

**USP 456/556: URBAN TRANSPORTATION: PROBLEMS AND POLICY
WINTER 2006**

Instructor: Jennifer Dill, Ph.D.
Room/Time: Thursdays 6:40 – 9:20 pm, 158 Cramer
Office: Urban Center 370T
Office Hours: Tuesdays 2-4 pm
Phone: 503-725-5173
E-mail: jdill@pdx.edu
Web site: <http://web.pdx.edu/~jdill/>

COURSE REQUIREMENTS

Objectives

This is an introductory course in transportation problems and policies for graduate and upper-division undergraduate students. By the end of the quarter, students should have a better understanding of the current transportation problems facing urban areas in the U.S. and how policymaking addresses those problems. Our focus will be urban areas in the U.S., though we will use examples from abroad for comparison. The focus is also on the *policy* process, rather than the planning process, though the two overlap at times. Transportation planning is the focus of USP 544 offered in the Spring. Given the time constraint of 10 weeks and the myriad problems facing the U.S. transportation system, we will also focus on ground transportation (cars, trucks, trains, etc.).

Grading

Undergraduates

Attendance/Class participation	10%
Weekly reading reflections	20%
Policy paper	40%
Midterm quiz	10%
Final	20%

Graduates

Attendance/Class participation	5%
Weekly reading reflections	20%
Policy paper	40%
Midterm quiz	5%
Final	15%
International experiences	15%

Class Participation

Everyone is expected to attend class regularly and participate actively, e.g. ask questions, answer questions, provide topics for discussion, participate in group activities, etc.

Everyone is also expected to participate in discussions and activities on the course web site. Half of your participation grade will be based upon web site activity – posting messages, responding to messages, etc. Students should post discussion questions or information on topics/issues you read in the newspaper or elsewhere. Be sure to provide some background information and a reference to where you read about the topic.

Weekly Reading Reflections

At the beginning of class each week you should turn in a 1-2 page (single-spaced) memo summarizing and discussing the readings. The memo should first *briefly* summarize what you felt were the important points of the reading(s). Then, discuss and reflect on the readings. You can critically evaluate the findings, raise questions, suggest other ideas, etc. When there are

multiple readings and topics for the week, you can group the readings or handle them one by one; it's up to you. The style does not need to be too formal, but you should use correct spelling and grammar.

Midterm Quiz and Final

There will be one quiz and a final. The quiz and final will cover material from the readings and class. You will take the quiz on-line. It will cover the first 6 weeks of class, including Week 6 (February 16). It will take place during the week of February 20. I will provide details in class and on the web site. The final is comprehensive. It will take place on Thursday, March 23 at the assigned time in the Bulletin. The quiz and final will include true/false, multiple choice, matching, and short answer questions. The final may also include 1-2 short essay questions.

Policy Paper

The Policy Paper should be on a current transportation policy issue, ideally within the Portland region or the state of Oregon. National or international topics are fine, but must be narrowly defined. "Current" means that a policy decision was recently made or is about to be made. The topic should be specific and focused. Examples of specific topics include extending the MAX light rail system to Clark County, increasing the gas tax to fund transportation, or city-wide policies to increase bicycling. Non-specific topics would be air pollution and motor vehicles, global warming, transportation-energy policy. These are just examples. Please do not limit yourself to these topics. The final paper should address the following questions (but *not* in a question: answer format and *not* necessarily in this order):

- What is the policy problem that you investigated? In addition to describing the specific problem, provide some historical background. Also, explain the broader policy context – beyond the location you are examining. For this, draw from the course readings or similar sources.
- What interest groups are involved, what are their positions, and how do their positions differ? How do the groups influence policy?
- What alternatives were (or are being) considered to address the problem?
- What was the policy decision? Who made the decision? If no final decision has been made, explain why and the current state of the decision making process.
- Explain the process that was used to make the decision. For example, how was the public involved? Were consultants used? How long did it take? What decision making bodies were involved?
- What analytical methods, models, or forecasts have been (or will be) used to study or analyze this problem? What role did they play in evaluating the alternative policies? What role did they play in the outcome?
- What did you learn about the policy making process? How could it be improved?

