

**PUP 598 – Syllabus**  
**SUSTAINABLE TRANSPORTATION PLANNING**  
**(And Public Health)**

**School of Planning @ ASU**

**== Version 1.1 (January, 21 2006) ==**

**-- SPRING 2006 --**

Class schedule: Mondays 8:00-10:30 AM  
Classroom ARCH.141

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**1. BRIEF DESCRIPTION:**

This course looks at transportation planning through the lenses of the sustainable development paradigm. It assumes that transportation problems have global implications that can only be addressed with multi-level and multi-disciplinary approaches. Central to this year's seminar is the debate between the built environment and public health. Among others, we will cover the following topics: automobile dependence and oil consumption; sustainable transportation planning; land use and travel behavior; the built environment and public health; transportation demand management; bicycle and pedestrian planning; design of bicycle and pedestrian facilities; retrofitting existing urban areas; safety issues for pedestrians and bicyclists; the transportation needs of special populations (elderly, children, disabled and immigrants); professional praxis; innovative transportation solutions and case studies, and students' own research interests. The course will include lectures, movies, fieldtrips, guest speakers, group assignments and a research paper.

**2. PREREQUISITES:**

Class enrolment is limited to masters and PhD students. Upper division undergraduate students can be allowed at the discretion of the instructor.

**3. INTRODUCTION:**

Transportation planning is critical to the proper functioning of cities and metropolitan areas. Transportation planning processes include many areas of intervention from

highway, airport and harbor development to rail, mass transit, bicycle and pedestrian planning systems, transportation demand management, modeling, land use interactions, budgeting, etc. But the main focus of urban transportation planning is how to accommodate private automobiles.

**Table1. Conventional vs. Sustainable Transportation Planning**

	<b>Conventional Planning</b>	<b>Sustainable Planning</b>
<b>Transportation</b>	Defines and measures transportation primarily in terms of vehicle travel.	Defines and measures transportation in terms of access.
<b>Objectives</b>	Maximize road and parking capacity to meet predicted traffic demand.	Uses economic analysis to determine optimal policies and investments.
<b>Public Involvement</b>	Modest to moderate public involvement. Public is invited to comment at specific points in the planning process.	Moderate to high public involvement. Public is involved at many points in the planning process.
<b>Facility Costs</b>	Considers costs to a specific agency or level of government.	Considers all facility costs, including costs to other levels of government and costs to businesses (such as parking).
<b>User Costs</b>	Considers user time, vehicle operating costs, and fares or tolls.	Considers user time, vehicle operating and ownership costs, fares and tolls.
<b>External Costs</b>	May consider local air pollution costs.	Considers local and global air pollution, down-stream congestion, uncompensated accident damages, impacts on other road users, and other identified impacts.
<b>Equity</b>	Considers a limited range of equity issues. Addresses equity primarily by subsidizing transit.	Considers a wide range of equity issues. Favors transportation policies that improve access for non-drivers and disadvantaged populations.
<b>Travel Demand</b>	Defines travel demand based on existing user costs.	Defines travel demand as a function, based on various levels of user costs.
<b>Generated Traffic/ Induced Travel</b>	Ignores altogether, or may incorporate limited feedback into modeling.	Takes generated traffic into account in modeling and economic evaluation of alternative policies and investments.
<b>Integration With Strategic Planning</b>	Considers community land use plans as an input to transportation modeling.	Individual transportation decisions are selected to support community's strategic vision. Transportation decisions are recognized as having land use impacts.

<b>Cont.</b>	<b>Conventional Planning</b>	<b>Sustainable Planning</b>
<b>Investment Policy</b>	Based on existing funding mechanisms that target money by mode.	Least-cost planning allows resources to be used for the most cost-effective solution.
<b>Pricing</b>	Road and parking facilities are free, or priced for cost recovery.	Road and parking facilities are priced for cost recovery and based on marginal costs to encourage economic efficiency.
<b>Transportation Demand Management</b>	Uses TDM only where increasing roadway or parking capacity is considered infeasible (i.e., large cities and central business districts).	Implements TDM wherever possible. Capacity expansion only occurs where TDM is not cost effective. Considers a wide range of TDM strategies.

