AUTOMOBILITY AND FREEDOM PROJECT

CARS, WOMEN, AND MINORITIES

THE DEMOCRATIZATION OF MOBILITY IN AMERICA

Alan E. Pisarski

Disparities in mobility between men and women, and among various racial groups, have declined in recent decades, and the indications are that they will continue to decline. But automobility is under increasing attack, on grounds ranging from resource and environmental concerns to arguments over "urban sprawl." If restrictions on car use are imposed, their impact across our national landscape will be far from uniform. Their most severe effects will fall on those groups that either have recently attained mobility or are just now on the verge of attaining it. By undermining the "democratization of mobility," such restrictions would weaken a key attribute of the American Dream.

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Executive Summary

The central role of automobility in American society is well recognized; far less understood is automobility's importance for gaining entry into American society. Access to mainstream jobs and social opportunities in America depends in large part on having a car. American women have nearly achieved equality in this respect; in the United States, unlike anywhere else in the world, the percentage of women who hold drivers' licenses is very close to that of men.

Minorities, on the other hand, are still lagging in key measures of automobility. For example, the percentage of African-American households having no cars is nearly five times as great as that of white households. Long-distance travel by African-Americans and Hispanics is only half that of whites.

These disparities have declined in recent decades, and the indications are that they will continue to decline. At the same time, the key demographic factor that led to transportation crises in the past, the Baby Boom, is itself changing. As Baby Boomers approach retirement age, their travel patterns are shifting away from peak-use periods. The explosive growth in traffic fueled by that generation is, for the most part, a thing of the past.

But automobility is under increasing attack, on grounds ranging from resource and environmental concerns to arguments over "urban sprawl." Calls for restrictions on car use are becoming increasingly common. If such restrictions are imposed, their impact across our national landscape will be far from uniform. Their most severe effects will fall on those groups that either have recently attained mobility or are just now on the verge of attaining it. By undermining the "democratization of mobility," such restrictions would weaken a key attribute of the American Dream.

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THE DEMOCRATIZATION OF MOBILITY IN AMERICA Alan E. Pisarski

INTRODUCTION

Automobility is an aspect of American life that most people take for granted. Yet automobility is under increasing attack on a variety of grounds. The oil shocks of the 1970s raised concern over our consumption of foreign oil, leading to the enactment of federal new-car fuel economy mandates that restrict the production of large cars and reduce vehicle crashworthiness. More recently, "social costing" critics of automobility have come forth, arguing that car users do not pay the full societal cost of their driving. In their view, gasoline taxes need to be significantly increased to fill the gap. Environmental attacks on driving have increased as well, with charges that auto emissions pose serious threats to both personal health and the global climate. Finally, suburban living has come under attack in the new debate over "urban sprawl."

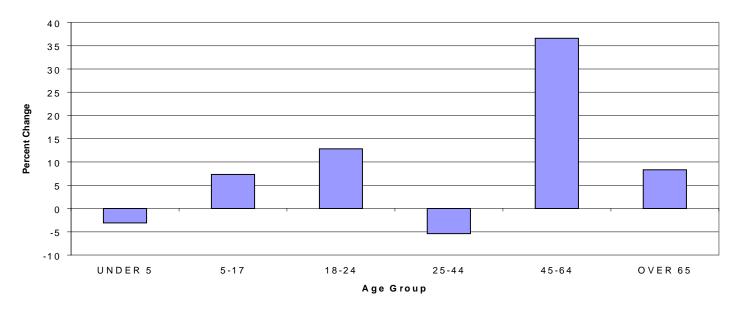
The lack of merit of these various attacks on automobility is beyond the scope of this paper. It is clear, however, that each of them involves significant restrictions on vehicle use, either by direct regulation or by tax increases. But the phrase "reduced mobility" can be misleading, if it suggests that there is some across-the-board description that can accurately describe what will happen. Mobility means many things to many people, but in one sense it means the most to those who have most recently achieved it, or who are just now on the verge of attaining it. To understand just who those people are, one must examine the demographics of mobility—which groups of Americans have it, which groups are just attaining it, and which groups are still in need of it. If government starts restricting mobility, it is very likely that the last groups to have attained it will be the first groups to lose it.

Mobility restrictions, should we reach that stage, will hurt all of us. But, as the discussion below indicates, that pain will not be uniformly distributed. It will fall most heavily on those who either have recently attained mobility or are about to do so. As this paper demonstrates, there are two groups whose social disempowerment has been an issue of great concern—women and minorities.

