7

An Exchange on Building U.S. Road Capacity: Part I

Robert Atkinson

The Politics of Gridlock

In an era when political consensus is failing in a host of policy areas, it is not surprising that there are fundamental disagreements about transportation policy. But it was not always this way, and it need not be so in the future.

In the heyday of the old economy from the 1940s to the early 1970s, transportation technologies, the spatial order of the economy, and political and institutional arrangements all worked together to create an effective transportation system. Most Americans agreed on what to do (invest in building highways, airports, and seaports) and how to do it (federal leadership and funding combined with technocratic planning and administration at the local level). America was confident it could build the world's best transportation system.

However, as the old economy broke down in the 1970s, and the problems of the transportation system began to be seen (at least by many) as producing more problems than solutions, that consensus eroded. The car (and to a lesser extent planes and ships and their supporting infrastructures) became a source of problems. The excesses of technocratic and myopic public highway and infrastructure departments led to a backlash and the imposition of a host of procedural and environmental rules and regulations governing transportation agencies. The old central-city dominated metropolis gave way to the development of dispersed urban cores. Demand for transportation grew rapidly while the cost of supplying infrastructure rose dramatically. At the same time, the rise of what Montgomery County, Maryland Executive Doug Duncan calls the "congestion coalition" (a small, but extremely influential anti-highway—and seaport and airport—anti-car, and anti-suburban coalition) has changed the focus of transportation policy from one expanding supply to one restraining demand and getting people out of cars (and planes).

This has lead to paralysis, pessimism, stalemate, and disagreement. Should we build more roads or expand transit? Should government take the lead or should we foster privatization? Should infrastructure be funded from tax revenues or user fees? Should the federal government maintain a lead role, or should responsibilities be devolved to the state and local level? Should policy and project decisions be subject to the widest possible participatory and regulatory process or should the focus be on getting things built? And finally, and most fundamentally, where and how should Americans live and work in—the sprawling suburbs or in dense urban areas? With no clear answers, the American transportation system is in crisis. Congestion levels, in virtually all modes, are at all time highs (perhaps with the exception of air traffic after the September 11 attacks) as Americans waste millions of hours stuck in traffic, waiting for buses, and being delayed on planes, while goods remain stuck in ports. And most experts predict that things are only going to get worse. However, there is reason to be hopeful.

First, new technologies, enabling much cleaner cars and quieter airplanes will enable us to expand mobility with significantly less pollution and noise. Second, new information technology-based intelligent transportation systems will enable us to improve the efficiency of existing transportation infrastructures. Rising productivity suggests we will have the revenue to make the significant innovations needed to address congestion. Finally, the old debates about sprawl vs. compact cities are likely to soon be resolved as it becomes clear that the spatial form of America in the New Economy will invariably contain a wide variety of living styles, from so-called sprawl to revitalized urban neighborhoods, all of which need to be served by transportation infrastructures.

But these developments alone will not be enough to solve our transport crisis; that will require political leadership at all levels of government. In particular, it will require elected officials to commit to the types of policies that will afford Americans the transportation (and lifestyle) choices they want—including the option of getting to work without being consistently stuck in traffic. Above all, we need to modernize U.S. transportation policy and restore mobility as its central goal. In the aftermath of September 11, we need to add safety to that as well, particularly with regards to airports. A new approach will emphasize market incentives, public-private partnerships, and user fees to ease congestion and expand transport facilities. It will entail a new determination to face down narrow interests that derail or delay major transportation improvements that clearly serve the wider public interest. And it will require giving states more authority to fund their own transportation projects.

To understand this, it is necessary to first examine how we got here.

The Politics of Expansion: Robert Moses and the "Road Gang"

In the heyday of the old economy, most Americans saw the automobile and the interstate highway system, jet travel, and suburbia as wonderful achieve-

ments that dramatically improved their lives. Why else would so many have adopted these innovations so quickly? While anti-suburb, anti-car critics have asserted that these developments resulted from the federal government building highways and subsidizing single-family housing, at best (or worst, depending on your perspective) these policies only accelerated the inevitable transition from a transit-riding, urban society to an automobile-driving, suburban one.

The politics of transportation reflected American's happiness with the system. Transportation policy enjoyed a national consensus held by elected officials at virtually all levels of government (notwithstanding some big city elected officials) and in both political parties—the task for the era was to build a transportation system for the modern economy—and the federal government was to lead, in particular, by building the interstate system. Liberals, in particular, were among the strongest supporters of infrastructure spending since it helped create good-paying jobs and knit the nation together. Indeed, the 1968 Democratic Party Platform read: "still more superhighways are needed for safe and rapid motor transport. We need to establish local road networks to meet regional requirements" (Democratic National Committee 1968:37).

