

PAUP 821: Transportation Policy and Planning

Old Dominion University

INSTRUCTOR INFORMATION

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COURSE DESCRIPTION

Potholes, traffic congestion, crumbling bridges, the gas tax, and distracted driving. Transportation issues are on the front page and on the minds of policymakers. This **seminar** will look at the historical, cultural, demographic, technological, economic and political underpinnings of transportation policy in the United States. The course will focus on understanding how transportation policy at the federal, state, regional and local level by examining statutory and regulatory frameworks, institutions involved in transportation policy, policymaking processes, and the stakeholders who shape transportation planning, policy and investments.

This course discusses key topics relevant to surface transportation policy and planning, and highways and roads specifically. The course provides an overview of important issues critical to transportation policy and planning at the current crossroads that has emerged due to the aging and lack of capacity of existing infrastructure; the complex intergovernmental and multi-sectoral approach to transportation decision making; devolution of transportation decision making to lower levels of government; challenges in generating revenues and paying for transportation, and changing assumptions regarding the roles and functions of transportation.

The following key questions will frame course discussion:

- (1) Why is transportation important?
- (2) How do federal policies guide and affect the transportation system we have today?
- (3) How is the transportation system financed at the federal, state and local level, and what are the problems associated with transportation finance?
- (4) What is the relationship between transportation, the environment, and the economy?
- (5) How have federal, state and local politics impacted transportation policy in the recent past, and how might political issues continue to impact transportation policy in the near- and long-term?
- (6) What are the nation's biggest transportation challenges and how might those be resolved?

The course will cover the following topics:

- (1) Actors and their roles,
- (2) Public involvement in transportation planning,
- (3) Transportation and highway finance (e.g. fuel taxes, tolls and user charges, debt financing),
- (4) Innovative financing and the future of highway finance,
- (5) Privatization and public-private partnerships,

(6) Other critical issues and questions facing transportation policy of the future.

This course has five broad learning outcomes. By the end of the course, you will:

- (1) Understand the central issues in transportation policy and planning;
- (2) Understand the roles of the multiple stakeholders in transportation policy process, and their respective concerns;
- (3) Be able to synthesize information from government data, published studies, and other sources to determine what information is known and what questions remain unanswered regarding a transportation policy issue;
- (4) Be able to apply knowledge about the functional, social, political, environmental, and technical aspects of transportation to articulate and evaluate transportation policy;
- (5) Be able to develop well-reasoned oral and written policy analysis and arguments on issues related to a technical policy area such as transportation policy.

READINGS

The assigned readings are detailed in the course schedule and available on BlackBoard.

GRADING

The grading scheme for doctoral students is as follows:

Guest lecture/seminar leadership	10%
Leadership and assessment of on-line discussion	5%
Research paper	
Prospectus	10%
Data report	10%
Findings draft	10%
Final paper	20%
Presentation	10%
Participation	25%

<u>Points</u>	<u>Letter Grade</u>	<u>Points</u>	<u>Letter Grade</u>
93-100	A	80-82	B-
90-92	A-	77-79	C+
87-89	B+	70-76	C
83-86	B	< 70	F

Note: A grade of "I" indicates assigned work yet to be completed in a given course or absence from the final examination. It is assigned only upon instructor approval of a student request. The "I" grade can be given only in exceptional circumstances beyond the student's control, such as illness. In these cases, the student is responsible for notifying the faculty member. The "I" grade becomes an "F" if not removed by the last day of classes of the following term (excluding the exam period) according to the following schedule: "I" grades from the fall semester become "F", if not removed by the last day of classes of the spring semester; "I" grades from the spring

and summer sessions become “F” if not removed by the last day of classes of the fall semester. An “I” grade may not be changed to a “W” under any circumstances.