Source: Litman - <http://www.vtpi.org/> (1999)

The premise of this course is that automobiles are undeniably the main mode of transportation in North-America and that they are not going to “disappear” in the immediate future. However, we know that an excessive car dependency has some serious shortcomings. Automobiles generate air pollution, congestion, contribute to the depletion of natural resources, and endanger the safety of the most vulnerable users of our streets (pedestrians and bicyclists). A transportation system mainly based on the automobile does not account for the needs of those who cannot or do not want to drive (the elderly, children and the mobility impaired, etc.).

This course’s main objective is to discuss how transportation can be made more sustainable and how to encourage alternative ways of transportation. By the end of the semester you can expect to know a whole array of theoretical discussions, as well as innovative techniques to bring sustainable transportation to the forefront of planning decisions.

#### **4. LEARNING OBJECTIVES:**

- To know and characterize the sustainable transportation planning paradigm
- To analyze different transportation modes from a sustainable development viewpoint
- To know the prevalent contemporary sustainable transportation techniques, their applications and shortcomings
- To understand how land use development can influence travel behavior and public health
- To apply transportation demand management principles to different spatial settings
- To compare different types of bicycle and pedestrian facilities and assess their main design features
- To formulate retrofitting strategies for urban areas
- To assess safety issues for pedestrians, bicyclists and population groups with special needs
- To distinguish the successful features of innovative transportation planning schemes

## **5. GROUND RULES:**

You are required to attend ALL classes and actively participate in discussions. You are bound by the student code of conduct (see: <http://www.asu.edu/aad/manuals/sta/sta104-01.html>) and will be held responsible for any infringements to it (e.g. academic dishonesty, cheating, plagiarism, fabrication, etc.).

ATTENTION: The internet is a good source of information and can be very valuable during your academic as well as professional life. It not only gives you access to lots of data with the click of a mouse, but it also lets you easily use other people's words, drawings, pictures, etc in your own papers, reports and assignments. However, to do this without properly acknowledging all sources is a severe infringement of copyright laws. For this reason you have to explicitly indicate all bibliographical and internet sources in your assignments.

Students with disabilities who have special needs should see the Disability Resources for Students (DRS) office (see: <http://www.asu.edu/drs/>). Before requesting special accommodations of the instructor, students must obtain a written document stating their disability from the DRS office.

## **6. COMMUNICATION:**

Outside of the classroom communication between students and the instructor will be done through MyASU, email, in person during office hours or by appointment. Reading assignments are to be submitted onto the class's MyASU website before 12:00 AM on the day prior to class (i.e. Sunday). In addition, you must turn in a hard copy at the beginning of class. I will collect all your email addresses on the first day of class. You must check your email everyday since I will be sending you regular updates, links to relevant online articles and organizations, etc. All emails should indicate the course number on the subject line (PUP598) and be followed by a very short description of its content.

## **7. READINGS:**

We will use a collection of book chapters, journal, magazine, conference, and newspaper articles. The required readings will be made available to students as downloadable and printable PDF files on MyASU a week in advance of the class in which they will be used. The suggested readings can be obtained directly from the instructor.

## **8. EVALUATION:**

Your final grade will be the result of the following evaluation grid:

	<b>% of final grade</b>	<b>Deliverable due date</b>
<b>Class attendance and participation</b>	20	Ongoing
<b>6 Reading assignments</b>	30	Ongoing
<b>Final presentation and research paper</b>	50	May 8, 2006
<b>TOTAL</b>	100	

All assignments are individual. No group assignments will be allowed since you will have ample opportunity for group discussions and activities during class. Late assignments are penalized by 10% per day after the due date. All assignments should be sent in a word file, with a line spacing of 1.5 and an indication of the total number of words. Class absence will only be accepted in case of major emergency or University-sanctioned activities. In accordance with the University's policy, students should notify the instructors before missing a class.

### **8.1 Class Participation**

Active participation is a significant requirement of this course. Class participation has to be meaningful and respectful of other's opinions. You should do the readings prior to class and bring at least two new pieces of relevant information about that week's course's topic to class. These can be newspaper or journal articles, websites, books, professional reports, etc.

