



**URPL 6555: Transportation, Land Use,
and the Environment**
Department of Urban and Regional Planning
College of Architecture and Planning
University of Colorado Denver

Instructor

Name: Manish Shirgaokar, Ph.D., AICP (Assistant Professor)
Office: 320W CU BLDG
Email: manish.shirgaokar@ucdenver.edu
Phone: (303) 315-0336
Sign up for office hours at:
→ office hours held at

Course Logistics

Name: (URPL 6555) Transportation, Land Use, and the Environment
Canvas:
Term: Spring 2021
Class Meeting Days: Wednesday
Class Meeting Hours: 2:00PM - 4:45PM
Class Location:
Or, find your local number:

COURSE OVERVIEW

1. Welcome!

If there wasn't a raging pandemic, would you drive a vehicle or ride transit to get to campus? Maybe you would rely on transit during inclement weather but otherwise you might bicycle/walk to most destinations. What are your travel choices when you have to pick up groceries? This course is designed to shine a light on travel choices that individuals like us make for everyday travel. The course also explores how transportation planning happens as well as how individual and societal decisions affect the environment.

2. University Course Catalog Description

This course teaches how current transportation modes shape regions and how future transportation technologies might impact us. Topics include policy making and governance; land use interactions with transportation investments; climate change and resilience; energy use; environmental justice; and equity considerations. Restriction: Graduate level students. Cross-listed with GEOG 4630. Max hours: 3 Credits.

3. Course Overview

This is a survey of the transportation planning field and will give you the foundation to understand what the various modes of transportation do for society—both in terms of benefits and costs. We will visit various aspects (see table on page 4-5) that inform transportation policy and planning. From a professional standpoint, this course sets the foundation on which many practical planning decisions are made.

The instructor will lecture during the first half of the class session on most days (2.00 P.M. to 3.15 P.M.). We will have a 15-minute break. During the second half (3.30 P.M. to 4.45 P.M.), we will have a series of activities, namely, seminar discussions; student-led activities based on that week's topic; a skills-building lab; or review of term papers to encourage thinking about transportation policy. The purpose of the activity portion is to give you an incentive to revisit the concepts covered in the lectures, and to talk about concerns and ideas related to the week's topic.

This class has equal amounts of reading and assignment loads. You are expected to budget, on average, about 6 hours every week for this workload. Please note that some students will finish the required readings and assignments faster than others will.

4. Course Goals and Learning Objectives

Goals: The course is a survey of the wide field of transportation planning. Students will be trained in thinking about transportation in relation to land use and environmental considerations. The course provides an opportunity for students to investigate real-world transportation planning/policy issues that are of interest to them.

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

- Understand the purpose and structure of transportation data
- Write a technical transportation policy memo
- Lead a meeting through development of agenda and discussion points
- Examine a complex, open-ended issue within a fixed deadline (through a term paper)
- Justify evidence-based positions on transportation issues as would practicing planners

5. Course Prerequisites

There are no prerequisites for this course.

6. Course credits

3 Credits

7. Required Texts and Materials

Required text book: Genevieve Giuliano and Susan Hanson (Editors). *The Geography of Urban Transportation*. The Guilford Press, 4th Edition, 2017 available to you at <https://ebookcentral.proquest.com/lib/cudenvr/detail.action?docID=4832774>

Please review the last section of this syllabus for weekly readings. Note that instructor may change readings in the week/s prior to the lecture. You should refer to the reading list on the last slide of each week's lecture for any changes and updates.

A note on reading: Students are expected to be able to read around 50 (plus or minus 10) pages per week and synthesize the material to enable fruitful class engagement. Reading *actively* increases your understanding of the material and your critical thinking about a topic. The instructor will demonstrate how to read *actively*. More generally, 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 assignments and the term paper. This can only be achieved if you have a firm grasp of the material through reading.

8. Supplementary (Optional) Texts and Materials

The instructor may have additional (optional) readings assigned each week.