DEMOGRAPHY IS DESTINY

The defining event of the social era since World War II has been the "Baby Boom," working its way through the age structure like a lamb swallowed by a boa constrictor. Nothing exemplifies this as clearly as the accompanying figure, which shows the extraordinary shifts occurring in our age structure today. Mobility means most to those who have recently achieved it, or are now on the verge of attaining it.

Projected Population Shifts by Age Group 1995 - 2005



All figures in this paper are based on United States Census data and on the United States Department of Transportation's National Personal Transportation Survey (1995).

Government responses to such social trends tend to occur after the problems have passed; the trend is rarely recognized when we are in the middle of it. So it has been with the Baby Boom. Government has reached a stage of paralysis in its ability to respond to the transportation demand generated by the Baby Boomers, just as the major determinants of that demand are behind us. The same people who filled our grammar schools in the 1950s and 1960s and our high schools and colleges in the 1970s clog our roads today.

The 1990 Census documented the peak of the Baby Boom's impacts on the working world and commuting needs. These impacts were essentially the following:

- · A boom in workers as Baby Boomers came of working age;
- A surge in women workers as they joined the labor force in record numbers;
- A shift outward of homes and jobs to the suburbs, resulting in suburb-to-suburb commuting becoming the dominant national pattern;
- A boom in automobile affordability and durability, making personal vehicles available to almost all workers.

But as explained below, today there are new forces of stability and of change affecting our transportation needs. Those forces will sharply modify vehicle choice, travel behavior, and the social context in the years just ahead.

FORCES OF STABILITY

Today, many of the historical forces of change have transmuted into forces of stability. These include:

Low population growth - We are experiencing the lowest growth rates since the Depression, modified strongly by immigration rates;

Low labor force growth - The last of the Baby Boomers joined the labor force in the mid-eighties. We are in a trough with respect to new workers;

Reduced growth in new household formations - A major factor in producing new travel demand has slowed;

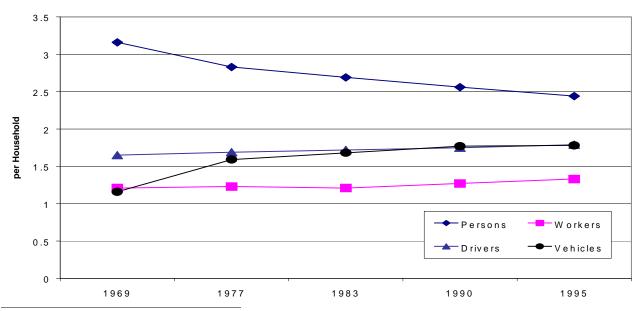
Low drivers' licenses growth - We have largely reached saturation on drivers' licenses per adult;

Low impacts of vehicle growth - With the vehicle fleet exceeding the number of drivers, it doesn't matter how many more vehicles we add—the impact on travel is small;

Small changes in the number of women workers - The great surge of women into the labor force is behind us.

All of these factors suggest that the dramatic changes of the post-World War II era are a thing of the past. The key trends are summarized in the figure below. The next great shift will occur in about 2010, when the first of the Baby Boomers hits 65 and then the world changes again.

Key Household Trends



FORCES OF CHANGE

But there are new and significant social factors suggesting where the travel growth in the future will come from. These include:

The democratization of mobility - Racial and ethnic minorities increasingly will be joining the majority as we democratize our transportation system with even more broadly-based private vehicle ownership and use;

A new immigrant population - Immigrants often arrive in the peak work years of their lives with a job and a car as their goals.

There are other factors, to be sure. Not the least of these will be a population moving into the high travel-propensity years—45 to 55 years of age—suggesting heavy tourism, an increasingly wealthy population, and the continued dispersion of that wealthier population. All of these will make for increased trip making and greater average trip lengths. But this will not necessarily mean more congestion. To the contrary, society is shifting away from congested areas and reaching for lifestyles unrelated to peak period travel, as shown by the fact that commuting is a declining share of total travel.

We have done pretty well, by and large, since World War II in our transportation systems despite colossal changes; the Baby Boom has moved through its life cycle, women have surged into the workplace, and we have experienced national migrations, first from the South to the North and then to the Sun Belt. Even with all of this, we have managed to construct a transportation system that serves people and the larger society well—perhaps not the envy of the world, but certainly a very good system.