Your research will likely include a wide variety of sources, including the newspaper, public agency reports, journal articles, the web, and perhaps interviews. All sources **must** be cited appropriately. Use this site for information about citations:

<http://www.lib.pdx.edu/instruction/survivalguide/writeandcitemain.htm>

You **must** use the academic literature (journal articles, books) to ground your discussion and help explain the policy process. The course readings include many general sources that will help.

Initial Proposal: Submit a one-page proposal identifying your paper topic. Include a brief description of the issue and what you know about it so far. Identify 1-3 sources of information (newspaper articles, reports, etc.) that you used to help identify the issue. List any questions you may have about the topic that you may need help answering. **Due January 26** at the beginning of class. (2.5 points)

Progress Report: Write a one-page progress report on what you have done, what you still need to do, and what problems you have encountered. Attach a bibliography. The bibliography **must** include some academic sources – not just newspaper articles, web sites, and government documents. This can include the textbooks and assigned readings, but to do well on the paper you should look for additional sources. **Due February 16** via email to Prof. Dill. (2.5 points)

Final Paper: Due March 16 at the beginning of class. (35 points). Maximum 12 pages, double-spaced using 12-point type, plus any necessary appendices and list of references. Use subheadings to organize your paper. This is a professional-style paper, not a literary essay or prose.

International Experience (Graduate Students)

Students enrolled in the course for graduate credit (USP 556) will form pairs of two and choose a country (not the U.S.) to study for the quarter. Each week, you will bring information to share with the rest of the class on the day's topic applied to your country. I've listed the topics and some questions that you should try to answer as guidance. Do not consider this a definitive list; it's just guidance. You can go off the list, as long as it's related to the topic. It may be difficult to find some information. Do the best you can, but come up with something for each week. You will also post what you find on WebCT, with appropriate citations. The postings should briefly summarize the highlights of what you found. Posting should be up by the noon on Saturday after you presented in class.

Week	Topics
Week 2	Travel: How do people travel? (mode split, % with cars, etc.) Finance: How do they fund transportation infrastructure?
Week 3	Congestion: Is it a problem? How significant? How are they dealing with it, or not?
Week 4	Environmental Issues: How significant is transportation as a source of pollution and environmental problems? What standards do they have for vehicle emissions? Any other environmental policies related to transportation?
Week 5	Energy: What share of the energy used is for transportation? What sources of energy (fuels) are used for transportation? Are there fuel economy policies? Other energy-related transportation policies or programs?
Week 6	Safety: What are the safety problems? How significant? Intelligent Transportation Systems: Are they doing anything? What?
Week 7	Transit: What transit is provided? Do people ride? How is it funded? Any policies related to Transportation Demand Management? Any carsharing?

Week 8	Bicycling & Walking: How much is going on? Equity: What are the issues? Telecommunications: Anything going on?
Week 9	Land Use: Describe the land use (e.g. density) How is land use planning integrated with transportation?
Week 10	Pricing: Do they price transportation facilities? Describe. Are they thinking about it?

COURSE WEB SITE

There is a WebCT web site for the course. You must have an ODIN account to access WebCT. WebCT course sites can be accessed at *webct.pdx.edu*. If you're registered for the class and have an ODIN account, you'll be added to the course web site automatically. I will rely on the web site extensively for mail messages, announcements, updates, and additional information. The web links for the readings in the syllabus will work from the site.

Bulletin Boards: The boards are a place to bring up relevant topics and issues. Undoubtedly during the quarter you will come across articles in the newspaper or other information that relates to the class. Please share these with everyone via the web site. Please follow proper "netiquette" and good taste.

Lectures: I will try to post copies of lecture slides here a day or two after class.

Readings: I will be posting readings that aren't from the two books here.

Calendar: Just what it sounds like. Important deadlines and other events will show up here.

Grading: WebCT has a place for the instructor to record grades, where a student may view his/her grades to date. I'll try my best to keep this updated during the quarter.

Mail: WebCT has a separate mail system – separate from your e-mail account. I will use this system to contact students. If you don't check WebCT often, you should have this mail forwarded to your regular e-mail address.