9. Course Schedule

Chapter numbers are for required text book

<https://ebookcentral.proquest.com/lib/cudenver/detail.action?docID=4832774>

Week	Date	Topic	Book chapter	Notes	Assign-ments
1	20-Jan	Introducing urban transportation	1	Syllabus discussion	
2	27-Jan	Impacts of information and communication technology (+ looking to the future)	4 / 14		
3	3-Feb	Transportation and urban form (Student-led Session #1)	3	Term paper <i>abstract</i> due + discussion (3 points)	
4	10-Feb	Land use impacts of transportation investments (+ transit-oriented development and value capture) (Student-led Session #2)	9		
5	17-Feb	Theories and models in transportation planning (Part A)	5	Spreadsheet laboratory (Microsoft Excel needed)	
6	24-Feb	Theories and models in transportation planning (Part B)			#1 released
7	3-Mar	Land use, travel behavior, and disaggregate travel data (Student-led Session #3)	7		#1 due
8	10-Mar	Social equity and urban transportation (Student-led Session #4)	13	Updated term paper <i>proposal/outline</i> due + discussion (7 points)	
9	17-Mar	Safety and security in transportation (+ active transportation) (Student-led Session #5)			
10	24-Mar	Managing Congestion and Parking policy (Student-led Session #6)			#2 released
11	31-Mar	Regional transportation planning (Student-led Session #7)	6		#2 due
12	7-Apr	The geography of urban transportation finance	10		
13	14-Apr	Transportation and environmental impacts (+ air quality and climate change mitigation)	11	Term Paper Progress #1 (Intro. + methods) (5 points)	
14	21-Apr	Spring Break (No Class)			

15	28-Apr	Transportation and energy	12	Term Paper Analysis #2 + discussions (Findings) (5 points)	
16	5-May	Working session for term paper		Term Paper Pre-final state #3 (Discussion + conclusions) (5 points)	
17	12-May	Final paper due by 4:45PM (Finals week – no class)			

EVALUATION

10. Assignments

Student-led Seminar: During seven sessions, there will be an opportunity for students to engage with the weekly topic in a non-lecture format. Students will work in teams of two on preparing to lead the seminar. A few logistics about the activity:

- Each team member needs to read the full set of readings for the week.
- Teams are required to present the readings briefly. This presentation will be verbal; use of PowerPoint slides is okay but not required or recommended. As a team, you must be able to describe the overall arc of the argument, evidence, and policy implications for all the papers assigned for the week of class you are leading.
- Teams need to come up with a set of question and prompts to start the conversation (and keep it moving.)
- You can choose to structure specific activities for the 80 minutes but most of the time must be left for discussion.
- Write a brief memo describing your plan and submit to the instructor at least one week before you are leading the seminar. He may have some suggestions to improve the questions and activities.
- Design the exercise so that everyone participates, and use techniques of facilitation to be sure that everyone does.

Assignments: This class has two assignments: #1 Transportation Data Analysis and #2 Policy Memo. All students must submit assignments individually on Canvas. Assignments will be posted on the class website as shown in section 9 (see table); please note release and due dates. All deliverables are due at the start of class unless otherwise noted in the instructions. For all deliverables in this course detailed instructions including grading rubrics will be provided. Plagiarism will not be tolerated.

Term Paper: In teams of two, students are required to look at a set of stories in Denver over the last two calendar years. This will require some online research of news articles. 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: COVID-19's impact on transit, tele-work and its effects on transportation, suburbanization and transportation investments, transit expansion/transit gaps and

cutbacks, bicycle infrastructure planning, parking, speeding, pedestrian and bicyclist safety, access for the older adults or women, and personal mobility devices (e-bicycles, e-scooters, etc.). Students, in teams of two, must choose a planning/policy topic within their area/s 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 paper.

You are expected to answer a combination of the following questions in your final paper that is due on May 12th.

- 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?

Four stages in the evolution of your term paper:

1. Ideation Stage (Jan 20 to Mar 10): Before the first term paper discussion session, students should figure out an area of interest. The agenda is for you to mature and evolve the central question for your term paper. On March 10th, topics should be finalized with a working title, a fully formulated research/policy question, and a detailed outline for the paper.
2. Basic Analysis Stage (Mar 10 to Apr 14): You are expected to figure out most of the analysis for the papers during this time. Analysis can include a literature and/or policy and/or best practices review; data analysis; design work; and other formats in consultation with instructor. Note that this is the “meat” of your term paper.
3. Final Analysis (Apr 14 to May 5): Students are expected to have an almost fully formed paper by May 5. If there are analytical pieces missing, students should work *proactively* to fill in the gaps. Please note that the paper should be about 80% done at this stage but may change somewhat based on discussion with instructor/s.
4. Final Paper Stage (May 5 to May 12): You should be fine-tuning the paper for the final submission.

