

Commentary on the Report of the National Surface
Transportation Policy and Revenue Study Commission
(Transportation for Tomorrow)

Prepared by the

National Transportation Policy Project



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NTPP is a Project of the Bipartisan Policy Center



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to achieve real progress.*

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INTRODUCTION

America's global economic strength is due, at least in part, to a surface transportation system that has historically ranked among the best in the world. Maintaining and enhancing that system to meet the transportation needs of the 21st century is therefore a critical national policy priority—as Congress recognized in 2005 when it created the National Surface Transportation Policy and Revenue Study Commission (hereafter “the Commission”). The Commission was charged with conducting a comprehensive study of the “current condition and future needs” of the nation’s surface transportation system, and with exploring long-term alternatives to replace or supplement current mechanisms for funding transportation system investments.¹ In January 2008, the Commission released its findings in a report titled “Transportation for Tomorrow.” The recommendations contained in that report provide a useful framework for advancing new approaches to national transportation policy. Moreover, they provide hope that the discussion on transportation policy is moving forward to the point at which Congress will be driven to make substantial changes. In fact, the debate has now moved beyond *whether* U.S. transportation policy needs to change—with the release of the Commission’s report, the question now is *how*. The goal of the National Transportation Policy Project (NTPP) is to encourage and support the development of a new national transportation policy direction that reflects the Nation's values and social and economic vision of the future. The NTPP will stimulate the dialogue which must be undertaken to assess proposed approaches and directions in transportation policy. While completion of the Commission report marks an important milestone, much work remains to be done to advance specific solutions to the nation’s transportation challenges. The Commission’s emphasis on performance-based funding and its attention to issues like freight transport and national connectivity, for example, are welcome and suggest important directions for future reform. But significant questions remain concerning the implementation of these ideas. Moreover, there are other important transportation-related policy questions—notably with respect to climate change and energy security—that the Commission largely did not address.

The work of the NTPP will help close those gaps by developing detailed, actionable policy proposals that are not only politically viable, but supported by sound data and thoughtful analysis. In many cases, these proposals will build on the general vision and recommendations

¹ Specifically, the Commission was created under Section 1909 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act—A Legacy for Users (SAFETEA-LU). The original SAFETEA-LU legislation authorized two separate commissions—one to study policy issues and one to study financing issues. Some lawmakers felt that this bifurcated approach would be counterproductive as policy and revenue are inextricably linked, and thus proposed to combine the two commissions into one commission with an extremely long name and even longer list of duties. However, authorization for a separate finance commission was later added back in to the final legislation. This commission, called the National Surface Transportation Infrastructure Financing Commission, has yet to issue its final report.

outlined by the Commission; in other cases they are likely to take a different approach. The overall objective, however, is consistent with that articulated by Congress in 2005: to ensure that the United States continues to be well served by a transportation system that provides the safe, reliable, and efficient mobility needed to support a vibrant economy while also meeting the changing travel demands of the future, responding to essential national security needs, and promoting improved environmental performance and quality of life.

The NTPP is a project of the Bipartisan Policy Center (BPC), a non-profit organization dedicated to promoting bipartisan dialogue and progress on some of the most important policy challenges our nation confronts.² By way of providing a launching point for NTPP’s efforts, this document offers a detailed commentary on key aspects of the “Transportation for Tomorrow” report and begins to identify areas where the Commission’s findings and recommendations could be usefully expanded upon and enhanced, as well as areas where additional or alternative policy approaches should be explored. It is organized as follows: The first section discusses several of the central recommendations in the Commission’s report and identifies general subjects where further analytical work or policy refinements are needed to add specificity or address remaining questions. The second section provides more detail about possible directions for future NTPP efforts, including topics for further research and areas where the Project is likely to propose different solutions than those outlined in the Commission report.

