

# URP6716 –Transportation Policy and Planning University of Florida

<b>Instructor:</b> Alissa Barber Torres, PhD, AICP, CLTD	<b>Semester:</b> Fall 2019
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<b>Required Text(s):</b>  The following book, which can be purchased at the University Bookstore, is the required text for the course:  Giuliano, G. & Hanson, S. (2017). <i>The Geography of Urban Transportation Fourth Edition</i> . New York: The Guilford Press.  Additional required readings, available online, are listed in each module.  Supplemental readings may be added to the course, as needed, and will be added to the University of Florida Library Reserve Readings.	

## Contacting the Instructor

Please send all communication with the instructor through Canvas by selecting the "Instructor Role" from the address book. Any e-mails received outside of Canvas will not receive a response. \*To prevent an e-mail from being sent outside of the Canvas system, DO NOT check the box within the option "Send Cc: Send a copy of this message to recipients' e-mail address(es)."

Your instructor will respond to your emails within 24 hours on weekdays and within 48 hours on weekends. If you would like to discuss the course by phone or video conference with the instructor using Zoom Conference, please contact her by email to arrange an appointment and provide contact information.

## Course Description

This course deals with urban transportation planning and policy. The course is an overview of transportation planning issues largely in a metropolitan context. Because urban transportation is a broad field, the course will be a survey of a number of topics of importance in urban transportation planning.

In the first part of the course, we will establish a common understanding of policy-making processes, identify critical issues in transportation policy, and review the history of U.S. transportation policy at the federal, state, and local level. We then discuss how transportation planners understand and plan for movement within cities, including the four-step transportation modeling process and activity-based modeling, the use of disaggregate data and geographic information systems in planning and the regional transportation planning process.

Finally, we discuss a variety of policy issues related to the transportation system: public transportation, land use impacts of transportation investments, transportation and energy, urban transportation finance, social and environmental justice issues, environmental regulation of transportation and energy and air quality associated with the transportation sector. Case study examples and examples from the United States and other countries will be used throughout the course.

At the completion of this course, students should have a basic understanding of urban transportation planning and policy in its multiple dimensions. Students should also have developed in-depth knowledge of an area of transportation planning that is the subject of their research paper.

This course is a required course for Urban Planning students in the online program and on-campus students who are pursuing the specialization in Transportation and Land Use. It also meets an elective core requirement in Section B.2 (The Built Environment: Land Use/Growth Management/Design/Transportation/Housing/Real Estate) for students in the on-campus Masters of Urban and Regional Planning. It is open to graduate students and advanced undergraduates in related disciplines.

***This syllabus is tentative. As the course develops, the instructor may change the readings, assignments, and scheduling.***

## **Course Objectives**

After successful completion of this course, students should be able to:

- 1) Develop a basic understanding of urban transportation planning processes and policy in its multiple dimensions.
- 2) Show a common understanding of transportation policy-making processes.
- 3) Identify and analyze critical issues in transportation policy and planning and the historic development of a metropolitan region.
- 4) Review the history of US transportation policy at the federal, state and local level and consider the elements that might be applicable in other country contexts.

5) Discuss how transportation planners understand and plan for movement within cities, including the regional transportation planning process, four-step transportation modeling process, activity-based models, and the use of geographic information systems (GIS) and a variety of disaggregated data in transportation planning.

6) Discuss a variety of policy issues related to the transportation system: public transportation, land use impacts of transportation investments, transportation and energy, the geography of urban transportation finance, social and environmental justice in transportation, and transportation and the environment.

7) Apply concepts of transportation policy and planning to a specific transportation planning policy context.

### **Structure of the Course**

This course will include a wide range of topics that we will discuss through a variety of methods. Each new topic is introduced with a lecture, special readings and, as appropriate, presentations by guest lecturers. The course consists of four elements: reading assignments, lectures and class discussion, an in-class presentation, and written assignments. Because so many topics are being presented in this course, I will attempt to respond to areas of special interest to members of the class. This will be possible through the written assignments and the presentations.

