



**University of Alberta
HGP 485 Transportation Planning and Policy
Fall 2016**

Instructor

Name: Manish Shirgaokar, PhD, AICP
 Office: Tory 3-113
 Email: shirgaokar@ualberta.ca (preferred for communication; please write “HGP 485” and state the issue briefly in the email subject line for quicker response)
 Office Hours: Tuesday and Thursday 3:00 P.M. – 4:00 P.M. (sign up at <https://www.wejoinin.com/sheets/tgrwz>)

Course Logistics

Name: HGP 485 Advanced Topics in Planning (Transportation Planning and Policy)
 Location: Tory 3-58
 Time: Friday 1:00 P.M. – 3:50 P.M.
 Details: Section A1, Lecture, Class 65772, 3 Units
 eClass: <https://eclass.srv.ualberta.ca/course/view.php?id=33038>
 Notes: Topics covered in HGP 381 B1 (Class 81015 – Transit Urbanism) during Winter 2017 are not the primary focus of this class. This is a survey course looking at the broad reach of transportation planning. There will be some conceptual overlap between the two classes but the material covered is different.

[Parts of this syllabus are adapted from syllabi for CIVE 612, Fall 2013 (Univ. of Alberta); CIVE 411, Fall 2013 (Univ. of Alberta); HGP 381, Fall 2014 (Univ. of Alberta); CP 114, Spring 2014 (Univ. of California, Berkeley)]

1. Calendar Description

Exploring planning theories in the context of contemporary events phenomena.

Prerequisite: HGP 210 and consent of the department.

Variable content course which may be repeated if topic(s) vary.

2. Course Objectives and Outcomes

Objectives: This survey course covers a range of themes related to the planning of efficient, safe, and sustainable transportation, which are essential to the social, economic, and environmental well-being of cities and regions. The focus is primarily on North America and some cases from other parts of the world. The material covered is multi-modal ground transportation with a focus on automobiles, mass transit and non-motorized transport, at scales ranging from local neighborhoods such as Garneau to large urban regions such as the National Capital Region (Canada). The course presents a general introduction to transportation planning. It provides an opportunity for students to investigate real-world transportation planning/policy issues that are of interest to them. From a practitioner’s perspective, the class is designed to teach students how to be planners who are required to make evidence-based claims and defend them before an expert and non-expert audience.

Outcomes: At the end of this course the students will be able to:

- Appraise transportation policy documents and synthesize them into succinct presentations
- Write a technical policy memo
- Analyze datasets to extract insights
- Work on a team that must analyze a complex, open-ended issue within a fixed deadline, making the best possible use of the varied skills of the team members
- Formulate and implement a strategy to identify key issues and attributes of a planning problem, which can be addressed within the time and personnel resources available
- Justify evidence-based positions on transportation issues as would practicing planners

3. Professional Planning Accreditation Requirements

HGP 485 is an advanced course for students in the BA Major in Planning and BSc specialization in Planning. For students enrolled in these programs, this course contributes to developing the knowledge, skills, and ethics identified by Canadian Institute of Planners (CIP) as necessary components for practice as a professional planner. This course provides an introduction to all of the components as identified by the CIP to some degree, however, the following are emphasized:

Functional Competencies under CIP

- Forms, scales and settings of human settlements
- Land use, design and infrastructure
- Visioning, goal-setting and problem-solving
- Information gathering and analysis

Enabling Competencies under CIP

- Identifying patterns and trends
- Thinking at various geographic scales
- Gathering and analyzing quantitative data
- Teamwork and team-building
- Written/Oral/Graphic communication

4. Course Format and Workload

This survey class is run as an upper-level lecture and seminar course. This class has equal amounts of reading and assignment loads. You are expected to budget 6 hours every week for this workload. Please note that some students will finish the required readings and assignments quicker than others. The instructor will lecture for about 65% of the class time (~110 minutes). The rest of the class will be run partly (~30 minutes) as a seminar that will be led by students focusing on readings for the week's topic—the balance class time (~30 minutes) will be used to discuss term projects with/in student teams. The purpose of the seminar is to give you an incentive to read. Reading greatly increases your understanding of the material and your critical thinking on a topic. A sign-up sheet will be available and all students are required to sign up for one seminar session with the expectation of reading 1-2 journal papers and/or a book chapter, and presenting/leading the class discussion. Each week we will have 2-4 students run the ~30-minute seminar.

The best way to achieve a deeper understanding of the course material is not via lectures but via your own reading of material. You are expected to synthesize from across the course readings, present relevant information and cite key authors when working on your term project and on the exam. This can only be achieved if you have a firm grasp of the material through reading.

