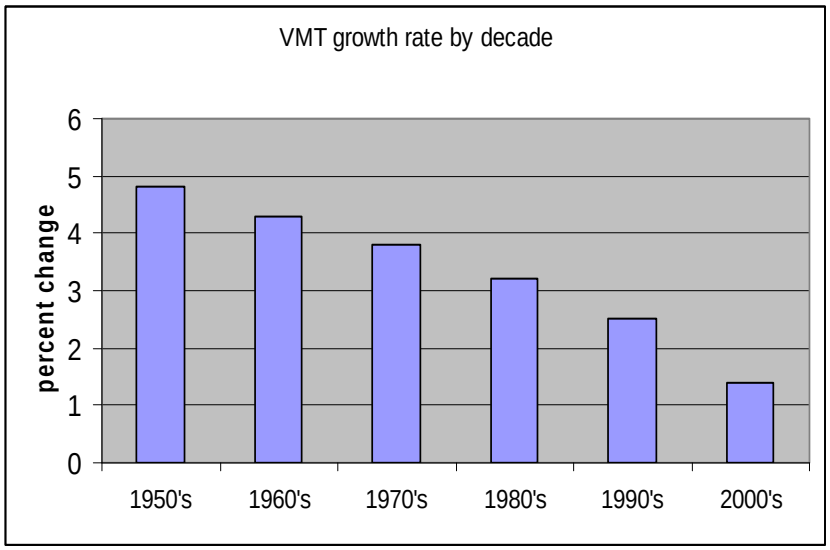
- Massive metropolitan regions will result, with approximately half the US population living in metropolitan complexes of over 5 million. The results will be immense megalapolitan areas with spans of a hundred miles or more. These agglomerations will be increasingly critical to national productivity; and serving their transportation needs will be a major input to that productivity.
- Continued "suburbanization" of people and jobs; with continuing in-fill of existing areas should be expected, despite increased fuel costs, leading to a blurring or, in some areas, complete eradication of metropolitan and non-metropolitan boundaries. This will continue for the foreseeable future as general population migration continues from the metropolitan areas to the rural fringes with households in search of residential amenities and affordable housing.
- Within this metropolitan context community nodes will evolve with a greater emphasis on walking for some local trips.
- Rural populations will be more critical to the nation's economy; and rural development will follow functional lines based on retirees and amenities-seeking workers: focused around recreation/tourism retirement based areas; or specialized economic development features. America's rural populations will be the best-connected in the world.
- The transportation result will be high frequency trip-making, of increasing lengths to and from increasingly dispersed origins and destinations abetted by high level communications capabilities.
- Long distance travel (e.g. exceeding 100 miles) for both business and personal purposes will grow dramatically.
- Greater competition will arise between air and auto travel for intermediate trips between the usual ranges of each, roughly 250 to 500 miles. In some corridors rail will play a significant role.

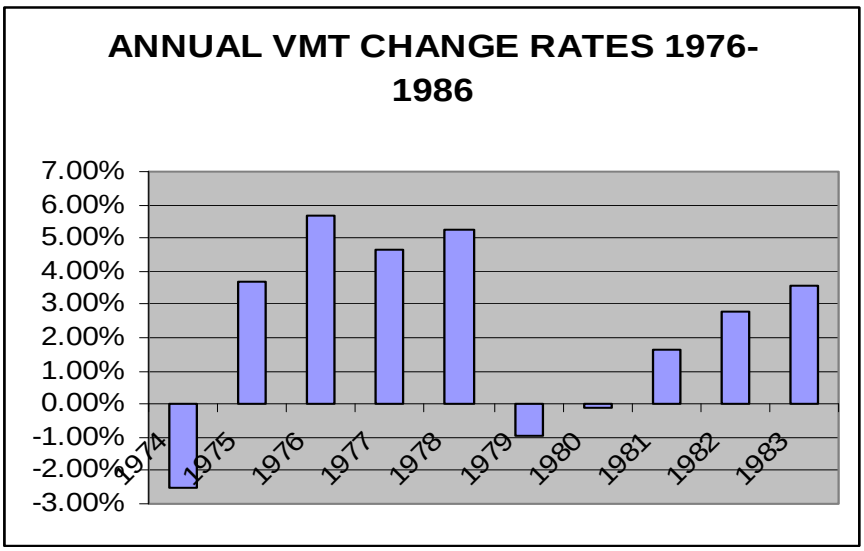
Looking at these trends through the lens of the current energy cost increases seems to lead to almost opposite conclusions. We have to be careful and maintain our longer view perspective here. I conducted policy research in the US DOT during the '74 energy crises and again in 1979-80. I was quoted in the Annals of Social Science in 1981 as saying: "Sustaining our high levels of mobility as a society in an energy scarce environment will be the key issue of the decade."