I. NTPP COMMENTS ON KEY ASPECTS OF THE COMMISSION’S “TRANSPORTATION FOR TOMORROW” REPORT

Performance- Based Funding

Given the substantial transportation infrastructure investments that will be needed over the next several decades, a major focus of the Commission’s report, and of the current policy debate more generally, is funding. Within this discussion, the question of how to spend transportation money more effectively is as important—and perhaps more important—than the question of where the money will come from. In this context, the Commission’s recommendation that the current system of transportation investment be reformed so that it is “subject to benefit-cost analysis and performance-based outcomes” is extremely valuable and arguably more consequential than its call for a substantial (25–40 cents over 5 years) increase in the federal gas tax³, even though the latter proposal has received far more attention in the

² The BPC is based in Washington D.C. and led by former Senate Majority Leaders Howard Baker, Tom Daschle, Bob Dole, and George Mitchell. More information on the BPC is available at www.bipartisanpolicy.org.

³ The Commission was not unanimous in its decision to raise the gas tax, with Mary Peters, Marie Cino, and Rick Geddes issuing a dissenting opinion that centered on the issue.

press. The current transportation funding structure was designed to support the expansion of the Interstate Highway System. It does not reflect the many changes and new transportation needs that have arisen over the last half century.

In fact, it is fair to say that U.S. transportation policy has increasingly devolved into a fight over a large pot of money with little or no regard for cost-benefit considerations or performance objectives. The Equity Bonus program, which is the largest source of national highway funding, distributes funds with no explicit transportation policy purpose. The Commission's response is to propose an independent commission, the National Surface Transportation Commission (NASTRAC), to oversee the development of performance standards by the U.S. Department of Transportation (DOT). Presumably, these standards would then be used to guide future funding decisions. But while it is relatively easy to find agreement on the need for a performance-based approach, reaching agreement on how such an approach would work in practice is much more difficult. As with many important issues in transportation policy, the devil is in the details and those details are largely missing from the Commission's report—or left to DOT. For example, the Commission often refers to congestion and safety as key performance indicators, but the question remains: how should congestion and safety be measured? And even if we can agree on how to measure congestion and safety, which should receive more weight in future funding decisions? What about other possible goals, such as energy security or economic growth?⁴

How performance metrics are linked to funding is just as crucial as that they be linked in the first place. For example, should a state with lots of congestion receive more federal funding? This would seem to encourage congestion. On the other hand, funding for a state with little or no congestion may be difficult to justify. Lawmakers are unlikely to support new performance indicators unless they understand how these indicators will be utilized and how they will affect future funding decisions.

Furthermore, the Commission report implies that NASTRAC would oversee the U.S. DOT process for deciding whether any given project will receive federal funding. This idea seems to put the federal government in charge of approving every major transportation project in the U.S., which would be a cumbersome and potentially faulty process given the unique nature of different parts of the country. When linking performance indicators to funding, it is crucial that the federal government limit itself to analyzing transportation systems rather than individual projects. This would allow states and metropolitan areas to tailor their transportation projects to meet their individual needs, while still meeting national standards for performance.

⁴ In fairness to the Commission, its failure to develop specific recommendations in some of these areas may reflect a shortage of time and resources, as well as the inherent difficulty of many of these questions.

Funding Needs and Metrics

In analyzing transportation system needs, the Commission used extensive scenario modeling to define a range of possible investment levels. The results lead the Commission to conclude that if the United States continues spending at current levels, it will not be able to maintain the performance and physical condition of the existing transportation infrastructure, much less improve it. This would be true, the Commission finds, even if every dollar was spent in the most efficient manner. Given these conclusions, the Commission outlines two tiers of possible investment (medium and high) above current spending levels. The medium level of investment corresponds to maintaining current highway conditions and performance; according to the Commission's analysis it would require annual expenditures ranging between \$146 and \$195 billion (in 2006 dollars) over the period 2005–2055. The high level of investment is defined as one that funds all cost-beneficial transportation-system improvements. According to the Commission, this would imply expenditures ranging from \$185 to \$276 billion annually.