The format for the final exam will be a mix of multiple choice questions, short answers, and an essay question—the exam is open book. Note, however, that unless you keep up with the required readings, you will find the exam difficult. Students will also have three homework assignments to be worked on individually and a term project to be worked on in teams of two.

Homework Assignments: The course has three homework assignments that have to be submitted on eClass. All assignments will focus on Edmonton to make learning more relevant to the city where we live. Assignments will be posted on the class website as shown in section 5—please note release and due dates. Students must complete all assignments since this will result in significant improvement on the term project. Plagiarism will not be tolerated.

Term Project (adapted from Amy Kim, CIVE 612 Transportation Planning: Methodology & Techniques, Fall 2013, Univ. of Alberta): Students are required to look at a set of stories in Edmonton over the last calendar year. This will require some online research of news articles (you can visit the librarian if you are challenged for finding information). You are expected to look for the transportation focus of the policy issue you pick, if the primary focus is different. Some sample issues are: suburbanization and transportation investments, challenges of infill development due to arguments of traffic, transit expansion/transit gaps, LRT versus BRT investments, bicycle infrastructure planning, parking, speeding, pedestrian and bicyclist safety, access for the elderly/women, and winter and access to facilities. Students must choose, in teams of two, a major planning/policy topic within their areas of interest. You are advised to define your topic and scope narrowly, since this will result in focused thinking about issues and a good term project.

You are expected to answer a combination of the following questions when you present.

- What is the issue you have investigated?
- What analytic methods, models, and data have been used to study the problem (by you and/or by others)?
- Who is involved in this issue? What are their positions and how do they differ from one another? How did each group react to the methods used to study the problem by other groups?
- What alternatives are being/were considered?
- What role (and to what degree) did the analytic methods play in the development and evaluation of alternative policies? How did the political economy influence the outcome? If final decisions have not been made, explain why not and report on the current state of progress.
- What have you learned about the planning process and how it shapes policy?

Deliverables will include the following:

Initial Proposal: One-page description of the topic, some background information, and the purpose of the paper (i.e., what is it you are going to investigate/learn). The instructor will read these and make suggestions about the topic itself, offer guidance on reading materials.

Progress Update: Two meetings per project minimum during second half of the class where teams are expected to show progress. Additional meetings are possible during office hours.

In-class Presentation: Using Power Point, present your work in 20 minutes (additional 5-10 minutes for discussion and transitioning to next group). Note that teams will have to submit a Word document (along with their slides on eClass) showing how the work was split and which team member is responsible for what part of the project from inception to completion. Project presentations will be held at the same time as regular class. Requirements for the final presentation will be available on the class website 2-3 weeks before the due date. Teams are encouraged to come to office hours to get feedback on the project and the presentation. Please note that the final Power Point files are due at 11:55 P.M. the day *before* your team is scheduled to present.

Class Participation: In order to encourage you to share your thoughts and ideas with the class, 10% of your course grade will be determined by the quality and quantity of your participation in various course activities every class. In particular, students will have an opportunity to present synopses of reading materials for in-class seminars. Students are expected to answer the following questions when presenting a verbal synopsis –

- What is/are the main argument/s?
- What is the context of the chapter/paper?
- Which methods are used to analyze the information?
- What are the outcomes/policy recommendations?
- What are your critical observations?
- Discuss the relevance of the paper/chapter for the Edmonton Capital Region.
- Share a video or a story that is related to the issues contained in the reading/s.

You can also earn participation credits by answering questions, asking questions, or commenting in class. As a result, attendance will have an impact on your grade; however the instructor will not take attendance at each class meeting.

5. Lectures /Assignments

Week	Date (Day)	Lecture / Topic	Assignments [released / collected via eClass at 12:30 P.M. unless noted otherwise]
1	Sept 2 (Fri)	Introduction to the Course. Syllabus discussion. Topic 1: Contemporary Issues in Transportation Planning	
2	Sept 9 (Fri)	Topic 2: A History of Transportation Planning (~1850s-1950s)	
3	Sept 16 (Fri)	Topic 3: Policy Making for Transportation Planning	Guidelines for term project proposal released