Important: All written assignments must be submitted via BlackBoard (under ‘Doctoral Student Assignments’) in Word format (no PDF documents will be accepted). All assignments MUST be submitted by 11pm on the designated due dates. **Late assignments will not be accepted.**

Guest Lecture/Seminar Leadership

You will each select one class session/topic (marked ** in the course schedule) and will be responsible for preparing a guest lecture and leading seminar discussion for that class session/topic. You must prepare a PowerPoint presentation and submit it to the instructor by the Friday before the class session you will be guest lecturing/leading seminar (by 5pm). Your guest lecture/seminar leadership should take up the entire class session.

Leadership and assessment of on-line discussion

You will be assigned two on-line BlackBoard discussion forums. You will be responsible for leading the discussion – e.g. developing discussion questions, and responding to and prompting student discussion in the BlackBoard forum. You will also be responsible for assessing the quality of the students’ on-line participation in the forum – using a pre-determined rubric.

Research Paper

You will undertake a complete data-driven, empirical research project on a transportation policy of your choice. The research project will provide the opportunity to identify a research topic and question, conduct a literature review, conduct empirical analysis, write-up results and findings, and make conclusions regarding your research question. You may use primary or secondary data, and utilize a qualitative or quantitative research methodology. If using primary data, you will need to submit your research to ODU’s Institutional Research Board for approval.

Completion of the research project will be in stages, with each stage having a graded deliverable.

- **Prospectus (10%)**
A proposal describing your research project, including the substantive question being addressed (positioning your contribution within the existent scholarly literature), and a rough description of the data you intend to bring to bear. You must identify the data set or data sources you will be using. You can think of this assignment as a starting point for the literature review for your final paper, the purpose of which is to convince both of us that you have a feasible, valuable project. Approximate length: 5-7 pgs.
- **Data Report (10%)**
You should have collected all data for the research project by this point, unless extenuating circumstances force me to grant you an explicit extension. Think of this assignment as a trial run at the methodology section of your paper, the purpose of which is to convince us that you are ready to begin with analyses. For a quantitative research paper, you also must have made whatever basic transformations the data require before they may be used. The written part of this assignment should be a brief report summarizing your data and the

variables. It should describe data source(s); variables, their operationalization, and why they appropriately measure the concepts discussed in your Prospectus; descriptive statistics; and an overview of how you plan to analyze the data. For a qualitative research paper, your data must be prepared and ready for analysis. For example, your interviews or focus groups must be transcribed and ready for analysis. Approximate length: 3-5 pages, not counting visuals.

- Findings Draft (10%)

An initial draft of the finding and interpretation section(s) of your research paper. This should represent *actual empirical analysis* of the data, that tests the ideas introduced in your earlier submissions and provides detailed analysis of the data. Clarity and depth are both important. Make sure that you interpret the findings substantively. For quantitative research, it is not enough just to report Stata output. Approximate length: 5-7 pages.

- Final Project (20%)

A version of your project that you would present at a conference or to your dissertation committee. The paper should incorporate the suggestions and corrections provided during the process of developing the Prospectus, Data Report, and Findings Draft. It also should reflect a polished effort at presenting what you have found: for example, tables rather than raw output to show the regression results, interpretation of the substantive meaning of coefficients rather than simply hypotheses tests, comparison of models to determine the relative impact of variables in your study, etc.

- Presentation (10%)

Presentation of your research following the format of an academic conference: 20 minute presentation (using PowerPoint) with 5 minutes question and answer.

Attendance and Participation

Because of the participatory nature of this seminar course, attendance and participation are key components of the final grade. 25% of your course grade will be based on your attendance and in-class participation. There are two important elements to this performance: quality of participation, and quantity of participation. While a little quality can go a long way, quantity cannot be a substitute for quality. You must be present in order to participate. While conflicts can and do arise, absences will detract from your participation grade.

For each class session, you are expected to read all assigned readings. You will not be able to effectively participate if you do not read the material. We will often discuss our personal opinions and experiences as they relate to the issues we are addressing in class. To ensure that class and on-line discussions are civil and reflect a spirit of open-minded inquiry and respect for the opinions of others, we will agree to the following:

- We will not interrupt one another
- We will address our responses to the content of the comments, not to the person
- We will try to use “I statements,” stating what we feel and think rather than anticipating what others may think
- We will ALL be responsible for seeing that everyone has an opportunity to speak
- We will ALL participate and contribute to each other’s learning, recognizing that learning is an interpersonal process, both a gift and an ethical responsibility to our colleagues

- We will respect confidentiality
- We won't belittle or demean individuals or groups
- We will give people the benefit of the doubt. Life is hard enough for all of us. We will do our best to be wise, caring and decent.