Class Participation: In order to encourage you to share your thoughts and ideas with the class, 5% of your course grade will be determined by the quality and quantity of your participation in various course activities. You can score these points by engaging pro-actively in class discussions and asking questions or by posting relevant stories to the course Discussion section. It is greatly appreciated when students can find current videos, articles and images that can be incorporated into lectures or posted on the Canvas Discussion for other students to see/comment on. This is particularly true for literature and information about the Denver and Front Range context. More generally, the instructor expects everyone to participate actively in a way that demonstrates familiarity with the assigned materials. One way to demonstrate participation is to

jot down thoughts/questions while you are reading and to bring up these ideas/questions during the lectures or discussions.

11. Basis for Final Grade

Assessment	Points Possible	Percent of Final Grade
Assignment #1: Transportation Data Analysis	15	15%
Assignment #2: Policy Memo	15	15%
Leading seminar/discussion	20	20%
Term paper	Proposal (10 points) + Build-up stages (15 points) + Written Paper (20 points)	45%
Attendance / Participation	5 points	5%
Total	100	100%

This course uses the grading scale of the university and the MURP Department:

Letter	Definition
A (94 to 100) A- (90 to 93)	Exceptional scholarship and superior work products that significantly exceed stated requirements in scope and/or quality
B+ (87 to 89) B (84 to 86) B- (80 to 83)	Commendable scholarship and accomplished work products that somewhat exceed stated requirements in scope and/or quality
C+ (77 to 79) C (74 to 76) C- (70 to 73)	Satisfactory scholarship and work products that meet or almost meet stated requirements in scope and/or quality
D+ (67 to 69) D (65 to 66) D- (60 to 63)	Inadequate scholarship and inferior work products that clearly fail to meet stated requirements in scope and/or quality
F (59 or lower)	Unacceptable scholarship and work product

12. Grade Dissemination

Graded tests and assignments in this course will be returned via the Canvas course shell. Please note that the total computed at each stage on Canvas is not the final total but rather reflects the percentage you have earned for the assignments graded until date. Importantly, your participation and attendance can affect the final grade significantly.

COURSE PROCEDURES

13. Course Policies

Attendance Policy: The instructor has not designed this course to learn the material asynchronously. Students are expected to attend all sessions, participate in class, and finish all the assignments. Students are expected to arrive on time for all sessions and meetings. The instructor will note absences from class. If you have compelling reasons to be away from class, please let the instructor know of the reason and dates you will be away.

Late Work Policy: 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. No late submissions will be accepted after two days from deadline.

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. Instructors 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 term paper.

A student who cannot submit the final term paper due to incapacitating illness, severe domestic affliction, or other compelling reason can apply to the instructor for an extension. Such an application must be made to the instructor within 24 hours of the missed deadline and must be supported by appropriate documentation. If an extension is granted, the term paper will be due on Friday 14th May, 2020 at 4:45PM. Deferral of term work is a privilege and not a right; there is no guarantee that a deferral will be granted.

Grades of “Incomplete”: The current university policy concerning incomplete grades will be followed in this course. Incomplete grades are given only in situations where unexpected emergencies prevent a student from completing the course; students have up to one year (three semesters) to complete course requirements. The instructor is the final authority on whether you qualify for an incomplete. Incomplete work must be finished within the time allowed or the “I” will automatically be recorded as an “F” on your transcript.

14. Technology and Media

Email: If you have a question for the instructor you can email him at manish.shirgaokar@ucdenver.edu. Please state in the subject line URPL6555 and say briefly what the email is about. I will do my best to respond to an e-mail received from Monday morning through Friday morning within 24 hours, and by midday Monday morning for an e-mail received after Friday morning. The same goes for questions posed via Canvas.

Canvas: We will use Canvas for this course. All announcements, assignments, and discussions for this course are conducted via Canvas. Students are expected to log into the Canvas website at least once every 2-3 days to keep up with the class.

