

Economics 465/565-Transportation Economics

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General Course Description

This course uses microeconomic theory as a tool to analyze the transportation sector of the economy. First there is an overall introduction to the transportation sector of the U.S. economy including terminology and a brief history of how this sector has developed over time. Basic microeconomic principles are then used to examine pricing of transportation services and infrastructure. Finally, we identify and critically evaluate regulatory and policy issues facing the transportation industries.

Course Objectives/Outcomes

1. To provide students with terminology and background necessary to work in the interdisciplinary field of transportation economics.
2. To familiarize students with methodologies used in the analysis of transportation issues.
3. To help student learn to apply economic concepts to transportation issues in a way that allows them to critically evaluate transportation policy and make informed decisions.

Course Reading Materials

There is not a single text that adequately covers all of the topics in this course. Thus, readings will be assigned from a variety of sources and new readings may be added as the course progresses. Readings are available either on line or at the library.

The following books will be placed on reserve at the OSU Valley library:

Small, Kenneth A., Clifford Winston, and Carol A. Evans, Road Work: A New Highway Pricing & Investment Policy, Brookings Institution, 1989.

Downs, Anthony, Stuck in Traffic: Coping With Peak Hour Traffic Congestion, Brookings Institution, 1992.

Harper, Donald V., Transportation in America: Users, Carriers, Government

Morrison, S. and Winston, C., The Evolution of the Airline Industry, Brookings Institution, 1995.

*McCarthy, Patrick S., Transportation Economics Theory and Practice: A Case Study Approach, Blackwell Publishers, 1999.

Sampson, R.J. and M.T. Farris Domestic Transportation: Practice, Theory, and Policy

Finally, additional articles listed below are available either at the Valley Library or on the ECON 465/565 Blackboard page.

Reading assignments:

The following is a tentative list of assigned readings --- additional assignments and any changes/revisions will be announced in class. Asterisks below (*) indicates recommended reading for the Econ 565 students.

Week 1: Introduction to Transportation

9/24-9/26

Definition of Transport Economics :

http://en.wikipedia.org/wiki/Transport_economics

U.S. Transportation History

Harper, Ch. 1

Sampson and Farris, Ch.2 (summarized in Blackboard Lecture notes #1)

*Small, Kenneth Chapter on Transportation Demand on Blackboard

*McCarthy: Chapter 1

Articles:

Button, Kenneth "Transportation Economics: Some Developments Over the Last 30 Years" Journal of the Transportation Research Forum, Vol. 45, No. 2 (BB)

McMullen, B. Starr "Commodity Specific Rate Differentials in a Competitive Trucking Industry", Logistics and Transportation Review, June 1985: 133-144.

* Winston, Clifford "Conceptual Developments in the Economics of Transportation: An Interpretive Survey" Journal of Economic Literature, Vol 23 (March 1985): 57-94

WEB Pages:

Pacific and Union Pacific: <http://www.cpr.org>.

Erie Canal: <http://www.eriecanal.org/>

Weeks 2-6: Transportation Demand, Costs, and Pricing

10/1 – 10/31 (approximate)

Infrastructure Pricing and Investment:

Small, Winston, and Evans, Road Work

Introduction: pp.3-8

Road Pricing and Investment: pp.9-21

Skim chapters 3, 4, and 6.

Congestion and Highway Capacity: pp.80-98

A New Highway Policy: pp.114-123.

Downs, Stuck in Traffic

Chapters 1-5

*McCarthy: Chapter 3, skim Ch.4, Ch. 5 to p. 171 (Take a look at Ch. 2 if you need a review of econometrics).

Merriss, J. Krukar, M., Burgess, G. and L. Henion, "A Proposal for an Axle Weight Distance Road User Charge"

McMullen, B. Starr and Thomas Gut "A Note on the Effectiveness of HOV Lanes in Controlling Urban Highway Congestion" Transportation Quarterly, Vol. 46, No.3, 1992: 429-434. (Illustration of a counterfactual methodology)

McMullen, B. Starr "Congestion Pricing and Demand Management: A Discussion of the Issues", Policy Studies Journal, Vol. 21, No.2 , Summer 1993: 285- 295.

*Morrison, Steven A. "The Structure of Landing Fees at Uncongested Airports: An Application of Ramsey Pricing", Journal of Transport Economics and Policy.(Illustration of Ramsey pricing in practice)

Phang, S. and R. Toh, Road Congestion Pricing in Singapore: 1975-2003, Transportation Journal, Spring 2004:16-25.(BB)

ODOT RUFTUF Executive summary and pp1-23. (BB)

West, Sarah "Distributional Effects of Alternative Vehicle Pollution Control Policies" (BB)

Urban Transit

Pucher, J. M. Stedt, and I. Hirshman "The Impact of Subsidies on the Cost of Urban Transport" Journal of Transport Economics and Policy, May 1983.