4	Sept 23 (Fri)	Topic 4: Social Equity and Transportation	Initial proposal for term project due (in groups of 2 students)
5	Sept 30 (Fri)	Topic 5: Transportation Finance	Assignment 1: <i>Policy Analysis</i> released (10% of grade)
6	Oct 7 (Fri)	Topic 6: Transportation's Impact on Land Use	Assignment 1 due
7	Oct 14 (Fri)	Topic 7: Managing Automobiles and the Need for Parking	
8	Oct 21 (Fri)	Topic 8: Non-motorized Travel (Bicycling)	Assignment 2: <i>Policy Memo</i> released on Oct. 19 Wed. and due in 48 hours (8% of grade).
9	Oct 28 (Fri)	Topic 9: Mass Transit: Train, Metro, BRT, Bus	
10	Nov 4 (Fri)	Guest lecturer (TBD)	Assignment 3: <i>Transportation Data Analysis</i> released (12% of grade)
11	Nov 11 (Fri) (University Holiday)	Note: Reading Week (Nov 7 – Nov 10)	
12	Nov 18 (Fri)	Topic 10: Energy, Environment and Transportation	Assignment 3 due
13	Nov 25 (Fri)	Presentations (Day 1) (Group A)	Due on eClass by Nov 24 (Thu) at 11:55 P.M.
14	Dec 2 (Fri)	Presentations (Day 2) (Group B)	Due on eClass by Dec 1 (Thu) at 11:55 P.M.
	Dec 15 (Thursday)	Comprehensive Final examination (Confirm details on BearTracks)	2.00 P.M.

6. Required Textbooks / Other Major Course Materials

There is a required textbook for this class. Susan Hanson and Genevieve Giuliano (eds). *The Geography of Urban Transportation*. The Guilford Press, 3rd Edition, 2004. Two copies of the text book have been kept on reserve in Rutherford Library (Call Number: HE 305 G3527 2004). Journal papers, blogs, op-eds, and newspaper stories are additional readings for this class. This syllabus shows required and optional readings for each week in section 14.

7. Class Behavior / Attendance

The instructor has not designed this course so as to learn the material remotely. Students are expected to attend all lectures, participate in class, and finish all the assignments. Students are expected to arrive on time for all sessions and meetings. The instructor expects everyone to participate actively in a way that demonstrates familiarity with the assigned materials. One way to assist in this is to jot down questions while you are doing the reading at home and bring them

up during the lectures or discussions. It is greatly appreciated when students can find current videos, articles and images that can be incorporated into lectures or posted on the class web-site for other students to see.

8. Course Website

The course has an eClass website. Students are to use this forum to access lectures and assignments, and to submit homework assignments and progress on projects. You can also access additional resources and will receive announcements through the class website. A message board is available that can be used to ask questions on homework assignments to the class. Students are required to visit the course website regularly to download course materials and get important updates. It is the student's responsibility to make sure you able to log into the website. If you are unable to log into the course website please consult the eClass support webpage for further instructions.

9. Lab Access, Course Fees (If Applicable), and Gaining Access to Past or Representative Evaluation Course Material

Please check with Michelle Vaage, Planning Program Coordinator, ESB 1-26, 780-492-4416, mvaage@ualberta.ca OR Soars Craig, Undergraduate Program Administrator, ESB 1-26, 780-492-7988, csoars@ualberta.ca. The instructor will gather past term projects from HGP 381 (Winter 2015) and post them on the class website for reference.

10. Overall Grading Policy

Homework: 30% (Assignment#1 10% + Assignment#2 8% + Assignment#3 12%)

Final project: 30% (Development 14% + Analysis 8% + Presentation 8%)

Comprehensive final exam: 30%

Attendance and in-class participation: 10%

All assignments and the term project in this course will be given a numerical mark. A cumulative course mark will be calculated from those individual marks, weighted as tabulated above. A final letter grade will be assigned based upon your cumulative mark and the instructor's analysis of the class's cumulative mark distribution. Where possible, natural breaks in the cumulative mark distribution may be used in assigning grades, but no pre-determined distribution of grades will be imposed on the class. Your grade will reflect a combination of your absolute achievement and relative standing in the class.

If you have questions or concerns with a given grade for any homework or the project, send the instructor an email outlining the issue and specifically arguing, using evidence, why you think the marks should be different. The instructor will review your assignment or project with this concern in mind. However, the adjusting of marks/grades is entirely the instructor's prerogative.

Late submissions will carry a penalty as follows:

After deadline but before 12 hours from deadline: Penalty is 25% marks

After 12 hours but before 24 hours from deadline: Penalty is 50% marks

After 24 hours but before 48 hours from deadline: Penalty is 75% marks
Your submissions will be online and date stamped by the server, except where indicated otherwise in section 5. No late submissions will be accepted after two days from deadline.

Missed Assignments or Exams

For an excused absence where the cause is religious belief, a student must contact the instructor within two weeks of the start of classes to request accommodation for the term (including the final exam). The instructor may request adequate documentation to substantiate the student request.

A student who cannot complete one of the course assignments due to incapacitating illness, severe domestic affliction, or other compelling reason should contact the instructor via e-mail as soon as possible. The weight of the missed assignment will be added to the comprehensive final exam.

