ENDNOTES

SECTION II: THE CONTEXT FOR THE DISCUSSION


3. Based on projections by the Joint Center for Housing Studies, Harvard University.


12. The FHWA notes that these figures are much higher than those reported in the U.S. Census’ vehicle inventory for 2002 because of new data collection and reporting, and not necessarily because of not because of substantial vehicle registration changes. See Office of Highway Information Management, “Highway Statistics 2005,” Federal Highway Administration Table MV-9.


21. One recent study of 13 large metropolitan areas found that small-scale, scattered commercial development—referred to as Edgeless Cities—account for about 40 percent of the total office space. Traditional downtowns follow with nearly 33 percent of space. Edge cities have about just over 15 percent, with the remaining 13 percent in suburban corridors and secondary downtowns Robert E. Lang, Thomas Sanchez and Jennifer LeFurgy, “Beyond Edgeless Cities: Office Geography in the New Metropolis,” National Center for Real Estate Research, National Association of Realtors, 2006.


SECTION III: SEVERAL FACTORS ARE DRIVING THE WIDESPREAD DEMAND FOR REFORM


2. Ibid.


5. Federal Transit Administration, National Transit Database, Table 2: Revenue Vehicle Inventory, 2004.


9. The highway figures include only public road and street mileage. Beginning in 1998, approximately 43,000 miles of Bureau of Land Management Roads are excluded. The transit system length is measured in both directions and beginning in 2002, the data for commuter and light rail modes include “purchased” transportation service provided to a public transit agency from transportation provider based on a written contract.

10. Pisarski, Table 3-5.


23. Although the report points out that the costs of delivering these benefits could be substantial depending on the congestion strategy, see Rod Eddington, “Main Report: Transport’s Role in Sustaining the UK’s Productivity and Competitiveness,” HM Treasury, UK, 2006a.


26. See NCHRP Project 8-36, Task 22.

27. For a comprehensive discussion of the causes of congestion, its dynamics, and its relative incidence in various parts of the country, see Anthony Downs, Still Stuck in Traffic: Coping with Peak-Hour Traffic Congestion Brookings, 2004.


29. For this paper, data from 2002, 2003, and 2004 are examined for the nation and for the 32 metropolitan areas surveyed during those years.

30. The top five metropolitan areas ranked by perceptions of transit availability are Los Angeles, New York, Denver, Angeles, and Seattle. The bottom five states are Kansas City, Indianapolis, Oklahoma City, Charlotte, and Fort Worth.

31. An ABC/Time/Post poll generally confirms these statistics and in 2005 found that public transit is more available in the Northeast and West (where seven in 10 said it was an option) than it is in the South and Midwest (only five in 10). (ABC News/Time Magazine/Washington Post Poll, “A Look Under the Hood of a Nation on Wheels,” 2005); Another study from the Bureau of Transportation Statistics found that only 40 percent of Americans reported that they live within a quarter mile of a bus stop of any kind, and under a quarter mile within five miles of rail. (Bureau of Transportation Statistics, “National Transportation Availability and Use Survey,” 2002.)

32. The information in the NTD is presented by transit agency so what is reported here has been aggregated up to the urbanized area level. For consistency’s sake they are referred to as metropolitan areas here.

33. These figures for buses report number of vehicles operated in maximum service (VOMS), according to the National Transit Database: “VOMS is the revenue vehicle count taken during a transit agency’s maximum season of the year, on the day of the week that this maximum occurs. It is not taken on a day when a special event or other extreme set of circumstances would cause the resulting tally to represent a one-time event rather than a recurring maximum service requirement. Because it does not include spare and stored vehicles, this fleet-size measure provides a more meaningful estimation of a transit agency’s operating characteristics.”

34.Brookings analysis of Federal Transit Administration data from the National Transit Database.


38. The FHWA notes that these figures are much higher than those reported in the U.S. Census’ vehicle inventory for 2002 because of new data collection and reporting, and not necessarily because of not because of substantial vehicle registration changes. See Office of Highway Information Management, “Highway Statistics 2005,” Federal Highway Administration Table MV-9.


40. Bureau of Transportation Statistics, “National Transportation Statistics 2007.”

41. Ibid; U.S. Department of Transportation, Table 1-42 Average Length of Haul, Domestic Freight and Passenger Modes (Miles).


44. Road Congestion Impacts on Shippers’ Inventory Costs,” Final report to the U.S. Department of Transportation, Federal Highway Administration. 2004.

45. For consistency’s sake they are referred to as metropolitan areas here.


50. Special Feature, Table MV-9, “National Transportation Statistics 2007.”

51. Note that while CO2 has a low global warming potential, the enormous amount of it in the atmosphere means that it comprises 84 percent of total greenhouse gas warming potential.
60. Intergovernmental Panel on Climate Change, “Climate Change 2007: The Physical Science Basis.”