Li, J. and M. Wachs "The Effects of Federal Transit Subsidy Policy on Investment Decisions: the Case of San Francisco's Geary Corridor", Transportation 31: 43-67, 2004 (BB)

Frick, K.T. , Taylor, B. and M. Wachs "Contracting For Public Transit Services in the US Evaluating the Tradeoffs" (BB).

Benefit-Cost Analysis

DefinitionL http://en.wikipedia.org/wiki/Cost-benefit_analysis

Bent Flyvbjerg, Mette K. Skamris Holm, and Søren L. Buhl, "How (In)accurate Are Demand Forecasts in Public Works Projects? The Case of Transportation." *Journal of the American Planning Association*, vol. 71, no. 2, Spring 2005, pp. 131-146. [6]

Weeks 7-10: Transportation Industries and Government Policy

11/5-11/28 (approximate)

General/ Introduction:

- *Winston, Clifford "Economic Deregulation: Days of Reckoning for Microeconomists", *Journal of Economics Literature*, Vol.31, No.3 (September, 1993): 1263-1289(Good reference source)
- * McCarthy: Ch 5 pp. 171-end; Ch 7-8 (exclude pp. 254-258)

Railroads

Harper: Chapters 12-14, 16-21, 23

Web Pages:

<http://www.bts.gov/NTL/DOCS/contents/ch4c.htm>

<http://www.bts.gov/NTL/DOCS/contents/ch4e.htm>

<http://www.bts.gov/NTL/DOCS/contents/ch4j.htm>

AMTRAK:

http://www.house.gov/transportation/rail/04_30_03/04_30_03memo.html

Williams, Daniel G. and Joseph J. Warren "Amtrak Revenues, Fare, and Ridership in the 1990s: Trends and Passenger Revenue Forecast Errors" *Transportation Journal*, Summer 1997, Vol 33, No1: 119-125.(BB)

Motor Carriers:

McMullen, B. Starr "The U.S. Motor Carrier Industry at the Millennium," *Journal of the Transportation Research Forum*, Vol. 39, No.4, Fall 2000, 141-150 (BB).

McMullen, B. Starr "The Evolution of the U.S. Trucking Industry "1-22 (Chapter 1) in Belman, D. (ed.) Trucking in the Age of Information, Ashgate Press, November 2005.(BB)

*Hubbard, Thomas N. "The Demand for Monitoring Technologies: The Case of Trucking", *The Quarterly Journal of Economics*, May 2000: 533-560 (interesting application of transactions cost concepts) (BB)

WEB Pages:

NAFTA Web Page: <http://www.bts.gov/NTL/DOCS/contents/ch4i.htm>

Maritime

"The Efficacy of Maritime Policy Regulation" (Xerox on reserve)

WEB Pages:

<http://www.bts.gov/NTL/DOCS/contents/ch4f.htm>

<http://www.bts.gov/NTL/DOCS/contents/ch4l.htm>

Airlines

Morrison & Winston: pp. 1-73.

Tretheway, Michael "The Characteristics of Modern Post-Deregulation Air Transport", 1991 pp. 1-55.

Bamberger, G.E. and Carlton, D.W. (April 2004), "An Empirical Investigation of the Competitive Effects of Domestic Airline Alliances", *Journal of Law and Economics*, V XLVII, 195-222 (BB)

Morrison, Steven A. "Actual, Adjacent, and Potential Competition: Estimating the Full Effect of Southwest Airlines," *Journal of Transport Economics and Policy*, Vol. 35, Part 2, May 2001:239-256. (BB)

Exams: There will be two take home exams for this course.

Attendance: REQUIRED

Students with Disabilities: Students with documented disabilities who may need accommodations should inform the instructor no later than the first week of classes.

Grades:

Course grades will be based on the two take home exams (60%-30% each), various homework assignments (30%), and class participation/presentations(10%).

Economics 565: Students enrolled in Economics 565 are required to read the starred assignments (*) in the above syllabus in addition to the 465 readings. Students in ECON 565 are required to do a paper/project rather than the second take home exam; ECON 465 students have the option of a paper or the second take home exam

Plagiarism and Cheating: University guidelines and policies apply.