A student who cannot write the comprehensive final examination due to incapacitating illness, severe domestic affliction or other compelling reasons can apply for a deferred comprehensive final examination. Such an application must be made to the student's Faculty office within 48 hours of the missed examination and must be supported by a Statutory Declaration or other appropriate documentation (Calendar section 23.5.6). If a deferred comprehensive final exam is necessary, it will take place on Monday 19th December, 2016 at 10:00 a.m. in Tory 3-113.

IMPORTANT: Deferred examinations are a privilege and not a right; there is no guarantee that a deferred examination will be granted. Misrepresentation of Facts to gain a deferred examination is a serious breach of the Code of Student Behaviour.

11. Grading Policy for Assignments

All homework will include a set of tasks that are to be performed and reported in a write up. For the three homework assignments, the assignment description will show how many marks each step carries. Each task will be evaluated according to the following criteria:

- a. Academic merit of your answers to the questions.
- b. Conciseness and completeness of your answers. Please write to the point and explicitly address the questions or tasks. Avoid using unnecessary graphics (figures, tables, graphs, etc.) unless they add value. Similarly do not write what you can show and discuss through figures and graphs. Make sure to use captions and to refer to the graphics you include in your written answer. Graphics without any reference or accompanying explanation will be disregarded.
- c. Organization and presentation. Remember that your homework assignment is a professional document that reflects your thinking and learning process. Please organize your writing in a logical fashion so that your answers can be easily identified. A general format for your presentation should, as a minimum, include the following components:
 - i. Question number
 - ii. Your answer and discussion

- iii. Your support documents (images, graphs, tables, etc.) as required.
- d. Compliance with assignment instructions. Before submitting your assignments please verify that your submission complies with the submission instructions. Make sure all the necessary files/deliverables are included in your submission.

Each assignment's instructions will include the total maximum marks and its percentage weighting in the final course mark. The contribution of each assignment to your final mark will therefore be the assignment marks given to you multiplied by the percentage. Please note that assignments have different percentages depending on their level of difficulty. Also note that some assignments may include bonus questions or tasks.

12. Exams

Your student photo I.D. is required at exams to verify your identity. Students will not be allowed to begin an examination after it has been in progress for 30 minutes. Students must remain in the exam room until at least 30 minutes has elapsed. The exam is open-book so the textbook and notes are allowed. The exam will not require a calculator. Electronic equipment such as cellphones cannot be brought into examination rooms and hats should not be worn.

IMPORTANT: Students must verify final exam date on BearTracks when the Final Exam Schedule is posted.

13. Additional Notes

- 1. The University of Alberta is committed to the highest standards of *academic integrity and honesty*. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect. Students are particularly urged to familiarize themselves with the provisions of the Code of Student Behaviour (see <http://www.governance.ualberta.ca/en/CodesofConductandResidenceCommunityStandards/CodeofStudentBehaviour.aspx>) and avoid any behaviour which could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offence. Academic dishonesty is a serious offence and can result in suspension or expulsion from the University. From time to time, the instructor may run sentence or paragraph checks of a random sample of student's assignments for plagiarism. All forms of dishonesty are unacceptable at the University. Any offence will be reported to the Senior Associate Dean of Science who will determine the disciplinary action to be taken. Cheating, plagiarism and misrepresentation of facts are serious offences. Anyone who engages in these practices will receive at minimum a grade of zero for the exam or paper in question and no opportunity will be given to replace the grade or redistribute the weights. As well, in the Faculty of Science the sanction for cheating on any examination will include a disciplinary failing grade (no exceptions) and senior students should expect a period of suspension or expulsion from the University of Alberta.
- 2. *Audio or video recording*, digital or otherwise, of lectures, labs, seminars or any other teaching environment by students is allowed only with the prior written consent of the instructor or as a part of an approved accommodation plan. Student or instructor content, digital or otherwise, created and/or used within the context of the course is to be used solely

for personal study, and is not to be used or distributed for any other purpose without prior written consent from the content author(s).

3. Policy about course outlines can be found in §23.4(2) of the University Calendar.
4. Specialized Support and Disability Services (SSDS) provides assistance to University students whose disabilities involve any number of conditions affecting mobility, vision, hearing, learning or mental or physical health. Students who require accommodations in this course due to a disability affecting mobility, vision, hearing, learning, or mental or physical health are advised to discuss their needs with Specialized Support and Disability Services, 2-800 Students' Union Building, 492-3381 (phone) or 492-7269 (TTY). Please do not hesitate to contact the instructor regarding your special needs if you encounter any issues.
5. Students who require additional help in developing strategies for better time management, study skills or examination skills should contact the Academic Support Centre, 2-300 Students' Union Building, 492-2682 (phone) or success@ualberta.ca
6. Disclaimer: Any typographical errors in this Course Outline are subject to change and will be announced in class. The date of the final examination is set by the Registrar and takes precedence over the final examination date reported in this syllabus.
7. Copyright: Dr. Manish Shirgaokar, Urban and Regional Planning Program, Department of Earth & Atmospheric Sciences, Faculty of Science, University of Alberta (2016).