There is no doubt that the nation faces extraordinary challenges to its transportation infrastructure and that increased investment will be necessary to maintain a high-quality system. Without access to the supporting data, however, NTPP can only speculate on the factors and assumptions that went into the cost-benefit analysis the Commission used to forecast investment needs. The Commission's conclusions about overall investment needs also provide little guidance on the question of how to prioritize among different needs. Given funding constraints, investing in all cost-beneficial projects is not likely to be an option—difficult choices will need to be made.

Conventional cost-benefit analysis is clearly a valuable tool for making these choices, but its application in the transportation context often suffers from a number of shortcomings. For example, conventional cost-benefit analyses often fail to consider the full range of impacts on society from a given transportation investment, including impacts on carbon emissions, air quality, noise and landscape. In addition, important economic effects are often missing, such as benefits from leisure travel, agglomeration, labor flexibility, and improved system reliability. The best investments are those that have the highest rates of return when assessed using a comprehensive approach that accounts for these impacts. Conversely, failure to include such impacts may mean that certain components of the transportation system do not get the priority they deserve.

The question of how government funds future transportation investments is closely intertwined with the question of how these investment decisions should be made. The Commission recommends increasing the federal gas tax as the best way to raise revenue in the near term, but it is not clear that Commission members considered all the policy ramifications of that conclusion. Depending on how they are implemented, higher gas taxes could impact other

important policy objectives related to U.S. oil dependence and energy security, as well as environmental quality and climate-change mitigation. Increased gasoline taxes can provide incentives to reduce VMT and to purchase vehicles that offer greater fuel efficiency. Reduction in VMT and energy consumption could mean a better balance of trade, greater energy dependence, reduced maintenance costs, and fewer greenhouse gas emissions. Finally, revenue generators have varying effects on different segments of the population. The equity implication of a fuel tax versus other potential revenue sources is not discussed in the Commission's report. Understanding all of these impacts is essential in order to make comprehensive recommendations regarding funding mechanisms. The fact that this understanding seems to be missing from the Commission's analysis makes their recommendations in this area suspect.

Metropolitan Mobility and Congestion Relief

The Commission rightly recognizes that metropolitan areas are the economic engines of the nation and that high priority must therefore be given to maintaining a functioning urban transportation system. This is one of the Commission's key accomplishments and is an invaluable contribution to the policy debate. Their recommendation for a separate program specifically designed to support mobility in metropolitan areas thus represents an excellent step in the right direction, and shows a clear understanding of the fact that many more people live in metropolitan areas now than when the Interstate System was designed. These additional inhabitants have brought substantial challenges, particularly with respect to congestion. When congestion in metropolitan areas makes it time-consuming to move people and goods, access to labor markets, productivity, and the capacity for economic growth all decline. Many of the investments necessary to tackle this problem, such as improved airport access or additional commuting capacity, require large amounts of capital that neither local governments nor the private sector have shown an ability to provide on their own. Without the participation of the federal government, it is likely that investments from these other sources will not be leveraged and many needed projects in urban areas will not be built. The resulting underinvestment could substantially restrain future economic growth.

Another Commission recommendation that greatly affects metropolitan areas is the promotion of public-private partnerships (PPPs) to increase transportation capacity in certain cases. The Commission proposes some restrictions on such projects that may not be necessary in many cases. Although some PPPs have arguably produced less than desirable results, these have stemmed from problems with the specific contracts in those cases. There is nothing inherently problematic about private involvement in public infrastructure. Also, an important distinction must be made between PPPs that create new infrastructure and those that involve the sale of existing infrastructure. PPPs in support of new investment often create net benefits to society

by providing the capital to construct additional transportation capacity that might otherwise never be funded. PPPs that involve the sale of existing infrastructure, by contrast, have in some cases been controversial because their public benefits are more questionable.

