RUTGERS UNIVERSITY

BLOUSTEIN SCHOOL OF PLANNING AND PUBLIC POLICY

970:555 **Prof. John Pucher**
Urban Transport Policy **Autumn 2009**
Wednesdays, 10:00-12:30

COURSE DESCRIPTION

This course provides an overview of travel trends, problems, alternative solutions, and government policies in urban transport, focusing mainly on the United States. We survey the characteristics of the present urban transport system and examine historical developments in both transport and land use. We analyze several specific problems of the present car-dominated system: energy use, equity, congestion, air pollution, safety, and urban sprawl. We also examine problems of public transportation, particularly the fiscal crisis of transit and the need to improve service quality. We evaluate the relative effectiveness and cost of various proposed solutions: e.g. traffic management, business regulation, pricing and taxation policies, improved technology, increased transit service, widespread adoption of carpooling and vanpooling, consumer regulation, traffic calming, better facilities for pedestrians and cyclists, and limited investment in highway infrastructure. The political/institutional context of urban transportation (legislation, subsidies, regulations, and planning guidelines) has changed dramatically in recent years. The evolution of that political/institutional context will be presented, along with discussion of its consequences for the future of transportation planning.

Most of the course will focus on the United States since my spring semester seminar (970:557) is a comparative analysis of urban transportation that examines Canada, Europe, and the rest of the world. Nevertheless, comparisons will be made to other countries throughout the semester, since international analysis of urban transport is my main research area. This course will deal almost exclusively with urban transport in developed countries, while my spring seminar includes developing countries (as well as developed OECD countries) as part of a comprehensive international comparison.

The overall course materials listed below have been chosen deliberately to be as non-technical as possible so that they will be comprehensible and interesting even to those students without any background in transportation.

There are various written assignments and oral presentations required for the course:

- ***major term paper*** that will be presented at the end of the semester**.**
- ***joint powerpoint presentation of special topic*** together with other students, in groups of 3-4 students
- ***book review*** of one of the books listed below for consideration, to be discussed in class during a week with an appropriate topic. Joint presentations of some sort would be made by groups of students choosing the same book.
- ***media article review***: Analysis of some current newspaper or magazine article relevant to the topic for the week

TERM PAPER: The term paper may focus on urban transportation in a particular neighborhood, city or metropolitan region (or specific local project), or it may contrast urban transportation systems, problems, solutions, and institutional arrangements in different cities or in different countries. OR you can focus on a specific type of technology, policy issue, or problem instead of a particular city or country: such as BRT or LRT, or congestion pricing, or HOV lanes, or integration of cycling with public transit, or whatever. Do whatever interests you! **Your papers should be specific, focused, and not general overviews of broad topics.** In many cases, students have worked together on joint or coordinated term papers and presentations, but such joint papers must be more extensive (or intensive) and require more effort than a normal paper. Students will be asked to make a Powerpoint presentation of the key aspects and main findings of their term papers at the end of the semester. The term paper is NOT something that you postpone until 2 weeks before the end of the semester and then rush to throw something together in the last two weeks. It should reflect truly a full semester's worth of thought, research, and effort. Each student will also be presenting her/his paper during the last two weeks of the course. The PPT handouts (slide printouts) will also be turned in, along with the written paper.

BOOK REVIEW: Every student will be expected to read ONE of the 7 books listed below, write a 3-4 page (double-spaced) review of the book, and then make a 5-10 minute class presentation about the book. Since several students will probably be reading some of the same books, a joint presentation for that book will be most appropriate, but each student must write his/her own independent review. I hope that having several students present on the same book will generate more discussion than if only one student presents on any particular book. The total length of the presentation will depend on the number of students. Students will be expected to coordinate their discussions of the same book. Students can certainly have different opinions about the book and can even sharply disagree about their assessment of the book. But there should first be some sort of summary of that the book is about and what its main thesis and conclusions are. Then you should critique the book, examining its pros and cons, strengths and weaknesses. The Norton book is available for purchase at the Rutgers University Bookstore, but all the other books can be ordered directly via Internet sites like Amazon.com, or Barnesandnoble.com. If there is another book you would prefer reviewing, which is not listed below, please discuss that with me, as it might be possible to read and review books other than those listed below:

1) Norton, P. 2008. *Fighting Traffic: The Dawn of the Motor Age in the American City*. MIT Press. (~$30)
2) Kay, Jane Holtz. 1998. *Asphalt Nation: How the Automobile Took over America, and How We Can Take it Back.* University of California Press. (~$20)
3) Dunn, J. 1998. *Driving Forces: The Automobile, Its Enemies, and the Politics of Mobility*. Brookings Institution. (~$20)
4) Levine, J. 2005. *Zoned-out: Regulation, Markets, and Choices in Transportation and Metropolitan Land Use*. Resources for the Future. (~$27)
5) Ewing, R. et al. 2008. *Growing Cooler: The Evidence on Urban Development and Climate Change*. Urban Land Institute. (~$32)
6) Mapes, J. 2009. *Pedaling Revolution: How Cyclists are Changing American Cities*. Oregon State University Publishing. (~$20)
7) Sperling, D. 2009. *Two Billion Cars: Driving Toward Sustainability.* Oxford University Press. (~$25)