Society is shifting away from congested areas and reaching for life-styles unrelated to peak travel.

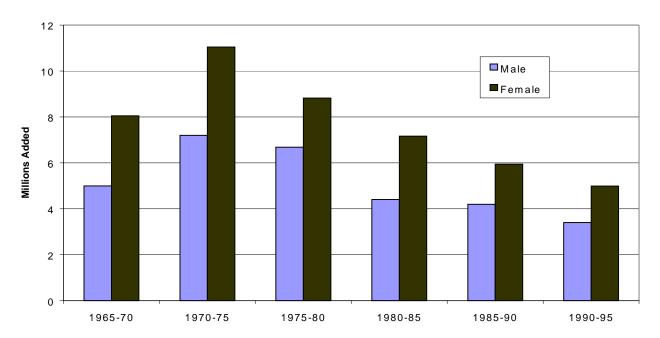
FOCUS FOR THE FUTURE

Many of the forces of change mentioned above represent "average" conditions for the population as a whole. Behind those averages lie significant variations.

Drivers' Licenses

We noted saturation in drivers' licenses as a fact of society. Licensing of drivers has declined in absolute numbers in recent years as saturation has been approached, with women accounting for about 60% of the increase in the past 30 years.

Male & Female License Trends 5-Year Increases

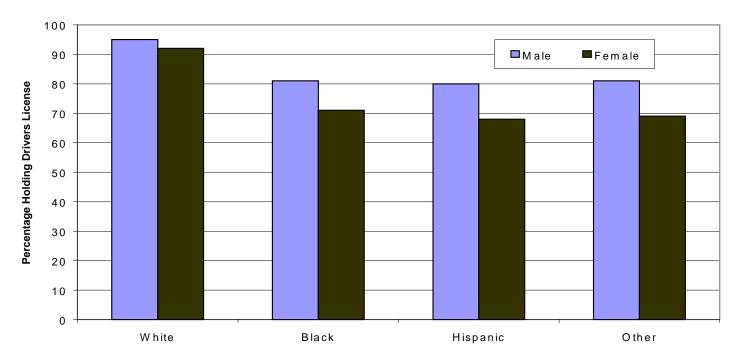


In reality the saturation we see is among the white non-Hispanic population. White non-Hispanics have drivers' license levels of about 92 or 93 percent of the population. Only those above 65 years of age still show any potential for further increases in licensing. This group's license holding will grow simply by virtue of the aging of the 55-year-old age groups over the next several years. Today almost our entire population has grown to adulthood in the automobile era.

These data mask a fact of major importance—that license holding is not anywhere near as close to saturation among the nation's minorities. The figure below emphasizes the point. Black and Hispanic males have licensing rates of about 80 percent; those of females are lower yet. Given that a license to drive is often a diploma providing access to many entry level jobs, we can expect that the levels of ownership of drivers' licenses among minorities will approach the levels of the white majority in the coming years. Clearly, almost all of the potential growth in drivers' licenses will come from these groups.

It is also notable that the significant distinctions we see among minority men and women are not seen among the white population. There is only a 2 or 3 point gap between the percentage of white women holding licenses and that of white men, as contrasted to a 10 percentage point gap between minority females and males. If there is a measure of true female equality, it is perhaps in this: In Europe and elsewhere around the world, the possession of a driver's license and its use to operate a vehicle

Urban License Holders Age 16 - 64



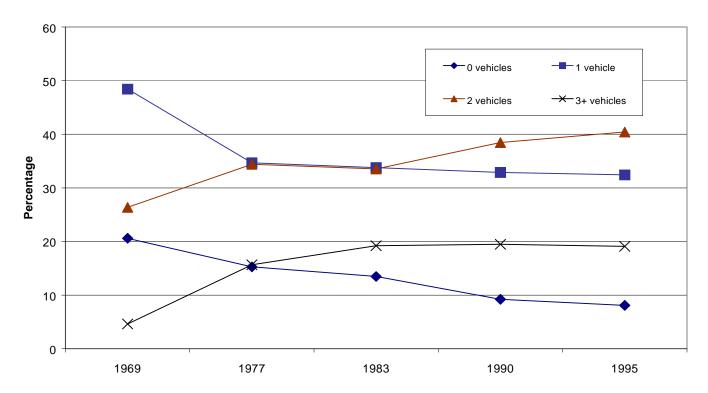
is far less typical of women than it is in America. In many cases the possession of a driver's license among women outside America is below the rate for minority women in the United States.

