Introduction

This course surveys the theory and practice of urban transportation policy and planning in both developed and developing countries. Students will learn the historical origins of urban transportation planning, how it has evolved to the present, and how current planning practice is bounded by certain economic, environmental, institutional, political, social, and technological constraints. The principal topics are: access, capacity, and safety issues in planning roadways and transit systems; impacts of motor vehicles on land use, urban development and the environment; strategies for more energy-efficient transportation; plans and policies for different modes of transportation; the land use/transportation connection; and transit-oriented development.

Besides the above student learning objectives, the course has two others:

1. To evaluate a long-range urban transportation plan for the Island of O’ahu;
2. To analyze proposals for rail transit, bus rapid transit and managed lanes for the Island of O’ahu.

Prerequisites

The course has no formal prerequisites. Ideally, students in the Department of Urban and Regional Planning should take PLAN 600: Public Policy and Planning Theory, either prior to or concurrently with enrollment in PLAN 648. The instructor will review relevant topics from PLAN 600 as necessary for those who have not taken PLAN 600.

Course Requirements

This course uses a lecture and class discussion format. Lectures are based on the assigned readings listed in the attached Class Schedule. Course requirements include:
Grading Policy

The following table shows the minimum points needed to earn certain grades:

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<tr>
<th>Grade</th>
<th>Points</th>
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<tbody>
<tr>
<td>A+</td>
<td>488</td>
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<tr>
<td>A</td>
<td>463</td>
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<tr>
<td>A-</td>
<td>450</td>
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<tr>
<td>B+</td>
<td>438</td>
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<tr>
<td>B</td>
<td>413</td>
</tr>
<tr>
<td>B-</td>
<td>400</td>
</tr>
<tr>
<td>C+</td>
<td>388</td>
</tr>
<tr>
<td>C</td>
<td>363</td>
</tr>
<tr>
<td>C-</td>
<td>350</td>
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<td>D</td>
<td>300</td>
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Students are expected to participate fully in class discussions and to stay current in the readings. Students who participate regularly in class are more likely to receive a better grade for the course. While attending class is important, simply listening to the instructor and other students in class discussions does not constitute adequate class participation.

The assignments and research paper are discussed briefly below. They will be graded primarily on the extent to which they satisfy the requirements of the assignment. Other grading criteria include persuasiveness of argument, accuracy, documentation, grammar, and spelling.

Late assignments will be penalized 20% of the maximum grade for each day that the assignment is late. Incomplete grades will be given only upon request for compelling reasons, such as extended sickness or overseas travel. Insufficient time to complete work is not an adequate reason, because it is a common trait of academic life.

Assignments

Each of the two assignments will be distributed about four weeks prior to the submittal dates shown on the attached Class Schedule. The assignments are designed to measure comprehension of lectures and readings.
Research Paper

The purpose of the research paper is to enable students to explore a particular urban transportation policy or planning issue in more depth. Suggested topics are shown on the next page. You may select one of these topics or propose an alternative. In either case, confer with the instructor about your topic choice and write a three page, typewritten memorandum that briefly describes your topic, the purpose and scope of your research, and why the topic is important and relevant to this course. If your topic concerns an urban transportation issue in the United States, explain how the topic relates to one of the critical issues discussed in the following report:


The instructor will distribute a digital copy of this report to all students during the second week of the semester. Also, the memorandum should give a preliminary list of 5-10 references and/or names of people to be interviewed about your topic, if necessary. These people should have expertise on your proposed topic. The memorandum is due on the date indicated in the Class Schedule.

Each student will have about 15 minutes to give an oral report of his or her research paper during the last day of class. The report should identify the questions that you are trying to answer, the method you used to answer these questions, and your findings. Students may use the classroom computer and projector in presenting their oral reports and should be prepared to answer questions from the audience. Refer to the following article in the Course Reader for ideas on how to improve your public speaking skills:


In general, the length of your research paper should be commensurate with the scope of the topic as you define it. The recommended length of this assignment, which includes cover page, tables, figures, and references, is 20 pages. Indicate the sources of all tables and figures if they are borrowed from published literature. Papers should be typewritten, double spaced on 8.5 x 11 inch plain bond paper with one-inch margins. Footnotes and references should be completely documented and should follow a consistent and conventional format. Read the following article in the Course Reader, if you need suggestions on how to improve your writing skills:


The paper and oral report are due on the date indicated in the attached Class Schedule.

*Suggested Topics*

- Compare Honolulu’s previous plan for rail transit in the early 1990s with its current plan in terms of their alignments, financing, technology, and planning process.
• Select a city that has recently expanded or intends to expand its public transit system and determine whether it fits or has adapted successfully to existing land use patterns.