The point is we have had lots of "energy decades" and society adjusts. Just as the great responses to the transportation air quality issues of the past decades were resolved by vehicle and fuel technologies rather than changes in behavior I believe that that is what we will see again where American life style preferences will lead and technology will respond. It is fatuous to believe that because fuel costs $4 a gallon today that we will all decide to live in apartment houses. (I was just in Europe and paid $8 a gallon and was immediately stuck in a forty minute traffic jam of commuters driving home from work—and Europe continues to suburbanize.) Remember there are more Americans living in trailers than in apartment houses with 50 units or larger. What will be changed will be the calculus – the arithmetic – of decisions in the housing-transportation trade off. Typically, householders base their decisions on the total cost of housing plus

transportation and usually the exurban/rural household wins in that trade-off. That arithmetic is changing and we will see how it manifests itself. Much has been made of the declines in vehicle miles of travel (vmt) in recent months. Three points are important in that:

1. We have been seeing declining vmt growth rates since the fifties. (Chart 1)
2. We saw such declines in the '74 energy crises and again in 1979-1980 with growth rates resuming after adjustments to the new fuel costs. (Chart 2)
3. It is very difficult to disentangle the declines due to changing demography from the slow down in economic growth, housing problems and from the fuel cost spike.





We must assure that the opportunities exist for householders to live the higher density life style with walking and transit opportunities if they choose but we cannot coerce that life style. Most likely it will be younger and older Americans who take advantage of that option. We must resist the sense that raising the costs of the ways American's want to live will lead to a better world. Trying to make them want what we might want them to want is a bankrupt public policy. Accepting consumer sovereignty is the fundamental basis for the federal role.

Many of the transportation implications derivable from the population trends described here need further delineation.

- Community and Neighborhood Design – There is nothing in the foregoing discussion that indicates that development must take the form of widely dispersed housing. There will be interest in, and pressures for, more clustered development that create walking opportunities. Given that much work will be addressed by those working at home or working on flexible schedules the opportunities will exist for more responsive patterns of development at the neighborhood level while the entire metropolitan area is more broadly dispersed. The commute, at less than 20% of trip making, will be more limited in its influence on how areas are structured.

- Transportation and Productivity – As employers and suppliers reach out farther and farther to obtain the needed skills and supporting goods and services they require, the ability to sustain the mobility of people and goods will be crucial to our economic effectiveness and productivity. Communities of interaction will grow up encompassing the entire nation that will be served by communications advancements but that will also further the needs for transportation.

- Congestion and Capacity Needs – the immense national backlog of needed capacity improvements is the critical factor affecting metropolitan economies for the immediate future. Given the relatively benign growth rate levels and the substantial affluence of the society, future needs can be met reasonably once the present backlogs of capacity, maintenance and reconstruction are overcome.

The Federal Role

How best then does the federal government function in this environment. The answers are not immediate but there are some useful guiding concepts. Federal roles can vary from exhortation to outright ownership and control. The balance has been struck over the years in transportation as we have moved from economic regulation to environmental and social regulation and toward varying levels of participation in funding and control. The emphasis has been and should remain on private sector market-based decision-making wherever possible. The boundary between private and public should be assiduously recognized and scrupulously guarded. This does not mean that there shouldn't be cooperation and joint actions to serve the public but that the costs and benefits must be weighed in the public arena with maximum public oversight.

Addressing the key demographic questions of

- Providing Access to a Skilled Work Force
- Abetting and Serving a Wealthy High Value Society
- Serving an Aging Population

In the light of our sense of the federal role leads to the following.

<u>Providing Access to a Skilled Work Force</u>

It is fundamental that oversight and support of interstate and international commerce are well within the appropriate purview of the federal role. Public safety and security also easily fit into that environment. Other speakers here are addressing the topic of freight flows and safety and so I will confine my remarks largely to focus more on passenger travel. Assuring access to the work force is among the most fundamental elements of assuring a sound and productive economy. This however begins to get into the scale of metropolitan and local interaction. The Europeans use a term "subsidiarity" that indicates that actions should always be taken at the level of government closest to the problem. The central federal role here must be to assure that local governments recognize that they have the responsibility to serve the needs of interstate commerce and international trade as part of their metropolitan mobility planning. The prospects will grow for situations where states and the federal government will need to overrule central cities and other metropolitan jurisdictions plans in order to protect interstate commerce corridors.