Vehicle Ownership

There is a mixed story with regard to vehicle ownership in the United States. On the one hand, we added more vehicles than people in the 1980s and we have almost done the same in the 1990s. The majority of households has two or more vehicles. We have a national fleet well in excess of 200 million vehicles. These automobiles are a major part of the landscape, suggesting that we need to establish a science of the "demography" of vehicles.

But given all that, it is also true that vehicle ownership, in all important ways, has stabilized. The key commuting measure of vehicles per worker has actually declined after prodigious growth from the 1960s to the 1980s; despite rapid growth in total vehicles, it is still 1.3 vehicles per worker. Household growth has kept vehicles per household roughly unchanged in the 1990s, and the distribution of households classified by the number of vehicles they have available has held relatively stable, as shown in the figure below. In fact, the share of households with 3 or more vehicles has actually declined recently, after dramatic growth since World War II.

Shares of Households by Vehicles Available

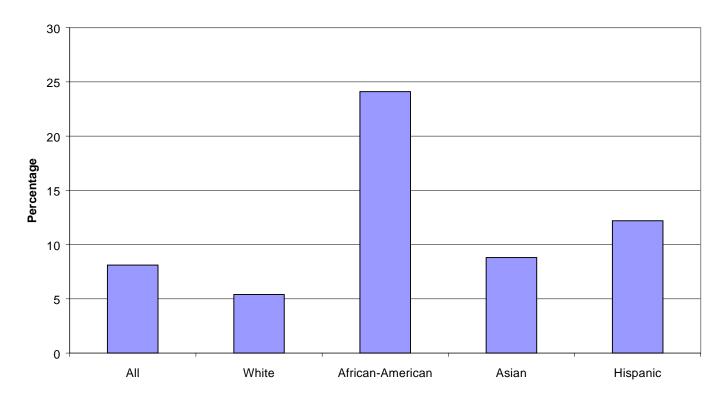


Today, the central question in all of this relates to the households without vehicles. Who comprises these households? Where are they and what is their character? What happens when they join all of the other households with vehicle access? We have seen the share of carless households decline from 21 percent in 1960 to about 8 percent today, and that has occurred in the presence of a dramatic surge of immigrants throughout this period. This has meant a great increase in people with free choice and a greater range of job and other opportunities.

As the figure on the next page shows, the national average for households without vehicles mask important realities. Disaggregation of households by race and ethnicity indicates that while the share of households that are carless among white non-Hispanic households is about 5 percent, for Hispanics that number is closer to 12 percent and for the African-American population, 25 percent.

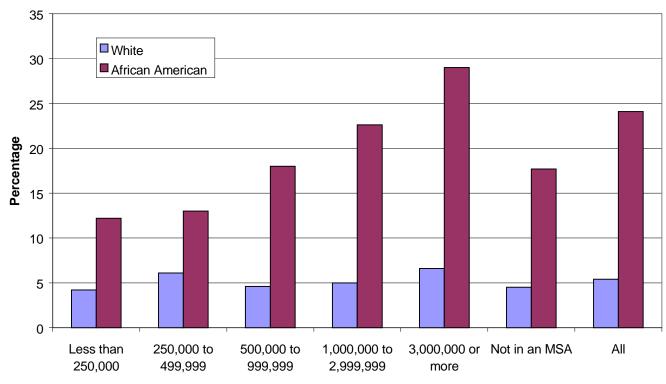
Clearly those numbers are not immutable; in fact, we can expect that these minority populations will have vehicle-owning characteristics like the general population in not too many years. But if the current trends in this direction are dampened or eliminated by mobility restrictions, we will have lost one of the major forces of democratization in our nation, a force that has helped to dramatically reduce inequalities in economic and social opportunities throughout this country.

Percentage of Households with No Vehicle Among Racial and Ethnic Groups



One argument that may be made against this view of carless households is that more than half of the African-American population tends to be located largely in high density central cities, where transit service is generally good and private vehicles are less likely to be useful to them. The data do support that to some extent, but they tell an additional story of great importance. In the figure below we see that carless rates do rise with increasing size of metro areas, extraordinarily so for African-Americans. There are, however, several "buts" that go with this observation. Carless rates for white households increase from about 4 percent in metro areas of less than 250,000 population, to just over 6 percent in metro areas of more than 3 million. African-American households jump from 12 percent to almost 30 percent, going from three times to well over four times the white rate. Moreover, more than 17 percent of African-American households in rural areas are carless, in contrast to less than 5 percent of white households. It is difficult to construct any ameliorating hypotheses about the fact that 17 percent of African-American rural households are carless. This must have a crucial bearing on their ability to access jobs, community services, and other opportunities such as shopping choices and recreational sites.

