

**URPL 6550 TRANSPORTATION PLANNING AND POLICY (3 UNITS)
FALL 2014**

Class meets: Mondays, 9:30 a.m. – 12:15 p.m.
CU Building Room 320C
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1. Course Information

This course is an introduction to transportation policy, planning, and system design. In this seminar, we explore topics such as why cars and freeways have been so central to mobility in the US, how transportation system design can contribute to urban sustainability, how to mitigate the negative effects of transportation systems on natural environments and community health, and how transportation systems change through planning and advocacy.

The course is taught as an interactive seminar in which students and the instructor share responsibility for leading active learning exercises and facilitating discussion. The course includes training in facilitation as a practical skill and as a pathway for increasing equity in contemporary policy making and planning.

This is a graduate-level course with no prerequisites. Students should be ready to engage with concepts and methods from a variety of disciplines, including city planning, political science, urban design, sociology, public policy, statistics, economics, and transportation engineering.

Learning Objectives

After completing this course, students will be knowledgeable about major debates and issues in contemporary transportation policy, and how transportation relates to broader economic, physical, environmental, and social systems in regions, cities, and countries.

Per the Planning Accreditation Board's educational outcomes criteria, the course has the following learning objectives:

1. Purpose and Meaning of Planning: Appreciation of why planning—in this case, transportation planning and policy—is undertaken by cities, communities, regions, and nations, and the impact that planning—transportation planning and policy—is expected to have.
2. Governance and Participation: Appreciation of the roles of officials, stakeholders, and community members in planned change.

Table 1. Course Schedule

Week	Date	Topics	Learning
Part 1: What is at stake in transportation planning?			
1	Aug 18	What is at stake in transportation planning?	Introduction to the course, facilitation pre-assessment survey
2	Aug 25	Planning, policy, and facilitation part 1	Why facilitation in a transportation course, dialogue, Myers Briggs
3	Sep 1	NO CLASS, LABOR DAY	
Part 2: Transportation and land use history and institutional context			
4	Sep 8	History of transportation, urban form, and finance	The story of cars, land use, cities, and regions
5	Sep 15	The power and evolution of design standards	Why design standards are important and how they are created and used
6	Sep 22	In-class presentations of environmental analysis	
Part 3: Transportation system design and policy issues			
7	Sep 29	Public participation and facilitation part 2	Thinking together in groups
8	Oct 6	Personal mobility in a modern transportation system	Sustainable urban systems, public transit, designing for multiple travel modes
9	Oct 13	Discuss public meeting + social and economic factors of transportation	Streets as social places, demographic factors and change
10	Oct 20	Economic development	Urban goods movement, maritime, aviation
11	Oct 27	Streets and environmental systems	Green streets
12	Nov 3	Environmental policy and transportation systems	How our air has become cleaner, and how we can address climate change
13	Nov 10	Discuss interviews in class + public health in transportation	Health in all policies, individual and community health effects of transportation
Part 4: Innovative practices in transportation planning, policy, and design			
14	Nov 17	Evaluation and ethics	How do we know whether the transportation system meets social goals?
15	Nov 24	NO CLASS, FALL BREAK	
16	Dec 1	Planning, policy, and facilitation part 3	Agendas, collaborative processes, and facilitation debrief

3. Sustainability and Environmental Quality: Appreciation of natural resource and pollution control factors in planning, and understanding of how to create sustainable futures.
4. Growth and Development: Appreciation of economic, social, and cultural factors in urban and regional growth and change.
5. Social Justice: Appreciation of equity concerns in planning.

Readings and Attendance

Students are expected to attend every class and to complete all reading assignments before class. Most course materials will be available electronically. Occasionally, additional materials will be handed out in class.

Most readings are intended to familiarize students with a range of current topics in transportation planning and policy. Students who want more training in system design and engineering (or any other specialized topic in transportation) should discuss this with the instructor.

Lectures, Class Discussions, and Exercises

The course is not organized around lectures, although sometimes they may be used. Generally, class time is spent in discussion and exercises, which review and extend the material covered in the readings. Students are expected to be active participants and leaders in these discussions and exercises, and to integrate information from lectures, readings, discussions, and exercises into their assignments.

Communication

Unless otherwise noted, we will use Canvas for all official course communication and it is the responsibility of each student to use Canvas settings that enable reliable communication. For example, this may mean selecting a personal e-mail address as the default in Canvas. Canvas may be used for making course announcements, changing the schedule, returning graded assignments, personal communication, or other course-related business.