### **8.2 Reading assignments**

You are required to write six short papers, not to exceed 750 words each. You choose when and which topic you want to write these assignments on. I will automatically drop your lowest grade, which in fact means that you only have to write 5 short papers if you wish to do so. You should critically synthesize and comment on that week's required readings. The purpose of writing these short papers is to make sure that you read the articles before class and also to enable you to actively participate in class discussions and group activities.

### **8.3 Research paper**

This assignment enables you to articulate in a concise and coherent way your own interpretation of a sustainable transportation planning topic or situation. You should use your research paper to demonstrate knowledge of the readings but also to address substantive debates and practices in sustainable transportation planning. All students are required to make a brief 15 minute presentation at the end of the semester. Undergraduate students should not write more than 4000 words. This total should include your reference list as well. In your writing you are required to explicitly engage with 3 of the class readings and use 5 other references of your own choice (papers from the suggested readings list are accepted). 3 of your own references should have been published during or after the year 2000.

Graduate students should not write more than 5000 words. This total should include your reference list as well. In your writing you are required to explicitly engage with 5 of the class readings and use 7 other references of your own choice. 4 of your own references should have been published during or after the year 2000.

Paper checklist:

Before submitting your final research paper you must complete the following checklist adapted from: <http://technographia.com/checklist.htm> (author: Dr. Martha J. Bianco)

1) Introduction

- My first introductory paragraph tells the reader the specific subject of my research -- that is, what the paper is about.
- My introduction identifies specific research questions and hypotheses.
- My introduction contains a clearly-stated thesis.
- My introduction identifies and describes the methodology used to conduct the research.
- My introduction briefly outlines the format of the paper.

2) Body

- I have thought about how my paragraphs are arranged, and they are structured in a way that best supports my argument.
- I have checked to make sure that I completely tackle one part of my argument before moving on to the next, and I have checked to make sure that I do not unnecessarily revisit arguments I began earlier in the paper.
- Each paragraph is focused around a main idea ("mini-thesis"), which is stated in the paragraph's first sentence ("topic sentence").
- Each paragraph employs evidence supporting that idea. That evidence is analyzed; that is, I have used my own words to tell the reader why and how my evidence supports the topic sentence.
- Each paragraph has a workable transition from its predecessor.
- Titles and subtitles divide sections to enhance readability.

3) Alternate explanations and differing schools of thought

- I have considered alternate explanations.
- I have not made unsubstantiated assumptions or claims.
- I have thought about the arguments that could be marshaled against mine and have addressed those through refutation or concession.

#### 4) Quoting and citations

- All material I have quoted appears between quote marks.
- I have minimized or eliminated block quotes. When I have used them, I have indented them on the left, single-spaced them, and not placed quotations at the start and end.
- Each time I bring in evidence that is not clearly common knowledge, I have cited the source of that information with a notation.
- Each time I quote I have checked to make sure the quotation is properly integrated into the sentence.
- Each of my quotes clearly relates to a notation which offers the source and page number of the quotation.
- For each of my quotes, it is clear who the speaker of the quote is, and the circumstances in which the speaker authored the quote (relevant time, place, and context).
- My citation style conforms to an accepted style; I have used a style manual.
- My citation style is consistent throughout the paper.
- Each notation corresponds with an entry in the bibliography or reference list.
- My bibliography or reference list style conforms to an accepted style; I have used a style manual.

#### 5) Presentation

- Each page is numbered consecutively.
- I have used a common typeface, e.g. Times New Roman, size 12.
- I have used 1.5-line spacing, and have left one-inch margins at top, bottom, and sides.
- The title of my paper clearly relates to its contents or to the question I set out to answer.
- I have a title page that includes the title of the paper, my name, the name of this course, this university, and the date.

#### 6) Editing

- I have run my paper through both a spelling and grammar check, paying special attention to synonyms (their/there) and other words that the spell-checker will not identify (proper names and mistakes like "are" instead of "area").
- In using the grammar check, I have read clicked on the question mark icon (usually in the lower left-hand corner of the spell/grammar-check box) so that grammar rules are explained as I go through.
- I have personally proofread the paper for spelling and grammar errors in addition to performing the spell- and grammar-check. I waited at least one day after finishing the online check to do the personal proofreading.
- I have checked each citation for style and for a corresponding entry in the bibliography or reference list.
- I have rewritten the paper at least once, identifying and eliminating instances of:

- passive voice
- inconsistent tenses
- subject/verb disagreement
- dangling clauses
- improper pronoun references
- comma splices, run-on sentences, and sentence fragments
- colloquial phrases
- split infinitives
- improper capitalization
- I have read the paper aloud to myself or to someone else, listening for sentences that do not work.