The Commission's recommendations also raise a concern, however, about the tendency to reduce the problem of metropolitan mobility to one of simply managing "congestion." When the challenge is defined strictly in terms of congestion, the usual solution is to build more capacity. In fact, reducing congestion to the level many people would prefer may not be efficient in many cases and could require investment choices and resource expenditures that would be far from optimal for society as a whole. This is not to say that congestion reduction should not be a component goal in many cases, but the overall goal of transportation policy for metropolitan areas is perhaps better framed as providing a desired level of safety and mobility rather than relieving congestion per se.

Of course, defining the challenge in terms of "mobility" also presents difficulties. The Commission, for example, proposes to measure mobility in terms of hours of delay per 1000 vehicle miles traveled (VMT). The problem with this approach is that it tacitly assumes increased VMT represents a positive outcome. If people experience the same amount of delay but travel more, mobility—according to this measure—has improved. Given the energy security and environmental considerations that would argue for reducing rather than increasing VMT, it might be preferable to develop a measure that evaluates how well people can access their travel destinations, regardless of whether they generate VMT in order to get there. For example, using the Commission's approach a person who drives a mile to buy a quart of milk may seem to improve mobility if he or she can accomplish that errand relatively quickly. Society might be still better off, however, if there were incentives that led that same person to walk to buy the milk. He or she would reduce his or her oil consumption, emit fewer greenhouse gases and get a little exercise all to accomplish the same task without much loss of time. Yet these benefits would not show up in any measure of mobility based on hours of delay per VMT.

Furthermore, despite forward-thinking on the issue of metropolitan transportation as a whole, the Commission misses some important components. First, they do not put forward policy suggestions that could deal directly with the problem of trying to foster effective regional planning bodies. While the Commission suggests that designated transportation agencies in metropolitan areas should make project decisions, they make no specific suggestions for how to implement such a program or reform the Metropolitan Planning Organization (MPO) structure. Second, transportation may be one of the least innovative sectors of the economy. Innovations that recognize the crossover benefits and economies of scale between transportation and information technology could potentially reap enormous rewards for

society. Unfortunately the Commission does not outline a role for the government in facilitating the development of such innovations. Finally, transportation and land use are inextricably linked, yet the Commission does not address how the federal government might hope to shape land use in a way that allows for more sustainable transportation investments. Without any sort of land use policy, the Commission's emphasis on public transportation- to use one example- will be much less effective.

In sum, although the Commission has recognized the primacy of metropolitan areas in the national economy that has emerged since 1956, they have not dealt adequately with the regional planning problem, or recognized the new role that information technology plays in our society, or addressed the land use issues that fundamentally impact transportation decisions. Furthermore, when addressing metropolitan transportation, careful attention needs to be paid to how mobility is measured, and whether it is even the right measure in all circumstances. In prioritizing transportation investments for metropolitan areas, it will be essential to ensure that funding is distributed in a way that promotes *efficient* travel in every sense of the word. This does not mean merely avoiding unnecessary delay, but also producing the minimum number of negative externalities.

Mode Neutrality

The term 'mode neutrality' captures perhaps one of the most important ideas put forward in the Commission's report. Specifically, the Commission's vision calls for a "generally mode neutral" system in which transportation policy and funding decisions are made without pitting one mode of transport against others. In line with this approach, the Commission's recommended ten funding programs generally do not pertain to a specific mode (the single exception is the recommendation for a program for intercity passenger rail). The concept of mode neutrality is essential for an agency, DOT, and an industry that for too long have been locked in battles between highways and transit, despite the fact that there is no inherent reason for these different modes to compete for funding.

Moving towards a mode neutral way of thinking with respect to transportation policy will in theory enable states and localities to make decisions about the best possible project to meet their needs, without concerning themselves with whether there is federal funding available for the specific mode they choose. Each metropolitan area, for example, is different and may face different capacity needs on different parts of its transportation system at any given time. These cities should have the flexibility to pursue the modes – or pricing or technological solutions - that best suit their needs with federal funding, as long as their decisions meet national performance standards. The original ISTEA (Intermodal Surface Transportation Efficiency Act) legislation moved in this direction by providing flexibility in highway and transit funding. However, as long as distinctions are made between highway and mass transit accounts within

the pool of fuel-tax revenues available for transportation investments, inter-modal battles will persist.