Note that failure to comply may result in points taken off your participation grade.

CLASSROOM CONDUCT

The following standards are intended to define acceptable classroom behavior that preserves academic integrity and ensures that students have optimum environmental conditions for effective learning.

1. Students must turn off cell phones and pagers during class or have them set to vibrate mode.
2. Classes are expected to begin on time, and students will respect the time boundaries established by the professor. If classroom doors are locked, students may not knock or seek entrance in other ways.
3. Students should notify instructors in advance when a class will be missed. In the event of an emergency that causes a class to be missed, instructors must be notified as soon as possible.
4. Instructors may require that cell phones and other electronic devices be left on their desks during tests or examinations.
5. Students must not engage in extraneous conversations during classes. Such acts are considered to be violations of the Code of Student Conduct.
6. Students will activate their Old Dominion email accounts and check them before each class. If the student chooses to have his/her messages forwarded to another account, it is the student's responsibility to take the necessary steps to have them forwarded.
7. Consumption of food and drink during class is prohibited, except when the professor has specifically approved of such acts.
8. Offensive language, gestures and the like are disrespectful and disruptive to the teaching-learning process. [http://studentservices.odu.edu/osja/ccp_pamphlet.pdf]

ACADEMIC HONESTY

Violations of the academic honesty code will be dealt with in the strictest terms. Students are advised to become familiar with the university's academic honesty code, as well as the Statement on Plagiarism for the College of Business and Public Administration. It is the student's responsibility to ensure that both the *letter* and *intent* of this code are met in all circumstances. Ignorance of this code, or of proper rules of citation, provides no defense. My policy concerning enforcement of this code is inflexible; no exceptions will be made.

HONOR PLEDGE

"I pledge to support the honor system of Old Dominion University. I will refrain from any form of academic dishonesty or deception, such as cheating or plagiarism. I am aware that as a member of the academic community, it is my responsibility to turn in all suspected violators of the honor system. I will report to Honor Council hearings if summoned." By attending Old Dominion University you have accepted the responsibility to abide by this code. This is an institutional policy approved by the Board of Visitors.

SPECIAL NEEDS

Old Dominion University is committed to achieving equal educational opportunity and full participation for persons with disabilities. It is the university's policy that no qualified person be excluded from participation in any university program or activity, be denied the benefits of any university program or activity, or otherwise be subjected to discrimination with regard to any university program or activity. This policy derives from the university's commitment to non-discrimination for all persons in employment, access to facilities, student programs, activities and services. For additional information visit the Office of Educational Accessibility online or at 1525 Webb Center.

UNIVERSITY EMAIL POLICY

The Old Dominion University e-mail system is the official electronic mail system for distributing course-related Communications, policies, Announcements and other information. In addition, the University e-mail user ID and password are necessary for authentication and access to numerous electronic resources (online courses, faculty Web pages, etc.) For more information about the policy, please visit: Electronic Messaging Policy for Official University Community Policy 3506 (pdf). For more information about student email, please visit <http://occs.odu.edu/accounts/studemail/>

WITHDRAWAL

A syllabus constitutes an agreement between the student and the course instructor about course requirements. Participation in this course indicates your acceptance of its teaching focus, requirements, and policies. Please review the syllabus and the course requirements as soon as possible. If you believe that the nature of this course does not meet your interests, needs or expectations, if you are not prepared for the amount of work involved - or if you anticipate that the class meetings, assignment deadlines or abiding by the course policies will constitute an unacceptable hardship for you - you should drop the class by the drop/add deadline, which is located in the ODU Schedule of Classes. For more information, please visit the Office of the University Registrar.