Student Work on the CAP Website

The Department of Planning and Design has developed a new website with the purpose of showcasing student work. Several of the assignments for this class would be good material for the website. We ask for students' permission to publish their work online in a release form filled in during the first week of class.

Grading Policy

Grades will be based on the following (see the descriptions and rubrics below):

Date Due	Assignment	Points
Each class	Attendance and participation	30
One time	Lead class discussion	25
August 25	Bring Paragon Learning Style Inventory results to class	0
September 22	Environmental analysis & presentation	25
October 13	Public meeting analysis & presentation	25
November 3	Interview the advocate & presentation	25
December 1	Cumulative essay and reflection	20
	Total	150

Final grades will be based on the total number of points earned:

- 150-136 points = A/A-
- 135-121 points = B+/B/B-
- 120-106 points = C+/C/C-
- ≤ 105 points = D or below

Grading for assignments will be based primarily on the quality and depth of the work presented, but organization, composition, and presentation (editing, spell checking) will also be taken into account. For group assignments, the grade will also reflect the number of persons working on the project (i.e., a team of three will be expected to produce a commensurately more detailed and sophisticated analysis than that produced by a team of two).

Students are expected to turn in both graded and ungraded assignments on time (see schedule). Out of respect and fairness for all members of the class, extensions will be granted only in the case of an actual emergency. Late assignments (those for which an extension has not been granted) lose up to five points per day.

Academic Honesty

Education at the University of Colorado Denver and in the College of Architecture and Planning (CAP) depends on honesty and integrity, as well as appropriate conduct. CAP students are required to follow the Student Code of Conduct and the Honor Code. Please refer to the following link for details.

<http://www.ucdenver.edu/academics/colleges/ArchitecturePlanning/discover/Documents/Honor%20Code-Graduate%20Students-Fall%202009.pdf>

All University and College policy, as well as common sense, regarding academic honesty applies in this course. Plagiarism and cheating are not tolerated and will be handled through the University's official process. When working in a group, it is the responsibility of everyone in the group to maintain the norms of academic integrity.

Students may do joint work with other courses only with the permission of both instructors and when the work is suitable for the topic and the course.

Accommodations

Any student who needs, or who may need, accommodations due to a disability should speak with the instructors as soon as possible, and should contact the Disability Resources and Services Office on campus to arrange accommodations.

<http://www.ucdenver.edu/student-services/resources/disability-resources-services/accommodations/Pages/accommodations.aspx>

2. Assignments

The assignments are designed to give students experience analyzing various aspects of transportation policies and planning processes, and to prepare students to participate in transportation decision-making through effective communication.

All assignments (except participation) should be submitted on Canvas in PDF format unless the assignment requires a different format.

ASSIGNMENT 1: Participation

Due: At each class meeting

Student grades for participation are based on two elements:

- (1) Attendance; and
- (2) Active participation (see description).

Elements of active participation

This course offers introductory training in discussion facilitation with Dr. Jane Hansberry, an expert in facilitation and lecturer in the CU Denver School of Public Affairs where she teaches courses in facilitation and management. In addition to training in facilitating discussions, we will also practice strategies for active participation that are appropriate for each individual's own intentions and learning styles. Participating in and leading group discussion is a skill that one develops over time.

One example of guidance for group participants is included below, adapted from: Lathrop A. 2006. Teaching How to Question: Participation Rubrics. *The Teaching Professor*, 20(2):4-5.

- Preparation: Demonstrate being prepared for seminar by taking notes, bringing notes and copies of the readings to class, researching unfamiliar or interesting topics found in the readings, and setting an intention for the meeting.
- Engagement: Actively engage with other members of the class in respectful and inclusive discussion.
- Initiative: Ask questions during discussion that focus, clarify, and summarize what the group is talking about. Be brave, and ask even the questions you feel nervous asking!
- Response: Respond to questions and discussion points in ways that build knowledge and comprehension, even if that means making discussion points that are not perfectly formulated at the moment. The group can work together to assemble disparate ideas. Try to apply ideas from the readings, experience, outside reading, or other material that makes a topic “real” to you.
- Discussion: Active participation is based in compassionate and respectful discussion with peers, and reflects higher order thinking/feeling skills (analysis, synthesis, compassion, etc.).