(*Important: Use the WIKI took on the Sakai website to sign up for the book you want to review. Just list your name under the title of the book you choose.)*

JOINT POWERPOINT PRESENTATION: As noted above, students will be asked to form groups and make joint presentations on some specific subtopic within a week's general topic. These joint powerpoint presentations would be by groups of 3-4 students. Students will be asked to turn in the PPT slide printouts (handouts), but no paper is required. Some possible topics might include:

- For the week on land use and urban development: transit-oriented development, urban growth boundaries, smart growth, new urbanism, etc
- For the week on energy: the potential of electric cars, hybrid cars or alternative fuels
- For the week on the environment: zero emissions vehicles, ultra low emissions vehicles, climate change, improved technology for gasoline engines, peak oil and limited petroleum resources, etc.
- For the week on congestion: congestion pricing, traffic management or transportation demand management strategies
- For the week on parking policy: cashing out free parking, charging market based parking rates for on-street parking, restricting parking supply, taxing free parking as fringe benefit
- For the week on safety: Safe Routes to School, improved car design, issue of bike helmets, crosswalk enforcement, complete streets, safer intersection design, etc
- For the week on public health: trends in obesity and relationship to car dependence; childhood obesity as special problem related to lack of active transport; active travel within buildings (stairs instead of elevators), etc.
- For the weeks on cycling and walking: bike sharing programs, cycle tracks, car-free zones, traffic calming, tax benefits for cyclists, etc.
- For the weeks on public transport: BRT and LRT systems in North America; ITS and public transit; innovations in transit service distribution, advances in public transport

technology

(*Important: Use the WIKI tool on the Sakai website to sign up for your PPT group presentation, listing your names under the topic and indicating the specific focus of your joint talk.*)

CURRENT MEDIA REPORTS ON URBAN TRANSPORT POLICY ISSUES: I am asking all students to keep an eye out for interesting media reports dealing with the range of issues we are examining this semester. If you find something really interesting and important in the newspaper, magazines, Internet blogs, etc., please bring in the article and be prepared to tell us something about it, very briefly, and how it relates to the course discussions and readings. Bring in a copy of the article and a short one-page of half-page write-up of your reaction to the article, and why you think it's important or interesting. Each student will be asked to do one of these during the semester, and I would expect maybe a 5 minute discussion, although it could also be longer, depending on general interest among the other students.

Students will be expected to participate actively in class discussion and should plan to do the required readings in advance of class meetings in order to be able to participate effectively. Your contributions to class discussions will influence the final course grade. It is absolutely essential that, at a minimum, students read the starred entries on this list. The material in these books and articles comprises the core of information for the course and will form the basis for class discussions. Other readings are recommended but not crucial; students should use their own discretion, depending on interest, topic, and time available. Those readings are listed primarily for your reference in case you are interested in pursuing several of the topics areas in more depth. The choice is up to you.

Wherever possible, I am indicating which readings can be directly accessed via the internet, and I will also be posting some readings as PDF files in the Resources section of the Sakai website for this course as well as on the common:knight S-drive of the Bloustein School's main computer server, in the folders 555f08 and Intertransport. So please check on Sakai and the S-Drive for postings.

Almost all journal articles are freely accessible via the RU Library's internet site for electronic journals.
http://www.libraries.rutgers.edu/rul/rr_gateway/ejournals/ejournals.shtml

You will also be able to access most of my own publications and some PPT talks directly from my Bloustein School webpage (under the tabs for publications and presentations):
http://www.policy.rutgers.edu/faculty/pucher.html

We will be using two textbooks for the course, and they are both available for purchase at the Rutgers University Bookstore in downtown New Brunswick, or you can purchase them online at Amazon.com, Barnesandnoble.com, or any other online bookseller:

***Susan Hansen and Gen Giuliano, eds. The Geography of Urban Transportation (New York: Guilford Publications, 3rd Edition, 2004), an excellent book of readings, although it is now a bit out of date.**

***Downs, Still Stuck in Traffic (Brookings, 2004), devoted mainly to traffic congestion issues, but with very good, insightful analysis of travel trends and transport policies in general. A superb book, with many useful discussions and analysis of US travel behavior, land use and transport policies, trends, etc. This book should be carefully read in its entirety by everyone.**

I have also ordered the Peter Norton book at the Rutgers University Bookstore, but you only need to buy it if you choose that book for your book review:

Peter Norton, Fighting Traffic (MIT Press, 2008), which examines the conversion of walking and transit oriented cities to car-oriented and car-dominated cities over the period of roughly 1900 to 1950, and the possibility of turning things around now, to give the city streets back to human beings (pedestrians and cyclists) and taking them back from cars and trucks.