Shares of Households with No Vehicle For Various Racial Groups and Areas



Metropolitan Statistical Area Population

Hispanic households display rates of carlessness midway between white non-Hispanics and African-Americans. In rural and smaller metro areas their rates more closely parallel white non-Hispanic rates, but in metro areas of more than 3 million their rates jump to nearly 18 percent, midway between the other two populations.

As noted above, the carless rate of African-American households in metro areas greater than 3 million in population is almost 30 percent. This number, however, varies enormously in our largest cities. The 1990 census data indicate such levels as: New York City, 61%; Philadelphia, 47%; Chicago and Washington, DC, 43%. These households may not be as disadvantaged as those in smaller areas with similar rates, such as Wheeling, WV (57%), and Utica, NY (44%). But in a society where so many jobs are rapidly shifting to suburbs, the ability of central city populations to access those jobs will be critical. At the same time, those jobs will be largely outside the useful range of transit services.

A non-demographic factor (other than the demography of the automobile) that plays a crucial role here is that the typical vehicle of today lasts much longer than that of not so many years ago. The average private vehicle today is more than eight years old. This means that there are literally millions of older vehicles available at low cost that can provide years of reasonable transportation service, and those vehicles are often more fuel efficient than their earlier representatives. This increase in vehicle longevity—the result of production advances, heightened industry competitiveness, and government regulation—has had one of the most profound social effects of any technological breakthrough in our era.

When minority populations achieve levels of auto ownership closer to that of the general population, we will know that the "Democratization of Mobility" in this country has been largely completed. Interestingly, current measures of travel indicate that when households reach annual income levels of around \$25,000, their travel behavior becomes very much like that of the mainstream population, particularly in choice of travel mode. Income levels for the black population are just now reaching that threshold.

Trip Making

In 1995 the average trip-making rate for the nation was about 4.3 (one-way) trips per person per day, but that rate, as would be expected, varies sharply with the demographic characteristics of the traveler. Historically a key was whether the traveler was a worker or perhaps a student. Today, as work travel recedes in importance, other factors have come to dominate. Growth in recent years has occurred largely among family and personal business activities: shopping, visiting banks, health services, social and recreational travel, etc. As women joined the labor force, obtained licenses and access to vehicles, and were impelled by immense time pressures, their use of the private vehicle increased accordingly. By the mid-1980s women's trip making per day had reached roughly the same level as men's. As their jobs became more like men's, their work trip characteristics similarly paralleled men's in distance, choice of mode, and location. Today their journey-to-work characteristics vary little from men's. Although they still make fewer work trips than men, their trips to take care of family and personal business substantially exceed those of men. Women's trip making directly reflects their multiple household roles.

The table below shows that African-Americans have an annual trip making rate about 90 percent of that of the white population. Disaggregation of that activity by mode of travel reveals several points. Auto travel, while less than the white population's and more oriented to being a car passenger than a driver, is still the major part of their travel patterns. Transit use, while several times that of the white population, accounts for only about 7 percent of their total travel activity. One of the costs of this

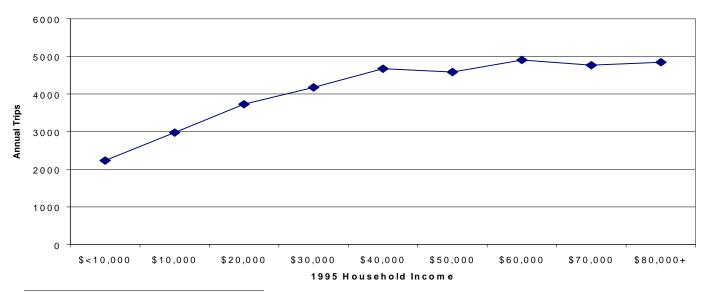
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lack of mobility is that shopping activities and other services are more likely to occur in a narrower radius around the household. They will usually occur within walking distance, and therefore African-Americans are likely to be more restricted in ranges of choice and prices.