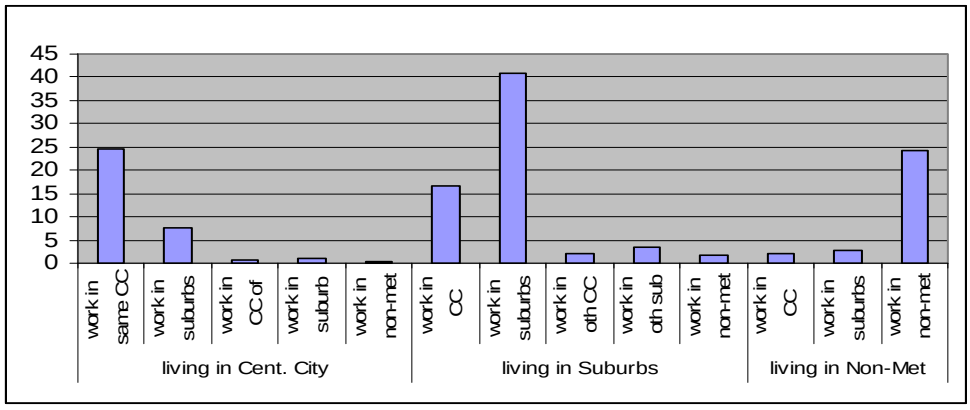
Work in Europe and Asia shows that expanding the effective market size pays immense dividends. A travel speed increase of 10% led to a 15-18% increase in labor market size and just a 10% increase in labor market size could increase productivity by around 2% -- an immense benefit. The recent very well organized and supported Eddington study in the UK focused heavily on assuring continued broad spread "catchment" areas for workers which were seen as key in a nation of large congested metropolitan areas that were responsible for high percentages of national output. The report strongly emphasizes support for "deep and productive" labor markets and the importance of productivity enhancing transportation investment that are environmentally responsive as well.

The great benefits of productivity have come and will come in the future in this society, and all modern societies, from increased specialization of labor and the technological support that it requires.

The central reality of future metropolitan areas will be the continued expansion of the suburbs – not merely in population but in jobs and other attributes such as retail sales as well. In metropolitan areas over a million in population, where about 54% of the nation's population reside, 92% of the population growth in this decade so far has been suburban.[1] In many areas the central cities have become "too important" for jobs and will focus their roles on being centers of culture, recreation and public functions.

Current commuting flows reflect the search for skilled workers. These attributes are shown in the figure below and should continue to follow this pattern as very different growth rates continue. The increasingly crucial nature of the interaction of rural areas with metropolitan areas and between metropolitan areas is revealed by the figure in Chart 3. Note that the work force that lives and works in rural areas roughly equals those who live and work in central cities.

Figure Metropolitan Commuting Flows 2000
(in millions of commuters)



As a result there will be a new worker dynamic operating in the new metropolitan complex. The recent study[2] prepared by the National Chamber Foundation for the Americans for Transportation Mobility coalition summarizes the future worker market in this way:

- *<u>It will be a sellers market for workers</u> resulting from decline of persons of working age. Employers will go where skilled employees are or want to be. Much of this will center around universities and research centers. This, coupled*

[1] The tragedy in New Orleans actually distorts these data enough so that the suburban growth share drops to 90% without the New Orleans metropolitan area.
[2] The Transportation Challenge – Moving the U.S. Economy, NCF of the US Chamber of Commerce, 2008

with more affluent, amenities-seeking workers will abet the shift to the South and West.

- *Employers will be more forthcoming re flexibility regarding hours and days of work in order to retain/obtain workers.*
- *Both center cities and suburbs will move toward balance in jobs and workers (i.e. fewer jobs per worker in cities; more jobs per worker in suburbs) but this will not change the need to commute significantly due to persisting skills mix differences.*
- *Increases in specialization in the labor force will mean that workers will need to be drawn from larger and larger worker pools over greater distances.*
- *Employers will continue to shift outward to be near workers, permitting workers to shift even farther out in search of rural amenities and lower cost housing if they choose. The attachment of immigrants and minorities to the center city has been broken.*
- *Multi-worker households, frequent job changes, housing preferences, and the general friction of changes in residence will generate long work trips.*