61. For examples of the potential consequences of climate change, see: Intergovernmental Panel on Climate Change, 2007.


63. Ibid.

64. U.S. Environmental Protection Agency, “Health Effects of Pollution.”


66. Environmental Protection Agency, “Light-Duty Automotive Transportation Fuels include renewable options like ethanol, which also releases CO₂ when burned. However, fuels like ethanol can be considered carbon-neutral because the original source of the fuel—plants such as corn—sequesters carbon.


68. Source: Brookings analysis of federal highway data


70. Ibid.


73. The rankings come from the 2007 Failed States Index prepared by The Fund for Peace and Foreign Policy Magazine. The index employs a rating of 12 social, economic, and political/military indicators as well as other assessments of institutional capabilities. See: http://www.foreignpolicy.com/story/cms.php?story_id=3865&page=0.


81. Ibid.

11. The rescission orders can be found on the FHWA’s website of Directives and Policy Memorandums: http://www.fhwa.dot.gov/legsregs/directives/notices.htm


1. School and church trips are combined. See Bureau of Transportation Statistics, "Highlights of the 2001 National Household Travel Survey;" 2003.
2. Joseph Gimpio, Mobility: America’s Transportation Mess and How to Fix It, New York, Hudson Institute, 2005, p. xii.
5. Eddington discusses this balancing act by examining three economically growing countries: China, India, and Ireland and how the latter two grew their national economy with only limited transportation investment. The report warns, however, that this is a difficult model to sustain and targeted investments do become necessary. Eddington, 2006a, p. 11.
12. One study found that the aggregate population of center cities would have grown by about 8 percent if the intestates had not been built. Nathaniel Baum-Snow, “Did Highways Cause Suburbanization?” The Quarterly Journal of Economics, MIT Press, vol. 122(2), pages 775-805, 05 (2007).
13. This is, of course, in addition to national defense. Before he signed the bill, Eisenhower notes that “in case of atomic attack on our key cities, the road network must permit quick evacuation of target areas.” Cited in: Kathleen Tobin, “The Reduction of Urban Vulnerability: Revisiting 1950s American Suburbanization as Civil Defense,” Cold War History, Vol. 2(2) 1-32; 2002.
14. HLB Decision Economics Inc. and KPMG LLP, “Public Policy Impacts on Freight Productivity: Final Report with Annotated Bibliography,” prepared for Federal Highway Administration, 1999. The authors note that caution should be used in interpreting these results for policy making.
15. Chad Shirley and Clifford Winston, “Firm Inventory Behavior and the Returns from Highway Infrastructure Investments,” Journal of Urban Economics 55 (2004) 398-415. Another way to look at it is that there are potentially large returns from the initial capital investment in the highway system, but once the system was completed subsequent expenditures that primarily attempted to maintain the system were likely to yield lower returns.
17. This is similar to the principle of triple convergence which holds that major improvements to a roadway will result in shifts to that roadway from other routes, other times, and other modes until that facility becomes congested. See Downs, 2004, p. 327.
21. See also: Federal Highway Administration, “Highway Operations Spending as a Catalyst for Job Growth,” MacroSys Research and Technology, 2003. Of course, the point could easily be made that spending a billion dollars on just about anything (e.g., transit, housing, medical care, alternative energy, convention centers, pollution control) would support job creation of roughly the same magnitude.
22. This argument was recently made at a National Research Council conference: “Key Transportation Indicators: Summary of a Workshop,” Janet Norwood and Jamie Casey, eds. National Research Council, 2002.