## **9. CLASS SCHEDULE, LECTURE TOPICS AND READINGS:**

### **1<sup>st</sup> WEEK – January 23**

*Topics:* Introduction; course / syllabus overview; videos:

- (2004) *The End of Suburbia* (<http://www.endofsuburbia.com/>)
- (2005) *Bicycle Friendly Cities* (<http://www.udesc.br/ciclo/>)

### **2<sup>nd</sup> WEEK – January 30 (Automobile dependence)**

*Topics:* Automobile dependence; changing trends and their implications for transport planning and public health

#### **@ Required readings:**

- Newman, Peter and Kenworthy, Jeffrey (1999) *Sustainability and Cities – Overcoming Automobile Dependence*. Washington DC: Island Press.  
(Ch2: The problem of automobile dependence at the end of the 21<sup>st</sup> century, Ch4: A vision of Reduced Automobile Dependence).
- Litman, T. (2005) *The Future Isn't What It Used To Be. Changing trends and their implications for transport planning*. Victoria, BC: VTPI.  
(<http://www.vtpi.org/future.pdf>)

#### **Suggested readings:**

- Killingsworth, R.; Nazelle, A. and Bell, R. (n.d.) *A new role for public health in transportation - creating and supporting community models for active transportation*. White paper – Active Living by Design – UNC Chappell Hill  
(<http://www.rwjf.org/research/files/ITEWhitePaper.pdf>).
- Purcell, D. (2000) The car and the city. *Bulletin of Science, Technology and Society*, 20(5): 348-359.
- Newman, P.; Kenworthy, J. and Vintila, P. (1995) Can we overcome automobile dependence? Physical planning in an age of urban cynicism. *CITIES*, 12(1): 53-65.
- Kenworthy, J. and Laube, F. (1999) Patterns of automobile dependence in cities: an international overview of key physical and economic dimensions with some implications for urban policy. *Transportation Research part A*, 33(7/8): 691-723.

### **3<sup>rd</sup> WEEK – February 6 (Sustainable development and transportation)**

Tentative Guest Speaker: Maureen DeCindis (Maricopa Association of Governments)

Topics: Sustainable development; conventional vs. sustainable transportation planning

#### @ Required readings:

- Litman, T. (2003) *Reinventing Transportation – Exploring the paradigm shift needed to reconcile transportation and sustainable objectives*. Victoria, BC: VTPI. (<http://www.vtpi.org/reinvent.pdf>).
- Goldman, T. and Gorham, R. (in press) Sustainable urban transport: Four innovative directions. *Technology in Society*.
- Banister, D. (2005) *Unsustainable Transport – city transport in the new century*. NY: Routledge. (Ch.12 Conclusions).

#### Suggested readings:

- Newman, Peter and Kenworthy, Jeffrey (1999) *Sustainability and Cities – Overcoming Automobile Dependence*. Washington DC: Island Press. (Ch1: The concept of sustainability and its relationship to cities)
- Black, W. (1996) Sustainable transportation: a US perspective. *Journal of Transport Geography*, 4(3): 151-159.
- Campbell, S. (1996) Green Cities, Growing Cities, Just Cities? Urban planning and the contradictions of sustainable development. *Journal of the American Planning Association*, 62(3): 296-312.

### **4<sup>th</sup> WEEK – February 13 (Transportation demand management)**

Topics: Transportation demand management; parking management, transit passes, ridesharing, telecommuting, college campus applications.

#### @ Required readings:

- Handy, S. (2002) *Accessibility vs. mobility enhancing strategies for addressing automobile dependence in the US*. Text written for the European Conference of Ministers of Transport (<http://www.des.ucdavis.edu/faculty/handy/>).
- Meyer, M. (1999) Demand management as an element of transportation policy - using carrots and sticks to influence travel behavior. *Transportation Research part A* 33(7/8): 575-599.
- Balsas, C. (2003) Sustainable Transportation Planning on College Campuses. *Transport Policy*, 10(1): 35-49.