• Compare the projected cost-effectiveness of the Honolulu rail transit project with that of similar transit systems already in existence.

• Will Honolulu’s rail transit project make the city’s economy more efficient by enhancing employers’ access to a larger labor pool at lower transport costs?

• Select a city in a developing nation of Asia or the Pacific Region, describe its urban transportation planning process, and explore ways to improve the process.

• Explore the linkage between urban transportation, fuel consumption, greenhouse gas emissions and global climate change at a national or regional scale.

• Explore the linkage between urban transportation, urban form, and air quality or other indicators of public health for a particular city.

• Assess the potential for improving energy efficiency and fuel substitution in the urban transportation sector in Honolulu, given the mandate of the Hawaii Clean Energy Initiative.

• Discuss bicycle planning and/or traffic-calming techniques in Honolulu; assess their potential for implementation of a ‘complete streets’ policy.

• Assess the potential of market-based strategies to relieve traffic congestion in Honolulu or elsewhere.

• Determine which transportation system management (TSM) or travel demand management (TDM) strategies offer the best potential to relieve traffic congestion in Honolulu or elsewhere.

• Describe attempts to develop an intelligent transportation system (ITS) in Honolulu or elsewhere and assess whether it has achieved its goals.

• Determine whether communities designed according to the principles of “new urbanism” could reduce trip-making and traffic congestion for new residential developments in Honolulu or elsewhere.

• Evaluate plans for transit-oriented development (TOD) in Honolulu or elsewhere.

• Does transit-oriented development (TOD) actually reduce driving by automobile?

• How do energy use, air pollution, and household costs change when rail transit and transit-oriented development (TOD) are integrated?
• Assess the potential impacts of climate change on transportation assets in Honolulu or elsewhere.

• Do narrower lanes on freeways increase both roadway capacity and accident rates?

• Evaluate the Statewide Pedestrian Master Plan prepared for the Highways Division, Department of Transportation, State of Hawaii, May 2013.

• To what extent can dynamic ridesharing programs reduce traffic congestion?

• To what extent will tele-commuting and tele-presence technologies enable households or businesses to relocate to more distant, but lower cost locations?

• How do bike-sharing programs influence the travel patterns of their members with respect to travel by rail, bus, and on foot?

• What types of investments may increase ridership on TheBus based on a review of the literature? Which of these investments are more cost-effective?

Final Examination

The final examination will be held on Monday, May 9th from 5:00 to 7:30 p.m. It will include several short-essay questions covering all course material. The instructor will review pertinent topics on the exam during the last class period. During the exam, you may not use lecture notes, textbooks, the course reader, a computer or smart phone to help you in answering questions.

Office Hours

My office is located in Saunders 107A. Regular office hours are from 3:00 to 4:30 p.m. on Mondays. If these hours are inconvenient, please make an appointment. At the University of Hawaii, I can be reached by telephone (956-8684), facsimile (956-6870), and e-mail (flachsba@hawaii.edu). Please do not submit written assignments as attachments to e-mail messages.

Readings

The readings for this course can be found in the textbook, course reader, and in various reference books listed below.

Textbook

The following textbook is not on sale at the University Bookstore in the Student Campus Center. However, it can be purchased from Amazon.com.
Reserve Reading

The following reading will be on reserve shelf in the Wong Audio Visual Center on the third floor of Sinclair Library starting the second week of the semester.


Digital Readings

I will distribute the following six reports as digital files to students who provide me with a thumb drive. Taken together, these six files are about 13 MB in size. In the Class Schedule, the symbol (DR) appears next to authors of Digital Readings.


Course Reader

The Course Reader provides copies of 34 journal articles on various topics. It has many of the assigned readings in the attached Class Schedule and some of the readings for the two homework assignments. In the Class Schedule, the symbol (CR) appears next to assigned
readings from the Course Reader. I will distribute a digital file of these readings, which is about 423.3 MB in size, to students who provide me with a thumb drive.


Small, Kenneth A. and Kurt van Dender. 2007. “If cars were more efficient, would we use less fuel?” Access 31 (Fall): 8-13.


**References**

Listed below are articles, books, reports and other references that may be useful for the two homework assignments and the research paper. Some of these items may be in the stacks of Hamilton Library. Some of the reports may be found on-line.


Schofer, Joseph and Raymond Chan. 2014. “We can learn something from that! Promoting an experimental culture in transportation,” Access 44 (Spring): 28-34.


Building Program, Federal Highway Administration and Federal Transit Administration, Washington, D.C.


