Transportation and Land Use

CRP 3XXX ● 4 units
Community and Regional Planning
University of Texas at Austin School of Architecture
Spring 2018 ● Tues 3:30-6:30PM ● XXX Sutton Hall
Class website: www.xxx

Instructor: Gian-Claudia Sciara
Office Hours: Thurs. 3:30-5:30PM or by appointment

Course overview:

Transportation and land use together play a central role in the development of urban regions, shaping patterns of access to people, goods and services, economic opportunities, and information across space. Urban planning has long focused on urban form for its promise as a lever to direct travel behavior and transportation choices, as well as for more aesthetic concerns. Can land use effectively shift individuals’ trips from the automobile to more environmentally sustainable travel modes, while also yielding more livable communities? Conversely, the potential for purposive transportation investment to shape urban land development and resulting patterns of residential and employment location has also been a key concern. Increasingly, the transportation-land use relationship, managed well, is viewed as a lever that can ameliorate the wicked economic, social, and environmental problems faced by 21st century urban regions; managed poorly, it will exacerbate them.

This graduate seminar examines key questions about the transportation-land use relationship from several angles. First, the course considers normative and explanatory theoretical propositions articulating how transportation and land use should and do relate, and reflects on contemporary shifts in urban spatial development and travel patterns away from conventional city-suburb distinctions. Second, the class critically reviews the historical and empirical evidence describing and quantifying co-dependencies between transportation and land use. What does this evidence suggest about the potential for transportation investment in roads or transit to shape urban development and for urban form to influence travel behavior? Finally, it appraises the options for planning policy and practice to intervene in the transportation-land use relationship. Sustainability-oriented options may be exercised through different governmental and informal mechanisms, with different implications for institutions and politics.
Course Objectives

In this course, key objectives for students are to:

- distinguish the underlying mechanisms through which transportation investment has and is anticipated to impact urban form and through which urban form has and is expected to impact travel;
- assess whether and in what contexts such impacts are significant enough to justify specific interventions in urban planning policy, practice, and investment as a means for addressing contemporary urban economic, social, and environmental dilemmas; and
- observe the basic research design and methods employed to discern the influence of transportation investment on urban form and of urban form characteristics on travel.

Course Calendar

<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Week</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tues.</td>
<td>Jan. 17</td>
<td>1</td>
<td>Course Overview</td>
</tr>
<tr>
<td>Tues.</td>
<td>Jan. 24</td>
<td>2</td>
<td>Normative Theory: Performance Characteristics for Cities &amp; Transport</td>
</tr>
<tr>
<td>Tues.</td>
<td>Feb. 7</td>
<td>4</td>
<td>Coevolution of Urban Regions and their Transportation Systems</td>
</tr>
<tr>
<td>Tues.</td>
<td>Feb. 14</td>
<td>5</td>
<td>Travel Trends &amp; Urban Form in Contemporary U.S. Regions</td>
</tr>
<tr>
<td>Tues.</td>
<td>Feb. 28</td>
<td>6</td>
<td>How Highway &amp; Road Investment Impacts the Built Environment</td>
</tr>
<tr>
<td>Tues.</td>
<td>Mar. 7</td>
<td>7</td>
<td>How Transit Investment Impacts the Built Environment</td>
</tr>
<tr>
<td>Tues.</td>
<td>Mar. 14</td>
<td>8</td>
<td>Influence of the Built Environment on Travel Behavior</td>
</tr>
<tr>
<td>Tues.</td>
<td>Mar. 28</td>
<td>9</td>
<td>Induced demand; Accounting for self-selection</td>
</tr>
<tr>
<td>Tues.</td>
<td>Apr. 4</td>
<td>10</td>
<td>Parking</td>
</tr>
<tr>
<td>Tues.</td>
<td>Apr. 11</td>
<td>11</td>
<td>Connecting Workers and Jobs: Transportation, Land Use, or Both</td>
</tr>
<tr>
<td>Tues.</td>
<td>Apr. 18</td>
<td>12</td>
<td>Land Use, Transportation, and Public Health</td>
</tr>
<tr>
<td>Tues.</td>
<td>Apr. 25</td>
<td>13</td>
<td>State &amp; Local Policy to Shape Growth and Travel</td>
</tr>
<tr>
<td>Tues.</td>
<td>May 2</td>
<td>14</td>
<td>Politics of Transportation and Land Use</td>
</tr>
</tbody>
</table>
I. Foundations: Theory and Observation

(1/xx) Course Overview
Reducing Travel: Transportation-Land Use Integration


(1/xx) Normative Theory: Performance Characteristics for Cities and Transport


(1/xx) Explanatory Theory: Transportation and the Distribution of Opportunity


Coevolution of Urban Regions and their Transportation Systems


Travel Trends & Urban Form in Contemporary U.S. Regions


II. Evidence and Methods

How Highway & Road Investment Impacts the Built Environment


Induced Demand


How Transit Investment Impacts the Built Environment


Influence of the Built Environment on Travel Behavior

Boarnet GUT chapter on why study disaggregate travel behavior.


Handy, S. L., Lovejoy, K., Sciara, G.-C., Salon, D., & Mokhtarian, P. (2013). The First Big-Box Store in Davis. Access, 46(Spring)

### Accounting for Self-selection


### Policy and Practice

**Parking Practice, Critique & Reform**

http://www.accessmagazine.org/articles/fall-2013/sfpark-pricing-parking-demand/

http://www.accessmagazine.org/articles/fall-2013/parking-reform-made-easy/


**Land Use, Transportation, and Connecting Workers and Jobs**


(3/xx)  Land Use, Transportation, and Public Health


(4/xx)  State Policy to Shape Growth and Travel


**SB375: Shaping Growth and Travel in California**


(4/xx)  Local Policy to Shape Growth and Travel


Politics of Transportation and Land Use