There are two other books that might be interesting and useful for some students, especially those of you interested in international comparisons, and I use them extensively in my spring course on international transport policy:

David Banister, Unsustainable Transport: City Transport in the 21st Century. London, UK: Routledge Press, 2005. This book is posted as a PDF file on the S drive, common:knight, in the folder called 555fall08, within the subfolder called Intro and Overview Mobility and Sustainability, stored as the file called Unsustainable Transport, a PDF file. It is also posted on the Sakai website for this course.

Pucher and Lefevre, Urban Transport Crisis in Europe and North America (London, England: Macmillan Press, 1996), comparative analysis of travel behavior, transport systems and policies in U.S., Canada, and Europe, out of print but on reserve at Alexander Library. ALL chapters have been scanned into the folder for my international transport class, s-drive, common knight, folder INTERTRANSPORT.

IMPORTANT: Almost all of the journals listed below are available in electronic format via the Rutgers University Libraries website: http://www.libraries.rutgers.edu/rul/rr_gateway/ejournals/ejournals.shtml.

The main transportation journals (E=electronic access via RU library website):

Access (E) accessible at: http://www.uctc.net/access/access.asp

Transportation Research Record (E)	(Library of Science and Medicine, Busch Campus)
Transportation Quarterly	(Alexander Library, College Avenue Campus)
Journal of Transport Economics and Policy (E)	(Alexander Library, College Avenue Campus)
Transportation Research (E) Series A-F	(Library of Science and Medicine, Busch Campus)
Transportation (E)	(Alexander Library, College Ave Campus)
Transport Reviews (E)	(Alexander Library, College Ave Campus)

The Journal of the American Planning Association (E)

To retrieve PDF files of any JAPA article, just go to the libraries homepage <http://www.libraries.rutgers.edu/>, choose "search catalogs" from the left menu, choose IRIS, and type in the title. It comes up with 8-9 locations for JAPA including a link to the ProQuest electronic gateway. There you re-enter the title, and it takes you right to the downloadable pdfs of all issues of JAPA. Almost everyone has had trouble in the past accessing JAPA, but Clint Andrews assures me that this works very well!!

The Journal of Transport Geography (E)

The Journal of Transportation and Statistics (E)

Transport Policy (E)

World Transport Policy and Practice (E) accessible at: www.ecoplan.org

For anyone doing a research paper, the first step should usually be a thorough review of these journals for the past 5 or so years to determine how much existing information will be available for use in your paper. The best way to find relevant literature is to check with the free transportation literature search engine of the U.S. Department of Transportation, called **TRIS** (Transportation Research Information Service) which is available on the BTS website: www.bts.gov. That website is a wealth of information with oodles of links to other websites as well. The statistical portion of that website is: www.transtats.bts.gov. Or just go to: http://ntl.bts.gov/index.cfm, and from there you can reach both **TRIS**, the literature search

engine, and **TranStats**, the nationwide statistics on all aspects of transportation.

There are many publicly accessible websites that provide a wide range of information on almost every aspect of transportation:

http://tran.library.northwestern.edu/ (TranWeb from Northwestern University)
http://ntlsearch.bts.gov/tris/index.do (Transportation Research Information Services)
http://www.dot.gov/ United States Department of Transportation (DOT)
http://www.bts.gov/ BTS (Bureau of Transportation Statistics)
http://www.fta.dot.gov/ FTA (Federal Transit Administration)
http://www.fhwa.dot.gov/reauthorization/safetea.htm SAFETEA - Site
www.apta.com (American Public Transportation Association)
www.fhwa.dot.gov (Federal Highway Administration)
http://apta.com/government_affairs/safetea_lu/ (Many links to SAFETA-LU)
http://www.vtpi.org (Victoria Transport Policy Institute)
http://www.nhtsa.dot.gov (National Highway Traffic Safety Administration)
http://www.cdc.gov/injury/wisqars/index.html (CDC Injury Statistics Reporting System)
http://www.brookings.edu/metro.aspx (Brookings Institution)
http://www.rff.org/Transportation.cfm (Resources for the Future (RFF))
http://cta.ornl.gov/data/index.shtml (Transportation and Energy Data Book, DOE)
http://nhts.ornl.gov (National Household Travel Survey)
http://ec.europa.eu/transport/index_en.html (EU directorate general transportation website)
http://www.internationaltransportforum.org/ (previously known as CEMT)
http://www.epa.gov/ttn/chief/trends/index.html#tables (National Emissions Inventory (NEI) Air Pollutant Emissions)

IMPORTANT DATES TO REMEMBER.....