Recording course content: The course may not be recorded in audio or video format for any reason except with the explicit permission of the instructor. Due to the online nature of this course during Spring 2021, the instructor will record the lecture component of the sessions and share the recordings via OneDrive.

15. Student Expectations regarding Civility:

Students come from a wide variety of backgrounds and bring enormously varying life experiences, perspectives, and opinions with them. I pledge to strive to do my best to be cognizant and respectful of those differences, and I hope that you will join me in doing the same. You should always feel free to express your opinion, whether you agree or disagree with something that I or another student have said, or if you feel that something that has not been discussed needs to be said. Just remember the difference between disagreeing with someone and being disagreeable. With an open mind, hard work and a little bit of luck, we will all learn from each other, work together, and maintain the classroom as a place of civility and learning.

CU Denver Student and Community Counseling Center: The Student and Community Counseling Center is located in Tivoli 454 and provides cost-free and confidential mental health services to help students manage personal challenges that impact emotional or academic wellbeing. You can learn more at <https://www.ucdenver.edu/counseling-center> or by calling (303) 315-7270.

Professionalism: In an off-campus environment, some level of disruption is normal but please try to keep yourself muted if you expect noise in your work environment. I do not expect you to keep your cameras on unless you want to.

UNIVERSITY POLICIES

16. Access

Disability Access: The University of Colorado Denver is committed to providing reasonable accommodation and access to programs and services to persons with disabilities. Students with disabilities who want academic accommodations must register with Disability Resources and Services (DRS) in the Student Commons Building, Suite 2116, Phone (303) 315-3510, Fax (303) 315-3515, or via email DisabilityResources@ucdenver.edu. See <https://www.ucdenver.edu/offices/disability-resources-and-services>. I will be happy to provide approved accommodations once you provide me with a copy of DRS's letter.

17. Academic Honesty

Student Code of Conduct: Plagiarism is the use of another person's ideas or words without acknowledgement. The incorporation of another person's work into yours requires appropriate identification and acknowledgement. Examples of plagiarism when the source is not noted include: word-for-word copying of another person's ideas or words; the "mosaic" (interspersing your own words here and there while, in essence, copying another's work); the paraphrase (the rewriting of another's work, while still using their basic ideas or theories); fabrication (inventing or counterfeiting sources); submission of another's work as your own; and neglecting quotation marks when including direct quotes, even on material that is otherwise acknowledge.

UC Denver has a license agreement with Turnitin.com, a service that helps detect plagiarism by comparing student papers with Turnitin's database and Internet sources. Students who take this course agree that all required papers may be submitted to Turnitin. While students retain copyright of their original course work, papers submitted to Turnitin become part of the Turnitin's reference database for the purposes of detecting plagiarism.

18. Nondiscrimination and Sexual Misconduct

The University of Colorado Denver is committed to maintaining a positive learning, working and living environment. University policy and Title IX prohibit discrimination on the basis of race, color, national origin, sex, age, disability, pregnancy, creed, religion, sexual orientation, veteran status, gender identity, gender expression, political philosophy, or political affiliation in admission and access to, and treatment and employment in, its educational programs and activities.

University policy prohibits sexual misconduct, including harassment, domestic and dating violence, sexual assault, stalking, or related retaliation. If you have experienced some sort of sexual misconduct or discrimination please visit the Office of Equity/Title IX web site to understand the resources available to you or contact the Office of Equity/Title IX Coordinator (303) 315-2567.

19. Important Dates to Remember

Academic Calendar: Please review the academic calendar for important dates available at https://www1.ucdenver.edu/docs/librariesprovider122/academic-calendars/spring-2021-printable-11182020.pdf?sfvrsn=57184b9_2

20. Copyright: Dr. Manish Shirgaokar, Department of Urban and Regional Planning, College of Architecture and Planning, University of Colorado Denver (2021). This copyright prohibits redistribution of the contents of this syllabus or any associated course material in any forum that is not provided directly through the University of Colorado Denver.