#### Suggested readings:

- Litman, T. (2004) Online TDM Encyclopedia. Victoria BC: VTPI (<http://www.vtpi.org/tdm/>).
- Toor, W. and Havlick, S. (2004) *Transportation and Sustainable Campus Communities – issues, examples and solutions*. Washington D.C.: Island Press.
- Lim, C. (1997) The status of transportation demand management in Greater Vancouver and energy implications. *Energy Policy*, 25(14/15): 1193-1202.

- Stradling, S.; Meadows, M. and Beatty, S. (2000) Helping drivers out of their cars – integrating transport policy and social psychology for sustainable change. *Transport Policy*, 7(3): 207-215.

### **5<sup>th</sup> WEEK – February 20 (Land-use and travel behavior)**

Topics: Land use patterns and public policy; urban form; urban growth and transportation implications; transit oriented development; Video: (2003) *Making Sense of Place – The Urban Desert* (<http://www.makingsenseofplace.org>)

#### @ Required readings:

- Frumkin, H.; Frank, L. and Jackson, R. (2004) *Urban Sprawl and Public Health, designing, planning, and building for healthy communities*. Washington DC: Island Press. (Ch.1 What is sprawl? and what does it have to do with health? Ch.2 The origins of sprawl).
- Handy, S.; Weston, L.; Mokhtarian, P. (2005) “Driving by choice or necessity?” *Transportation Research Part A*, 39 (2-3): 183-203.

#### Suggested readings:

- Beatley, T. (2000) *Green urbanism: learning from European cities*. Washington, DC: Island Press (Ch.2 Land use and urban form – planning compact cities).
- 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.
- Ewing R, et al. (2003) Relationship between urban sprawl and physical activity, obesity, and morbidity. *American Journal of Health Promotion*, 18: 47-57.
- Frank, L.; Engelke, P. and Schmid, T. (2003) *Health and Community Design – the impact of the built environment on physical activity*. Washington DC: Island Press. (Ch.8 Land use patterns).
- Southworth, F. (2001) On the potential impacts of land use change policies on automobile vehicle miles of travel. *Energy policy*, 29(14): 1271-1283.

### **6<sup>th</sup> WEEK – February 27 (The built environment and public health)**

Tentative Guest Speaker: Dean Brennan (City of Phoenix)

Topics: The built environment; urban design characteristics, urban health

#### @ Required readings:

- Frank, L.; Engelke, P. and Schmid, T. (2003) *Health and Community Design – the impact of the built environment on physical activity*. Washington DC: Island Press. (Ch.2 Public health and urban form in America, Ch.6 understanding the built environment, Ch.9 urban design characteristics).
- Frumkin, H.; Frank, L. and Jackson, R. (2004) *Urban Sprawl and Public Health, designing, planning, and building for healthy communities*. Washington DC: Island Press. (Ch.3 The evolution of urban health)

Suggested readings:

- TRB (2005) *Does the Built Environment Influence Physical Activity? Examining the Evidence*. Washington DC: Transportation Research Board.
- Malizia, E. (2005) Urban and Regional Planning: a Primer for Public Health Officials. *American Journal of Health Promotion*, 19(5): 1-15.
- Frank, L. and Engelke, P. (2001) The built environment and human activity patterns: exploring the impacts of urban form on public health. *Journal of Planning Literature*, 16(2): 202-218.
- Corburn, J. (2005) Urban planning and health disparities: implications for research and practice. *Planning Practice and Research*, 20(2): 111-126.
- Cervero, R. (2003) The Built Environment and Travel: Evidence from the United States. *European Journal of Transport and Infrastructure Research*, 3(2): 119-136.
- Perdue, W. et al. (2003) The Built Environment and Its Relationship to the Public's Health: The Legal Framework. *American Journal of Public Health*, 93(9): 1390-1394.
- Evans, G. (2003), The Built Environment and Mental Health, *Journal of Urban Health*, 80(4): 536-555.