September 23	Turn in a memo outlining your proposal for a term paper. This can be turned in earlier if you wish to get comments sooner.
October 21	Turn in outline and bibliography for your term paper.
December 3	Term paper due. **Late papers will be accepted up to one week late but with an increasing grade penalty for every day overdue**. **No papers will be accepted at all after Dec. 10.**

RELATIVE WEIGHT OF YOUR ASSIGNMENTS:

In calculating your grade at the end of the semester, the assignments will be weighted in the following manner:

1) Book review	**15%**
2) Joint powerpoint presentation on special topic 15%	
3) Media article discussion	**10%**
4) Overall attendance and class participation	**10%**
5) Final term paper and PPT presentation	**50 %**
TOTAL	**100 %**

NOTE: The following reading list may be supplemented some weeks by additional, more current readings on particular topics.

TOPIC OUTLINE AND READINGS

Starred selections within the list below are required reading. Remaining citations are suggested for those students wishing to read further in any of these areas of urban transportation.

Week 1. Introduction, Course Overview, Semester Plan, and Brief Discussion of Sustainability and Accessibility.

David Banister, **Unsustainable Transport**, chs. 1-4 (skim) (posted on the S-drive Knight:Common under INTERTRANS and also posted on Sakai resources for this course under Sustainability)

David Banister, John Pucher and Martin Lee-Gosselin, "Making Sustainable Transport Politically and Publicly Acceptable: Lessons from the EU, US and Canada", accessible at: http://policy.rutgers.edu/faculty/pucher/Acceptability%20EU%20CAN%20USA.pdf

The World Bank, Sustainable Transport: Priorities for Policy Reform, Washington, D.C. 1996. (Scanned into the INTERTRANS folder on the S-drive Knight:Common)

Week 2. History of the Development of Urban Transportation System and Their Impact on Urban Form

*Peter Muller, "Transportation and Urban Form: Stages in the Spatial Evolution of the American Metropolis," in Hanson, Geography, pp. 59-85.

*Video shown in class on evolution of public transport systems and land use patterns

Week 3: Recent Trends in Modal Choice, Urban Spatial Patterns, and Their Interaction; Characteristics of the Current Urban Transportation System

*Susan Hanson, "Context of Urban Travel: Concepts and Recent Trends," in Hanson and Giuliano, pp. 3-30.

*Pisarski, A. 2007. *Commuting in America III: The Third National Report on Commuting Patterns and Trends*. Transportation Research Board, 2007. Short summary. Accessible at: http://onlinepubs.trb.org/onlinepubs/trnews/trnews247CIAIII.pdf or listen to podcast accessible at: http://www.trb.org/news/blurb_detail.asp?id=6699 (click on podcast)

*Pucher and Renne, "Socioeconomics of Urban Travel," Transportation Quarterly, summer 2003, accessible at:
http://policy.rutgers.edu/faculty/pucher/TQPuchRenne.pdf

*I am also asking **ALL** of you to visit the BTS website (www.bts.gov) and/or transtats website (www.transtats.bts.gov) and just check out the range of ***trend statistics*** available at those sites: highway use, car ownership, transit use, etc.

Week 4: Land-Use and Urban Development
(Reviews of the Levine book due this week)

*Susan Handy. 2005. Smart growth and the transportation - Land use connection: What does the research tell us? Accessible online at:
http://repositories.cdlib.org/cgi/viewcontent.cgi?article=2410&context=postprints

Susan Handy. 2004. "Toward an Accessibility Framework for Transportation Policy," PPT talk posted on the Sakai website in the folder "Intro, Accessibility, and Sustainability" to be shown in class.

Handy, S. 2002. *Accessibility vs. Mobility.* Accessible online at:
http://www.des.ucdavis.edu/faculty/handy/ECMT_report.pdf

*Alternative views of sprawl, a two-part discussion (pro and contra) in the winter 1997 issue of the Journal of the America Planning Association (available as electronic journals under JAPA via RU libraries website, also posted on Sakai):

*P. Gordon and H. Richardson. 1997. "Are Compact Cities a Desirable Planning Goal?" *Journal of the American Planning Association*, Winter 1997, pp. 95-106.

*R. Ewing, 1997. "Is Los Angeles-Style Sprawl Desirable?" *Journal of the American Planning Association*, Winter 1997, pp. 107-126.
(I will ask all students to take a side in this debate and be prepared to defend on view or the other. So you must come to class prepared to actually debate!)

Newman and Kenworthy, "Promoting Sustainable Urban Change," ch. 6, and "Ethics, Spirituality, and Community in the Sustainable City," ch. 7

*Giuliano, “Land Use Impacts of Transportation Investments: Highway and Transit,” in Hanson and Giuliano, Geography, pp. 237-273.

Weeks 5 and 6: Transportation, Energy, and the Environment
(Reviews of the Ewing and Sperling books due this week)

*David Greene, "Transportation and Energy," in Hanson and Giuliano, Geography, pp. 274-293.

*Christine Bae, "Transportation and the Environment," in Hanson and Giuliano, Geography, pp. 356-381.

