

# PLAN 738 Transportation Policy

## Spring 2007

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### Description

With shifting political priorities, the role of central governments in transportation policy-making has changed significantly over the past two decades. Concepts such as congestion pricing, private toll roads, and for-profit mass transportation are beginning to be seriously considered as elements of a broad transportation policy both in the developed and the developing world. Meanwhile, local issues regarding the appropriateness of specific investments, their impacts on specific subpopulations, levels of travel demand, and transportation-related environmental concerns continue to be dominant themes of grass-roots politics. At the local and federal level, transportation continues to play a central role in concerns about sustainability, from local food buying to peak oil. As a result, this course examines surface transportation from a public policy perspective with special focus on its institutional components.

The course is divided into four parts. Part 1 provides an introductory review of the role of government in transportation markets. Part 2 covers how transportation decisions are evaluated, including the vital role that planners play in conducting technical analyses. The emphasis is on understanding how technical tools are used for project evaluation, whereas the mechanics of the tools are covered in other courses (PLAN 739 and 785). Part 3 covers policy responses to congestion problems. Finally, Part 4 covers transportation's role in achieving environmental and social sustainability.

### Objectives

The course introduces students to the current transportation policy discussions and methodological approaches for evaluating and making policy decisions. Students will be able to learn from the policy experience of many countries in areas such as:

- The role of government in transportation markets
- Transportation infrastructure financing
- Evaluation of transportation investments
- Transportation's role in sustainability
- Approaches to address traffic congestion
- Market and non-market approaches for addressing mobile source pollution
- Environmental justice analyses in transportation

### Format

This course combines lectures and seminar-style discussions. Active student participation is expected. Arrive prepared to engage your colleagues and me in active discussion. Several in-class examples will help in understanding and implementing the analysis tools covered. By the end of the class students are expected to write and present to their colleagues a transportation policy white paper.

## Requirements

Students will prepare two group assignments, one individual homework assignment, and an individual final paper. I encourage you to begin thinking about a transportation policy problem early in the semester. Additional handouts will describe assignments in detail.

	<b>Assignment</b>	<b>Due Date</b>	<b>% of Total</b>
1	Group	Feb 26	20%
2	Group	March 19	20%
3	Individual	April 16	20%
4	Final paper	April 27	30%
5	Oral presentation of paper to class	April 27	10%
	<i>Total</i>		100%

## Meeting Times and Location

Monday: 11:00-1:45 PM, Hanes Hall 002

## Required Textbook

All readings are now available electronically through the course's website. The required textbook is out of print, but is available also on reserve at Chapin Library

Gomez-Ibañez, et al (Eds.). (1999) Essays in Transportation Economics and Policy –A Handbook in honor of John R. Meyer. Washington DC: Brookings Institution Press.

## Books on Reserve

Gomez-Ibañez, et al (Eds.). (1999) Essays in Transportation Economics and Policy –A Handbook in honor of John R. Meyer. Washington DC: Brookings Institution Press. ("Essays" from hereon).

Button, K. and Stough, K. (Eds.) Transport Policy (1998). Northampton (MA): Edward Elgar Publishing.

Goddard, S. (1994). Getting There: The Epic Struggle Between Road and Rail in the American Century. New York: Basic Books.

## MEETING DATES AND TOPICS

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No.	Date	Topic	Comment
1	1/22	No class –Transportation Research Board Annual Meeting	
<b>Part 1: Role of government in transportation markets</b>			
2	1/29	Policy analysis in transportation + Role of government in transportation markets	
3	2/5	Policy environment: Drivers and trends + pricing	ASSIGNMENT 1 OUT
4	2/12	Infrastructure financing + Transportation and Economic Development:	
<b>Part 2: Transportation project evaluation</b>			
5	2/19	Evaluation of transportation projects: Approaches, induced demand & value of time	Assignment 2 out
6	2/26	Evaluation of transportation projects: Safety, environmental impacts and costs + Project planning: Streamlining	Assignment 1 due
<b>Part 3: Policy responses to congestion</b>			
7	3/5	Is congestion a problem? Diagnosis and feasibility of congestion pricing	
8	3/19	Video and discussion	Assignment 2 due Assignment 3 out
9	3/26	Is congestion a problem? Land use solutions to congestion	
<b>Part 4: Transportation and sustainability</b>			
10	4/2	Transportation and poverty +Transportation and local food buying	
11	4/9	Transportation and pollution: policy options+ politics	
12	4/16	The walk mode: insights and policy responses	Assignment 3 due
13	4/23	Environmental justice in transportation: Background, approach and example	
14	4/27	Final paper presentations	Presentations and paper due

## READINGS

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### Part 1: The Role of Government in Transportation Markets

2. Yates, FrankJ. (2003) Decision Management: How to Assure Better Decisions in Your Company, Jossey-Bass, Chapter 1.



2. Stough, R. and Rietveld, P. (1997) Institutional Issues in Transport Systems, *Journal of Transport Geography*, 5, 207-214.



2. The World Bank (1996) Sustainable Transport: Priorities for Policy Reform, Washington, D.C.:International Bank for Reconstruction and Development, 85-101.



2. Munnich, L. W. J. (1997) Roles and Responsibilities of Government, In The Future of Highway Transportation Systems (Ed, Research and Technology Coordinating Committee) National Research Council, Washington, D.C., 91-107.