While the Commission report endorses the concept of mode neutrality, it misses some opportunities to apply this principle in practice. For example, the Commission might have considered combining its proposed Intercity Passenger Rail program with its recommendation for a Connecting America program. Likewise, it is unclear why intercity rail gets its very own program in the Commission's report, but intercity bus is not even mentioned. To implement the concept of mode neutrality, old habits of thinking in terms of modal silos must be replaced by a rigorous emphasis on performance standards and outcome-based decision-making in the allocation of transportation resources. It may indeed be useful for public policy to encourage shifts between modes, but such policies would need to be justified based on the performance benefits that a given mode can provide rather than a particular modal bias.

Road Pricing

Interest in congestion pricing as a means of improving mobility, reducing environmental impacts and promoting sustainable modes of transportation, and generating new revenues has never been greater. Successes in London and Stockholm, as well as an advancing proposal in New York City, have made the time ripe for an approach that economists and planners have been advocating for over fifty years. The Commission has correctly recognized this opportunity by proposing that selected barriers to congestion pricing be removed. Specifically, the Commission recommends removing restrictions on the imposition of road tolls on the Interstate Highway System—in all cases for new capacity and in all metropolitan areas with a population greater than one million for existing capacity.

While these recommendations open the door for greater use of road pricing, there is little in the Commission's report that would actually create incentives for using this approach. Given that substantial hurdles still exist in terms of public acceptance, congestion pricing will need to be encouraged more actively under national policy if its potential policy benefits are to be more broadly realized. This becomes even more urgent if, as the Commission believes, a long-term move away from fuel taxes as the primary source of revenue for transportation investments is inevitable. Moreover, the Commission focuses primarily on road pricing as a method of managing metropolitan networks. Strategies such as dynamic HOV lanes, stop light management, and flow control based on real-time conditions are all potential technological innovations that could be effectively deployed towards the same end goal, and strategies for their widespread adoption need to be considered.

The urban partnership program currently being implemented by U.S. DOT provides a template of options for incentivizing urban areas to use congestion pricing and other similar techniques

and could be expanded into a more comprehensive program. This and other strategies for expanding the use of pricing mechanisms should be explored further. For example, if road pricing is going to evolve into an alternative source of revenue for transportation, it would be useful to explore how to create uniform toll collection technology. Also, while the Commission advocates expanded road pricing, they leave some restrictions in place without justification. For example, they do not provide an explanation for their choice of one million as the population cutoff for allowing versus not allowing congestion pricing on the Interstate Highway System in metropolitan areas.

Climate Change and Energy Security

The Commission's report acknowledges that transportation decisions not only have important implications for climate change and energy security, but that climate and energy-security concerns are likely to grow if they are not addressed, at least in part, through changes in transportation policy. Unfortunately, the Commission's recommendations in this area are largely limited to general statements and do not reflect much new thinking on these important topics.

An example of the Commission's failure to give more than superficial consideration to climate-change and energy security concerns and to integrate those concerns in its policy recommendations can be found in its discussion of freight movement. This is clearly an important issue with major economic implications and it deserves the emphasis it receives in the Commission report. However, the recommendation to focus on additional roadway capacity for large trucks raises significant concerns about whether this is the best way to meet growing demand for freight movement, especially in light of the greenhouse gas emissions and oil consumption it would entail.

To the extent that the Commission offers specific recommendations on climate change, they largely center on a proposed Environmental Stewardship program composed of many elements that already exist in current legislation. And although the Commission has proposed increasing funding for these programs, its recommendations make no attempt to link future efforts or funding outlays to program outcomes in terms of reducing transportation-related emissions of greenhouse gases. Admittedly, climate change was not at the forefront of Congressional or public concern at the time when the Commission was created. Given the growing urgency and visibility of this issue, however, it is nonetheless surprising that the Commission did not delve more deeply into the implications of climate change for national transportation policy. The time is ripe for substantial changes in the transportation sector with respect to climate change, and the Commission has missed an excellent opportunity to address this issue.

