Spring 2014 (Updated January 10, 2015)

Professor David King
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Office hours: Monday 3-5, 304 Buell Hall

Transportation and Land Use Planning

Lecture: Tuesday 9-11am, 300 Buell North

Urban sprawl, smart growth, traffic congestion and green cities are ideas that share a common policy linkage: integrated transportation and land use planning. This course is an overview of land use and transportation policy and planning drawing primarily on the United States experience with autos and transit. By introducing theory and principles of urban planning, civil engineering, economics and public policy, students will learn about how to use planning tools, polices and other infrastructure investments to help develop effective places and networks. By the end of this course students will be able to think critically about the transportation and land use implications of accessibility, environmental and urban design policies. In addition, students will understand the mutually reinforcing incentives of transportation and land use systems at local, regional and national scales.

Through the readings, lectures, assignments and class discussion we will explore the following themes of the literature.

. 1) Why do our cities look like they do?

. 2) How does transportation affect land use?

. 3) How does land use affect demand for transportation?

. 4) What tools are used to evaluate urban form and transportation?

The course is organized into three sections1) Theory and debates; 2) Evaluating transportation and land use interactions; and 3) New policy directions for practice. There will be some overlap among these three areas.

Assignments

- Weekly reading presentation
  - All readings are available via Courseworks. Most readings are journal articles, with some reports and news articles included.
- Participation in survey data collection
- Review of complementary transport mode
- Travel behavior assignment
- Research paper

Section 1: Explaining urban spatial structure: theory and debates

Week 1 (January 20): What do we know about how transportation and land use interact?

Week 2 (January 27): Does history hold? Transport technologies over time; Household and firm location decisions

Week 3 (February 3): Accessibility versus mobility

Week 4 (February 10): Transportation and Economic Development

Section 2.1: Travel Behavior Analysis

Week 5 (February 17): Socio-demographic associations with travel behavior

- Research Topic Due

Week 6 (February 24): Modeling transportation effects of land use

- Research Topic Returned
- Travel Behavior Assignment handed out

Section 2.2: Evaluating transportation and land use interactions

Week 7 (March 3): On density

Week 8 (March 10): Managing urban growth

- Travel Behavior Assignment due

Section 3: New directions in transportation and land use policy

Week 9 (March 24): Off-street parking

- Paper Outline Due

Week 10 (March 31): Managing the curb

- Paper Outline Returned

Week 11 (April 7): Street Design and Vision Zero

Week 12 (April 14): The New Era of Private Transit

- Review of Transport Mode Assignment due

Week 13 (April 21): Learning from others: Successful cases around the world

Week 14 (April 28): Looking to the Future