OTHER STUFF

Transportation Seminar

I encourage you to attend the weekly Transportation Seminar held on Fridays, noon to 1:30 pm in 204 Urban Center. The schedule of speakers and topics is at <http://www.cts.pdx.edu/seminars.htm>. You can also watch the seminars on-line, live or archived. You may also take the seminar for one-unit of credit (USP 407/507).

COURSE SCHEDULE AND REQUIRED READINGS

Readings

Most of the required readings are from two books:

Anthony Downs, *Still Stuck in Traffic*, Brookings Institution: Washington, DC, 2004.

Katz, Bruce and Robert Puentes (editors), *Taking the High Road*, Brookings Institution: Washington, DC, 2005.

Both books should be available at the PSU bookstore.

To supplement these books, there are articles that will either be on the WebCT site or another web site (linked). There are also optional readings that truly are optional. They are there if you want to learn more about a topic.

Date	Topics	Readings
Week 1 1/12	Travel & transportation trends	U.S. Department of Transportation, Bureau of Transportation Statistics, <i>The Changing Face of Transportation</i> , BTS00-007, Washington, DC. Chapter 1, pp. 1-1 – 1-33. Available on-line at http://www.bts.gov/publications/the_changing_face_of_transportation/ or order a free copy at https://www.bts.gov/pdc/index.xml Downs, Chapter 16
	Policy	Dittmar, Hank, "A Broader Context for Transportation Planning, Not Just An End In Itself," <i>Journal of the American Planning Association</i> , 61(1): 7-13, 1995. Katz, Chapter 6 Altshuler (handout)
Week 2 1/19	Finance	Katz, Chapters 3 & 4
	Costs	Delucchi, Mark, "Total Cost of Motor-Vehicle Use," <i>Access</i> , no. 8, pp. 7-13, Spring 1996.
Week 3 1/26 paper proposals due	Congestion	Downs, Chapters 1-8 Katz, Chapter 7 Taylor, Brian D. "Rethinking Traffic Congestion," <i>Access</i> , 21: 8-16, Fall 2002. http://www.uctc.net/access/21/Access_21_03 - Rethinking Congestion.pdf Economic Development Research Group, <i>The Cost of Congestion to the Economy of the Portland Region</i> , http://www.metro-region.org/library_docs/trans/cost_of_congestion_report_final_1_.pdf

Week 4 2/2	Environmental Issues Air quality Global warming	US EPA, <i>Indicators of the Environmental Impacts of Transportation</i> , October 1999 http://www.epa.gov/otaq/transp/99indict.pdf pp. 1-34 Howitt, Arnold M. and Alan Altshuler, "The Politics of Controlling Auto Pollution," in Gomez-Ibanez, Jose, William B. Tye, and Clifford Winston (eds.), <i>Essays in Transportation Economics and Policy</i> , Brookings Institution Press: Washington, DC, 1999. Chapter 7, pp. 223-255. Sperling, Daniel, "The Price of Regulation," <i>Access</i> , No. 25, Fall 2004.
	Wildlife	NCHRP, <i>Interaction Between Roadways and Wildlife Ecology: A Synthesis of Highway Practice</i> , Transportation Research Board, 2002. http://trb.org/publications/nchrp/nchrp_syn_305.pdf All, but you can skim chapters 6, 9, 10
Week 5 2/9	Energy	Greene, Chapter 10 in Susan Hanson and Genevieve Giuliano (editors), <i>The Geography of Urban Transportation</i> , Third Edition, Guilford Press: New York, 2004 Watch (live or archived) Prof. Dan Sperling's seminar on Friday 2/3 at noon.
	Alternative Fuels	Rubin, Jonathan, "Driving to New Sources of Transportation Energy," <i>TR News</i> , no. 226, pp. 16-23, May-June 2003. Ogden, Joan, "The Transition to Hydrogen," <i>Access</i> , No. 27, Fall 2005.
Week 6 2/16 paper updates due via email	Safety Guest: Prof. Chris Monsere	U.S. Department of Transportation, Bureau of Transportation Statistics, <i>The Changing Face of Transportation</i> , BTS00-007, Washington, DC. Chapter 3, pp. 3-1 – 3-28. See links from first week
	Intelligent Transportation Systems Guest: Prof. Robert Bertini	Shladover, Steven E., "What If Cars Could Drive Themselves?" <i>Access</i> , no. 16, pp. 2-7. Spring 2000. http://www.uctc.net/access/access16.pdf Shladover, Steven E., "Introducing Intelligent Transportation Systems," <i>TR News</i> , 218: 4-9, January-February 2002. Sussman, Joseph M, "Intelligent Transportation Systems at the Turning Point," <i>TR News</i> , 218: 10-17, January-February 2002. Bottom, Jon, Masroor Hasan, and Jane Lappin, "Traveler Response to Information," <i>TR News</i> , 218: 25-30, January-February 2002.