On the issue of energy security, the Commission has proposed a research program. Even this relatively mild recommendation is controversial, however, with the Secretary of Transportation and other Commissioners arguing, in a dissenting opinion, that such a research program would be more appropriately situated in the U.S. Department of Energy than at DOT. However, the location of this study is not the issue so much as the fact that we are well beyond the study point on this issue and need policy solutions immediately.

Any number of other transportation policy options that might provide incentives for reduced oil consumption—such as fuel taxes, congestion pricing, or VMT charges—are not explored in the Commission’s report or are discussed only in the context of other policy objectives (such as meeting revenue needs). The Commission does not fully consider the important role that transportation policy can play in promoting non-petroleum, low carbon fuels. In addition to providing incentives for alternative fuel usage, transportation funding could play an important role in enabling the development of the infrastructure necessary to distribute these alternative fuels. Given the pressing nature of this issue, more specific and effective options must be brought up for consideration.

Safety

The Commission’s recommendations on improving transportation safety reflect recognition that the nation’s highways are still far too deadly and place appropriate emphasis on reducing vehicle-related mortality. Specifically, the Commission recommends that states and metropolitan areas develop standards for safety and then develop plans to meet those standards. This is a useful start, but further work is needed to develop incentives for states and metropolitan areas to spend federal funding for safety improvements more effectively (under the Commission’s recommendations, the federal government would provide 90 percent of funding for such improvements). The Commission’s recommendations do not include any apparent penalty for states that fail to develop and implement safety programs other than missing out on safety funds. If states are going to make difficult choices about safety, perhaps with respect to changing safety or traffic laws, they are likely to need additional incentives.

Second, although the Commission provides several excellent suggestions for improving safety, it does not attempt to prioritize among options based on what the available research data indicate could be most effective. For example, 41 percent of automobile fatalities in 2006 were caused by alcohol-related crashes,⁵ while 36 percent of individuals who died in car accidents were not wearing seat belts.⁶ These numbers suggest that targeting drunken driving and seat-belt usage would be the most effective ways to improve safety.

⁵ National Highway Traffic Safety Administration. “Traffic Safety Facts, 2006 Data, Overview.” DOT HS 810 809

⁶ National Highway Traffic Safety Administration. “Traffic Safety Facts, 2006 Data, Occupant Protection.” DOT HS 810 807

Here, as in other issue areas, translating Commission recommendations into actionable policy proposals will require greater specificity. For example, 49 states require the use of seat belts, but only 27 have primary enforcement laws that allow police officers to stop vehicles and write citations when they observe occupants not wearing seat belts.⁷ Compared to other states that have either no law or only secondary enforcement laws (which allow seat belt citations only when a vehicle is stopped for some other violation), these 27 states have dramatically higher rates of seat belt usage and significantly lower vehicle-related mortality.⁸ Increasing seat belt use is also one of the best methods for reducing alcohol-related deaths.⁹ These data imply that federal incentives to encourage states to adopt primary seat-belt laws would provide effective, near-term safety benefits.

II. Possible Research Topics and Areas of Focus for NTPP

The Commission's recommendations serve an extremely useful and important role in moving towards a new approach to transportation policy. The Commentary above, however, suggests several ideas for the future direction of NTPP efforts. The Project is still in the early stages of defining a research agenda but some likely areas of focus include the following:

Performance-Based Funding

- **Create detailed metrics that effectively measure performance.** Developing the right metrics to measure the right performance criteria is a vital pre-requisite for implementing performance-based funding.
- **Prioritize performance metrics based on research.** Once metrics have been developed it will be important to prioritize them based on commonly agreed goals for national transportation policy.
- **Develop mechanisms for linking federal funding to performance indicators.** Performance metrics are meaningless unless they are tied to funding. More work is needed to develop specific mechanisms for linking performance measures with funding.