SECTION V: THE POLICY PROBLEM: FEDERAL TRANSPORTATION POLICY IS ABSENT, OUTDATED, AND UNDERPERFORMING
3. The law also required that the Secretary of Transportation distribute copies of the policy declaration to every employee and that it was posted in every office of the U.S. DOT. This statutory requirement was never fulfilled. ITEA, P.L. 102-240, Sec. 2, (1991).
4. Although there was strong language inserted with respect to the Future of Surface Transportation System Section 1909.
5. Although obscured by its disagreements about funding levels and sources, the NSTDPRSC’s most important contribution is its forceful call for a renewed federal purpose. In recent months organizations within the transportation lobby such as the U.S. Chamber of Commerce, the Association of Metropolitan Planning Organizations, the American Road & Transportation Builders Association, American Association of State Highway and Transportation Officials, and the American Public Transportation Association have all called for some articulation of a national vision and purpose as have a diverse group of research and policy organizations such as the T4America Campaign, the Bi-Partisan Policy Center, the Reason Foundation, America 2050, and the Hudson Institute. The National Stone, Sand and Gravel Association said that developing a new vision for transportation in the U.S. is “not negotiable – it’s a matter of life and death…” NSSGA, “Aggregates in Action,” 2007.
6. The 2006 National Strategy to Reduce Congestion on America’s Transportation Network comes close. However, that plan is focused only on strategies ostensibly intended to reduce traffic congestion such as toll roads and methods such as congestion pricing. While important, this does not represent a comprehensive approach to the nation’s transportation challenges. U.S. Department of Transportation, “National Strategy to Reduce Congestion on America’s Transportation Network,” 2006.
7. While the federal and state governments have provided extensive funding for truck, barge, and airline infrastructure over the past quarter century, freight railroads receive little funding assistance. The railroads pay all of their own infrastructure and rights-of-way costs and are responsible for the risks associated with those costs. Since 1980, the largest freight railroads invested over $350 billion split about equally between infrastructure and equipment.
16. Metropolitan Seattle and Denver are exceptions and successfully fought to receive an equitable funding share.
23. Air Transportation Safety and System Stabilization Act. 147th Congressional Record, pages H5894-S918.
26. The Senate passed the Passenger Rail Investment and Improvement Act of 2007 October 30, 2007
32. No doubt a key reason for the federal non-interventionist approach is the states themselves. During the deliberations regarding TEA-21 several AASHTO policy documents illustrate this resistance in no uncertain terms. In 1996 they wrote that “there would be considerable problems and the states would object to tying any federal distributions to national performance goals.” Then in 1997 the group resolved that “performance measures should not used by the federal government as a means of restricting the authority and flexibility of state transportation officials, complicating or further regulating the program, or creating additional data collection burdens on the states.” Cited in Teresa Curristine, “Reforming the U.S. Department of Transportation: Challenges and Opportunities of the Government Performance and Results Act for Federal-State Relations,” Publius, Vol. 32(1), page 25 (2002).
33. The criteria to be evaluated in planning highway projects are: 1) economic vitality and global competitiveness; 2) safety; 3) security; 4) accessibility and mobility of people and freight; 5) environmental protection and energy conservation; 6) connectivity; 7) system management; and 8) preservation and maintenance. Public Law 109-59, Sections 5303 (h)(1) and 5304 (d)(t).
34. New Hampshire is the only state without a seat belt law, consistent with its motto: Live Free or Die. TEA-21 created two federal incentive grant programs to encourage states to increase the use of seat belts and child safety seats: Section 405 incentive grants and Section 157 incentive grants. These grant programs are designed to encourage states to increase seat belt use rates and target specific occupant protection laws and program. U.S. Department of Transportation, “Buckle Up America: Incentive Grants for Increasing Seat Belt Use,” 2003.
35. NHTSA identified 6 states and a total of $137.4 billion that could be withheld under this regulation. U.S. Department Of Transportation, “Annual Core Apportionments and Potential Penalties Under Sec. 163(A) for FY 2004 and Thereafter,” 2007.
36. 23 U.S.C. 145(a)
38. SAFETEA-LU Section 1102 (j); and Section 1935 (b)(1-4)
44. The American Road and Transportation Builders Association recently stated that the ”18 year shift to flexible federal funds has created a serious obstacle to meeting emerging national needs.” ARTBA, “America’s Future Federal Surface Transportation Program,” Washington: 2007.
47. Parsons Brinckerhoff, “Identification of Opportunities to Improve the Leveraging Potential of Federal Transportation Funding with Other Public Sector and Private Sector Resources,” Briefing paper 5C-04 prepared for the National Surface Transportation Revenue and Policy Study Commission, 2007.

SECTION VI: POLICY RECOMMENDATIONS: A TRANSPORTATION AGENDA FOR A PROSPEROUS AMERICA
1. The U.S. Postal Service is the nation’s largest public enterprise with current annual revenues approaching $70 billion. Winston, 2006.
2. That report referred to the authority as the National Surface Transportation Commission (NASTRAC).
3. This proposal is consistent with the American Association of State Highway and Transportation Officials’ 2007 recommendations on the future of the interstate system. However, this report stops well

4. It should be noted that the focus is on traffic calming and accidents that take place off the interstate system. See: Neal Peirce, ‘Vision Zero’ for Traffic Deaths: Wild Dream or Critical Goal?” Washington Post Writers Group, 2007.


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Acknowledgments

The Brookings Institution Metropolitan Policy program wishes to thank The Surdna Foundation and The Rockefeller Foundation for their support of the Program’s Metropolitan Infrastructure Initiative, a multi-year effort launched in 2008. We also wish to thank the members of the Metropolitan Leadership Council for their support of the Blueprint Initiative.

This study is the result of a collaborative process with a network of civic, corporate, academic, and political leaders in metropolitan areas across the country. In the summer of 2007, The Rockefeller Foundation sponsored a summit of American and international experts in transportation policy, planning and governance to take part in a session devoted to metropolitan transportation and infrastructure reform in the United States. This study draws heavily from that exchange and the ideas discussed that week.

Many people provided valuable information, advice, and comments during the development of this paper. For their participation in the 2007 transportation summit and/or substantive and thoughtful comments on earlier drafts and other elements of this paper, we wish to acknowledge:


This paper benefited enormously from the Brookings Metro Program team especially Alan Berube, Bruce Katz, Chris Leinberger, Amy Liu, Mark Muro, and Julie Wagner. Adie Tomer provided invaluable research assistance, detailed data collection and analysis, and substantive feedback. Tyler Kinder, Shoshanna Law, and David Warren also lent critical research assistance at various steps along the way. Sean Hardgrove contributed detailed fact checking, and David Jackson managed the paper through the editing process. Additional thanks go to Sara-Paul Design.

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