**7<sup>th</sup> WEEK – March 6 (Physical activity and public health)**

Tentative Guest Speaker: Dr. Catrine Tudor-Locke (ASU)

Topics: Physical activity: types and patterns, public health

@ Required readings:

- Frank, L.; Engelke, P. and Schmid, T. (2003) *Health and Community Design – the impact of the built environment on physical activity*. Washington DC: Island Press. (Ch.3 physical activity and public health, Ch. 4 physical activity: types and patterns).
- Frumkin, H.; Frank, L. and Jackson, R. (2004) *Urban Sprawl and Public Health, designing, planning, and building for healthy communities*. Washington DC: Island Press. (Ch.5 physical activity, sprawl and health)

Suggested readings:

- Vojnovic, I., et al. (2005) The renewed interest in urban form and public health: Promoting increased physical activity in Michigan. *Cities*, 23(1): 1-17.
- Besser, L.; Dannenberg, A. (2005) Walking to public transit: steps to help meet physical activity recommendations. *American Journal of Preventive Medicine*, 29(4), 273-280.
- Kameshwari, P. (2005) Building community infrastructure for healthy communities: Evaluating action research components of an urban health research programme. *Planning Practice and Research*, 20(2): 127-146.
- Brown, E. et al. (2005) *Half of California Adults Walk Less Than One Hour Each Week*. LA: UCLA Center for Health Policy Research.
- Frank, L.; Andresen, M., and Schmid, T. (2004) Obesity relationships with community design, physical activity, and time spent in cars. *American Journal of Preventive Medicine*, 27(2): 87-96.

- Torres, G. and Pittman, M. (2001) *Active-living through community design*. Princeton: The Robert Wood Johnson Foundation.

### **8<sup>th</sup> WEEK – March 13 – SPRING BREAK (No Class)**

### **9<sup>th</sup> WEEK – March 20 (Bicycle and pedestrian planning)**

Tentative Guest Speaker: Michael Sanders (AZDoT)

Topics: Bicycling and walking activities; the 4 E's approach: engineering, enforcement, encouragement and education

#### @ Required readings:

- USDOT/FHA (1994) *The National Bicycling and Walking Study – transportation choices for a changing America (Final Report)*. Washington DC: USDOT/FHA.
- McClintock, H. (2002) *Planning for Cycling – principles, practice and solutions for urban planners*. Cambridge: CRC Press. (Ch.17 US bicycle planning)
- Pucher J., Komanoff, C. and Schimek, P. (1999) Bicycling Renaissance in North America? Recent Trends and Alternative Policies to Promote Bicycling. *Transportation Research, Part A*, 33(7/8): 625-654.

#### Suggested readings:

- Schimek, P. (1996) *The Dilemmas of Bicycle Planning*. Paper presented at the ACSP Conference in Toronto. (<http://danenet.wicip.org/bcp/dilemma.html>)
- Tolley, R. – Ed. (2003) *Sustainable Transport: planning for walking and cycling in western cities*. Cambridge: Woodhead Publishers.
- Ultermann, Richard (1984) *Accommodating the Pedestrian – Adapting towns and neighborhoods for walking and bicycling*. New York City: Van Nostrand Reinhold Company.

### **10<sup>th</sup> WEEK – March 27 (Design of bicycle and pedestrian facilities)**

Tentative Guest Speaker: Reed Kempton (City of Scottsdale)

Topics: bicycle and pedestrian facilities: types and design issues

#### @ Required readings:

- USDOT/FHA (2000) *FHWA Course on Bicycle and Pedestrian Transportation*. Washington DC: USDOT/FHA. (Ch.8-19 Design Issues Common to Bicycles and Pedestrians, Pedestrian Facility Design, Bicycle Facility Design). Please see: [http://safety.fhwa.dot.gov/ped\\_bike/univcourse/swtoc.htm](http://safety.fhwa.dot.gov/ped_bike/univcourse/swtoc.htm)

#### Suggested readings:

- USDOT/FHA (1999) *Implementing Bicycle Improvements at the Local Level*. Washington DC: USDOT/FHA.
- USDOT/FHA (2002) *Pedestrian Facilities Users Guide – providing safety and mobility*. Washington DC: USDOT/FHA.
- AASHTO (1999) *Guide for the Development of Bicycle Facilities*. Washington DC: AASHTO.