Week 7 2/23	Transit	<p>Downs, Chapter 9 Katz, Chapter 10 Kain, John F., "The Urban Transportation Problem: A Reexamination and Update," in Gomez-Ibanez, Jose, William B. Tye, and Clifford Winston (eds.), <i>Essays in Transportation Economics and Policy</i>, Brookings Institution Press: Washington, DC, 1999. Chapter 11, pp. 359-401.</p> <p>Cervero, Robert, "Informal Transit: Learning from the Developing World," <i>Access</i>, Spring 2001, pp. 15-22. http://www.uctc.net/access/access18.pdf</p>
	Transportation Demand Management	<p>Downs, Chapter 11 Optional: Meyer, Michael, D., "Demand management as an element of transportation policy: using carrots and sticks to influence travel behavior," <i>Transportation Research Part A</i> 33(1999): 575-599.</p>
	HOV Lanes	<p>Optional: Cervero, Robert, "Reviving HOV Lanes," <i>Transportation Quarterly</i>, 53(4): 67-81, 1999.</p> <p>Optional: <i>TR News</i>, May-June 2001 (series of articles on HOV facilities) Turnbull, Kathryn, "Evolution of High-Occupancy Vehicle Facilities" Wellander and Leotta, "Gauging the Effectiveness of High-Occupancy Vehicle Lanes" Spielberg and Shapiro, "Slugs and Bodysnatchers" Orski, "Carpool Lanes: An idea whose time has come and gone" McGhee, "High Occupancy Vehicle Lanes"</p>
	Carsharing	<p>Shaheen, Susan, "Pooled Cars," <i>Access</i>, Fall 1999, pp. 20-25. http://www.uctc.net/access/access15lite.pdf</p>
Week 8 3/2	Bicycling & Walking	<p>Pucher, John and Lewis Dijkstra, "Making Walking and Cycling Safer: Lessons from Europe," <i>Transportation Quarterly</i>, 54(3): 25-50, 2000.</p> <p>Optional: Pucher, John, Charles Komanoff, and Paul Schimek, "Bicycling renaissance in North America? Recent trends and alternative policies to promote bicycling," <i>Transportation Research Part A</i> 33(1999): 625-654.</p>
	Telecom-munications	<p>Helling, Amy, and Patricia L. Mokhtarian, "Worker Telecommunication and Mobility in Transition: Consequences for Planning," <i>Journal of Planning Literature</i>, 15(4):511-525, 2001.</p>
	Equity, Social Impacts, Environmental Justice	<p>Katz, Chapters 8 and 9 Optional: Gottlieb, Robert, and Andrew Fisher, "Food Access For the Transit-Dependent," <i>Access</i>, Fall 1996, pp. 18-20.</p>

Week 9 3/9	Land Use	Downs, Chapters 12-15 Giuliano, Genevieve, "The Weakening Transportation-Land use Connection," <i>Access</i> , Spring 1995, pp. 3-11. Cervero, Robert and John Landis, "The Transportation-Land Use Connection Still Matters" <i>Access</i> , Fall 1995, pp. 2-10. Levine, Jonathan, "Access to Choice," <i>Access</i> , Spring 1999, pp. 16, 18-19 http://www.uctc.net/access/access14.pdf
Week 10 3/23 papers due	Pricing	Downs, Chapter 10 Sorenson, Paul and Brian Taylor, "Paying For Roads New Technology For An Old Dilemma," <i>Access</i> , No. 26, Spring 2005. <hr/> <i>Optional:</i> Shoup, Donald, "The High Cost of Free Parking," <i>Access</i> , no. 10, pp. 2-9, Spring 1997. <hr/> Conclusions
Week 11 3/23	Final	