21. Readings

Readings by week with code to decipher the reading list:

- “Two Asterisks (**)” must be read
- “One Asterisk (*)” at least one of three/four such must be read (will be randomly assigned by instructor; assigned papers cannot be traded with other students)
- “T” = Textbook
- “C” = Canvas resource
- “W” = Web Resource (use link, DOI, or a search engine)

Week 1: (Jan 20) Introducing urban transportation

- T** Susan, H. Chapter 1 Introducing Urban Transportation in Giuliano, G., and Susan, H. (Editors) 2017. *The geography of urban transportation*, 4th edition, New York and London: The Guilford Press. (30 pages)
- W National Academies of Sciences, Engineering, and Medicine 2018. *Critical Issues in Transportation 2019*. Washington, DC: The National Academies Press.
<https://doi.org/10.17226/25314> (25 pages)

Week 2: (Jan 27) Impacts of information and communication technology (+looking to the future)

- T** Circella, G., Mokhtarian, P. Chapter 4 Impacts of Information and Communication Technology in Giuliano, G., and Susan, H. (Editors) 2017. *The geography of urban transportation*, 4th edition, New York and London: The Guilford Press. (21 pages)
- W* Docherty, I., Marsden, G., Anable, J., 2017. The governance of smart mobility. *Transportation Research Part A: Policy and Practice*.
<https://doi.org/10.1016/j.tra.2017.09.012> (10 pages)
- W* Straub, E., Schaefer, K., 2018. It takes two to Tango: Automated vehicles and human beings do the dance of driving – Four social considerations for policy. *Transportation Research Part A: Policy and Practice*.
<https://doi.org/10.1016/j.tra.2018.03.005> (10 pages)
- W* Hubbard, S., 2018. Automated Vehicle Legislative Issues. *Transportation Research Record: Journal of the Transportation Research Board*.
<https://doi.org/10.1177/0361198118774155> (11 pages)
- W* Milakis, D., Kroesen, M., van Wee, B., 2018. Implications of automated vehicles for accessibility and location choices: Evidence from an expert-based experiment. *Journal of Transport Geography* 68, 142–148.
<https://doi.org/10.1016/j.jtrangeo.2018.03.010> (6 pages)

Week 3: (Feb 3) Transportation and urban form

- T** Muller, P. Chapter 3 Transportation and Urban Form: Stages in the Spatial Evolution of the American Metropolis in Giuliano, G., and Susan, H. (Editors) 2017. *The geography of urban transportation*, 4th edition, New York and London: The Guilford Press. (27 pages)

- W* Adler, S., 1991. The Transformation of the Pacific Electric Railway: Bradford Snell, Roger Rabbit, and the Politics of Transportation in Los Angeles. *Urban Affairs Quarterly* 27, 51–86. <https://doi.org/10.1177/004208169102700104> (33 pages)
- C* Hall, P. 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) (available at <https://ebookcentral.proquest.com/lib/ucdenver/detail.action?docID=1676937>) (23 pages) (40 pages)
- C* Jackson, K., 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. (also available at <http://skyline.ucdenver.edu/record=b1439183~S0>) (24 pages)

Week 4: (Feb 10) Land use impacts of transportation investments (+transit-oriented development and value capture)

- T** Giuliano, G., Agrawal, A. Chapter 9 Land Use Impacts of Transportation Investments in Giuliano, G., and Susan, H. (Editors) 2017. *The geography of urban transportation*, 4th edition, New York and London: The Guilford Press. (27 pages)
- W* Baker, D., Lee, B., 2019. How Does Light Rail Transit (LRT) Impact Gentrification? Evidence from Fourteen US Urbanized Areas. *Journal of Planning Education and Research* 39, 35–49. <https://doi.org/10.1177/0739456X17713619> (13 pages)
- W* McIntosh, J., Newman, P., Trubka, R., Kenworthy, J., 2015. Framework for land value capture from investments in transit in car-dependent cities. *Journal of Transport and Land Use* 10, 155–185. <https://doi.org/10.5198/jtlu.2015.531> (26 pages)
- W* Stevens, M., 2017. Does Compact Development Make People Drive Less? *Journal of the American Planning Association* 83, 7–18. <https://doi.org/10.1080/01944363.2016.1240044> (10 pages)

Week 5: (Feb 17) Theories and models in transportation planning (Part A)

