UP 460: SUSTAINABLE URBAN TRANSPORTATION AND LAND USE POLICY

Fall 2018, Department of Urban and Regional Planning, University of Illinois at Urbana-Champaign

CLASS MEETINGS: Tuesday and Thursday, 3:30 pm – 4:50 pm
Room DKH 307

INSTRUCTOR: Bumsoo Lee, bumsoo@illinois.edu
OFFICE HOURS: 2:30 pm – 3:20 pm on Tuesday and by appointment, TBH M206

COURSE OVERVIEW

Congestion in auto-oriented US cities has been worsening for decades. However, the government’s ability to finance new transportation infrastructure has become increasingly constrained. Further, the climate change and energy issues make any policy and public investment entailing more automobile uses unpopular. Instead, planners are increasingly turning to alternative policies that involve changing development patterns and land use to solve transportation problems. There is ample evidence that downtown workers and residents drive less and use more sustainable modes than suburban residents. If we design and develop suburban neighborhoods like downtown neighborhoods – with higher density, mixed land uses, and transit and pedestrian friendly street layouts, – would people drive less?

This course is designed to teach integrated perspectives and analytical frameworks for sustainable urban transportation and land use policies. It emphasizes the need to understand how the built environment and transportation interact. How new investments on transportation infrastructure – highway or transit – influence subsequent development patterns? How different forms of land uses and the built environment influence travel patterns? To address these questions, students will learn land use/transportation theories and models, review empirical studies, and compare different transportation/land use policies and planning techniques.

Topics to be covered in the course include:
1. Contemporary urban transportation and land use policy debates and issues
2. Theories of travel demand and behavior
3. Influences of urban form (land use) on travel patterns
4. Impacts of transportation on land use and urban form
5. Integrated transportation and land use planning and smart growth
6. Soft transportation policy measures
7. Transit oriented development (TOD)

This course will focus on the interaction between transportation and land use. Students who seek to learn more traditional theories and planning skills in the two fields are advised to take UP 430 Urban Transportation Planning, UP 447 Land Use Planning Workshop, and UP 546 Land Use Policy and Planning. This course is research oriented and focuses on learning theories, analytical tools, and state of art practices from the most recent literature.

TEXTBOOK

* Additional readings or the links to them will be posted on the Illinois Compass website.
** In most sessions, a lecture will be accompanied by discussion based on reading assignments. Students should read ALL reading assignments before coming to the class

EVALUATION

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<th>Component</th>
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<tr>
<td>Class Participation/Attendance</td>
<td>10 %</td>
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<tr>
<td>Assignments</td>
<td>50 %</td>
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<tr>
<td>Final presentation (10%) and term paper (30%)</td>
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Random attendance checks will be taken. Poor attendance will not result in automatic failure, but 20% participation grade will be significant in your final grade. Class participation grade will also be affected by class distracting behaviors such as tardiness and texting. Laptops should be used only for note taking. No web surfing! No texting!
ASSIGNMENTS and TERM PAPER

Various assignments will be given throughout the semester in forms of short essays, case studies, and take home exercises. All homework assignments are due by Noon on due dates and late submission of homework assignments will be penalized by 20% per day.

Students are required to present and submit a term paper. The term paper must address a topic on sustainable transportation and land use policies. Students can do a case study, an empirical study, policy evaluation, or any other type of research or analysis on the topics covered in class. Detailed instructions about the term paper will follow. Besides the deadlines, students are encouraged to discuss with the instructor as often as needed about the research topic, methods, data sources, etc.

Schedule for term paper deadlines:
[Oct 2] One-page abstract including research questions and study plan and a list of at least five references.
[Nov 6] Three-page progress report documenting what has been and to be done, expected findings, and expected content in the final paper.
[Nov 29, Dec 4, 6 & 11] Research presentation. PPT file is due by noon on your presentation day.
[Dec 17] Term paper due by Noon.

POLICIES

SPECIAL ACCOMMODATIONS

This course will accommodate students with documented disabilities. Please refer to http://disability.illinois.edu/disability-resource-guide for more information and provide the appropriate documentation at the beginning of the semester.

ACADEMIC INTEGRITY

This course follows the guidelines set forth by the University student code. See http://studentcode.illinois.edu/article1_part4_1-401.html for specific guidelines, examples, and punishment associated with academic dishonesty.

CLASS CLIMATE

The Department of Urban and Regional Planning (DURP) is committed to creating an environment of inclusion and opportunity that is rooted in the very goals and responsibilities of practicing planners. Conduct that interferes with the rights of another or creates an atmosphere of intimidation or disrespect is inconsistent with the environment of learning and cooperation that the program requires. By enrolling a course in the Department of Urban and Regional Planning, students agree to be responsible for maintaining a respectful environment in all DURP activities, including lectures, discussions, labs, projects, and extracurricular programs. We will be governed by the University Student Code. See Student Code Article 1—Student Rights and Responsibilities, Part 1. Student Rights: §1-102 In the Classroom.