COURSE DISCLAIMER

Every attempt is made to provide a syllabus that is complete and that provides an accurate overview of the course. However, circumstances and events may make it necessary for the instructor to modify the syllabus during the semester. This may depend, in part, on the progress, needs, and experiences of the students.

COURSE SCHEDULE AND READINGS

Note: This schedule is tentative and might change depending on how the course evolves. Unless noted, the readings are available on BlackBoard. Changes to readings, due dates, class cancellation, etc. will be announced on BlackBoard. Please check BlackBoard regularly.

* DOCTORAL STUDENTS ARE REQUIRED TO ALSO READ THE ADDITIONAL READINGS.

TRANSPORTATION POLICY AT CROSSROADS

TRANSPORTATION AND KEY POLICY ISSUES

1. Garrison, W.L. & Levinson, D.M. 2006. Chapter 2: Policy. In *the Transportation Experience: Policy, Planning, and Deployment*, pp. 14-33. New York: Oxford University Press.
2. Plant, J.F. 2007. The Big Questions of Transportation Policy and Administration in the Twenty-First Century. In J. Plant, V. Johnson & C. Ciocorlan (eds.), *Handbook of Transportation Policy and Administration*, pp. 3-7. New York: CRC Press.
3. Transportation Research Board. 2009. Critical Issues in Transportation: 2009 Update. Transportation Research Board of the National Academies. Washington, D.C.
<http://onlinepubs.trb.org/Onlinepubs/general/CriticalIssues09.pdf>
4. Council for State Governments. 2011. Top 5 Issues in 2011: Transportation. Lexington, KY: Council of State Governments.
http://knowledgecenter.csg.org/drupal/system/files/TOP5_transportation.pdf

Additional Readings:

- The American Association of State Highway and Transportation Officials, & TRIP. 2009. *America's Top Five Transportation Headaches – and Their Remedies*. Washington, DC: The American Association of State Highway and Transportation Officials & TRIP.
http://www.tripnet.org/docs/Transportation_Headaches_Report_Jan_2009.pdf
- Urban Land Institute & Ernst and Young. 2011. *Infrastructure 2011: A Strategic Priority*. Washington, DC: Urban Land Institute.
<http://www.uli.org/~media/Documents/ResearchAndPublications/Reports/Infrastructure/Infrastructure2011.ashx>

TRANSPORTATION BY THE NUMBERS: STATUS AND CONDITION

1. Hartgen, D.T., Fields, M.G., San Jose, E. & Moore, A. 2013. *20th Annual Report on the Performance of State Highway Systems (1984-2009/10)*, pp. 17-38. Los Angeles, CA: Reason Foundation.
Full report: <http://reason.org/studies/show/20th-annual-highway-report>
2. TRIP. 2010. *Hold the Wheel Steady: America's Roughest Rides and Strategies to Make our Roads Smoother*. Washington, DC: TRIP.
http://www.tripnet.org/Urban_Roads_Report_Sep_2010.pdf
3. Council of State Governments. 2013. *America's Infrastructure: Bridges*. Capitol Facts and Figures. Lexington, KY: Council of State Governments.
<http://knowledgecenter.csg.org/drupal/system/files/bridges.pdf>
4. Council of State Governments. 2010. *Condition of U.S. Roads and Bridges*. Capitol Facts and Figures. Lexington, KY: Council of State Governments.
http://knowledgecenter.csg.org/drupal/system/files/FF_Roads_and_Bridges.pdf
5. Schrank, D., Eisele, B. & Lomax, T. 2012. *TTI's 2012 Urban Mobility Report*, pp. 1-9. College Station, TX: Texas A&M Transportation Institute.
Full report: <http://d2dtl5nnlpfr0r.cloudfront.net/tti.tamu.edu/documents/mobility-report-2012.pdf>

Additional Readings:

- American Society of Civil Engineers. 2013. *2013 Report Card for America's Infrastructure*. Reston, VA: American Society of Civil Engineers.
<http://www.infrastructurereportcard.org/a/browser-options/downloads/2013-Report-Card.pdf>
- Transportation for America. 2011. *The Fix We're In For: The State of our Nation's Bridges*. Washington, DC: Transportation for America.
<http://t4america.org/docs/bridgereport/bridgereport-national.pdf>
- Bureau of Transportation Statistics. 2013. *Pocket Guide to Transportation 2013*. Washington, DC: US Department of Transportation.
http://www.rita.dot.gov/bts/sites/rita.dot.gov.bts/files/pocket_guide_2013_1.pdf
- Pisarski, A. 2006. *Commuting in America III*. Washington, D.C.: Transportation Research Board.
Commuting Facts: Facts from Alan Pisarski's Commuting in America III Study.
<http://onlinepubs.trb.org/onlinepubs/nchrp/CIAllfacts.pdf>
Full report: <http://onlinepubs.trb.org/onlinepubs/nchrp/CIAll.pdf>
- Pew Center on the States & Rockefeller Foundation. 2011. *Measuring Transportation Investments: The Road to Results*.
http://www.pewcenteronthestates.org/uploadedFiles/Measuring_Transportation_Investments.pdf

QUESTIONING THE STATUS QUO

1. Smart Growth America and Taxpayers for Common Sense. 2011. *Repair Priorities: Transportation Spending Strategies to Save Taxpayer Dollars and Improve Roads*. Washington, DC: Smart Growth America.
<http://www.smartgrowthamerica.org/documents/repair-priorities.pdf>
2. Dutzik, T. & Baxandall, P. 2013. *A New Direction: Our Changing Relationship with Driving and the Implications for America's Future*, pp. 8-39. U.S. PIRG Education Fund and Frontier Group. <http://www.uspirg.org/sites/pirg/files/reports/A%20New%20Direction%20vUS.pdf>
3. American Society of Civil Engineers. 2011. *Failure to Act: The Economic Impact of Current Investment Trends in Surface Transportation Infrastructure*. Washington, D.C.: American Society of Civil Engineers.
http://www.asce.org/uploadedFiles/Infrastructure/Report_Card/ASCE-FailureToActFinal.pdf

AN INTERGOVERNMENTAL AND MULTI-SECTORAL POLICY AND FINANCE FRAMEWORK

THE PLAYERS – PART I – FEDERAL GOVERNMENT**

1. National Academy of Public Administration. 2008. *Financing Transportation in the 21st Century: An Intergovernmental Perspective*. Washington, DC: National Academy of Public Administration. Read **Chapter 1**: Existing Surface Transportation Roles and Responsibilities. Full report: <http://www.napawash.org/wp-content/uploads/2008/08-16.pdf>
2. Encyclopedia entry: Federal Transportation Policy
3. Fischer, J.W. 2005. From Interstates to an Uncharted Future: A Short History of the Modern Federal-Aid Highway Program. In W. Cox, A. Pisarski & R.D. Utt (eds.), *21st Century Highways*, pp. 9-36. Washington, DC: The Heritage Foundation.
4. Transportation for America. 2011. **Chapters 1 & 2**. In *Transportation 101: An Introduction to Federal Transportation Policy*. Full report: <http://t4america.org/docs/Transportation%20101.pdf>

Additional Readings:

- National Academy of Public Administration. 2008. *Financing Transportation in the 21st Century: An Intergovernmental Perspective*. Washington, DC: National Academy of Public Administration. All chapters.
- Encyclopedia entry: Intermodal Surface Transportation Act (ISTEA)
- Encyclopedia entry: Transportation Equity Act for the 21st Century (TEA-21)
- Encyclopedia entry: Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)
- Slone, S. 2013. Federal Transportation Bill Reflects State Government Wish List, But Fails to Address Long-Term Future. *Book of the States 2013*, pp. 482-487. Lexington, KY: Council of State Governments.