*Newman and Kenworthy, Sustainability and Cities, ch. 3 (posted as PDF on S-Drive, common:knight in INTERTRANS folder)

*Peter Newman and Jeffrey Kenworthy, "Gasoline Consumption and Cities: A Comparison of U.S. Cities with a Global Survey " Journal of the American Planning Association, Winter 1989, pp. 24-36; and reply by Gordon and Richardson, JAPA, Summer 1989, pp. 342-345.

*I am asking you to visit the BTS website (www.bts.gov) again, and check out the whole range of energy and environmental stats available in the National Transportation Statistics of that website, and the even more comprehensive website of the US Dept of Energy: www-cta.ornl.gov/data (for the 2002 edition of the Transportation Energy Data Book). See also the EPA’s website on national trends in transportation emissions and ambient air quality in US cities:
http://www.epa.gov/ttn/chief/trends/trends98/
http://www.epa.gov/ttn/chief/trends/index.html#tables

Also just take a look at the Litman website on the environment:
http://www.vtpi.org/0_sust.htm

Week 7. Congestion and Parking
(Review of Norton book due this week)

*Downs, **Still Stuck in Traffic**, entire book

*Texas Transportation Institute. 2009. *The 2009 Urban Mobility Report.* TTI. Accessible online at: http://tti.tamu.edu/documents/mobility_report_2009_wappx.pdf

*Everyone should visit the BTS website, National Transportation Statistics, section on congestion and economics costs, and also the Litman website (www.vtpi.org), which has extensive analysis of congestion costs. You might also visit the Texas Transportation Institute’s website, which has all sorts of publications on congestion. TTI publishes the most widely used estimates on congestion costs for US cities: http://tti.tamu.edu.

Choose a couple of the following articles on parking to read:

*Donald Shoup, "Evaluating the Effects of Cashing out Employer-paid Parking: Eight Case Studies," ***Transport Policy***, Vol. 4, No. 4, 1997, pp. 201-216.

*Donald Shoup, "The Trouble with Minimum Parking Requirements," ***Transportation Research A,*** Vol. 33, 1999, pp. 549-574.

*Donald Shoup, "The High Cost of Free Parking," ***Journal of Planning Education and Research***, Vol. 17, No. 1, fall 1997, pp. 3-20.

*Donald Shoup, "An Opportunity to Reduce Minimum Parking Requirements," ***Journal of the American Planning Association***, 1994, Vol 61, No. 1, pp. 14-28.

*Richard Wilson, "Suburban Parking Requirements: A Tacit Policy for Auto Use and Sprawl," ***Journal of the American Planning Association***, 1995, Vol. 61, No. 2, pp. 29-42.

Week 6: Transportation Safety
(We will probably only need half a week for this, since we also cover safety in the ped/bike section, but it gives us leeway if we fall behind in the schedule.)

Richard A. Retting, Susan A. Ferguson, and Anne T. McCartt, "A Review of Evidence-Based Traffic Engineering Measures to Reduce Pedestrian-Motor Vehicle Crashes," Amer. J of Public Health, September 2003, Vol. 93, No. 9 (check out RU libraries website for electronic journals)

*Again, I am asking you to check out the BTS website (www.bts.gov), National Transportation Statistics, section on SAFETY, and ALSO to check out the US DOT's website of the National Highway Safety Traffic Administration: http://www.nhtsa.dot.gov. In both cases, please examine the range of statistics available and the trends in traffic deaths and injuries by mode of transport. On the NHTSA website, you'll need to pull down statistics one category at a time in their Accident Report section, mode by mode, I think.

IMPORTANT: The very best international website for traffic deaths, injury data, safety rates, for different countries is from the International Road Traffic Accident Database:
http://www.bast.de/htdocs/fachthemen/irtad/english/englisch.html
Everyone should carefully examine this website for differences in traffic safety rates, trends, etc. among countries and for different modes of travel.

Weeks 8 and 9: Bicycling and Walking
(Reviews of the Mapes book due this week)

*Pucher, Dill, and Handy, "Infrastructure, Programs and Policies to Increase Bicycling: An International Review," prepared for the Active Living Research Program of the Robert Wood

Johnson Foundation, ***Preventive Medicine***, Vol. 48, No. 2, February 2010, in press. (I will post this as a PDF file on the Sakai website in the Bicycling and Walking folder.)

*Pucher, Komanoff, and Schimek, "Bicycling Renaissance in North America," Transportation Research, September 1999, ***Transportation Research***, Vol. 33A, Nos. 7/8 special issue on transport policy in international perspective, available on Rutgers website: http://policy.rutgers.edu/faculty/pucher/NAmBIKE.PDF

*Pucher and Dijkstra, "Making Walking and Cycling Safer: Lessons from Europe," ***Transportation Quarterly***, summer 2000. Posted on my RU webpage: http://policy.rutgers.edu/faculty/pucher/MakingWalkingAndCyclingSafer_TQ2000.pdf

*Peter Jacobsen, "Safety in Numbers," Injury Prevention, 2003, posted as PDF file on the common:knight drive, folder for 555 (called "safe numbers").