The focus on building the system meant that there was a broad consensus that government needed to do what it took to build and expand highways, bridges, airports, and ports, even if it meant displacing people and businesses, or damaging some environmentally sensitive areas. There was, after all, no point in standing in the way of progress. And since government was empowered to do this, the government agencies in charge were given what by today's standards would be seen as unprecedented power to get the job done.

Such top-down planning authority was epitomized by Robert Moses, an engineer in charge of a multitude of infrastructure agencies in New York City and State from the 1930s through to the 1960s. Moses and his projects were praised far and wide. Listen to how he was described by the *Atlantic Monthly* in 1939:

> …the automobile in which Robert Moses was riding was stopped by traffic lights at a busy street crossing in Manhattan. Suddenly the driver of a large truck leaned from his cab and asked excitedly: "Ain't that Commissioner Moses?" "Yes, that's me," was the reply. "Well, I just want to tell you you're doin' a swell job on them parks," the man shouted. Then the lights changed. This spontaneous tribute is indicative of the growing appreciation of millions of New Yorkers of all ages and classes for the man who, in less than five years, has remade or refurbished a considerable portion of the metropolis (Rogers 1939).

The article goes on to praise the Commissioner's personal characteristics, that today would be seen as major liabilities in an appointed official who

must attempt to satisfy a wide array of narrow interest groups, many of whom do not want additional infrastructure development.

> A fighter quick of temper, he is ruthless in dealing with self-seekers and those who would obstruct his plans. He flatly contradicts opponents, tells them they don't know what they are talking about, puts them straight as to facts, or sears them with sarcasm and ridicule….In the meantime Robert Moses has his work to do, and, if one can tell anything by what his limited objectives have meant so far, the people of New York State will reap a bright inheritance (Rogers 1939).

Moses' response to the growing cadre of intellectuals who, in the early 1960s, formed the lead of what would grow to be today's anti-auto, anti-suburban movement is hardly imaginable today.

> How would they reduce the output of cars, and if they could, what would take the place of the car as an employer of workers or as a means of transport in a motorized civilization? If more cars are inevitable, must there not be roads for them to run on? If so, they must be built somewhere, and built in accordance with modern design. Where? This is a motor age, and the motorcar spells mobility. Is the present distinction between parkways, landscaped limited-access expressways, boulevards, ordinary highways, and city streets unscientific? If so, what do the critics propose as a substitute?…what of the people who prefer cars and car pools and find them more comfortable, faster, and even cheaper than rails?…Pending responsible answers to these questions, those of us who have work to do and obstacles to overcome, who cannot hide in ivory towers writing encyclopedic theses, whose usefulness is measured by results, must carry on (Moses 1962).

Moses was the most powerful, the most ruthless, and perhaps the most acerbic of transportation officials. But he, and the technocratic planning he represented, were the order of the day. That is not to say that Moses and road planners and builders did not face opposition. They did, but in most places that opposition was confined to a small group of individuals directly affected by the construction. The large majority of the population, and the elected officials representing them, saw road building as progress.

Behind Moses and others like him was a strong coalition of forces. Dubbed the "road gang," and made up of organized road users (e.g., the American Automobile Association [AAA], trucking companies, road contractors, engineering firms, and automobile producers), they were able to push successfully for continuous expansion of transportation infrastructure.

The Politics of Constraint: NIMBYism and the Anti-Car Coalition—1970s to the Present

By the early 1970s, this all began to break apart. The engineering mentality that said we could build our way out of problems and that increasing the supply of transportation was the solution began to be called into question. Government planners and road builders were criticized for being out of touch with what their constituents wanted. The most entrenched Detroit executive would no longer proclaim this to be the "auto age." Even Robert Moses has been reviled, especially by liberals. Mario Cuomo, the former governor of New York State and a noted liberal, has said of Moses:

> A paladin of big government, the seventy-six-year-old Moses was a preternaturally energetic man whose multiple positions within the city and state had allowed him to construct a gigantic network of parks, roads, beaches, bridges, and housing projects. In so doing, he destroyed dozens of neighborhoods and displaced hundreds of thousands of people (Mann 1990).

So what happened? As the old economy began to break down in the 1970s, so did the transportation system upon which it was based. Today many people see the automobile not as a solution but a problem, and the policies that support it as failures. By the early 1970s, the car became implicated in any number of social problems, including safety, energy depletion, air pollution, and global climate change. The auto was implicated in destroying communities, promoting an atomistic society, and enabling sprawl.

But just as importantly, the car (and the plane) began to fail at exactly what it did so well—giving Americans mobility. As more and more Americans took advantage of it and began to drive, and as dispersive forces led to a distributed metropolis, transportation congestion kept getting worse.