THE PLAYERS – PART II – STATES, REGIONS, LOCALITIES AND CITIZENS**

1. Goetz, A. 2007. State Departments of Transportation: From Highway Departments to Transportation Agencies. In *Handbook of Transportation Policy and Administration*, pp. 121-144. New York: CRC Press.
2. O’Connell, L., J. Yusuf & M. Hackbart. 2009. Transportation Commissions as Accountability Structures: A Review of Their Statutory Roles and Other Attributes. *American Review of Public Administration* 39(4): 409-424.
3. Gordon, P. 2005. Will a Bigger Role for States Improve Transportation Policy Performance? In W. Cox, A. Pisarski & R.D. Utt (eds.), *21st Century Highways*, pp. 163-182. Washington, DC: The Heritage Foundation.
4. Encyclopedia entry: Metropolitan Planning Organizations
5. Lovan, W.R. 2004. Regional Transportation Strategies in the Washington, D.C. Area: When Will they be Ready to Collaborate? In W.R. Lovan, M. Murray & R. Shaffer (eds.), *Participatory Governance: Planning, Conflict Mediation and Public Decision-Making in Civil Society*. Burlington, VT: Ashgate.
6. Council of State Governments. 2009. Increasing Public Awareness of Infrastructure Costs and Finance. Lexington, KY: Council of State Governments.
http://www.csg.org/knowledgecenter/docs/TIA_infrastructure_cost.pdf
7. Working paper: Gaining Public Acceptance for Transportation Finance Policy Solutions: A Public Participation Experiment.

Additional Readings:

- National Conference on State Legislatures. 2011. *Transportation Governance and Finance: A 50-state Review of State Legislatures and Departments of Transportation*. Washington, DC: National Conference of State Legislatures and the AASHTO Center for Excellence in Project Finance. http://transportation-finance.org/pdf/50_State_Review_State_Legislatures_Departments_Transportation.pdf
- Grossardt, T., K. Bailey & J. Brumm. 2003. Structured Public Involvement: Problems and Prospects for Improvement. *Transportation Research Record* 1858, p. 95-102.

THE BASICS OF HIGHWAY FINANCE

1. Encyclopedia entry: Highway Finance
2. Encyclopedia entry: Highway Trust Fund
3. Encyclopedia entry: Motor Fuel Tax
4. Slone, S. *Transportation and Infrastructure Finance: A CSG National Report*.
<http://www.csg.org/knowledgecenter/docs/TransportationInfrastructureFinance.pdf>
5. Yusuf, J., L. O’Connell & S. Abutabenjeh. 2011. Paying for locally owned roads: A crisis in local government highway finance. *Public Works Management and Policy*.
6. Yusuf, J. and L. O’Connell. The Crisis in State Highway Finances: Its Roots, Current Effect, and Some Possible Remedies. *Public Budgeting, Accounting and Financial Management*. Forthcoming.

Additional Readings:

- Puentes, R. & R. Prince. 2005. Fueling Transportation Finance: A Primer on the Gas Tax. In B. Katz & R. Puentes (eds.), *Taking the High Road: A Metropolitan Agenda for Transportation Reform*, pp. 45-76. Washington, DC: Brookings Institution.
- Wachs, M. 2003. A Dozen Reasons for Raising Gasoline Taxes. *Public Works Management and Policy* 7(4): 235-242.
- Forkenbrock, David J. 2006. Financing Local Roads: Current Problems and New Paradigm. *Transportation Research Record*, 1960: 8-14.
- O'Connell, L. and J.-E. W. Yusuf 2013. Improving Revenue Adequacy by Indexing the Gas Tax to Indicators of Need: A Simulation Analysis. *Public Works Management & Policy* 18(3): 229-243.
- National Surface Transportation Infrastructure Financing Commission. 2009. Paying Our Way: A New Framework for Transportation Finance. Washington, D.C.: National Surface Transportation Infrastructure Financing Commission.
[http://financecommission.dot.gov/Documents/NSTIF Commission Final Report Advance%20Copy Feb09.pdf](http://financecommission.dot.gov/Documents/NSTIF_Commission_Final_Report_Advance%20Copy_Feb09.pdf)
- The National Surface Transportation Policy and Revenue Study Commission. 2007. Transportation for Tomorrow: Report of the National Surface Transportation Policy and Revenue Study Commission. Washington, D.C.: National Surface Transportation Policy and Revenue Study Commission.
http://transportationfortomorrow.com/final_report/pdf/final_report.pdf