- T** Miller, H. Chapter 5 Theories and Models in Transportation Planning in Giuliano, G., and Susan, H. (Editors) 2017. *The geography of urban transportation*, 4th edition, New York and London: The Guilford Press. (22 pages)
- W* Banister, D., 2008. The sustainable mobility paradigm. *Transport Policy* 15, 73–80. <https://doi.org/10.1016/j.tranpol.2007.10.005> (7 pages)
- W* Milne, D., Watling, D., 2018. Big data and understanding change in the context of planning transport systems. *Journal of Transport Geography*. <https://doi.org/10.1016/j.jtrangeo.2017.11.004> (8 pages)
- W* Seter, H., Arnesen, P., Hjelkrem, O., 2019. The data driven transport research train is leaving the station. Consultants all aboard? *Transport Policy*, 80, 59–69. <https://doi.org/10.1016/j.tranpol.2019.05.016> (10 pages)

Week 6: (Feb 24) Theories and models in transportation planning (Part B) (no additional readings)

Week 7: (Mar 3) Land use, travel behavior, and disaggregate travel data

- T** Boarnet, M. Chapter 7 Land Use, Travel Behavior, and Disaggregate Travel Data in Giuliano, G., and Susan, H. (Editors) 2017. *The geography of urban transportation*, 4th edition, New York and London: The Guilford Press. (18 pages)
- W* Blumenberg, E., Ralph, K., Smart, M., Taylor, B., 2016. 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* 93, 39–54. <https://doi.org/10.1016/j.tra.2016.08.010> (15 pages)
- W* Shirgaokar, M., Habib, K., 2018. How does the inclination to bicycle sway the decision to ride in warm and winter seasons? *International Journal of Sustainable Transportation* 12, 397–406. <https://doi.org/10.1080/15568318.2017.1378779> (7 pages)
- W* Zhang, W., Guhathakurta, S., 2018. Residential Location Choice in the Era of Shared Autonomous Vehicles. *Journal of Planning Education and Research*. <https://doi.org/10.1177/0739456X18776062> (13 pages)
- W* Shirgaokar, M., Dobbs, B., Anderson, L., Hussey, E., 2020. Do rural older adults take fewer trips than their urban counterparts for lack of a ride? *Journal of Transport Geography* 87, 102819. <https://doi.org/10.1016/j.jtrangeo.2020.102819>

Week 8: (Mar 10) Social equity and urban transportation

- T** Blumenberg, E. Chapter 13 Social Equity and Urban Transportation in Giuliano, G., and Susan, H. (Editors) 2017. *The geography of urban transportation*, 4th edition, New York and London: The Guilford Press. (23 pages)
- W* Grengs, J., 2012. Equity and the social distribution of job accessibility in Detroit. *Environment and Planning B: Planning and Design* 39, 785 – 800. <https://doi.org/10.1068/b36097> (14 pages)
- W* Lucas, K., Philips, I., Mulley, C., Ma, L., 2018. Is transport poverty socially or environmentally driven? Comparing the travel behaviors of two low-income populations living in central and peripheral locations in the same city. *Transportation Research Part A: Policy and Practice* 116, 622–634. <https://doi.org/10.1016/j.tra.2018.07.007> (11 pages)
- W* Smart, M., Klein, N., 2018. Disentangling the role of cars and transit in employment and labor earnings. *Transportation*. <https://doi.org/10.1007/s11116-018-9959-3> (18 pages)
- W* Hanson, T., Goudreau, M., 2019. Developing Transportation Engineering and Planning Metrics for Rural Volunteer Driver Programs. *Transportation Research Record: Journal of the Transportation Research Board*, 0361198118821377. <https://doi.org/10.1177/0361198118821377> (9 pages)
- W Shirgaokar, M., Lanyi-Bennett, K., 2019. I'll have to drive there: How daily time constraints impact women's car use differently than men's. *Transportation*. <https://doi.org/10.1007/s11116-018-9969-1> (24 pages)

- W McDonald, N., Steiner, R., Lee, C., Smith, T., Zhu, X., Yang, Y., 2014. Impact of the Safe Routes to School Program on Walking and Bicycling. *Journal of the American Planning Association* 80, 153–167.
<https://doi.org/10.1080/01944363.2014.956654> (10 pages)
- W Vivoda, J., Harmon, A., Babulal, G., Zikmund-Fisher, B., 2018. E-hail (rideshare) knowledge, use, reliance, and future expectations among older adults. *Transportation Research Part F: Traffic Psychology and Behaviour* 55, 426–434.
<https://doi.org/10.1016/j.trf.2018.03.020> (8 pages)