These problems opened up the political space for a host of advocacy groups to step in—all loosely bound together around one theme—opposition to the automobile in particular, and mobility in general. This anti-car, anti-road coalition includes environmentalists, urban planners, anti-poverty activists, Naderite activists, transit supporters, and some big-city politicians who believe federal U.S. highway, housing, and other policies have facilitated the flight from the cities and thereby hastened their decline. Through organizations like the Washington, D.C.-based Surface Transportation Policy Project (STPP), these forces have been able to advance their agenda in Congress, the Administration, the states, and in local Metropolitan Planning Organizations. As a result, it has now become a point of doctrine among many on the left to oppose infrastructure expansion. This is reflected in the fact that no Democratic Party platform after 1968 has endorsed highway expansion.

If these groups have their way, public policy will dramatically reduce the auto's convenience and significantly raise its costs. But this coalition wants

to go beyond this, to change not just how Americans get from place to place, but where they live. Many urbanists (planners, anti-poverty activists, big-city elected officials) and environmentalists have long opposed suburbia, the former seeing it as a trend that is sapping the energy from cities, with the latter seeing it as an environmental disaster and a destroyer of cohesive and "human-scale" communities (Kunstler 1994, Jackson 1987, Duany et al. 2001).

It would be easy to underestimate the influence of the anti-auto coalition. Through masterful use of rhetoric and oversimplified analysis, they have succeeded in dramatically influencing not just federal, state, and local polices, but the entire orientation of the transportation debate. Terms and phrases like "smart growth," "increasing access to choices instead of building freeways," and "sustainable, holistic solutions" sound great. Yet for much of the movement, these are code words that mask an anti-automobile, anti-highway agenda (Sierra Club 2002). Just as those on the left have used terms like "fair trade," to mask their opposition to globalization, they have done the same with transportation policy. Because they know that an anti-car, anti-airport, anti-growth agenda would not have the support of Americans, they couch their goals in the rhetoric of "enhancing access, not mobility" and "smart growth" (Dunn 1998, Kay 1998). Who cannot be for that?

Through organizations like the Surface Transportation Policy Project (STPP) and the Center for Neighborhood Technology, whose agendas on the surface appears to be devoted to solving the mobility problem, these anti-suburban and anti-car forces are able to disguise their real agendas. But it does not take too much reading between the lines to understand their true agendas. Hank Dittmar, former head of STPP, states, "We are past the era of big new highway ideas. We need to meet people's needs more, not get more throughput and more capacity" (Lee 2000). Groups like STPP, the Sierra Club, and the Alliance for the New Transportation Charter* are using the problem of transportation congestion to advance their own ideologically and politically driven agenda. For example, supporters of transit argue that transit funding should be increased in order to reduce congestion (Shapiro et al. 2002). Environmental groups like the Sierra Club, which once used to focus largely on protecting wilderness, have adopted "smart growth" as an issue. The Sierra Club Web site posts a section entitled, "Smart Choices: Less Traffic" that features good and bad transportation projects from states (2002). The bad projects involve road construction, the good ones transit.

*See the Alliance's charter members for a list of a wide range of organizations focused on reducing demand for traffic and generally opposing expanding transportation supply.

Yet, if road congestion is worsening every year, it takes a unique logic to convince the public and decision makers that expanding road capacity is not the answer, since to most Americans it appears to be the obvious answer. At the core of the opposition's argument as to why this strategy will not work is the "myth of induced demand." The best way to convince decision makers and the public to oppose road (or airport) construction is to convince them that it will not solve the problem. Hence, groups like the STPP publish studies purporting to show that adding more highway lanes does nothing to reduce

congestion (2001). In a study examining the relationship between road expansion and traffic congestion in the largest 68 metro areas, STPP finds that there is no relationship between building more roads and reducing congestion. Yet because the STPP study failed to control for a region's population growth when assessing the effect of new roads on congestion, it conveniently reinforces STPP's anti-road message. When this population is controlled for, it turns out that the metros in the STPP study that added lane-miles faster than population growth did reduce traffic congestion, exactly as common sense would tell us it would.*

**Author's calculation based on STTP data.*

Numerous other studies show that adding lane-miles eases congestion both on the new road/lanes and adjacent roads. Texas A&M University's highly respected Texas Transportation Institute says it best when it concluded, "Road construction has been shown to play a key role in holding the line against urban mobility decline" (1999). But the really obvious evidence is the fact that in the past 20 years, road and street mileage grew just 1.7 percent, while the number of licensed drivers grew 31.3 percent.