3. Gómez-Ibañez, J. A. Pricing (Chapter 4). In Essays.



4. Gomez-Ibanez, J. A. and Meyer, J. R. (1993) Going Private: The International Experience with Transport Privatization, Washington, D.C.: Brookings Institution, 1-9;145-163.



4. Fielding, G. J. and Klein, D. (1993) How to Franchise Highways, *Journal of Transport Economics and Policy*, 27, 113-130.



4. Banister, D. and Berechman, J. (2000) Transport Investment and Economic Development. Chapter 6, University College-London Press, 131-160.



### Part 2: Transportation Project Evaluation and Decision-Making

5. The World Bank (2005). A Framework for the Economic Evaluation of Transport Projects, Transport Note No. TRN-5, Washington, DC, 25 pp.



5. Small, K. (1999) Project Evaluation (Chapter 5) in Essays.



5. Gunn, H. F. An Introduction to the Valuation of Travel-time Savings and Losses. In Handbook of Transport Modelling (Hensher and Button, Eds.) Pergamon, 433-448.



5. The World Bank (2005). Valuation of Accident Reduction, Transport Note No. TRN-16, Washington, DC, 25 pp.



5. Hayashi, Y and H. Morisugi (2000). International comparisons of background concept and methodology of transportation project appraisal. *Transport Policy*, 7, 73-88. **Optional**



5. General Accounting Office (2004) Surface Transportation: Many Factors Affect Investment Decisions. Report Number 04-744.



6. Flyvbjerg, B. et. al. (2002) Underestimating Costs in Public Works Projects. *Journal of the American Planning Association*, 68,3, 279-296.



6. Mackie, P. and Preston J. (1998) Twenty one sources of error and bias in transport project appraisal. *Transport Policy*, 5, 1-7.



6. Bejleri I, Roaza R, Thomas A, et al. (2002) Florida's efficient transportation decision-making process - Laying the technology foundation. *Transportation Research Record* (1859): 19-28.



### **Part 3: Policy Responses to Congestion**

7. Curbing Gridlock (Ed. Committee for Study on Urban Transportation Congestion Pricing) National Academy Press, Washington, D.C., 16-26; 39-57.



7. Mogridge, M. J. H. (1997) The self-defeating nature of urban road capacity policy. *Transport Policy*, 4, 1, 5-23.



7. Mohring, H. Congestion (Chapter 6). In Essays.



7. Levine, J. and Garb, J. (2002). Congestion Pricing's Conditional Promise: Promotion of Accessibility or Mobility? *Transport Policy*, 9, 3, 179-182.



7. Gomez-Ibañez, J. A. (1992) The Political Economy of Highway Tolls and Congestion Pricing, *Transportation Quarterly*, 46, 343-360. **Optional**



8. Giuliano, G. (1991) Is Jobs-Housing Balance a Transportation Issue? *Transportation Research Record*, 1305, 305-312.



8. Levine, J. (1998) Rethinking accessibility and jobs-housing balance. *Journal of the American Planning Association*, Vol. 64, No. 2, 133-150.



8. Ferguson, E. (1990) Transportation Demand Management: Planning, Development, and Implementation, *Journal of the American Planning Association*, 56.



8. Meyer, M. (1999) Demand management as an element of transportation policy: using carrots and sticks to influence travel behavior, *Transportation Research Part A: Policy and Practice*, 33, 7-8, 575-599



9. Videos: (2005) Who Killed Electric Car (90 mins) and (1963) Lewis Mumford on the City: The City -- Part 2: Cars or People?

10. Surface Transportation Policy Project and Center for Neighborhood Technology (2000), *Driven to Spend*, Washington DC, 44 pp.



10. AEA Technology Environment (2005), The validity of food miles as an indicator of sustainable development, A Report to the UK Department for Environment Food and Rural Affairs, 117 pp.

Chapter 2, Factors driving food miles 6-15

Chapter 4, The direct impacts of food transport 36-47

Chapter 5, Wider social and economic issues 48-63

Conclusions, 95-97



11. Benfield, K. and Replogle, M. (2002). The Road More Traveled: Sustainable Transportation in America –or Not. *Environmental Law Reporter*, 6, 10,633-10,647.



11. Leone, R. Technology-Forcing Public Policies and the Automobile. (Chapter 9) In Essays



11. Fullerton, D. and S. West. (2000). Tax subsidy combinations for the control of car pollution. Working Paper 7774, *NBER Working Paper Series*. 1-35.



11. Salomon, I. Can Telecommunications Help Solve Transportation Problems? In Handbook of Transport Modelling (Hensher and Button, Eds.) Pergamon, 449-462.



11. Rajan, Sudhir C. (1996) The Enigma of Automobility –Democratic Politics and Pollution Control. Chapter 1, University of Pittsburgh Press, 3-32.



#### **Part 4: Transportation's Forgotten Aspects**

12. Saelens, B. E., Sallis, J. F., & Frank, L. D. (2003). Environmental correlates of walking and cycling: findings from the transportation, urban design, and planning literatures. *Annals of Behavioral Medicine*, 25(2), 80-91.



13. Forkenbrock, D. and, L. Schweitzer (1999). Environmental justice in transportation planning. *Journal of the American Planning Association*, 65, 1, 96-112.



14. Final paper presentations

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