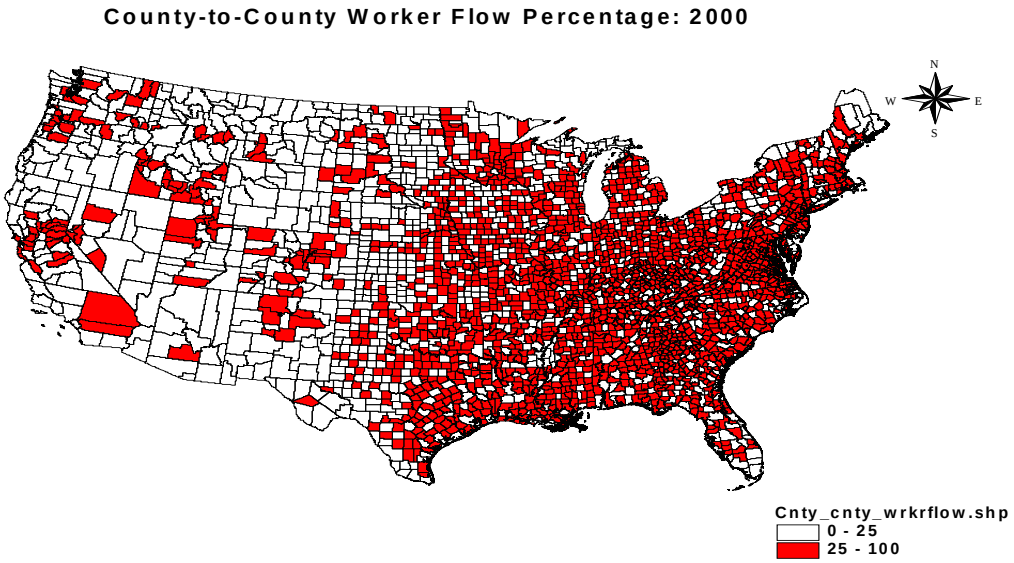
The resulting pattern could be summarized as greater freedom among workers to live where they want and work where they want but where they will have to accept the time and cost penalties associated with longer commutes.

Why won't workers cluster around their jobs as they did in the 18th and early 19th century? A number of very forceful reasons:

1. We are not wedded to a job for life anymore. The average turn-around in jobs is measured in just a few years. It is expensive to move every time one changes jobs uprooting one's family; and self-defeating as well if you may be moving back again soon.
2. About 70% of workers live in households with other workers. Whose job will they live next to?
3. workers work in much smaller units today so that there is no big factory gate to live next to.

It will be the challenge of transportation mobility to assure that the broadest array of worker opportunities are available in metropolitan areas. This will be a critical part of assuring national productivity. Largely this will mean providing effective road access, perhaps in the form of beltways, to permit long distance work opportunities. Greater opportunities for working at home and more flexible work schedules would all have immediate value. Better car-pooling opportunities need to be instituted. Again these actions are low cost with immediate energy savings. Approaching 30% of all workers leave their home counties to work each day. In the accompanying map are shown the counties that export more than 25% of their workers everyday. In the states around the Washington DC area it is closer to 50%. The really challenged households will be those lower income two-worker households (perhaps junior federal employees) pushed to the edge of the metropolitan region by housing costs or a search for good schools and safe neighborhoods, traveling long distances to disparate job sites. The threat to the higher levels of automobility and use which has expanded access to jobs is a great loss. There is

a last-in first-out phenomenon working here. There were tremendous gains in African-American household access to personal vehicles in the last decade but who may be just on the margins of affordability which could be lost.



Transit may have two significant roles: helping provide access to the center from longer distances, (think Baltimore to Washington) much like what commuter rail systems now provide; and providing broader opportunities for lower income workers to access job and other social opportunities. This could mean more access to suburban jobs for center city workers and more access to broadly distributed jobs than heavy corridor investments can serve. The great mega-corridors for transit now exist and we must assure that opportunities to use them to live or build businesses near them are not impaired.

None of this is to diminish the prospective opportunities providing walking access but to recognize that its prospects – given the age consist of the population and the nature of origins and destinations are limited. These are fundamentally areas of local responsibility. Walking has diminished in its role, particularly in work travel for the last 30 years. It will not be a victory if people who have just attained access to autos or transit are forced back to being constrained to finding jobs they can walk to. (e.g., the decline in walking to work in rural areas must be seen as progress.)