The need for the supply of roads to keep up with growing demand might seem obvious, but it is heresy to many of today's anti-mobility activists. Their agenda is not to solve the very real problems that come from suburbanization and the automobile. They would prefer to roll back the clock and get people out of the suburbs and their cars by making it more difficult and expensive to drive. Their attitude can be summed up as follows: "How else are we going to get people out of their cars and into buses and onto bicycles if we don't make their commute as unpleasant as possible?" To be sure, these groups offer alternative solutions to our transportation problems, including mass transit, biking, smart growth, and higher gas taxes (Center for Neighborhood Technology 2003, Surface Transportation Policy Project 2003). All of these ideas are worth considering, and in many cases implementing, but by themselves they cannot reduce congestion in a country that overwhelmingly travels by car.

The anti-mobility coalition now forms one pole of the debate that decision makers listen to whenever Congress considers legislation, a state forms a transportation task force, or a locality tries to deal with road congestion. Yet it seems a goal of this coalition to make driving such an unpleasant experience that drivers will leave their cars and their suburban homes. Thus, whenever local leaders attempt to expand infrastructure, this coalition weighs in to stop it, raise its costs, or do everything they can to delay or defeat any proposed construction.

The anti-auto coalition especially opposes bridges, for they know that bridges can be made into choke points that make congestion worse, and the best way to ensure that a bridge becomes a choke point is to keep it as narrow as possible. For example, in Washington, D.C. there has been a major debate over how wide the new Woodrow Wilson Bridge over the Potomac should be. Rather than building to as wide as the transportation planners want and to ensure that the bridge has enough room to accommodate modest traffic

growth, the anti-car activists want a much narrower bridge than what has been proposed. For once the bridge is built, it will be virtually impossible to widen it, and even if roads on either side are widened, it will not make any difference since the bridge will be a choke point. That is why the Sierra Club has run radio ads in Washington, D.C. calling on Washingtonians to oppose building a wider bridge.

But the coalition opposes bridges and roads not because they do not want to pave over virgin earth, it is because they do not want to make car travel easier. This is reflected clearly in their attitude toward intelligent transportation systems. ITS systems are accepted as long as they support their agenda of expanding transit or supporting pedestrian life. But using ITS to make cars move faster on roads is something they do not support, since it would go against their core agenda (Horan 2001).

The coalition draws grassroots support from local residents who do not want a new road or airport built near them. Compared to the thankfully bygone days of Robert Moses, local residents have become emboldened and organized. "Freeway revolts" broke out in the late 1960s, as groups of citizens tried to halt highways that would destroy neighborhoods and houses. Today, local residents frequently oppose new transportation developments, even sometimes transit expansion as a matter of course. Such "NIMBYism (Not In My Backyard) is certainly understandable and even justified in instances where road projects are poorly conceived or politically inspired. Yet this NIMBY activism increasingly prevents the development of transport facilities that would benefit an entire region composed of millions of people. While NIMBYism itself is not new, what is new is that local residents now routinely invoke higher communal interests ("it will destroy open space," "it will degrade aesthetics," etc.) to mask understandable, but ultimately selfish desires to restrict development.

When local residents are unable to stop transportation projects, they often seek to have restrictions imposed that severely limit the usefulness of the projects. A classic example was Interstate 66, built in the early 1970s to link Washington, D.C. to the Capital Beltway and points west. When residents of the District's Virginia suburbs found they could not block the road, they insisted that it be limited to only four lanes. Though it could easily be widened today to eight lanes to lessen its almost constant congestion, local opposition has blocked expansion.

The civil rights movement, the environmental movement, rising civic groups proclaiming "not in my backyard," and the increased distrust of government in general, have meant that public-sector infrastructure planners and builders no longer enjoy autonomy. They must now protect historic sites, protect the environment, enhance environmental justice, and do a host of other things before they can even think of building or expanding roads.

Also, as a result, it now routinely takes 12-15 years for major highway construction projects to wend their way through the maze of planning, design,

and environmental review processes before construction is even begun (Orski 2001). But not just highways are delayed; airports are delayed also. It took 16 years to add a new runway to the Memphis-Shelby Airport, home of Federal Express, despite community support. In this regard, the anti-car forces have succeeded in their goal. If they cannot stop new construction outright—which in many cases they cannot—they are able to have onerous and costly delays imposed on the process, and thus they slow it down significantly. In spite of some efforts by Congress to streamline this process, it has actually gotten worse in the last five years.

The political process also gives the anti-road interests a much more potent forum for airing their ideas and stopping new transportation projects. In particular, the Metropolitan Planning Organizations strengthened by the 1991 Federal Intermodal Surface Transportation Efficiency Act (ISTEA) provide forums in which the anti-auto coalition can have a say far in excess of their numbers. In short, public participation has largely become a process whereby those whose interests are negatively affected by a project, mobilize to oppose it, while the tens of thousands of citizens who would benefit from the project do not participate.