### **Teaching Philosophy**

The assignments of this course have been designed to allow students to practice the kinds of skills they will use as planning professionals. The exercises have been designed to develop the following skills that will be important in professional practice: (1) critical thinking; (2) presentation (verbal) communication; (3) evaluation and critique; (4) argumentation; and (5) written communication skills. Consistent with the expectations of professional conduct in this course, all written assignments must be typed. No hand-written assignments will be accepted.

Students will be asked to exercise their critical thinking skills throughout the course. In the summary of the readings and discussions, they will read and analyze the perspective of the various authors, understand the assumptions being made by the authors, summarize and present the argument to the class, and contrast the readings with other course materials. In the writing assignments, students will be asked to consider the diverse perspectives on transportation and develop their own perspective. All students will develop their presentation skills through the presentation of their research paper. In weekly discussions, students will be required to respond to questions from the instructor and other members of the class. Each student will be required to evaluate the arguments of the authors of the required readings.

In the research paper and in comments on the readings, students will be required to develop a basic argument and present it in a manner that is easily understood, thus

developing good written communication skills. These skills are important because in professional practice, transportation professionals need to write in a manner that clearly states goals of the writing, develops the argument persuasively, and is easily understood.

## **Course Outline**

<b>Module</b>	<b>Topics</b>
<b>Module 1:</b> The Context of Urban Transportation	Basic Concepts in Transportation Planning: Transportation as a Derived Demand, Accessibility and Mobility, Scale and Context, and Aggregate and Disaggregate Approaches  Trends in Passenger Travel  Trends in Goods Movement
<b>Module 2:</b> Transportation and Urban Form/Transportation and Telecommunications	How Cities Develop and the Implications for Transportation  Historical Development of Cities  The Sprawl Debate  Transportation and Land Development  Constraints on Personal Travel  Time-Space Convergence  Communications, Linkages, and Information Needs  Implications of Changes in Communications for Travel
<b>Module 3:</b> The Urban Transportation Planning Process/Characteristics of Travel and Techniques for Estimating Travel Demand	The Traditional Four-Step Modeling Process  Innovations in Transportation Modeling: Activity-Based Models and Other Innovations
<b>Module 4:</b> Transportation Investment, Subsidy, and Finance	Transportation System Costs  Land Use Impacts of Transportation Investments

	<p>The Geography of Urban Transportation Finance</p> <p>Finance of Transit and Highways</p> <p>Source of Transportation Funding</p> <p>Efficiency and Equity in Transportation Planning</p> <p>History of Transportation Finance</p>
<p><b>Module 5:</b> Achieving Multimodal and Intermodal Balance: Planning for All Modes of Travel</p>	<p>Strategies for Better Urban Transportation Planning</p> <p>Transportation Demand Management (TDM)</p> <p>Transportation System Management (TSM)</p> <p>Transit- and Pedestrian-Oriented Development</p> <p>Complete Streets and Context-Sensitive Design</p>
<p><b>Module 6:</b> Achieving Multimodal and Intermodal Balance: Planning for All Populations</p>	<p>Transportation Access for All Populations</p> <p>Transportation—Disadvantaged Populations (Non-drivers)</p> <p>Social Equity and Environmental Justice in Transportation Planning</p>
<p><b>Module 7:</b> Environmental Impacts of the Transportation System: Impacts and Regulations</p>	<p>Regulatory Framework for Environmental Impact Assessment in the Transportation Sector</p> <p>Environmental Impacts and Mitigation Strategies</p> <p>Effects of Transportation Systems on Human And Plant/Wildlife Ecosystems.</p> <p>National Environmental Policy Act (NEPA) and Environmental Streamlining</p>
<p><b>Module 8:</b> Environmental Impacts of the Transportation System: Energy and Air</p>	<p>Energy Use</p>