MOVING BEYOND THE TRADITIONAL GAS TAX**

1. Wachs, M. 2005. Improving Efficiency and Equity in Transportation Finance. In B. Katz & R. Puentes (eds.), *Taking the High Road: A Metropolitan Agenda for Transportation Reform*, pp. 77-100. Washington, DC: Brookings Institution.
2. Urban Land Institute. 2013. *When the Road Price Is Right: Land Use, Tolls, and Congestion Pricing*. Washington, D.C.: Urban Land Institute. **Read Parts 1 & 2.** http://www.uli.org/wp-content/uploads/2013/03/When-the-Road-Price-is-Right_web_F.pdf
3. Council for State Governments. 2010. Vehicle Miles Traveled Fees. http://www.csg.org/policy/documents/TIA_VMTcharges.pdf
4. Council for State Governments. 2010. Tolling and Congestion Pricing. http://knowledgecenter.csg.org/drupal/system/files/favorites/CR_Tolling.pdf

Additional Readings:

- Rufolo, Anthony M. and Robert L. Bertini. 2003. "Designing Alternatives to State Motor Fuel Taxes," *Transportation Quarterly*, 57(1): 33-46.
- King, David, Michael Manville, and Donald Shoup. 2007. "The political calculus of congestion pricing." *Transport Policy*, 14:111-123.
- Forckenbrock, David J. 2004. "Mileage-Based Road User Charge Concept," *Transportation Research Record* 1864: 1-8.
- Dill, J., & Weinstein, A. 2007. How to Pay for Transportation? A Survey of Public Preferences in California. *Transport Policy*, 14(4), 346-356.

- Duncan, D., & Graham, J. 2013. Road User Fees Instead of Fuel Taxes: The Quest for Political Acceptability. *Public Administration Review*, 73(3), 415-426.

PRIVATE SECTOR PARTICIPATION AND PUBLIC-PRIVATE PARTNERSHIPS**

1. Council for State Governments. 2010. Public-private Partnerships in Transportation. http://knowledgecenter.csg.org/drupal/system/files/CR_Public_Private_Partnership_in_Transportation_0.pdf
2. Schank, J. 2011. Public-private Partnerships: Understanding the Tradeoffs. *Eno Brief*
3. Boarnet, Marlon G. and Joseph F. DiMento. 2004. "The Private Sector's Role in Highway Finance: Lessons from SR 91," *Access* 25: 26-31.

INTERLINKAGES

TRANSPORTATION, ENERGY, CLIMATE CHANGE, ENVIRONMENT, AND SUSTAINABILITY**

1. Suarez, P., W. Anderson, et al. 2005. Impacts of flooding and climate change on urban transportation: A systemwide performance assessment of the Boston Metro Area. *Transportation Research Part D: Transport and Environment* 10(3): 231-244.
2. Litman, T. and D. Burwell. 2006. Issues in sustainable transportation. *International Journal of Global Environmental Issues* 6(4): 331-347.
3. Council for State Governments. 2010. Green Transportation. http://www.csg.org/policy/documents/CR_GreenTransportation.pdf
4. Agrawal, A. W., Dill, J., & Nixon, H. 2010. Green transportation taxes and fees: A survey of public preferences in California. *Transportation Research Part D: Transport and Environment*, 15(4), 189-196.

TRANSPORTATION AND ECONOMIC DEVELOPMENT**

1. Helling, A. 1997. Transportation and Economic Development: A Review. *Public Works Management and Policy*, 2(1):79-93
2. Baird, B. 2005. Public Infrastructure and Economic Productivity: A Transportation-Focused Review. *Transportation Research Record: Journal of the Transportation Research Board* 1932: 54-60
3. Shatz, H.J., K.E. Kitchens, S. Rosenbloom & M. Wachs. 2011. *Highway Infrastructure and the Economy: Implications for Federal Policy*. Santa Monica, CA: RAND Corporation. Full report: <http://www.rand.org/pubs/monographs/MG1049.html>