Grading Rubric: Participation			
	Excellent	Fair	Poor
Attending and demonstrating engagement during class sessions, 15 total, 2 points each	Can be relied on to be present and prepared	Misses class or is unprepared up to two times	Is late, absent, or unprepared more than two times
Total	30 points	26-29 points	≤ 25 points

ASSIGNMENT 2: Design and lead a class session

To gain experience in facilitation, and to practice the training carried out through readings and through in-class clinics, each student will design and lead a class session. Students will sign up for the session they want to lead during the first week of class.

In addition, an ungraded assignment for the first week is to complete the Paragon Learning Style Inventory (PLSI) assessment. Students should bring their results with them to the second week of class, August 25th. This assessment, which is similar to the Meyers Briggs assessment, gives insight into how individuals participate in groups, including how we participate in class.

During the second week of class, we will also complete a group exercise in which we co-create an “ideal seminar” framework, as well as a list of strategies for leading class. We will translate this “ideal seminar” framework into the rubric below, which is intentionally empty. After co-creating a strategy for leading seminar, the instructor will revise the syllabus with the new information, and will demonstrate the framework during the third week of class. If the framework needs any revision during the semester, then we will revise it together as a group.

In addition to receiving training in facilitation, and practicing facilitation skills in class, at the end of each class session each member of the class will provide constructive feedback to the discussion leader about how class went, what they learned, what worked, and what could be improved in the next week.

A few logistical concerns are:

Prepare for a two-hour discussion, leaving about 15 minutes at the beginning of the class for housekeeping, 15 minutes at the end of class for filling in the feedback form, and a 10- to 15-minute break.

Some class sessions will be unique, such as when we have a guest speaker or when we discuss assignments, and others will be more traditional sessions that focus on readings and pre-assigned topics. Each kind of session provides equally good experience for the facilitator.

For the class session that you lead, create an agenda and post it in the Canvas page that has been created for that class session.

Feel free to talk with Dr. McAndrews and Dr. Hansberry about your ideas for leading the class, and any questions that you may have about creating an agenda, in-class exercises, working with guest speakers, or any other topics.

Grading Rubric: Designing and leading class discussion			
	Excellent	Fair	Poor
Total	24-25 Points	20-23 points	≤ 19 Points

ASSIGNMENT 3: Environmental analysis: One small, but significant, thing

Due: September 22

The objective of this assignment is to practice the environmental observation and analysis skills necessary for transportation planning fieldwork and planning. This assignment may be completed individually or in pairs.

In this assignment, each student (or pair of students) will document and analyze a small—but significant—example of transportation system infrastructure/planning that he or she believes represents an opportunity to create better design.

For instance, one might select the lack of wayfinding around the Alameda light rail station (there is a station there?), or the missing sidewalk access on the north side of Building 500 on the Anschutz campus (a loading dock is placed between the student/employee/visitor parking lots and the building entrance instead of designing for pedestrian access).

There are myriad micro-level design problems in cities and regions that are representative of larger issues. The point of the assignment is to identify and analyze such a microcosm, not a macro-level problem like congestion, climate change, or obesity. Using this microcosm, think through how various systems of policy, finance, design, expertise, and decision-making came together to create it. Also think through how these systems would need to change to remedy the problem.

This assignment has two deliverables. The first is a well-designed poster (no larger than 24”x36”) that accomplishes the following things:

1. Document the site or example using photographs, drawings, and/or archival materials. Successful documentation will “show” the audience what the problem is rather than “tell” them.
2. Communicate the problem in this microcosm, and explain why it is a problem, and what planning, policy, design, or other systems are involved in producing it and creating a solution. The goal here is to be analytical and insightful, not simply descriptive.
3. Suggest a solution to the problem, and present this solution a re-imagined image or drawing.

The second deliverable is a presentation of the poster. Students will present their work in a pin-up session in class on September 22 and we will discuss the work as a group.