Funding Needs

- **Use comprehensive cost-benefit analyses.** To improve the use of cost-benefit analysis in transportation planning, methodologies must be developed for including a broader range of impacts and externalities.

⁷ NHTSA. "Traffic Safety Facts, 2006 Data, Occupant Protection."

⁸ Sources include: NHTSA. "Traffic Safety Facts, 2006 Data, Occupant Protection;" Shults, Ruth, et al. "Primary enforcement seat belt laws are effective even in the face of rising belt use rates." *Accident Analysis and Prevention* 36 (2004) 491-493; and analysis of NHTSA data.

⁹ Young, Douglas and Thomas Likens. "Alcohol regulation and auto fatalities." *International Review of Law and Economics* 20 (2000) 107-126.

- **Prioritize projects based on benefits.** Given real-world budget constraints, it will be necessary to develop tools for prioritizing among individual projects that may all meet a cost-benefit test but cannot all be funded.
- **Use funding mechanisms as policy levers.** Different funding mechanisms—such as tolls, gas taxes, or VMT charges—create different incentives. Funding discussions must therefore focus not only on revenue generation but on the incentive properties of different funding mechanisms.

Metropolitan Mobility and Congestion Relief

- **Move beyond “congestion” as the issue.** To advance more effective transportation policies for metropolitan areas it will be important to replace the traditional focus on congestion reduction with a broader emphasis on economic growth and transportation efficiency (including reducing negative environmental and other externalities). This emphasis will also include innovative incorporation and exploitation of information technology with respect to the transportation network.
- **Develop a measure like mobility that does not encourage VMT.** Performance metrics for metropolitan transportation policy must be compatible with climate change and energy security objectives if they are to promote patterns of economic growth and infrastructure investment that are sustainable over the long term.
- **Work to address regional planning, technological innovation, and land use within metropolitan areas.** All of these components are essential to sustainable economic growth, and they must be taken into account by any performance indicators related to funding.

Mode Neutrality

- **Work towards true mode neutrality.** Implementing the concept of mode neutrality in the federal transportation policy will require changes in institutional and funding arrangements. More work is needed to identify specific strategies for achieving this objective, but the general idea should be that value will be placed on the policy goals rather than the modes used to achieve them.

Climate Change and Energy Security

- **Tie environmental and energy issues to funding.** Additional environmental regulations and new research programs are insufficient to meet the challenges we currently face in this area. To achieve real progress in these areas it will be essential to include the environmental and energy impacts as integrated components of federal transportation funding mechanisms.

- **Explore the policy options offered by financing mechanisms.** Each potential financing mechanism – tolling, fuel taxes, VMT charges, or others – offers different ways of influencing emissions and energy consumption. These mechanisms must be evaluated with this concept in mind, and not just in terms of their ability to generate funding.
- **Recognize the links between economic growth, environmental impacts, and energy security.** The old model that pits economic growth against environmental protection is outdated and shortsighted. In the long-term, economic growth is strongly linked to reducing environmental impacts and dependence on oil - transportation policy must be geared towards capitalizing on this mutually beneficial relationship.

Road Pricing

- **Provide incentives to actually encourage road pricing.** Road pricing in heavily congested areas can advance multiple policy objectives, including improved mobility. To overcome political hurdles and gain public acceptance for this approach, the federal government needs to work with states and localities and provide additional incentives.
- **Develop better understanding of the appropriateness and effectiveness of road pricing in different situations.** Restrictions on congestion pricing, including those recommended by the Commission, appear to be largely arbitrary (e.g. based on a population cut-off). It would be preferable to make decisions concerning the use of this mechanism based on further research and evidence from real-world experience to date.

Safety

- **Provide incentives for safety.** The federal government could play a more proactive role in encouraging states and localities to implement safety measures as an integrated component of their transportation plans.
- **Target the most effective safety measures.** All safety measures are not created equal; hence future efforts in this area should give special weight to the kinds of measures that have been shown to be most effective in reducing transportation-related deaths and injuries.