Week 9: (Mar 17) Safety and security in transportation (+ active transportation)

- W* Fan, Y., Guthrie, A., Levinson, D., 2016. Waiting time perceptions at transit stops and stations: Effects of basic amenities, gender, and security. *Transportation Research Part A: Policy and Practice* 88, 251–264.
<https://doi.org/10.1016/j.tra.2016.04.012> (12 pages)
- W* Lubitow, A., Abelson, M., Carpenter, E., 2020. Transforming mobility justice: Gendered harassment and violence on transit. *Journal of Transport Geography*, 82, 102601. <https://doi.org/10.1016/j.jtrangeo.2019.102601> (7 pages)
- W* Loukaitou-Sideris, A., Medury, A., Fink, C., Grembek, O., Shafizadeh, K., Wong, N., Orrick, P., 2014. Crashes on and Near College Campuses: A Comparative Analysis of Pedestrian and Bicyclist Safety. *Journal of the American Planning Association* 80, 198–217. <https://doi.org/10.1080/01944363.2014.978354> (16 pages)
- W* Marshall, W., Garrick, N., 2011. Evidence on Why Bike-Friendly Cities Are Safer for All Road Users. *Environmental Practice*; Cambridge, 13(1), 16–27.
<http://dx.doi.org.aurarialibrary.idm.oclc.org/10.1017/S1466046610000566> (11 pages)
- W* Rebentisch, H., Wasfi, R., Piatkowski, D., Manaugh, K., 2019. Safe Streets for All? Analyzing Infrastructural Response to Pedestrian and Cyclist Crashes in New York City, 2009–2018. *Transportation Research Record*, 0361198118821672.
<https://doi.org/10.1177/0361198118821672> (12 pages)

Week 10: (Mar 24) Managing congestion and Parking policy

- T** Giuliano, G., Susan, H. Chapter 14 Looking to the Future in Giuliano, G., and Susan, H. (Editors) 2017. *The geography of urban transportation*, 4th edition, New York and London: The Guilford Press. (28 pages)
- W* Rivadeneyra, A., Shirgaokar, M., Deakin, E., Riggs, W., 2017. Building more parking at major employment centers: Can full-cost recovery parking charges fund TDM programs? *Case Studies on Transport Policy*, 5(1), 159–167.
<https://doi.org/10.1016/j.cstp.2016.10.002> (8 pages)
- W* Henao, A., Marshall, W., 2019. The impact of ride hailing on parking (and vice versa). *Journal of Transport and Land Use*, 12(1).
<https://doi.org/10.5198/jtlu.2019.1392> (18 pages)
- W* Li, F., Guo, Z., 2017. Do Parking Maximums Deter Housing Development? *Journal of Planning Education and Research*, 0739456X16688768.
<https://doi.org/10.1177/0739456X16688768> (14 pages)

- W* Rearick, E., Newmark, G., 2018. Reducing Rural Car Ownership: Cultural Not Policy Changes? *Transportation Research Record: Journal of the Transportation Research Board*, 0361198118790327. <https://doi.org/10.1177/0361198118790327> (9 pages)
- W* Pierce, G., Shoup, D., 2013. Getting the Prices Right. *Journal of the American Planning Association*, 79(1), 67–81. <https://doi.org/10.1080/01944363.2013.787307> (15 pages)

Week 11: (Mar 31) Regional transportation planning

- T** Gian-Claudia, S., Handy, S. Chapter 6 Regional Transportation Planning in Giuliano, G., and Susan, H. (Editors) 2017. *The geography of urban transportation*, 4th edition, New York and London: The Guilford Press. (22 pages)
- W* Barbour, E., Deakin, E., 2012. Smart Growth Planning for Climate Protection. *Journal of the American Planning Association* 78, 70–86. <https://doi.org/10.1080/01944363.2011.645272> (14 pages)
- W* Merlin, L., 2016. A portrait of accessibility change for four US metropolitan areas. *Journal of Transport and Land Use*, 0(0). <https://doi.org/10.5198/jtlu.2015.808> (24 pages)
- W* Trapenberg Frick, K., 2013. The Actions of Discontent: Tea Party and Property Rights Activists Pushing Back Against Regional Planning. *Journal of the American Planning Association* 79, 190–200. <https://doi.org/10.1080/01944363.2013.885312> (9 pages)
- W Oden, M., & Sciara, G. C. (2020). The salience of megaregional geographies for inter-metropolitan transportation planning and policy making. *Transportation Research Part D: Transport and Environment*, 80, 102262. <https://doi.org/10.1016/j.trd.2020.102262>