Grading Rubric: Environmental analysis			
	Excellent	Fair	Poor

Document the problem	High-quality images focus in on one issue (5 points)	Images are ok but could be more professional; problem could be more focused (≤ 4 points)	Does not clearly present the problem or scenario (≤ 3 points)
Insight into the problem	The interpretation of the problem is insightful and analytical (5 points)	Interpretation is descriptive, not analytical (≤ 4 points)	Problem is not accurately analyzed (≤ 3 points)
Re-imagined scenario	Represents thoughtful ideas that draw on insights into planning, policy, and design (9-10 points)	Represents some good ideas adequately, but is not tightly connected to the analysis of planning, policy, and design systems (8 points)	Has a problem representing new ideas (≤ 7 points)
Organization, composition, presentation	Professional (5 points)	A good draft (≤ 4 points)	Needs serious revision (≤ 3 points)
Total	24-25 Points	20-23 Points	≤ 19 Points

ASSIGNMENT 4: Public Meeting Analysis

Due: October 13

The objectives of this assignment are to: (1) analyze transportation policy making in a real-world setting; (2) evaluate the policy making process and communicate this to a peer-audience; (3) create an analytical framework for observing transportation policy and planning in action.

Each student will attend a meeting at which a transportation policy concern is being discussed. This can be a meeting of a government agency or an NGO, or it can be a meeting of a professional society. Please keep in mind that meetings may be held only monthly or quarterly (or even less frequently) and it is necessary to plan ahead. Meetings may be held during business hours or in the evenings, and you may need to make special arrangements to attend.

Write a memo summarizing the meeting, written in a style that is suitable as a briefing document for department heads and other staff members not at the meeting. The memo should provide:

- (1) A brief synopsis of the topic being discussed;
- (2) Note who was at the meeting;
- (3) Summarize what was said (the key points raised, areas of agreement or disagreement, data sources, documents referenced/distributed, etc.); and
- (4) Outline what next steps the group will be pursuing.

The memo should not exceed two single-spaced pages. Also write a brief analysis the meeting, answering the following questions:

- (1) Who are the actors, and what interests are they representing?
- (2) What points were raised and why?
- (3) Who seems to be more powerful and what clues help you discern power relationships?
- (4) How would you describe the elements of the policy process that are being conducted during the meeting? and
- (5) What is your personal reaction to the meeting?

This reflection should not exceed two single-spaced pages.

We will discuss the meetings and your interpretation of them during class on October 13th.

Grading Rubric: Public Meeting			
	Excellent	Fair	Poor
Collects information from the meeting that is useful to support the analysis	Quotes conversation or documents from the meeting, counts attendees, uses names (5 points)	Makes general statements about the meeting (≤ 4 points)	Does not rely on information from the meeting (≤ 3 points)
Responds to each part of the assignment to evaluate this policy making process and communicate original ideas about transportation policy making and planning	Fully explained and clear (9-10 points)	Mostly explained, but there are some gaps (≤ 8 points)	Many gaps (≤ 7 points)
Articulate empirical examples of power relationships, elements of policy processes, and personal opinions about policy	Depth of description and detail is exemplary (5 points)	Descriptive, but not fully of detail and clarity (≤ 4 points)	(≤ 3 points)
Organization, composition, presentation	Little or no additional copy editing needed (5 points)	Would have benefitted from additional editing (≤ 4 points)	Requires substantial revision to be understood (≤ 3 points)
Total	24-25 points	20-23 points	≤ 19 points

ASSIGNMENT 5. Interview the advocate

Due: November 3

This assignment is the first part of the final project for the course, and focuses on understanding the strategies of advocacy groups within the policy-making process, including building and using partnerships. This assignment may be completed individually or in pairs.

Each student (or pair) will identify an advocate working on an aspect of transportation planning and policy (e.g., a bicycle or pedestrian advocate). For the example of bicycle and pedestrian advocacy, this interview subject is an advocate because he or she actively promotes policies and plans to encourage walking and bicycling, and he or she seeks to institutionalize walking and bicycling as important modes of travel in the transportation system. The interview will provide insight into how this advocate uses partnerships, the role of partnerships in transportation policy and planning, and some of the constraints and conflicts that practitioners encounter. The interviews will be discussed during class on November 3rd.

- Preparing for the Interview

After identifying an interview subject, each student will carry out background research about the interviewee and his or her area of expertise to help prepare a set of interview questions. Compile this information into a one-page briefing document.

The next step is to prepare for conducting a qualitative interview. For example, one might study the following source, or other similar sources:

http://www.jhsph.edu/research/centers-and-institutes/center-for-refugee-and-disaster-response/publications_tools/publications/_pdf/pr_section_3.PDF

Finally, each student will develop a set of interview questions. As a guideline, avoid including more than one substantive question for every ten minutes with the interviewee. Be prepared to answer the following questions (do not ask these exact questions verbatim to the interviewee):

1. What does the advocate think about how partnerships can advance policy change?
2. Is mutual learning one of the ways that partnerships advance policy change?
3. How does the advocate understand his or her role in these partnerships and policy change?
4. What strategies does that advocate use to create partnerships to advance walking and bicycling in Colorado (or the issue in question)?