Annual Trips per Person		
African- Americans	Caucasians	
1421	1602	
722	1006	
352	411	
95	15	
131	72	
121	98	
	African- Americans 1421 722 352 95 131	African- Americans Caucasians 1421

Trip making is of course responsive to changes in income. The figure below shows that trip making increases significantly with income, indicating its value to the trip makers. This points to an important facet of travel activity—it is both a necessity and a luxury good. It is crucial in meeting the most basic needs, such as access to job opportunities, schools, and health care, but it also plays a central role in providing access to friends and relatives, and to a broad array of recreational and cultural opportunities and other activities associated with living well—activities that so many of us take for granted.

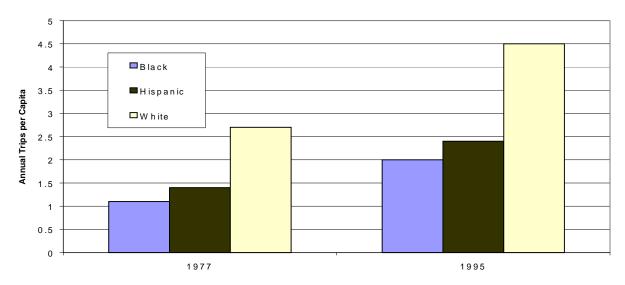
Annual Trips per Person by Household Income - 1995



Rising incomes obviously permit people to act on their needs and desires in ways they prefer, and therefore rising incomes also affect mobility. Rising incomes increase auto availability and use, increase trips per household, and increase average trip lengths. There is obviously something in travel that people value, because as the means to travel increase, people consume more transportation. Inexplicably, this aspect of transportation has largely been ignored in social research.

The following figure makes that case strongly. It depicts the long-term growth in long-distance travel (trips of one-way length greater than 100 miles). It shows that African-American and Hispanic growth has mirrored, and even exceeded, white non-Hispanic growth rates in long-distance travel since 1977. But it also shows that the recent trip making of these minorities is still below the 1977 rates of the majority population. These trips include all travel, both work-related and recreational. The data certainly indicate that there is an immense opportunity for growth in long-distance travel among the minority population.

Annual Long-Distance Travel by Race and Ethnicity



Along with increasing incomes comes an increasing value of time. The pressures of time will dominate commuting and other local travel purposes, pushing faster modes, such as the single-occupant vehicle and trip chaining. Trip chaining is a form of work travel that does not follow the simple pattern of leave home, go to work, return home. Instead, it is a series of drop-off/pick-up functions involving children, laundry, food, and other chores on the way to work and on the way home. Trip chaining, particularly evident among females, is a highly time-efficient and fuel-efficient pattern that strongly reinforces the utility of the personal vehicle.

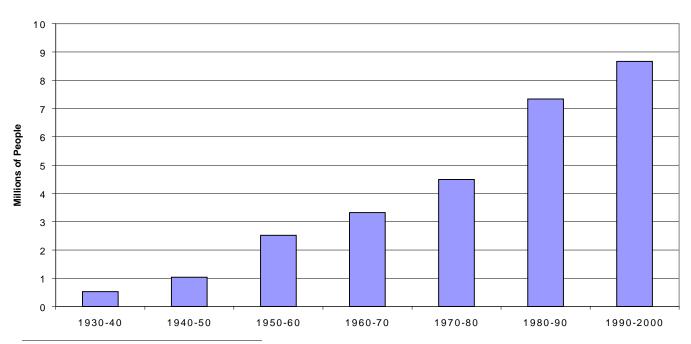
Immigration Effects

U.S. population increase in the 1990s has been near the lowest in the century, rivaling the rate of increase in Great Depression era. We are growing at well below 1 percent a year, and would be growing at even lower rates absent strong foreign immigration. Why does this matter for future transportation policy and planning? A few thoughts:

When you add one person to the population by childbirth you get a commuter in about 18 years. When you add one to the population by immigration you almost always have an instant commuter. Where the immigrant populations go will matter greatly in our plans. At this point they tend to locate where other Americans are—the center cities and suburbs of our largest metro areas. Trend data indicate that immigrants are a major source of travel on America's mass transit systems. This, however, is largely a transitional phenomenon.