*Pucher and Buehler, "Making Cycling Irresistible: Lessons from the Netherlands, Denmark, and Germany," ***Transport Reviews***, July 2008. Posted on my RU webpage: http://policy.rutgers.edu/faculty/pucher/Irresistible.pdf

Pucher, "Bicycling Boom in Germany: A Revival Engineered by Public Policy," ***Transportation Quarterly***, Autumn 1997. Posted on my RU webpage: http://policy.rutgers.edu/faculty/pucher/BicyclingBoomInGermany_TQ1997.pdf

"Copenhagen: City of Cyclists," segment of DVD video from ***Contested Streets***, Transportation Alternatives, NYC.

Tolley, ed., Sustainable Transport, 2003, about 40 articles on all conceivable aspects of bicycling and walking trends and policies in Europe and North America. For those whose main interest is walking and cycling.

Check out the website of the National Walking and Bicycling Center: http://www.bikewalk.org/index.htm. A huge range of information on walking and cycling issues as well as active living programs.

Group presentations by students on some specific aspect of bicycling or walking (bike sharing programs, ciclovias, car-free districts, traffic calming, etc.)

Week 10: Public Transport

*Pucher, J. 2004, "Public Transportation," in Hanson, *Geography*, pp. 199-236.

*Pucher, J. 2002 "Renaissance of Public Transport in the USA," Transportation Quarterly, winter

2002, accessible at: http://policy.rutgers.edu/faculty/pucher/TQPDF.pdf

*Brian Taylor, "Geography of Urban Transportation Finance," in Geography, pp. 294-331.

Group presentations by students on Light Rail Transit (LRT) and Bus Rapid Transit (BRT)

Week 11: Public Health Impacts of Transportation and Land Use

*Transportation Research Board. 2005. ***Does the Built Environment Influence Physical Activity? Examining the Evidence***. Washington D.C. Report can be downloaded at: http://trb.org/news/blurb_detail.asp?id=4536 (Please just skim this, as it is a very long report.)

*Basset, D. et al. (2008). "Walking, Cycling, and Obesity Rates in Europe, North America, and Australia." ***Journal of Physical Activity and Health***. (posted on my RU webpage under publications)

*John Pucher, and Lewis Dijkstra "Promoting Safe Walking and Cycling to Improve Public Health: Lessons From the Netherlands and Germany," ***American Journal of Public Health***, Sept. 2003, posted on my RU webpage under publications.

*Ewing R, et al. (2003) Relationship between urban sprawl and physical activity, obesity, and morbidity. ***American Journal of Health Promotion,*** 18: 47-57.

Boarnet, M. and Crane, R. (2001) The influence of land use on travel behavior: specification and estimation strategies, ***Transportation Research part A***, 35(9): 823-845.

Frumkin, H. 2002 Viewpoint: Urban sprawl and public health. In: *Public Health Reports*: Volume 117, pp. 201-217. Accessible online at: http://www.cdc.gov/healthyplaces/articles/Urban%20Sprawl%20and%20Public%20Health%20-%20PHR.pdf

Thunderhead Alliance. 2007. "Benchmarking Report: Walking and Cycling in the U.S." Accessible online at: http://www.thunderheadalliance.org/site/index.php/site/comments/2007_benchmarking_report/

*Special September 2003 issue of the **American Journal of Public Health** (vol. 93, no. 9) devoted exclusively to the public health impacts of the physical environment, especially of transport and land use patterns, on public health (available as electronic journal through Rutgers University website). Try to read at least a few of the following articles:

Robert Cervero and Michael Duncan, "**Walking, Bicycling, and Urban Landscapes: Evidence from the San Francisco Bay Area"**

Lyson L. Geller, "**Smart Growth: A Prescription for Livable Cities"**

Reid Ewing, Richard A. Schieber and Charles V. Zegeer, "**Urban Sprawl as a Risk Factor in Motor Vehicle Occupant and Pedestrian Fatalities"**

Kevin M. Leyden, "**Social Capital and the Built Environment: The Importance of Walkable Neighborhoods"**

Brian E. Saelens, James F. Sallis, Jennifer B. Black, and Diana Chen, "**Neighborhood-Based Differences in Physical Activity"**

ALSO: See the following two PDF files of articles by Reid Ewing and the Center for Smart Growth on their detailed study of the link between obesity and suburban sprawl called "Sprawl Makes you Fat!":
http://www.smartgrowthamerica.org/report/JournalArticle.pdf
AND
http://www.smartgrowthamerica.org/report/HealthSprawl8.03.pdf

*Also in September 2003, there is a special September-October issue of the **American Journal of Health Promotion** devoted to the same topic of transport, land use, and public health. It is entitled: "Health Promoting Community Design." As the title of the issue suggests, all the articles focus on how communities can be designed in order to permit and encourage safe, feasible, and pleasant physical activity as a natural element in our daily lives. Please skim over the articles in that issue to see if anything interests you. I have the PDF of the table of contents that I will post on our course's site on the s-drive.