14. Readings

Readings by week with code to decipher the reading list:

- “Two Asterisks (**)” must be read
- “One Asterisk (*)” at least one of two such must be read
- “T” = Textbook
- “eC” = eClass
- “W” = Web Resource (use link, DOI, or a search engine)
- “A” = Additional resource

Week 1: (Sept 2) Topic 1: Contemporary Issues in Transportation Planning

- T** Susan Hanson. 2004. The context of urban travel: Concepts and recent trends. Chapter 1 in *The geography of urban transportation*, 3rd edition, edited by Susan Hanson and Genevieve Giuliano. New York: The Guilford Press.
- A/W Transportation Research Board. 2013. *Critical issues in transportation 2013*. Washington DC: Transportation Research Board.
<http://onlinepubs.trb.org/Onlinepubs/general/criticalissues13.pdf>
- A/W Govt. of Canada. *Pathways: Connecting Canada's Transportation System to the World: Volume 1*. Ministry of Transport, Toronto, Ontario, 2012, p. 286.
http://www.tc.gc.ca/eng/ctareview2014/CTAR_Vol1_EN.pdf
- A/W Urban Transportation Task Force. 2005. *Urban Transportation in Canada: Needs and Opportunities*. Washington DC: Transportation Research Board.
<http://www.comt.ca/english/urbantrans.pdf>
- A/W Blumenberg, E., K. Ralph, M. Smart, and B. D. Taylor. Who knows about kids these days? Analyzing the determinants of youth and adult mobility in the U.S. between 1990 and 2009. *Transportation Research Part A: Policy and Practice*, Vol. 93, 2016, pp. 39–54. DOI:

10.1016/j.tra.2016.08.010

Week 2: (Sept 9) Topic 2: A History of Transportation Planning (~ 1850s-1950s)

- T** Peter Muller. 2004. Transportation and urban form: Stages in the spatial evolution of the American metropolis. Chapter 3 in *The geography of urban transportation*.
- eC* Kenneth Jackson. 1985. “The transportation revolution and the erosion of the walking city (Chapter 2)” in *Crabgrass frontier: The suburbanization of the United States*. New York: Oxford University Press.
- W* Peter Hall. 2014. “The City of By-Pass Variegated – The Mass Transit Suburb: London, Paris, Berlin, New York, 1900-1940” in *Cities of Tomorrow : An Intellectual History of Urban Planning and Design Since 1880*, Hoboken, NJ: Wiley-Blackwell (Fourth Edition) (eBook Available at U of A library website)
- A/T Kenneth Jackson. 1985. “The time of the trolley (Chapter 6)” and “The new age of automobility (Chapter 9)” in *Crabgrass frontier: The suburbanization of the United States*. New York: Oxford University Press. (U of A library call no. HT 384 U5 J13 1985)
- A/W Sy Adler. 1991. The transformation of the Pacific Electric railway: Bradford Snell, Roger Rabbit, and the politics of transportation in Los Angeles. *Urban Affairs Quarterly* 27 (1) 51-86. DOI: 10.1177/004208169102700104
- A/W Sarah Goodyear. 2012. The invention of jaywalking. *The Atlantic*, April 24. <http://theatlanticcities.com/commute/2012/04/invention-jaywalking/1837/>

Week 3: (Sept 16) Topic 3: Policy Making for Transportation Planning

- T** Robert Johnston. 2004. The urban transportation planning process. Chapter 5 in *The geography of urban transportation*.
- T* Martin Wachs. 2004. Reflections on the planning process. Chapter 6 in *The geography of urban transportation*.
- W* Casello, J. M., W. Towns, J. Bélanger, and S. Kassiedass. Public Engagement in Public Transportation Projects: Challenges and Recommendations. *Transportation Research Record: Journal of the Transportation Research Board*, Vol. 2537, 2015, pp. 88–95. DOI: 10.3141/2537-10
- A/W Flyvbjerg, B., M. S. Holm, and S. L. Buhl. How (In)accurate Are Demand Forecasts in Public Works Projects?: The Case of Transportation. *Journal of the American Planning Association*, Vol. 71, No. 2, 2005, p. 131. DOI: 10.1080/01944360508976688
- A/W City of Edmonton. 2009. *The Way We Move – Transportation Master Plan*, http://www.edmonton.ca/city_government/documents/land_sales/TransportationMasterPlan.pdf
- A/W Alberta Infrastructure and Transportation. 2006. *2005 Household Travel Survey – Summary Report on Weekday Travel by Residents of the Edmonton Region*. http://www.edmonton.ca/transportation/RoadsTraffic/2005HTSRegionReportFINALOct24_06.pdf