Serving an Aging Population

The nation certainly owes great debts of gratitude to its aging population. How best to serve them will be a crucial social question over the coming years. In part this will be answered by some of the other points made here. We will need the continued skills of the aging workforce and we must assure that there access to continued employment, if

needed or desired, is not impeded for lack of transportation. Moreover it should be recognized that work travel is a small and declining part of travel and with this group an even smaller share. It is the access to services – medical, government and other institutions that are likely to be key. Social and recreational travel are key features of their interest as it is with the rest of the traveling public.

This is a complex subject that can be helpfully viewed in stages both in terms of levels of income and levels of age and the ability to drive or to walk significant distances or to wait on a corner for a bus. Our present collection of agencies addressing these problems seem too disparate, overlapping and uncoordinated. A major federal review of these programs would be in order.

Serving an Affluent Society

The point has been made above that the role for transportation is to abet and support, and certainly, at least, not retard, the economic growth of the US. Part of that has been addressed above in regard to assuring access to a larger job-worker market-shed. Certainly the main contributing factor that need to be addressed is traffic congestion that wastes fuel and pollutes the air and impedes economic and social interactions. A major contribution can be made to improving the well-being of the society by reducing congestion. As the value of time increases for people and goods their judgment of the effectiveness of the transportation system will change with it. Conversely, using congestion as a tool in the hope of changing public behavior must be specifically renounced in any useful construction of a future federal role or use of federal funds.

The connection between un-congested transportation and housing values is a key consideration. At this time with housing in the doldrums improved access to housing can make housing more affordable for more people and help preserve the value of home sites.

Another factor linked to aging to consider is that as the baby boomer segment of society retires the numbers of the population that will have the discretionary funds and discretionary time for travel and tourism will grow immensely. This is to be supported at least in partial recognition that it is part of the good life but also for its immense economic benefits to the receiving regions. Tourism is among the top 10 employers in 48 of the fifty states. It is now generating immense positive balance of payments income to our national accounts with the surge of foreign visitors to our shores. This adds to life's enjoyment and enhances world understanding and appreciation for the cultural and natural gifts of our nation.

Specific Federal Roles

- Provide better data and research needed for more effective business and government planning. This is a central indisputable federal role.
- Develop the monitoring capabilities to know what is happening in transportation costs and services on a timely basis. (In 1974 I was reporting fuel costs and usage levels and consumer behavior attitudes on a weekly basis to the White House – we are not close to that today)
- Adopt the performance-based approaches being espoused by many, notably the National Surface Transportation Policy and Revenue Commission. Make certain that performance measured includes national goals of enhanced interstate commerce and recognizes the primacy of national economic and social progress.
- Recognize that the Highway Trust Fund has been the central feature of the federal surface transportation role for more than 50 years. As a guiding concept the dedication to the user pays principle and the integrity of the fund is paramount. Protecting the fund from other prospective uses is central to maintaining credibility with the public.
- Funding by the federal government has ranged from very high to low to non-existent over the years in the different modes with hard to discern differences in results. It is possible to have an effective federal role without dominant funding. Transit in Canada for example is purely a local responsibility with no significant federal program yet Canada's metropolitan transit systems are the envy of American cities. The federal role in the national road program has varied from very high to very limited more recently without a particularly sound basis for the levels.
- Given the present challenges of International competition a greater focus by the federal government on assuring that our transportation system enhances our competitiveness rather than being a brake on progress is central to national concern.
- A key concern is the need for focus of the federal program. It must be focused much more on clear national interest targets rather than acting as a broad series of general support grant programs that has diminished its effectiveness and the public's respect for the programs. When almost anything can be funded by the federal programs then there is no focus.

In closing, my goal for transportation, and my proposed goal for you to consider, is that Transportation's goal is to reduce the effects of distance as an inhibiting force in our society's ability to realize its economic and social aspirations.

We should not be trying to adapt ourselves and our economy to high transportation costs. Rather we should imagine a world where low cost transportation has permitted us largely to overcome the time cost, energy costs and dollar costs of distance and visualize how that world might come to be. That should be our goal and our sense of the federal role in guiding us to that goal.

Rather than celebrating the recent decline in vmt as some kind of victory we must examine the changes and recognize what was lost and not just what might appear to have been gained. How many trips shifted to carpools or transit; or more likely; were shortened in distance, or combined into a time and energy-saving trip chain; or worst of all postponed or deferred. We must accept that people travel for rational reasons. Trips have economic or social transactions at their ends that benefit the trip-maker and the larger society. With a threatened economy, this is not a time to be inhibiting the economic interactions of our society – rather we should be seeking to stimulate them. Those whose goals for transportation can be met by people staying home need to rethink their goals.