**FINALLY, please check out the Center for Disease Prevention and Control's website for their detailed data and programs on active living, obesity trends, need for physical exercise, etc: http://www.cdc.gov/nccdphp/dnpa/obesity/index.htm,
and the Robert Wood Johnson Foundation's website for active living communities: http://www.rwjf.org/programs/physicalActivity.jsp. Both the CDC and RWJF programs emphasize the need to redesign communities, land use, and travel behavior to encourage more physical exercise.**

Week 12. Equity

* John Pucher and John Renne, "Socioeconomics of Urban Travel," Transportation Quarterly, accessible at: http://nhts.ornl.gov/2001/Documents/Pucher-Renne-TQarticle.pdf

*D. Deka, "Social and Environmental Justice Issues in Transportation," in Hanson and Giuliano, Geography, pp. 332-355.

Check out Litman website for useful links and readings:

http://www.vtpi.org/0_equity.htm

Week 13. Politics and Public Policy: The Changing Institutional Environment of Urban Transportation and Its Impact on Transportation Planning
(Reviews of the Dunn and Kay books due this week)

*Wachs, "Reflections on the Planning Process," in Hanson and Giuliano, pp. 141-162.

*Hansen and Guiliano, "Managing the Auto," in Hanson and Giuliano, Geography, pp. 382-404.

*David Banister, John Pucher and Martin Lee-Gosselin, "Making Sustainable Transport Politically and Publicly Acceptable: Lessons from the EU, US and Canada", accessible at: http://policy.rutgers.edu/faculty/pucher/Acceptability%20EU%20CAN%20USA.pdf

Johnston, "The Urban Transportation Planning Process," in Hanson and Giuliano, pp. 115-140.

***** SAFETEA-LU: Safe, Accountable, Flexible, Efficient Transportation Equity Act, Legacy for Users: MAIN federal transportation legislation for the period 2005-2009, establishing all federal funding and regulations for surface transport in the USA. Please check out the following US DOT website for detailed information about this legislation:

http://www.fhwa.dot.gov/safetealu/
(You will find several downloadable files here, including the full text of the act, summary information, fact sheets, and funding tables, as well as special reports for each of the main modes of transport. No need to get into all the details, but you should be least familiarize yourselves with this source of info, as it is by far the most important legislation affecting transport in the USA.)

Yet another very extensive source of information on SAFETEA-LU is the website of the American Public Transportation Association, which provides every conceivable detail of the law, especially as it applies to public transport, but also provides direct links to the FHWA and FTA websites for SAFETEA-LU:

http://apta.com/government_affairs/safetea_lu/

***David Banister, **Unsustainable Transport**, chs. 1-4 (skim for intro, but will use these chapters in detail for later topics), posted as PDF file on S drive, common:knight, in folder 555fall07, subfolder Intro and Overview, as file named Unsustainable Transport.

***David Banister, John Pucher and Martin Lee-Gosselin, **"Making Sustainable Transport Politically and Publicly Acceptable: Lessons from the EU, US and Canada",** posted as Word file on S drive common:knight, in folder 555fall07, subfolder Intro and Overview, as file named Sustainability07 Banister Pucher Gosselin.

***** TERM PAPER DUE WEDNESDAY, DECEMBER 3th, regardless of whether you are presenting Dec. 3 or Dec. 10** (Late papers will NOT be accepted, as I absolutely MUST have one week to read the papers before turning in grades)

******* IN-CLASS PRESENTATIONS OF STUDENT TERM PAPERS ON DECEMBER 3 AND 10, and possibly December 17, if necessary, but that's my birthday, and I'd like to avoid holding class that day. But keep the morning of Dec. 17 free in case we need to meet them.**

****

TERM PAPER IN URBAN TRANSPORTATION POLICY ANALYSIS

****

Your most important assignment in the class is the preparation of a major term paper. Choose a topic that really interests you, and feel free to discuss this choice with the instructor before embarking on the paper. Choose a topic that is manageable. It is better to write a thorough paper on a topic that is narrowly defined, than a wide-ranging review that is shallow. There is not a required length for the paper, but it should probably be somewhere between 15-20 pages long.

In addition to discussing the topic with the instructor whenever you need to, please observe the following deadlines:

September 23 **Turn in brief proposal for paper topic**

October 21 Turn in an outline of the paper, and a preliminary bibliography.

December 3 Term paper due. Remember that late papers will **NOT** be accepted.

December 3, 10, 17 Student presentations of term paper.