Week 4: (Sept 23) Topic 4: Social Equity and Transportation

- T** Devajyoti Deka. 2004. Social and environmental justice issues in urban transportation.

- Chapter 12 in *The geography of urban transportation*.
- W* Legrain, A., R. Buliung, and A. M. El-Geneidy. Travelling fair: Targeting equitable transit by understanding job location, sectorial concentration, and transit use among low-wage workers. *Journal of Transport Geography*, Vol. 53, 2016, pp. 1–11. DOI: 10.1016/j.jtrangeo.2016.04.001
- W* Habib, K. M. N., and V. Hui. An activity-based approach of investigating travel behaviour of older people. *Transportation*, 2015, pp. 1–19. DOI: 10.1007/s11116-015-9667-1
- A/T Dobbs, B. The New Older Driver in the United States and Canada: Changes and Challenges. In *Aging America and Transportation: Personal Choices and Public Policy*, Springer Publishing Company, New York, N.Y., pp. 119–136. (eBook Available at U of A library website)
- A/W El-Geneidy, A., D. Levinson, E. Diab, G. Boisjoly, D. Verbich, and C. Loong. The cost of equity: Assessing transit accessibility and social disparity using total travel cost. *Transportation Research Part A: Policy and Practice*, Vol. 91, 2016, pp. 302–316. DOI: 10.1016/j.tra.2016.07.003
- A/W Habib, K. N. An investigation on mode choice and travel distance demand of older people in the National Capital Region (NCR) of Canada: application of a utility theoretic joint econometric model. *Transportation*, Vol. 42, No. 1, 2014, pp. 143–161. DOI: 10.1007/s11116-014-9537-2

Week 5: (Sept 30) Topic 5: Transportation Finance

- T** Brian Taylor. 2004. The geography of urban transportation finance. Chapter 11 in *The geography of urban transportation*.
- W* Martin Wachs. 2003. A dozen reasons for raising gasoline taxes. *Public Works Management and Policy* 7 (4) 235-242. DOI: 10.1177/1087724X03253152
- W* Siemiatycki, M. Implications of Private-Public Partnerships on the Development of Urban Public Transit Infrastructure: The Case of Vancouver, Canada. *Journal of Planning Education and Research*, Vol. 26, No. 2, 2006, pp. 137–151. DOI: 10.1177/0739456X06291390
- A/W Lisa Schweitzer and Brian Taylor. 2010. Just road pricing. *Access* 36: 2-7.
<http://www.uctc.net/access/36/access36-justpricing.pdf>
- A/W Dave Olsen. 2009. Why is fare-free transit the exception rather than the rule? *Planetizen*, Feb 23. <http://www.planetizen.com/node/37530>
- A/W Karen Frick. 2008. Pursuing the Technological Sublime: How the Eastern Span of the San Francisco-Oakland Bay Bridge Became a Megaproject.
http://uctc.net/access/44/access44_bay_bridge_megaproject.shtml
- A/W J. Richard Capka with the Federal Highway Administration. 2004. Megaprojects-they are a different breed. *Public Roads* 68 (1) 2-9.
<https://www.fhwa.dot.gov/publications/publicroads/04jul/01.cfm>

Week 6: (Oct 7) Topic 6: Transportation's Impact on Land Use

- T** Genevieve Giuliano. 2004. Land use impacts of transportation investments: Highway and transit. Chapter 9 in *The geography of urban transportation*.
- W* Giuliano, G. The weakening transportation-land use connection. *Access : Research at the University of California Transportation Center*, Vol. 6, 1995, pp. 3–11.