Week 12: (Apr 7) The geography of urban transportation finance

- T** Taylor, B. Chapter 10 The Geography of Urban Transportation Finance in Giuliano, G., and Susan, H. (Editors) 2017. *The geography of urban transportation*, 4th edition, New York and London: The Guilford Press. (24 pages)
- W* Dumortier, J., Zhang, F., Marron, J., 2017. State and federal fuel taxes: The road ahead for U.S. infrastructure funding. *Transport Policy* 53, 39–49. <https://doi.org/10.1016/j.tranpol.2016.08.013> (10 pages)
- W* Manville, M., Cummins, B., 2014. Why do voters support public transportation? Public choices and private behavior. *Transportation* 42, 303–332. <https://doi.org/10.1007/s11116-014-9545-2> (29 pages)
- W* Nixon, H., Agrawal, A., 2018. Would Americans pay more in taxes for better transportation? Answers from seven years of national survey data. *Transportation* 1–22. <https://doi.org/10.1007/s11116-018-9855-x> (21 pages)

Week 13: (Apr 14) Transportation and environmental impacts (+ air quality and climate change mitigation)

- T** Le Vine, S., Lee-Gosselin, M. Chapter 11 Transportation and Environmental Impacts and Policy in Giuliano, G., and Susan, H. (Editors) 2017. *The geography of urban transportation*, 4th edition, New York and London: The Guilford Press. (28 pages)
- W* Broomell, S., Budescu, D., Por, H-H., 2015. Personal experience with climate change predicts intentions to act. *Global Environmental Change* 32, 67–73. <https://doi.org/10.1016/j.gloenvcha.2015.03.001> (6 pages)
- W* Echenique, M., Hargreaves, A., Mitchell, G., Namdeo, A., 2012. Growing Cities Sustainably. *Journal of the American Planning Association* 78, 121–137. <https://doi.org/10.1080/01944363.2012.666731> (16 pages)
- W* Papakonstantinou, I., Lee, J., Madanat, S., 2019. Optimal levee installation planning for highway infrastructure protection against sea level rise. *Transportation Research Part D: Transport and Environment*. <https://doi.org/10.1016/j.trd.2019.02.002> (11 pages)
- W* Noland, R., Wang, S., Kulp, S., Strauss, B., 2019. Employment accessibility and rising seas. *Transportation Research Part D: Transport and Environment*. <https://doi.org/10.1016/j.trd.2019.09.017> (12 pages)

Week 14: (Apr 21) Spring Break (No Class)

Week 15: (Apr 28) Transportation and energy

- T** Green, D. Chapter 12 Transportation and Energy in Giuliano, G., and Susan, H. (Editors) 2017. *The geography of urban transportation*, 4th edition, New York and London: The Guilford Press. (28 pages)
- W** Barth, M., Sperling, D., Chapter 14 Environmentally Sustainable Transportation in Millard-Ball, A., Niemann M., Friese, S., (Editors) 2019. *Bending the Curve: Climate Change Solutions*. <https://escholarship.org/uc/item/6kr8p5rq#author> (24 pages)
- W* Hoehne, C., Chester, M., 2017. Greenhouse gas and air quality effects of auto first-last mile use with transit. *Transportation Research Part D: Transport and Environment* 53, 306–320. <https://doi.org/10.1016/j.trd.2017.04.030> (13 pages)
- W* Yang, Z., Mock, P., German, J., Bandivaddekar, A., Lah, O., 2017. On a pathway to de-carbonization – A comparison of new passenger car CO2 emission standards and taxation measures in the G20 countries. *Transportation Research Part D: Transport and Environment*. <https://doi.org/10.1016/j.trd.2017.06.022> (16 pages)

Week 16: (May 5) Working session for term paper

Week 17: (May 12) Final paper due by 4:45PM