- Arranging and Conducting the Interview

To arrange the interview, contact the interviewee and explain who you are, your request for the interview (about 30-60 minutes, depending on the interviewee's availability), and the purpose of the interview. Be on time to the interview, and before beginning, explain to the interviewee (again) the purpose of the interview and what to expect. Also, tell the interviewee that he or she can refuse to answer any question and can stop the interview at any time. Please ask your interviewee if you may contact him or her at a later date for any follow up questions. You may record the interview if you would like to. Be sure to ask for permission from the interviewee if you elect to record the interview.

- Interview Write-Up and In-Class Presentation

The deliverable from the interview is a transcript (or notes) of the interview, including the interview questions and the interviewee’s responses. This is an example of an interview transcript from *The New York Times*:

http://www.nytimes.com/2013/08/18/magazine/snowden-maass-transcript.html?_r=0

The final deliverable should also include the one-page briefing document prepared in advance of the interview.

During class on November 3rd each student/group will share what they have learned about partnerships in advancing innovative planning, and the role of advocates in the policy-making process.

During this class session each student/group will take notes about the strategies that the advocates use, and summarize these in a one-page memo that will be used in the final assignment.

Grading Rubric: Analysis of Partnerships in Pedestrian and Bicycle Policy-Making Processes			
	Excellent	Fair	Poor
Clear and organized, well written, well designed materials	Perfect style and copyediting (5 points)	A few minor errors, but not distracting (3-4 points)	Needs a thorough revision (≤ 2 points)
Interview	The interview teaches the reader about specific strategies that advocates use and why they are successful, including their role in a social process (13-15 points)	The interview focuses on relevant questions, but does not reveal insights about advocacy strategy very effectively (11-12 points)	Hardly attempts to gain insight from the interviewee (≤ 10 points)
Background and preparation	Thorough and useful preparation for the interview (5 points)	Background preparation could have been more effectively applied (4 points)	Does not present background preparation, or preparation is incomplete (≤ 3 points)
Total	23-25 points	20-22 points	≤ 19 points

ASSIGNMENT 6. Cumulative essay

Due: December 1

This final assignment integrates students’ knowledge of partnerships and advocacy developed in the previous assignment, the course’s training in facilitation, and the course’s readings into a cumulative essay.

The cumulative essay provides an opportunity for students to reinforce their understanding of the governance, management, design, and use of transportation systems. The cumulative essay has two parts.

In the first part, students use the readings, discussions, assignments, and any other materials developed or used in class to write a professional briefing memo that responds to the following prompt:

(1) You are a senior planner working for a city in a large metropolitan region. The director of the planning department has asked you to propose a strategy for bringing stakeholders on board to implement a complete streets policy. The problem is that there are different factions in the city and region, as well as existing policies and standards that are preventing support from city council.

Write a briefing memo for the director of the planning department (and all staff members) that explains who the different stakeholders are and their interests (i.e., what is at stake for them if the complete streets policy is adopted or not adopted).

Based on this inventory of interests and actors, use the list of advocacy strategies produced in class for the previous assignment to propose a plan for creating the needed support for the complete streets policy.

Also address the possible scenario that a complete streets policy is actually not appropriate for your city (explain why this might be the case), and provide information about alternative approaches to creating a more multi-model transportation in your city that would be socially acceptable.

In your memo, explain your reasoning, and draw upon all available materials used in class, as well as existing information (do some research) about complete streets policies, alternatives to them, and cities' experiences implementing them. It is appropriate to use a real city and its experience as your case, or you can create a hypothetical city.

The memo should be no longer than three pages in length (single spaced). It may be formatted in any style, and should include references as appropriate. In addition, the memo must include an introductory paragraph that states the purpose of the memo, as well as information about how you conducted your analysis (e.g., what data and information, any limitations). Include the list of advocacy strategies in the final submission.

The second part of the cumulative essay is a short reflection essay. As part of class this semester we have worked with a facilitation trainer to learn techniques for leading and participating in group discussion, and each member of the class has applied and reflected on these skills and the group dynamic in class.