- Beneficial Designs, Inc. (1999) *Designing Sidewalks and Trails for Access Part I and II*. Washington DC: USDOT/FHA.
- Forester, J. (1994) *Bicycle Transportation – a handbook for cycling transportation engineers*. Cambridge: the MIT Press.

### **11<sup>th</sup> WEEK – April 3 (Retrofitting existing urban areas)**

Topics: Adapting suburban communities, land use regulations, restriping

@ Required readings:

- USDOT/FHA (2000) *FHWA Course on Bicycle and Pedestrian Transportation*. Washington DC: USDOT/FHA. (Ch.5 Adapting Suburban Communities for Bicycle and Pedestrian Travel, Ch.7 Using Land-Use Regulations to Encourage Non-Motorized Travel, Ch.20 Restriping Existing Roads With Bike Lanes). Please see: [http://safety.fhwa.dot.gov/ped\\_bike/univcourse/swtoc.htm](http://safety.fhwa.dot.gov/ped_bike/univcourse/swtoc.htm)

Suggested readings:

- USDOT/FHA (2000) *FHWA Course on Bicycle and Pedestrian Transportation*. Washington DC: USDOT/FHA. (Ch.11 Traffic calming). Please see: [http://safety.fhwa.dot.gov/ped\\_bike/univcourse/swtoc.htm](http://safety.fhwa.dot.gov/ped_bike/univcourse/swtoc.htm)
- Després, C.; Brais, N. and Avellan, S. (2004) Collaborative planning for retrofitting suburbs: transdisciplinarity and intersubjectivity in action. *Futures*, 36(4): 471-486.
- Hirschhorn, J.; Souza, P. (2001) *New Community Design to the Rescue - Fulfilling Another American Dream*. Washington DC: National Governors Association (NGA). Please see: <http://preview.nga.org/Files/pdf/072001NCDFULL.pdf>
- Morris, M. (2004) Zoning to promote health and physical activity. *APA Zoning Practice*, June: 1-7.
- Schilling, J. (2005) *Creating a Regulatory Blueprint for Healthy Community Design*. Washington DC: International City and County Management Association (ICMA).

### **12<sup>th</sup> WEEK – April 10 (Safety issues for pedestrians and bicyclists)**

Tentative Guest Speaker: Michael Cynecki (City of Phoenix)

Topics: safety, crashes, pedestrian safety plans

@ Required readings:

- Frumkin, H.; Frank, L. and Jackson, R. (2004) *Urban Sprawl and Public Health, designing, planning, and building for healthy communities*. Washington DC: Island Press. (Ch.6 Injuries and deaths from traffic)
- USDOT/FHA (2000) *FHWA Course on Bicycle and Pedestrian Transportation*. Washington DC: USDOT/FHA. (Ch.4 Pedestrian and Bicycle Crash Types). Please see: [http://safety.fhwa.dot.gov/ped\\_bike/univcourse/swtoc.htm](http://safety.fhwa.dot.gov/ped_bike/univcourse/swtoc.htm)
- USDOT/FHA (2005) *How to develop a Pedestrian Safety Action Plan* (Draft – unpublished document). Washington DC: USDOT/FHA.

Suggested readings:

- Ernst, M. (2004) *Mean Streets 2004 – How far have we come? Pedestrian safety 1993-2004*. Washington DC: Transact STPP.
- Babey, S. Brown, E., and Hastert, T. (2005) *Access to Safe Parks Helps Increase Physical Activity Among Teenagers*. LA: UCLA Center for Health Policy Research.
- Loukaitou-Sideris, A. (2006) Is it Safe to Walk? Neighborhood Safety and Security Considerations and Their Effects on Walking. *Journal of Planning Literature*, 20(3): 219-232.
- Jones, S. et al. (2005) Traffic calming policy can reduce inequalities in child pedestrian injuries: database study. *Injury Prevention*, 11: 152-156.
- Pucher, J. and Dijkstra, L. (2003) Promoting safe walking and cycling to improve public health: lessons from The Netherlands and Germany. *American Journal of Public Health*, 93(9): 1509-16.