EMERGENCY RESPONSE RECOMMENDATIONS

The Department of Homeland Security and the University of Illinois at Urbana-Champaign Office of Campus Emergency Planning recommend the following three responses to any emergency on campus: RUN > HIDE > FIGHT
For more information, http://police.illinois.edu/emergencyplanning/general/

COUNSELING CENTER

The Counseling Center is committed to providing a range of services intended to help students develop improved coping skills in order to address emotional, interpersonal, and academic concerns. The Counseling Center provides individual, couples, and group counseling. All of these services are paid for through the health services fee. The Counseling Center offers primarily short term counseling, but they do also provide referrals to the community when students could benefit from longer term services.
https://counselingcenter.illinois.edu/
### COURSE SCHEDULE

**WEEK 1**

Aug 28  
Introduction and Course Overview

Aug 30  
Contemporary Issues and Debates – land use and travel connection  


Aug 30  
[Assignment #1 due]

### WEEK 2

Sep 4  
Transportation, Energy, and the Environment  
Greene, David. Ch.12 Transportation and energy, Le Vine & Lee-Gosselin. Ch. 11  

### WEEK 3

Sep 6  
The context of urban travel  
Hanson, Susan. Ch.1 Introducing Urban Transportation. In Giuliano & Hanson (2017).


Sep 11  
Theories of travel demand  
Miller, Harvey. Ch. 5 Theories and Models in Transportation Planning. In Giuliano & Hanson (2017).


### WEEK 4

Sep 13  


Sep 18  

http://www.planetizen.com/node/50451

Sep 20  


* indicates optional readings.
* Lee, S. and B. Lee. Toward sustainable urban form: Does urban spatial structure matter more
than neighborhood-scale land use? Submitted to *Landscape and Urban Planning*.

### WEEK 5

**Sep 25**

development and climate change. *Journal of Urbanism* 1(3): 201-216.


* Boarnet, Marlon. Ch.7 Land use, travel behavior, and disaggregate travel data. In Giuliano & Hanson (2017).


### TRANSPORTATION INVESTMENT AND URBAN DEVELOPMENT

**Sep 27**

Muller, Peter O. 2017. Ch.3 Transportation and urban form: Stages in the spatial evolution of the American metropolis. In Giuliano & Hanson (2017).

Giuliano, Genevieve. Ch.9 Land use impacts of transportation investments. In Giuliano & Hanson (2017).


**WEEK 6**

**Oct 2**


* Lee, H. Are Millennials Coming to Town? Residential Location Choice of Young Adults. *Urban Affairs Review*, 0(0).

### SUSTAINABLE TRANSPORTATION AND LAND USE POLICIES

**Oct 4**

* Integrated Transportation and Land Use Planning


**WEEK 7**

**Oct 9**

* Public Transportation (2 sessions)


**Oct 11**


**WEEK 8**

**Oct 16**

* Travel Demand Management


**Transportation Finance and Road Pricing (3 sessions)**

Oct 18


**WEEK 9**

Oct 23


Oct 25
No class due to ACSP Conference!

**WEEK 10**

Oct 30

**Parking Policy (2 sessions)**

Nov 1


**WEEK 11**

Nov 6


**Transit Oriented Development (4 sessions)**

Nov 8
* TOD—definition, impacts & design principles
  Center for TOD 2008 TOD202 Station area planning: How to make great transit-oriented places


**WEEK 12**

Nov 13
* TOD—Strategic planning, regional planning & corridor planning
  City of Denver 2014 *Transit Oriented Development Strategic Plan*.
  Center for TOD 2011 TOD204 Planning for TOD at the regional scale.
  Center for TOD 2011 TOD203 Transit corridors and TOD: Connecting the dots.

Nov 15
* TOD—Tools, finance & affordable housing

Center for TOD 2009 TOD201 Mixed income housing near transit: Increasing affordability with location efficiency.


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<tr>
<th>Nov 20 &amp; Nov 22</th>
<th>Thanksgiving Holiday!</th>
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<td><strong>WEEK 13</strong></td>
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<td>Nov 27</td>
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<td>TOD—Case studies</td>
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**RESEARCH PRESENTATION**

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<th>Nov 29</th>
<th>RESEARCH PRESENTATION 1</th>
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<td><em>PPT file is due by noon on your presentation day.</em></td>
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**WEEK 14**

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<th>Dec 4</th>
<th>RESEARCH PRESENTATION 2</th>
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<td>Dec 6</td>
<td>RESEARCH PRESENTATION 3</td>
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**WEEK 15**

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<th>RESEARCH PRESENTATION 4</th>
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*FINAL PAPER due on Dec 17 Monday by NOON.*