(2) Thinking of graduate-level seminar courses as professional conversations, write a short, reflective essay describing the story of your learning this semester. Pay attention to any

patterns that might appear between how you learned the “content” of the class (i.e., transportation planning and policy) and the “form” of the class.

Your essay should be no longer than 600 words in length. We will use these short essay as material for our final class meeting when we debrief about facilitation, group discussions, and collaboration in policy and planning.

Grading Rubric: Cumulative Essay			
	Excellent	Fair	Poor
Clear and organized compositions, well written, well designed materials	Perfect style and copyediting (5 points)	A few minor errors, but not distracting (3-4 points)	Needs a thorough revision (≤ 2 points)
List of advocacy strategies	Complete list of advocacy strategies, organized and synthesized into a useful summary (5 points)	A complete list of strategies, but not necessarily synthesized or processed (3-4 points)	Incomplete list of strategies (≤ 2 points)
Articulate strategy, explain the policy situation	Demonstrates knowledge of transportation policy systems and actors, expectations are realistic/constrained (5 points)	Some gaps in knowledge of transportation policy systems and actors, expectations are somewhat unrealistic (3-4 points)	Strategy reveals significant gaps in knowledge of transportation policy systems and actors (≤ 2 points)
Use of course material and research	Insightful and analytical use of course material and other materials (5 points)	Use of course material and other materials is descriptive (i.e., “book report”) rather than insightful (3-4 points)	Incomplete use of course and other materials (≤ 2 points)
Total	19-20 points	17-18 points	≤ 16 points

4. Readings

WEEK 1. AUGUST 18

Introduction to the course, discuss the syllabus: what is at stake in transportation planning?

1. Transportation Research Board. 2009. *Critical Issues in Transportation*. Transportation Research Board of the National Academies. Washington, D.C.
2. US Environmental Protection Agency. 2013. *Our Built and Natural Environments: A Technical Review of the Interactions Among Land Use, Transportation, and Environmental Quality*, second edition. EPA 231K13001. Washington, D.C.: US EPA.

This is a long document. See Chapter 3 for environmental details, and Chapter 4 for development strategies. Skim any sections that interest you.

WEEK 2. AUGUST 25

Planning, policy, and facilitation: part 1: why facilitation in a transportation course?

Questions to focus reading: Who are the actors in the transportation system, and how do they work together to plan and make policy? What skills are necessary for transportation planners and policy makers to be effective?

1. Wachs, Martin. 2004. "Chapter 6: Reflections on the Planning Process," in *The Geography of Urban Transportation*, Susan Hanson and Genevieve Guiliano, eds. New York: the Guilford Press.
2. Wier, Megan, Charlie Sciammas, Edmund Seto, Rajiv Bhatia, and Tom Rivard. 2009. "Health, Traffic, and Environmental Justice: Collaborative Research and Community Action in San Francisco, California." *American Journal of Public Health*, 99:S499-S504.
3. Kaner, Sam, Lenny Lind, Catherine Toldi, Sarah Fisk, and Duane Berger. 1996. Chapters 1, 3-6, in *Facilitator's Guide to Participatory Decision-Making*. Gabriola Island, BC: New Society Publishers.

Optional readings:

3. Kingdon, John W. 2003. "Chapter 6: The Policy Primeval Soup." *Agendas, Alternatives, and Public Policies*, 2nd ed. New York: Addison-Wesley Educational Publishers, Inc.

WEEK 3. SEPTEMBER 1—No Class, Labor Day

WEEK 4. SEPTEMBER 8

History of transportation, urban form, and finance: the story of cars, land use, cities, and regions

Questions to focus reading: What are some of the factors (demographic, infrastructure, policy, economy) that shape the transportation system that we experience as users?

1. Watch *Divided Highways* [[link](#) to video through Auraria Library].
2. Jackson, Kenneth T. 1985. "Chapter 2: The Transportation Revolution and the Erosion of the Walking City," in *Crabgrass Frontier: The Suburbanization of the United States*. New York: Oxford University Press.
3. Taylor, Brian D. 2000. "When Finance Leads Planning: Urban Planning, Highway Planning, and Metropolitan Freeways in California." *Journal of Planning Education and Research*, 20: 196-214.

4. Burbank, Cynthia J and Nick Nigro. 2011. "Primer on Federal Surface Transportation Authorization and the Highway Trust Fund." Pew Center on Global Climate Change, February 2011.