What has happened is not only that liberal advocacy groups and those adversely affected have turned against transportation infrastructure improvements, it is that the political culture has legitimated NIMBYism and made opposition to transportation infrastructure acceptable. For example, the *Boston Business Journal* recently named former Massachusetts transportation secretary Fred Salvucci as one of the 100 most influential Bostonians of the twentieth century for his work on transportation. They said:

> Frederick P. Salvucci's passion for public transportation had a profound effect on Greater Boston and the development of the region's economy. As a political and transportation adviser to Mayor Kevin White, Salvucci was among those leading the opposition to the "Inner Belt"—three highways that would have connected downtown Boston with Interstate 95. He was also an outspoken opponent of expanding Logan International Airport. But Salvucci may be best remembered for being one of the visionaries who mustered political and financial support for the more than $10 billion Central Artery/Third Harbor Tunnel project. Known as the "Big Dig," the project will, when it is finished early next century, dramatically alter the face of downtown Boston ("100 Years, 100 People" 1999:42).

In other words, while Robert Moses was praised during his time for building highways, Salvucci is praised in our time for stopping them, or in the case of the Big Dig, tearing them down to build what has been called the most expensive transportation boondoggle in history. When members of the business community itself are not full-throated advocates for mobility and

expanded infrastructure, it is difficult to overcome the full-time advocates fighting against them.

But there is another reason why we have done less to expand infrastructure capacity—it costs an increasing amount of money to do so. Infrastructure costs have gone up so much because one way out of the current policy gridlock is to build projects that hurt no one. This is the strategy in part behind the so-called "Big Dig." As Harvard's David Luberoff notes:

> There has been a fundamental shift in thinking about how urban infrastructure is built. The older projects were highly disruptive. The existing elevated Central Artery destroyed over 1,000 residential and commercial buildings. The people who conceived the current project (the underground "Big Dig") believed that it was possible to leave no one worse off and generally make a bunch of people better off. This project does not require taking any residential properties and only a few commercial ones. However, the problem is that the current strategy is phenomenally expensive. If you were to conduct any reasonable cost-benefit analysis, this project probably wouldn't pass the test (Kennedy School of Government 2000).

The lack of consensus on transportation is reflected in how the political parties approach the issue. In their zeal for tax cuts, many Republicans would cut the gas tax, which would starve transportation funding. One of the strongest opponents of expanding transportation investments in heavily congested northern Virginia, for example, was the previous governor, a conservative. Governor Jim Gilmore, and many other Republican elected officials evidently preferred lower taxes to a higher quality of life—a cornerstone of which is transportation mobility.

At the same time, many Democrats have cast their lot with the anti-car movement. For example, in Maryland, the former governor, a liberal Democrat, consistently opposed new road construction (as well as new HOT lanes that let drivers pay to use underutilized HOV lanes). Instead, he advocated multi-billion dollar investments in transit. In Congress, many liberal Democrats have pushed for higher gas taxes, but have made no commitment that the monies will actually go to expanding roads.

Finally, both parties increasingly support transportation "pork," euphemistically called demonstration projects. Political scientist James Dunn reports that while the 1982 Surface Transportation Act contained ten so-called demonstration projects worth $362 million, by 1998, the Act was loaded with $9 billion in "pork." As former head of the House Committee on Transportation and Infrastructure, Pennsylvania Republican Bud Schuster, was perhaps the most skilled at bringing home the bacon. So skilled, in fact, that Pennsylvania's I-90 was renamed the Bud Schuster Memorial Highway in the 1990s. Funded to the tune of $540 million, the highway carries less

traffic in a year than the Washington Beltway does in just a few days. "Schusterism" is but a symptom, however, of a transportation policy that is adrift and has been commandeered by politics.

The Way Forward: New Technology, New Federalism, and New Institutions

The politics of transportation can be understood as a battle among three groups: 1) auto-suburban status quo defenders (developers, many chambers of commerce, automobile associations, and highway builders) who work to continue old patterns; 2) anti-car, anti-suburban activists who seek to get people out of their cars and single-family suburban homes; and 3) "third-way" reformers who appreciate the vast benefits of the auto-suburban system but recognize the increasing costs that must be dealt with. However, rather than ignore the costs, as the status quo defenders do, or try to force/induce Americans out of their cars and single-family homes as the anti-car coalition does, the reform coalition seeks to preserve the benefits of mobility while addressing its problems.

For this "third way" to succeed, it will have to promote mobility and increase the supply and efficiency of transportation, but at the same time address the problems that have emerged in the past, including environmental, fiscal, and neighborhood impacts. It will have to focus on expanding the supply of transportation, including building and expanding roads, making the current system more efficient (including instituting pricing mechanisms and using intelligent transportation technology of all sorts), as well as taking reasonable steps to give Americans choices to reduce transportation demand while at the same time increasing their utility.

