Course Description
This course will cover the basic controversies and issues associated with transportation, land use, and development practices. The objective is to provide an understanding of debates over these topics and provide students with sufficient knowledge to understand the consequences and relationships between transportation and various forms of land use development. The course will provide a theoretical grounding on the issues, based on economic theory and academic studies examining travel impacts. Various practical tools and methods will be presented for estimating trip generation and for evaluating land use impacts, providing students with a survey of practical applications. A major focus of the course will be on parking, which is one of the main land use impacts of personal motorized transportation.

Recommended Books


All other reading materials will be available on Sakai.

Requirements
1. Discussion papers: Some—but not all—weeks, there will be designated “discussion papers” on the syllabus. You will provide commentary (in about 300 to 500 words) on two of these discussion papers on Sakai. You will also need to respond (in about 150 to 300 words) to two comments posted on Sakai by one of your classmates. Thus, there will be four “discussion paper” assignments per student. Please also “submit” to Sakai under “assignments” a note stating that you have written a commentary (i.e. “this week I responded to the Smith reading”) or a response to another student’s commentary (i.e. “this week I responded to the commentary left by Judy Smith on the Jacobsen reading.”).
2. **Mid-term take-home exam:** This take-home exam will consist of a few factual questions and a couple of short essays covering the material in the readings and in lecture.

3. **Final paper and presentation:** You will each submit a final paper on Sunday April 22nd. You will present your paper in a brief PowerPoint in the final week of class. More details on this will be forthcoming.

4. **Participation:** Everyone starts out with a B on this; you can move up or down from there!

**Grading**

Grades will be calculated using the following weights:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>%</th>
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<tr>
<td>Two commentaries on discussion papers</td>
<td>15%</td>
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<tr>
<td>Two responses to others’ commentaries</td>
<td>10%</td>
</tr>
<tr>
<td>Midterm take-home exam</td>
<td>30%</td>
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<tr>
<td>Final paper and presentation</td>
<td>35%</td>
</tr>
<tr>
<td>Participation (vim and vigor)</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100%</td>
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I will not penalize you for *excused* absences, but *unexcused* absences will count against your participation grade.

Similarly, I will not penalize you for getting an extension on your final paper. However, if you turn it in late without permission, I will dock 5% for the first hour of lateness, and 5% for each additional 24 hours after that.

**Schedule**

**Week 1: January 17**

Course Overview: Introduction, norms and values

**Required Readings**


**Suggested Readings**


**Week 2: January 25**
Discussion of Class Project and Overview of IRB
Theory: How transportation affects land use (part 1)

**Required Readings**


• O'Sullivan, Arthur, 1992, Urban Economics, 2nd edition, chapters 7, 8 and 10

**Suggested Readings**


**TERM PROJECT ASSIGNMENT WILL BE HANDED OUT. PROPOSALS WILL BE DUE IN TWO WEEKS.**

**Week 3: January 31**
Theory: How land use affects transportation (part 2)

**Required Readings**


Suggested Readings


Discussion Papers


Week 4: February 7
Theory: How land use affects transportation (part 3)

Discussion Papers


Week 5: February 14
Traffic impact analysis (1): Trip generation in practice
Readings and Resources (Trip Generation)

- Highway Capacity Manual, Transportation Research Board, (relevant sections are on Sakai)
- Institute of Transportation Engineers *Trip Generation*, 7th Edition, (one copy available for class)

Suggested Readings


Discussion Papers


Week 6: February 21

Transit-oriented development: Policy in New Jersey

Readings


**Week 7: February 28**
The High Cost of Free Parking

**Readings and resources**


**Discussion Papers**


**Week 8: March 7**
Transportation, Land Use, and Gentrification
Readings TBD

**SPRING BREAK! Enjoy and be safe!**

**Week 9: March 21**
Walking tour of New Brunswick: How walkable is it?

*Please dress appropriately to spend about 1-1/2 hours walking around New Brunswick to examine the good and bad features of the built environment.*
Modeling land use: The UrbanSim model (NOTE: THIS LECTURE IS SUBJECT TO CHANGE)

This will be a brief overview of the model. You can download it at www.urbansim.org, however, it has become increasingly cumbersome to load and run.

**Readings and Resources**

- [http://www.urbansim.org/Main/WebHome](http://www.urbansim.org/Main/WebHome)

**Discussion Papers**


**Week 10: March 28**

Transportation, land use, and health
READINGS TBD

TAKE-HOME EXAMINATION HANDED OUT AT END OF CLASS. DUE BY 11:00pm ON SUNDAY ON SAKAI.

**Week 11: April 4**

Land Use, Urban Design, and Safety

**Required Readings**


**Recommended Readings**

- Noland, Robert B., 2003, Traffic Fatalities and Injuries: The Effect of Changes in Infrastructure


Context-sensitive solutions and Complete Streets

**Readings and resources**

- NJ DOT Context Sensitive Design website, [http://www.state.nj.us/transportation/eng/CSD/](http://www.state.nj.us/transportation/eng/CSD/)
- [http://www.contextsensitivesolutions.org/](http://www.contextsensitivesolutions.org/)
- NJ DOT Complete Streets policy, [http://www.state.nj.us/transportation/commuter/pedsafety/complete.shtm](http://www.state.nj.us/transportation/commuter/pedsafety/complete.shtm)
- [www.rethinkingstreets.com](http://www.rethinkingstreets.com)

Download report “Rethinking Streets: An Evidence-Based Guide to 25 Complete Street Transformations”

**Week 12: April 11**

No class.

**Week 13: April 18**

NO CLASS! NJ TransAction Conference!

**Week 15: April 25**

Student project presentations, class will begin EARLY (9:20am) and end LATE (1:00pm).