Optional readings:

5. Urry, John. 2004. "The 'System' of Automobility." *Theory, Culture & Society*, 21(4/5):25-39.
6. Volti, Rudi. 1996. "A Century of Automobility." *Technology and Culture*, 37(4):663-685.
7. Law, John. 1989 [2012]. "Technology and Heterogeneous Engineering: The Case of Portuguese Expansion," in *The Social Construction of Technological Systems*. Cambridge, MA: MIT Press.

WEEK 5. SEPTEMBER 15

The power and evolution of design standards

Questions to focus reading: How would the transportation system be different if we did not use design standards? What do you think are the pros and cons of design standards?

1. Southworth, Michael and Eran Ben-Joseph. 1995. "Street Standards and the Shaping of Suburbia." *Journal of the American Planning Association*, 61(1): 65-81.
2. Institute of Transportation Engineers. 2006. *Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities*.

Optional readings:

3. U.S. Department of Transportation Federal Highway Administration. 2011. Manual on Uniform Traffic Control Devices for Streets and Highways, 2009 edition.
4. Browse the website of the National Association of City Transportation Officials (nacto.org).
5. Browse the Colorado Department of Transportation Design Guide 2005 ([link](#)).

WEEK 6. SEPTEMBER 22

In-class presentations of environmental analysis

WEEK 7. SEPTEMBER 29

Policy, planning, and facilitation: part 2: thinking together in groups

Questions to focus reading: Think of examples of groups thinking and working together to influence the transportation system, or to find creative ways to use the transportation system. How could group processes be integrated into public participation in transportation? Think about both public- and private-sector processes.

1. McAndrews, Carolyn and Justine Marcus. 2014. "The Politics of Collective Public Participation in Transportation Decision-Making." Under review at *Transportation Research Part A*.

WEEK 8. OCTOBER 6

Personal mobility in a modern transportation system

Questions to focus reading: Many cities are thinking about how to create a multi-modal transportation system that includes cars, but allows for easier use of other modes. What are some of the technologies, designs, policies, or other things that would support a multi-modal system? How would multi-modal systems work in rural and small communities? How would increased multi-modalism affect the travel behavior of specific groups (e.g., children, families, travelers with special mobility needs, older travelers)?

1. Pucher, John. 2004. "Public Transportation," in *The Geography of Urban Transportation*, 3rd ed. Susan Hanson and Genvieve Giuliano, eds. New York: The Guilford Press.
2. Handy, Susan. 2011. "The Davis Bicycle Studies: Why do I bicycle but my neighbor doesn't." *Access*, 29:16-21.
3. Patton, Jason W. 2007. "A pedestrian world: competing rationalities and the calculation of transportation change." *Environment and Planning A*, 39:928-944.

Optional readings:

4. Bruzzone, A. 2010. "Transit Service & Operations Planning, A Primer: Integrating Best Operating Practices into Design Processes." Arup North America Ltd.

WEEK 9. OCTOBER 13

Social and economic factors in transportation

Questions to focus reading: How can transportation planners create a flexible and responsive transportation system (not one-size-fits-all plans and policies) to respond to the heterogeneous preferences, travel patterns, and transportation environments? For example, think of the differences between novice and expert bicyclists, children's travel, older travelers, or households without cars.

1. Decker, Annie. 2006. "Stuck At Home: When Driving Isn't a Choice." *Access*, No. 29.
2. Anderson, Elija. 1999. "Down Germantown Avenue." In *Code of the Street: Decency, Violence, and the Moral Life of the Inner City*. New York: W.W. Norton & Company, Inc.
3. Berube, Alan, Elizabeth Deakin, and Steven Raphael. 2006. "Socioeconomic Differences in Household Automobile Ownership Rates: Implications for Evacuation Policy." Unpublished manuscript.

Optional readings:

4. Rosenbloom, Sandra. 2003. "The Mobility Needs of Older Americans: Implications for Transportation Reauthorization." The Brookings Institution Series on Transportation Reform. July 2003.
5. Sanchez, Thomas W., Rich Stolz, and Jacinta S. Ma. 2004. "Inequitable Effects of Transportation Policies on Minorities." *Transportation Research Record*, 1885:104-110.

WEEK 10. OCTOBER 20

Economic Development, Freight, and Air Transportation

Questions to focus reading: Is the heart of transportation planning actually land use planning? How should planners balance the demands of planning for local "places" versus planning for regional economic and development concerns? Are these competing demands?