The prospects for the third-way framework becoming the dominant one are strong. There is growing pressure on governments to do something in the face of growing congestion. New technologies such as hybrid electric vehicles that could dramatically reduce the environmental problems from transportation are on the horizon, while technologies to make transportation systems much more efficient are already here. Moving forward successfully to break this logjam will require several things:

Respect the Desire of Americans to Live Where They Want To

Much of the stalemate over transportation policy reflects a fundamental dispute about where Americans should live. Many on the left want Americans to live like Europeans (densely packed in cities and reliant on public transit). But, with most Americans preferring single-family homes, and with new information technologies giving businesses more locational freedom, the old economy's urban-centered system will never be revived. As a result, it makes no sense to have a transportation policy predicated on a view of the world that looks backward, not forward.

Yet, while most Americans are not likely to move to high-density urban locations, they do want more livable communities and closer connections to nature. That is why the message of smart growth resonates with many Americans. In-fill development makes sense, and government certainly should stop subsidizing sprawl and make new development pay their own way. But if smart growth is done at the expense of choice and mobility, Americans will not support it. Policy makers need to accommodate Americans' desire to live in single-family homes, drive cars, and support sensible planning and zoning that enhance aesthetic qualities and encourage livable communities.

Reject Today's Fashionable Defeatism About Congestion

The anti-road coalition has incorrectly diagnosed congestion as a problem of too many cars. Influential, but misguided analysts, like Brookings Institution's Tony Down, author of *Stuck in Traffic*, and countless environmental advocates have led most Americans to incorrectly believe that infrastructure expansion will not reduce congestion. Moreover, the anti-supply forces actively oppose expansion of transportation infrastructure. Given this fierce opposition to the expansion of roads and highways, it is no wonder that transportation officials take the easy way out: adding HOV lanes, repairing roads and bridges instead of building new ones, improving the aesthetics of highways, etc. Progressives should define congestion as a problem of inadequate infrastructure. They should support an array of policies designed to give Americans the world-class transportation infrastructures they deserve, including public transit, biking and walking trails, and expanded and less congested roads.

Speed Development and Deployment of New Transportation Technologies

If we are to enable Americans to continue to drive as much as or more than they do now, it is essential to develop significantly cleaner and more fuel-efficient cars. No matter how much we promote transit or raise fuel economy standards, the only way to substantially reduce vehicle-induced air pollution is to move beyond the internal combustion engine. While electric and fuel cell cars are at least a decade away, high mileage hybrids are being sold today. As prices fall and more Americans buy clean cars, it will be easier to gain political support for expanding road capacity without stoking fears of rising fuel prices and increased air pollution.

But clean car technologies are not the only part of the new transportation technology system. A host of information-technology based applications—dubbed intelligent transportation systems—will help make all modes of transportation safer and more efficient. In addition, the telecommunications and information technology revolution will lead to a modest increase in telecommuting and a significant increase in e-commerce, reducing the growth of both work and shopping trips (U.S. Congress 1995).

It is also possible that new, advanced tunneling technologies could someday make it economically feasible to put more roads, especially those in built-up urban areas, underground, allowing road capacity to be expanded while saving open space and reducing noise. Technologies to make transportation quieter, including new pavements and tires that make freeways quieter, and quieter jet engines could also reduce impacts. All of these and other technologies will surely be part of the new economy transport-technology system.

Tackle "NIMBYism" Head On

We cannot afford to continue granting small, self-interested groups the power to block infrastructure investments that are clearly in the larger community's interest. When self-interested groups hold inordinate power to block infrastructure investments clearly in the broader regional and national interest, it is time to admit that the pendulum has swung too far. It is imperative that we bring a more balanced view of what citizens owe to each other to these debates. Public-spirited civic and business leaders can help by stepping up to the task of advocating for a twenty-first-century transportation system.

Governments can help by streamlining regulatory and review processes that add years and costs to vital transportation projects. For example, airport and airline executives are working with Congress and the Bush Administration to speed up approvals for badly needed new runways. But policy makers also need to ensure that impacts are mitigated where possible (e.g., building sound walls along urban freeways) or failing that, that individuals are compensated for their reduction in property values or diminished quality of life.

Create Regional Transportation Councils

In most metropolitan areas, Metropolitan Planning Organizations (MPOs) take the lead in transportation planning and projects. But while MPOs are a step forward in bringing all the governmental players together, they are largely made up of local government representatives and do little to create a political consensus for the kinds of investments needed in a region. In addition, too often the anti-car coalitions have succeeded in driving the MPO agenda so that it does not focus on expanding infrastructure capacity.