At present, immigrants constitute more than a third of population growth in the United States. Typically, their age upon arrival is in the range of the general labor force. They rapidly join the labor force and as soon as feasible become car owners. That is why they came. The vehicle ownership statistics for the centers of immigration show these effects. Like immigrant populations before them, today's immigrants often inhabit central cities; often they are the factor keeping central cities from showing even greater population losses than they have exhibited. Unlike past immigrant arrivals, a large segment of current immigrants go directly to the suburbs, i.e., they go where the jobs are. The figure below shows the scale of present immigration.

Immigration per Decade



In many major metro areas, recent immigrants constitute a substantial part of the ridership of transit systems. This in fact may be a very important function of public transit—to help socialize immigrants and introduce them into the work force. Experience in California has shown that, with the passage of time, transit use by individual immigrants declines and more mainstream travel patterns develop.

SOME CONCLUDING THOUGHTS

The good news in all of these trends is that we have largely passed through an extraordinary one-time event—the bubble of the Baby Boomers' march through their life-cycle, frequently overwhelming our attempts to keep up with schools, roads, and other public services. The decades of explosive growth in our metropolitan areas, particularly those in the Southwest, are largely behind us. The major factors in the future often will be where immigrants come from and where they choose to locate.

The good news is that we have largely passed through an extraordinary one-time event.

The other good news is that the major sources of growth in travel demand in the future will come from the expansion of travel freedom and of the range of travel choices available to our minority populations. Most trips we make have economic transactions as their ends, and if not they have social interactions of great value to those making the trips. "Induced travel," the notion that improvements in transportation facilities merely induce people to travel more, may be reviled by some, but in fact it is a highly desirable phenomenon. Future increases in induced travel will come largely from getting personal vehicles into the hands of minority populations. This is a fact to be celebrated, not condemned. It should especially not be condemned by those who already possess such mobility. If we are to choose between the increased congestion effects of greater vehicle availability to minorities or their continued dependence on public services in a circumscribed area, then it is clear that the former are a very acceptable adjunct of greater mobility for those groups. The terrors of congestion are often overstated in many areas of the nation. There are only a limited number of areas suffering seriously constrained travel times.1

As described at the beginning of this paper, mobility constraining policies are a significant part of many political agendas today. Such policies seek to constrain mobility directly, or they seek to substitute "preferred" forms of mobility for what the public would choose on its own. Underlying such policies are the notions that additional travel is wasteful and frivolous (the induced argument) and that the idealized stroll to the local market can substitute for a broader range of choices. Such

¹ Pisarski, Alan E., *Commuting in America II–The Second National Report on Commuting Patterns and Trends*, Eno Transportation Foundation, 1996, pp. 86-91.

policies will fall most heavily on the emerging travel sectors of our society—minorities and women. What this discussion has shown is that large parts of our travel growth have been and will continue to be associated with the very best attributes of our society—rising incomes, growing freedom, and choices for everyone. Our failure to appreciate this, let alone to measure its benefits properly, has created fertile ground for heavy-handed public policies.

If we succeed in rejecting such policies, then our problems in the future will be much more operable. According to the Bureau of the Census, we will add a constant 25 million to our population over each decade for the foreseeable future, as we have since 1950. Our ability to respond to that growth will grow faster than that. Our public investments won't be overwhelmed by dramatic growth, and our resources should be greater as well, to deal with the smaller scale of problems we will face. It would be tragic if our failure to keep pace with the astonishing levels of growth of the past few decades weakens our resolve to deal with the problems of the future.

It seems that we are cowed by the growth rates of the past and cannot see the utility of any action, other than marginal responses to the problem. We have convinced ourselves that all we can do with demand is manage it—with some gladly arrogating to themselves the controlling management role.

Perhaps this is our own fault, for as a society we have done a very poor job of making the case for the value of transportation. We have depended too much on the public's own very sound sense of its needs to make that case for us. That may not be enough in a future filled with antimobility policy prescriptions. Mobility has value. Mobility for the minority groups who are currently without it has special value. We are in danger of losing our appreciation, as a society, of this vital fact.

Mobility has value. Mobility for the minority groups who are currently without it has special value.

Alan E. Pisarski has been involved in transportation issues for over 25 years. He is a consultant on national transportation policy and travel behavior analysis, with a particular emphasis on commuting. He is the author of *Commuting in America II* — *The Second National Report on Commuting Patterns and Trends* (Eno Transportation Foundation, 1996) and currently serves as Chair of the National Academy of Science's Transportation Research Board Committee on National Transportation Statistics. This past year Mr. Pisarski was selected to deliver the Transportation Research Board's Distinguished Lecture at its annual meeting.