**13<sup>th</sup> WEEK – April 17 (The transportation needs of special populations)**

Tentative Guest Speaker: Dr. Pam Goslar (St. Joseph's Hospital and Medical Center)

Topics: elderly, children, disabled and immigrants; safe routes to school.

@ Required readings:

- Frumkin, H.; Frank, L. and Jackson, R. (2004) *Urban Sprawl and Public Health, designing, planning, and building for healthy communities*. Washington DC: Island Press. (Ch.10 Health concern of special populations)
- Frank, L.; Engelke, P. and Schmid, T. (2003) *Health and Community Design – the impact of the built environment on physical activity*. Washington DC: Island Press. (Ch.5 physical activity: children, the elderly, and the poor).
- USDOT/FHA (2000) *FHWA Course on Bicycle and Pedestrian Transportation*. Washington DC: USDOT/FHA. (Ch.17 Pedestrian with disabilities). Please see: [http://safety.fhwa.dot.gov/ped\\_bike/univcourse/swtoc.htm](http://safety.fhwa.dot.gov/ped_bike/univcourse/swtoc.htm)

Suggested readings:

- USDOT/FHA (2002) *Toolkit - Safe Routes to School*. Washington DC: USDOT/FHA. Please see: <http://www.nhtsa.dot.gov/people/injury/pedbimot/bike/Safe-Routes-2002/>
- Boarnet, M., et al. (2005) California's Safe Routes to School Program: impacts on walking, bicycling, and pedestrian safety. *Journal of the American Planning Association*, 71 (3), 301–317.
- Loukaitou-Sideris, A. (2005) Is It Safe to Walk Here? Design and policy responses to Women's fear of victimization in public spaces (pp. 101-112). In: *TRB Conference Proceedings 35*. Washington DC: Transportation Research Board.
- Tal, G. and Handy, S. (2005) *The Travel Behavior of Immigrants and Race/Ethnicity Groups: An Analysis of the 2001 National Household Transportation Survey*. UCD-ITS-RR-05-24.

## **14<sup>th</sup> WEEK – April 24 (Professional praxis and Innovative transportation solutions)**

Tentative Guest Speaker: Lucas Nieri (Architect from Curitiba)

Topics: Professional praxis, carfree cities in Europe, transportation in Curitiba, etc.

### Ⓢ Required readings (please choose only 2):

- Newman, Peter and Kenworthy, Jeffrey (1999) *Sustainability and Cities – Overcoming Automobile Dependence*. Washington DC: Island Press. (Ch6: Promoting sustainable urban change).
- Frumkin, H.; Frank, L. and Jackson, R. (2004) *Urban Sprawl and Public Health, designing, planning, and building for healthy communities*. Washington DC: Island Press. (Ch.11 From urban sprawl to health for all)
- Taniguchi, C. (2001) Transport and Urban Planning in Curitiba. *DISP*, 147: 14-19.

### Suggested readings:

- Litman, T. (2003) Integrating public health objectives into transportation decision making. *American Journal of Health Promotion*, 18(1): 103-106.
- Emerine, D; Feldman, E. and Delchad, L. (2005) *Active Living and Social Equity: Creating Healthy Communities for All Residents*. Washington DC: International City and County Management Association (ICMA).
- Beatley, T. (2000) *Green urbanism: learning from European cities*. Washington, DC: Island Press. (Ch.5 Taming the auto – the promise of carfree cities)
- Levine, J. (2002) Congestion pricing's conditional promise: promotion of accessibility or mobility? *Transport Policy*, 9(3): 179-188.
- Rabinovitch, J. and Leitman, J. (1996) Urban planning in Curitiba. *Scientific America*, March: 46-53.

## **15<sup>th</sup> WEEK – May 1 (Student presentations)**

(LAST CLASS – course evaluation by the students)

➔ Student presentations of final papers

➔ Main research paper DUE by 5:00PM on Monday, May 8, 2006.

### **Miscellaneous**

- 1.) Final grades will be posted by 5:00PM on Wednesday, May 10, 2006
- 2.) Commencement will take place on Thursday, May 11, 2006

NOTE: This can be subjected to modification as needed.