As a result, we need coordination, planning, and leadership organizations that are seen as objective advocates for solving mobility problems. These private councils would be led by civic and business leaders and elected officials. They would provide clear and compelling analyses of the problems and what the solutions are. They would also lead the charge to build political support for both ensuring adequate funding for expansion of transportation infrastructure (including toll roads and increased gas taxes) and ensuring that new revenues are built to expand infrastructure capacity.

Reduce Public Subsidies and Rely More on User Fees and Public-Private Partnerships

Road and air travel already are heavily subsidized by government. Drivers pay only about 80 percent of the direct cost of highways, while fliers pay about the

same share of airline infrastructure (with neither paying for the indirect costs, such as damage from pollution) (U.S. Congress 1994). Moreover, in most metropolitan areas facing congestion, funding is not available for the projects needed. As a result, modest increases in the gas tax to reflect these costs make good economic sense.

But even if gas taxes are raised, cash-strapped metropolitan regions are still likely to be chronically short of money for roads. Thus, it is likely that future transportation projects will have to be funded more out of user fees, including toll roads/lanes and congestion pricing. The latter will be required to adequately allocate limited infrastructure capacity on both roads and at airports.

However, it has been difficult to institute tolls, congestion pricing, and other fees because of opposition from the auto lobby (AAA, auto producers, etc.) who want driving to be free, and anti-car groups (who do not want to expand driving). Moreover, by arguing as they do, that it is better to build the new lanes without tolls, the anti-car groups know full well that in most cases, nothing will get built because of fiscal constraints. As a result, using tolls to expand lane and highway capacity is difficult, but necessary.

Many on the left also oppose letting drivers pay more for better service. For example, some have criticized auctioning off unused lane space in HOV lanes (HOT lanes) to drivers as unfair, calling them Lexus lanes. They argue that all Americans should be treated equally and that charging some for premium service creates a two-tiered society with the privileged getting to have premium service and the rest of us stuck in traffic. One way to address this would be to limit access to HOT lanes to models of cars that get above a certain mileage per gallon.

In spite of this opposition, pricing strategies will grow for several reasons. First, the technology letting cars to pay "on the fly" is now available. Second, because many regions spend most of their limited transportation dollars on maintenance, this will be the only way for many regions to finance lane and highway expansions. Finally, congestion pricing will be required to adequately allocate sparse infrastructure capacity. It will start with the HOT lane projects of today and evolve into a way to finance lane expansion of existing highways. Eventually, we may evolve into a system in which people will be able and willing to pay for premium service on particular roads or lanes. This notion of value pricing could lead to a dual system of roads in the United States, with the old system of highways built in the twentieth century as free and the new one, built with user fees.

Restructure the Relationship Between the Federal Government and the States

At one time, the federal government was the major driver of needed infrastructure expansion in the nation. Now it funds an increasing number of "earmarked" projects which make no economic sense and which constrain the ability of regions to solve their own transportation problems. As a result, the federal role has become as much of a hindrance to solving the problem as a solution. It is time to significantly devolve authority for surface transportation

to states, along with much of the funding stream from the gas tax. While such a radical devolution proposal is unlikely to pass anytime soon, Congress could require the states to pay a bigger share of federal transportation projects. Increasing the state match from 20 to 30 percent would raise approximately $4.8 billion per year from the states as they would have to invest more in transportation in order to qualify for federal funding.*

**The FY2002 DOT conference agreement raised the required match for transit projects from 20 percent to 40 percent, yet kept it as 20 percent for roads. This creates an uneven playing field leading states to prefer road projects over transit. Federal policy should be neutral with regard to match requirements for different modes.*

Moreover, if Congress is going to provide states with upwards of $30 billion a year for surface transportation, it should give states both more flexibility and accountability. States have limited flexibility on how to use federal money to solve problems. While the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) reduced the number of categorical grant programs, gave states more discretion in choosing how to divide funds between highways and transit, and allowed states to decide which projects to fund, its successor legislation, the Transportation Equity Act for the 21st Century (TEA-21) still included over 70 separate categorical grant programs, from National Highway System and Interstate Highway Maintenance, to grants for ferry boat terminals and transit planning. Not only do states have limited flexibility, they have limited accountability. TEA-21 accelerated the process whereby highway and transit funds have largely devolved into mechanisms to give states back the money their residents pay in. As a result, while there is substantial process-based accountability for how federal funds are used, transportation agencies at all levels of government face virtually no accountability for results. It is time to require that a significant share of federal transportation funding to the states be based on real performance, particularly progress toward congestion mitigation, increased safety, and reductions in emissions. The principal reason it is even possible to begin to consider moving to a performance-based transportation program is that for the first time it is possible to accurately measure system performance. The rise of information technology and telecommunications technologies, including traffic sensors, means that it is possible to automatically measure congestion in our nation's metropolitan areas in real time. As a result, states should have much more flexibility in how they spend their transportation dollars, but should be held accountable for real results.