- <https://escholarship.org/uc/item/1dn8t3w7#page-1>
- W* Cervero, R., and J. Landis. The transportation-land use connection still matters. *Access : Research at the University of California Transportation Center*, Vol. 7, 1995, pp. 2–10. <https://escholarship.org/uc/item/7x87v1zk#page-1>
- A/W Ewing, R., & Cervero, R. (2010). Travel and the built environment: a meta-analysis. *Journal of the American Planning Association*, 76(3), 265–294. DOI: 10.1080/01944361003766766
- A/W Marlon G. Boarnet, Kenneth Joh, Walter Siembab, William Fulton, and Mai Thi Nguyen. 2011. Retrofitting the suburbs to increase walking. *Access* 39: 2-7. http://www.uctc.net/access/39/access39_suburbs.pdf
- A/W Thompson, D. Suburban Sprawl: Exposing Hidden Costs, Identifying Innovations. Oct. 2013. http://thecostsofsprawl.com/report/SP_SuburbanSprawl_Oct2013_opt.pdf

Week 7: (Oct 14) Topic 7: Managing Automobiles and the Need for Parking

- T** Genevieve Giuliano and Susan Hanson. 2004. Managing the auto. Chapter 14 in *The geography of urban transportation*.
- W* Zahabi, S. A. H., L. F. Miranda-Moreno, Z. Patterson, and P. Barla. Evaluating the effects of land use and strategies for parking and transit supply on mode choice of downtown commuters. *Journal of Transport and Land Use*, Vol. 5, No. 2, 2012. DOI: 10.5198/jtlu.v5i2.260
- W* Shaheen, S., A. Cohen, and M. Chung. North American Carsharing: 10-Year Retrospective. *Transportation Research Record: Journal of the Transportation Research Board*, Vol. 2110, Dec. 2009, pp. 35–44. DOI: 10.3141/2110-05
- A/W David King, Michael Manville, and Donald Shoup. 2007. For whom the road tolls: The politics of congestion pricing. *Access* 31: 2-7. <http://shoup.bol.ucla.edu/ForWhomTheRoadTolls.pdf>
- A/W Klincevicius, M., C. Morency, and M. Trépanier. Assessing Impact of Carsharing on Household Car Ownership in Montreal, Quebec, Canada. *Transportation Research Record: Journal of the Transportation Research Board*, Vol. 2416, 2014, pp. 48–55. DOI: 10.3141/2416-06
- A/W Anowar, S., N. Eluru, and L. F. Miranda-Moreno. Analysis of vehicle ownership evolution in Montreal, Canada using pseudo panel analysis. *Transportation*, 2015, pp. 1–18. DOI: 10.1007/s11116-015-9588-z
- A/W Shaheen, S. A., N. D. Chan, and H. Micheaux. One-way carsharing's evolution and operator perspectives from the Americas. *Transportation*, Vol. 42, No. 3, 2015, pp. 519–536. DOI: 10.1007/s11116-015-9607-0
- A/W Coll, M.-H., M.-H. Vandersmissen, and M. Thériault. Modeling spatio-temporal diffusion of carsharing membership in Québec City. *Journal of Transport Geography*, Vol. 38, 2014, pp. 22–37. DOI: 10.1016/j.jtrangeo.2014.04.017

Week 8: (Oct 21) Topic 8: Non-motorized Travel (Bicycling)

- W** Pucher, J., Buehler, R., & Seinen, M. (2011). Bicycling renaissance in North America? An update and re-appraisal of cycling trends and policies. *Transportation Research Part A: Policy and Practice*, 45(6), 451–475. DOI: 10.1016/j.tra.2011.03.001
- W* Klassen, J., K. El-Basyouny, and M. T. Islam. Analyzing the severity of bicycle-motor

- vehicle collision using spatial mixed logit models: A City of Edmonton case study. *Safety Science*, Vol. 62, Feb. 2014, pp. 295–304. DOI: 10.1016/j.ssci.2013.09.007
- W* Jennifer Dill. 2009. Bicycling for transportation and health: The role of infrastructure. *Journal of Public Health Policy* 30: DOI: 10.1016/j.jph.2011.03.001
- W* Pucher, J., and R. Buehler. Why Canadians cycle more than Americans: A comparative analysis of bicycling trends and policies. *Transport Policy*, Vol. 13, No. 3, 2006, pp. 265–279. DOI: 10.1016/j.tranpol.2005.11.001
- W* Faghih-Imani, A., N. Eluru, A. M. El-Geneidy, M. Rabbat, and U. Haq. How land-use and urban form impact bicycle flows: evidence from the bicycle-sharing system (BIXI) in Montreal. *Journal of Transport Geography*, 2014. DOI: 10.1016/j.jtrangeo.2014.01.013
- A/W El-Assi, W., M. S. Mahmoud, and K. N. Habib. Effects of built environment and weather on bike sharing demand: a station level analysis of commercial bike sharing in Toronto. *Transportation*, 2015, pp. 1–25. DOI: 10.1007/s11116-015-9669-z
- A/W Larsen, J., Z. Patterson, and A. El-Geneidy. Build It. But Where? The Use of Geographic Information Systems in Identifying Locations for New Cycling Infrastructure. *International Journal of Sustainable Transportation*, Vol. 7, No. 4, 2013, pp. 299–317. DOI: 10.1080/15568318.2011.631098
- A/W Jeff Speck. 2012. Stop climate change: Move to the city, start walking. *Salon*, Nov 3. http://www.salon.com/2012/11/03/stop_climate_change_move_to_the_city_start_walking/
- A/W Emily Badger. 2012. Dedicated bike lanes can cut cycling injuries in half. *The Atlantic Cities*, Oct 22. <http://www.theatlanticcities.com/commute/2012/10/dedicated-bike-lanes-can-cut-cycling-injuries-half/3654/>