1. Cervero, Robert. 2006. "Economic Growth in Urban Regions: Implications for Future Transportation." Resource Paper for Forum on the Future of Urban Transportation, Eno Transportation Foundation, Washington, D.C. December 2006.
2. Lakshmanan, T.R. and Lata R. Chatterjee. 2005. "Economic Consequences of Transport Improvements." *Access*, Spring 2005.
3. Kasarda, John D. 2006. "The Rise of the Aerotropolis." *The Next American City*, 10, Spring 2006.
4. THE Impact Project. 2012. *Storing Harm: The Health and Community Impacts of Goods Movement Warehousing and Logistics*. THE Impact Project Policy Brief Series.

Optional readings:

5. SACOG. 2006. "SACOG Regional Goods Movement Study: Phase One Report." Prepared by The Tioga Group. September 10, 2006. **This is a long document. Read the sections that interest you.**

WEEK 11. OCTOBER 27

Streets and environmental systems

Questions to focus reading: Transportation planning is often part of public works organizations, yet traffic and other public works concerns, such as stormwater and pollutions, are not always considered in combination, though there is opportunity to do so. Think about how streets are part of natural environments, and how this perspective would change the goals and practices of traditional transportation planning.

1. US Environmental Protection Agency. 2013. *Our Built and Natural Environments: A Technical Review of the Interactions Among Land Use, Transportation, and Environmental Quality*, second edition. EPA 231K13001. Washington, D.C.: US EPA. **This is a long document. Review the sections that relate to streets/roads and natural environments, including development and habitat fragmentation.**

2. Additional readings pending.

WEEK 12. NOVEMBER 4

Environmental policy and transportation systems

Questions to focus reading: Historically, how have environmental goals shaped how we plan for transportation systems, and the way we travel? How do you think policies and practices will change in response to new social goals? What are some of these new social goals?

1. Johnston, Robert. 2004. "The urban transportation planning process." In *The geography of urban transportation*, Chapter 5, pp. 86-114.
2. Environmental Protection Agency. 2012. "National Environmental Policy Act (NEPA): Basic Information." <http://www.epa.gov/compliance/basics/nepa.html>.
3. Environmental Protection Agency. 2007. "Automobile Emissions: An Overview."
4. Barth, Matthew and Kanok Boriboonsomsin. 2009. "Traffic Congestion and Greenhouse Gases." *Access*, 25:2-9.

WEEK 13. NOVEMBER 10

Public health in transportation

Questions to focus reading: Should transportation planning and policy include public health outcomes as explicit goals for transportation systems? What are the arguments for and against this position?

1. de Hartog, Jeroen Johan, Hanna Boogaard, Hans Nijland, and Gerard Hoek. 2010. "Do the Health Benefits of Cycling Outweigh the Risks." *Environmental Health Perspectives*, 118(8):1109-1116.
2. Künzli, Nino, Rob McConnell, David Bates, Tracy Bastain, Andrea Hricko, Fred Lurmann, Frank Gilliland, and John Peters. 2003. "Breathless in Los Angeles: The Exhausting Search for Clean Air." *American Journal of Public Health*, 93:1494-1499.
3. Raynault, Eloisa and Ed Christopher. 2013. "How Does Transportation Affect Public Health?" *Public Roads* (May/June):28-34.

WEEK 14. NOVEMBER 17

Evaluating policy interventions: technical analysis in a political context

Questions to focus reading: What quotations from these readings stand out to you? How do you, personally, deal with questions of politics in your own work?

1. Flyvbjerg, Bent, Mette Skamris Holm and Søren Buhl. 2002. "Underestimating Costs in Public Works Projects: Error or Lie." *Journal of the American Planning Association*, 68(3):279-295.

2. Wachs, Martin. 1990. "Ethics and Advocacy in Forecasting for Public Policy." *Business and Professional Ethics Journal*, 9(1&2):141-157.
3. Higgins, Thomas and Will L. Johnson. 1999. "Evaluating transportation programs: Neglected principles." *Transportation*, 26(4):323-336.
4. Small, Kenneth A. 1999. "Project Evaluation," in *Essays in Transportation Policy*, José A. Gómez-Ibáñez, et al., eds. Brookings Institution Press, pp. 137-177.

WEEK 15. NOVEMBER 24—No Class, Fall Break

WEEK 16. DECEMBER 1

Planning, policy, and facilitation: part 3