Conclusion

It is time for a new consensus that is based on the realization that we will never get Americans out of their cars. Trying to make the experience worse or more expensive is not only politically unpopular, but it is bound to fail at anything but the margin. It is time we not only accept the fact that in America many people want to live in suburbs and drive cars, but we should also work to solve the problems this creates. We need to develop solutions that let people go where they want faster and more conveniently while at the same time being sure not to exacerbate problems.

References

"100 Years, 100 People" (1999) *Boston Business Journal*, Supplement (October).

Atkinson, R. (2000) "Mapping Our Way Out of Gridlock," *DLC Blueprint Magazine* (September 1).

Center for Neighborhood Technology (2003) *Homepage* <www.cnt.org>.

Democratic National Committee (1968) *Toward a More Perfect Union: Democratic Platform 1968*, Washington, D.C.: Democratic National Committee.

Downs, A. (1992) *Stuck in Traffic: Coping with Peak-Hour Traffic Congestion*, Washington, D.C.: The Brookings Institution.

Duany, A., E. Plater-Zyberk, and J. Speck (2001) *Suburban Nation: The Rise of Sprawl and the Decline of the American Dream*, New York: North Point Press.

Dunn, H.A. (1998) *Driving Forces: The Automobile, Its Enemies, and the Politics of Mobility*, Washington, D.C.: The Brookings Institution.

Horan, T.A. (2001) "A New Goal for ITS and Transportation," *STTP Progress Newsletter* (May) <http://transact.iracorp.com/progress/may01/goal/asp>.

Jackson, K.T. (1987) *Crabgrass Frontier: The Suburbanization of the United States*, New York: Oxford University Press.

Kay, J.H. (1998) *Asphalt Nation: How the Automobile Took Over America and How We Can Take It Back*, Berkeley, CA: University of California Press.

Kennedy School of Government (2000) "David Luberoff Sheds Light on the 'Big Dig,'" *One Expert's Opinion on the News* (April 13) <www.KLG.harvard.edu/news/experts/luberoff_bigdig_ga.htm>.

Kunstler, J.H. (1994) *The Geography of Nowhere: The Rise and Decline of America's Man-Made Landscape*, New York: Touchstone.

Lee, C. (2000) "Transportation 2025," *Urban Land* (June) <www.diagnosticaplus.com/UrbanLandArticle.htm>.

Mann, C.C. (1990) "The Prose (and Poetry) of Mario M. Cuomo," *The Atlantic Online* (December) <www.theatlantic.com/issues/90dec/cuomo.htm>.

Moses, R. (1962) "Are Cities Dead?" *The Atlantic Online* (January) <www.theatlantic.com/issues/62jan/0162moses.htm>.

Orski, K. (ed.) (2001) "Streamlining the Environmental Review Process," *Innovation Briefs* 12:4 (July/August) <www.innobriefs.com>.

Rogers, C. (1939) "Robert Moses: An Atlantic Portrait," *The Atlantic Online* (February) <www.theatlantic.com/issues/39feb/0239rodgers.htm>.

Shapiro, R.J., K.A. Hassett, and F.S. Arnold (2002) *Conserving Energy and Preserving the Environment: The Role of Public Transportation*, Washington, D.C.: American Public Transportation Association <www.apta.com/info/online/shapiro.pdf>.

Sierra Club (2002) *Smart Choices, Less Traffic: Sierra Club Takes a Critical Look at 49 Transportation Projects* <www.sierraclub.org/sprawl/report02/>.

Sierra Club (2002) "Transportation and Sprawl" <www.sierraclub.org/sprawl/transportation>

Surface Transportation Policy Project (2001) *Easing the Burden: A Companion Analysis of the Texas Transportation Institute's 2001 Urban Mobility Study* <www.transact.org/report.asp?id=185>.

Surface Transportation Policy Project (2003) *Homepage* <www.transact.org>.

Texas Transportation Institute (1999) *1999 Urban Mobility Study* <http://mobility.tamu.edu/ums/1999/study/chapter6>.

U.S. Congress, Office of Technology Assessment (1994) *Saving Energy in U.S. Transportation*, OTA-ETI-589, Washington, D.C.: U.S. Government Printing Office.

U.S. Congress, Office of Technology Assessment (1995) *The Technological Reshaping of Metropolitan America*, OTA-ETI-643, Washington, D.C.: U.S. Government Printing Office.