Selected Previous Topics:

- Examination of jitney services in New York City, and how they serve the mobility needs of the poor and provide employment as well, as drivers and mechanics
- Impact of light rail transit line (Hudson-Bergen Line) on development along Hudson River shore in Jersey City, Hoboken, and Bayonne
- Tearing down urban freeways: experiences in US cities and potential for more
- Integration of bike and transit on NJ Transit suburban rail lines: current status and potential for improvement

- Overview of traffic calming techniques and their impact on speed and safety
- Potential of hydrogen fuels to increase energy efficiency of cars and reduce CO_2 emissions
- Overview of BRT systems in the USA, and then case study of BRT in one city, looking at costs and benefits, ridership, etc.
- Analysis of the bikeway plan for Westchester County
- The role of auto advertising in distorting American travel behavior
- Urban transportation problems and solutions in San Salvador.
- Comparison of the land-use impacts of rapid transit projects in Stockholm and San Francisco.
- The phenomenon of extremely long commutes to work in U.S., its cause, and how it is becoming more and more usual
- Transportation problems and solutions in Newark.
- History of NYC subway and its impact on urban development patterns.
- History of the Philadelphia transit system and its impact on urban development patterns.
- Analysis of the park-and-ride facility at Interchange #9 of the New Jersey Turnpike.
- History of the Erie-Lackawanna RR and its impact on land use and current problems.
- Pros and cons of Westway Project in Manhattan.
- Potential of the taxi to be a more broadly used mode of urban transportation, especially for the elderly and handicapped.
- Potential of jitney services in urban areas.
- A Marxist/radical analysis of the equity problem in urban transportation.
- Current transit problems in New Jersey and a history of the state government's reaction to them.
- Potential of electric cars.
- Land-use impacts of the Washington, D.C. Metro-rail system and the potential of value capture taxes for financing the costs of rail rapid transit construction.
- Income-redistribution impacts of the new rail rapid transit system in Atlanta.
- Potential of lanes reserved for high-occupancy vehicles to reduce congestion and save energy.
- Potential for distance-based fares on the New York subway.
- Transportation patterns of working women.
- Financing the Washington, D.C., Metro.
- Critique of American transit capital grant programs.
- Effectiveness of the Rutgers campus bus system.
- Problem of growing congestion in suburban areas and the potential of traffic management techniques for reducing this congestion.
- Potential of automated fixed guideway systems in urban areas.
- Potential of high-speed rail transportation, based on experience in France and Japan.
- Problem of crime on transit systems.
- Cost/Benefit analysis of Los Angeles rapid transit system.
- Potential of bicycling to be fully integrated into urban transportation system as practical transport mode.
- Analysis of detailed bikeway and bike route plan for Rutgers University and New Brunswick

- Role of drive-in restaurants, banks, laundries, etc. on transportation.
- Environmental problems arising from the disposal of used tires, batteries, and autos.
- The costs and benefits of air bags for auto safety.
- Technological advances in automotive fuel efficiency: past achievements and future outlook.
- Transportation themes in the films of Alfred Hitchcock.
- past and future of urban passenger ferry systems
- various papers on transportation management associations
- analysis of problem of transporting hazardous materials
- pros and cons of raising speed limit in New Jersey
- potential of battery-powered electric cars
- analysis of North Jersey Coast Line of NJ Transit
- improving pathways and other facilities for bicycle travel
- Disney World as an example of innovative, non-auto-based urban transportation systems
- recent advances in automotive safety and prospects for future improvements
- recent developments in light rail transit, cost-benefit analysis, study of where light rail transit would make economic sense, where not; whether light rail transit is more appropriate in developing countries, where funds not available for full-scale metro systems (several different paper topics here)
- advances in automotive technology to reduce air pollution emissions, progress since 1970 to 1995, and prospects for continued pollution reductions through technological advances in the future
- official EIS and the REAL environmental impacts of the widening of the NJ Turnpike
- recent experience with improving ferry service in cities as practical means of urban transport, with special emphasis on NYC
- safety impacts of raising the speed limit

- PLUS, literally hundreds of other topics I can't remember now, covering the entire range of issues, all over the world as well as right here in New Jersey

Whatever topic you choose, it is essential that the paper you write not be simply a regurgitation of class notes and required readings. It should be specific and concrete in its content, and should demonstrate a significant amount of research and thinking on areas omitted, or only briefly covered in class. You can certainly deal with a topic discussed in class, but do not simply review what we already did in class and readings. Do NOT pick a topic so broad that you cannot do justice to it; for example, do not propose a paper on the environmental impacts of transportation.

All professors at Rutgers University are required to include this statement in the syllabi for all courses:

Academic integrity

Academic honesty and intellectual integrity are fundamental to the process of

learning and to evaluating academic performance. This is the responsibility of all members of the university, and students share the responsibility for creating and maintaining an atmosphere of honesty and integrity. If you have any doubt about what constitutes academic integrity, consult http://teachx.rutgers.edu/integrity/policy.html