Week 9: (Oct 28) Topic 9: Mass Transit: Train, Metro, BRT, Bus

- T** John Pucher. 2004. Public transportation. Chapter 8 in *The geography of urban transportation*.
- W* Redman, L., M. Friman, T. Gärling, and T. Hartig. Quality attributes of public transport that attract car users: A research review. *Transport Policy*, Vol. 25, Jan. 2013, pp. 119–127. DOI: 10.1016/j.tranpol.2012.11.005
- W* Legrain, A., R. Buliung, and A. M. El-Geneidy. Who, What, When, and Where: Revisiting the Influences of Transit Mode Share. *Transportation Research Record: Journal of the Transportation Research Board*, Vol. 2537, 2015, pp. 42–51. DOI: 10.3141/2537-05
- W* Brown, J., D. B. Hess, and D. Shoup. Unlimited Access. *Transportation*, Vol. 28, No. 3, Aug. 2001, pp. 233–267. DOI: 10.1023/A:1010307801490
- W* Grube-Cavers, A., and Z. Patterson. Urban rapid rail transit and gentrification in Canadian urban centres: A survival analysis approach. *Urban Studies*, Vol. 52, No. 1, 2015, pp. 178–194. DOI: 10.1177/0042098014524287
- A/W Foth, N., K. Manaugh, and A. M. El-Geneidy. Towards equitable transit: examining transit accessibility and social need in Toronto, Canada, 1996–2006. *Journal of Transport Geography*, Vol. 29, 2013, pp. 1–10. DOI: 10.1016/j.jtrangeo.2012.12.008
- A/W Foth, N., K. Manaugh, and A. El-Geneidy. Determinants of Mode Share over Time: How Changing Transport System Affects Transit Use in Toronto, Ontario, Canada. *Transportation Research Record: Journal of the Transportation Research Board*, Vol. 2417, 2014, pp. 67–77. DOI: 10.3141/2417-08
- A/W Lisa Schweitzer. 2011. Public transit's imperiled future. *Progressive Planning* 189 (Fall): 4–

7. http://www.plannersnetwork.org/wp-content/uploads/2011/10/PNmag_Fall_2011_Schweitzer.pdf

A/W Sarah Kline and Sasha Forbes. *Midsized Cities on the Move*. Reconnecting America: Dec 2012. <http://reconnectingamerica.org/assets/Uploads/20121206midsizedfinal.pdf>

A/T Cervero, R. *The transit metropolis : A Global Inquiry*. Island Press, Washington D.C., 1998.

Week 10: (Nov 4) Guest Lecturer

Week 11: (Nov 11) University Holiday (Reading Week)

Week 12: (Nov 18) Topic 10: Energy, Environment and Transportation

T** David Greene. 2004. Transportation and energy. Chapter 10 in *The geography of urban transportation*.

T** Chang-Hee Christine Bae. 2004. Transportation and the environment. Chapter 13 in *The geography of urban transportation*.

W* Saxe, S., H. Cruickshank, and E. Miller. Greenhouse Gas Impact of Ridership on Sheppard Subway Line, Toronto, Canada. *Transportation Research Record: Journal of the Transportation Research Board*, Vol. 2502, 2015, pp. 62–70. DOI: 10.3141/2502-08

W* Lutsey, N. 2012. New Automobile Regulations: Double the Fuel Economy, Half the CO₂ Emissions, and Even Automakers Like It. *Access* 41: 2-9.

http://www.uctc.net/access/41/access41_fueleconomy.pdf

A/W Dill, J. 2004. Scrapping old cars. *Access* 24: 22-27.

http://web.pdx.edu/~jdill/Files/Dill_Access_Spring2004.pdf

A/T Sperling, D., and D. Gordon. *Two Billion Cars: Driving Toward Sustainability*. Oxford University Press, Oxford, 2009.

Week 13: (Nov 25) Presentations (Day 1) (Group A)

Week 14: (Dec 2) Presentations (Day 2) (Group B)