Quality	<p>Greenhouse Gas Emissions and Climate Change</p> <p>Alternative Fuel Technologies and Sources for Transportation</p>
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## **Course Technology**

In the event that you have technical difficulties with E-learning in Canvas or have trouble accessing materials or submitting assignments, please contact the [UF Computing Help Desk](#) online or at (352) 392-4357. If your technical difficulties will cause you to miss a due date, you MUST report the problem to Help Desk. Include the ticket number and an explanation of the issue based on consult with Help Desk in an e-mail to the instructor to explain the late assignment/quiz/test. The instructor reserves the right to accept or decline tickets from the UF Help Desk based on individual circumstances.

E-learning in Canvas (<http://elearning.ufl.edu> or (352) 392-4357, select option 2) may be new to some of you, but it is relatively simple to use. Students should already be familiar with word processing, and Internet-browsing software.

## **Student Support Services**

As a student in a distance learning course or program, you have access to the same student support services that on campus students have. For course content questions, please contact your instructor.

For any technical issues you encounter with your course please contact the UF computing Help Desk at 342-392-HELP (4357), select option 2. For Help Desk hours visit: [Information Technology–UF Computing Help Desk](#). Other resources are available at [Student Services|Distance Learning](#).

At times, students may experience periods of increased stress when challenges related to decisions, goals and relationships arise. Often these experiences are accompanied by thoughts and emotions that produce sadness, anxiety, frustration, anger and confusion. If you are experiencing excessive stress in your life that is affecting your ability to meet the deadlines for this course, please speak to the instructor or contact the [Counseling and Wellness Center](#) online or at (352) 392-1575 to make an appointment or contact the University Police Department at (352) 392-1111 or 911 for emergencies.. If you observe or know of anyone in distress, please reach out to [U Matter, We Care](#) online, at (352) 294-CARE (2273), or at #UMatterUF.

## **University Policies/Academic Misconduct**

University policies on such matters as add/drop, incomplete, academic probation, termination of enrollment, reinstatement, and other expectations or procedures can be found in the [Graduate Student Handbook](#) and at the [Dean of Students website](#).

Students MUST follow the University's policies regarding unauthorized use of materials (i.e., cheating), prohibited collaboration, and the use of copyrighted materials. Students are responsible for reading and abiding by the University's [Student Conduct Code](#) and [Student Honor Code](#).

These Codes and the [Regulations of the University of Florida](#) specify a number of behaviors that are in violation of this code and the possible sanctions. In particular, there are rules governing plagiarism. If you directly quote someone or use an idea from another source, you must attribute that idea or those words to an original author. If you use the same material in two courses without discussing this with your instructor, you may be engaging in self-plagiarism. Also, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel.

If you are unclear about what constitutes plagiarism, academic dishonesty, or academic misconduct, please make an appointment with the instructor to discuss. You may also consult the Codes referenced and the graduate catalog for more information.

## **Student Honor Code**

In adopting the [Student Honor Code](#), University of Florida students recognize that academic honesty and integrity are fundamental values of the University community. Students who enroll at the University commit to holding themselves and their peers to the high standard of honor required by the Honor Code. Any individual who becomes aware of a violation of the Honor Code is bound by honor to take corrective action.

Student and faculty support are crucial to the success of the Honor Code. The quality of a University of Florida education is dependent upon the community acceptance and enforcement of the [Student Honor Code](#).

### ***The Honor Pledge***

We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity by abiding by the Honor Code.

On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

## **Accommodations**

The instructor will respect the needs for accommodations for students with disabilities consistent with the University's policy on such accommodations. Students with disabilities requesting accommodations should first register with the [Disability Resource Center](#) (352-392-8565, ) by providing appropriate documentation. Once registered, students will receive an accommodation letter that must be presented to the instructor when requesting accommodation.

Students with disabilities should follow this procedure as early as possible in the semester. I am happy to provide reasonable accommodations for students who register with the DRC, and ask that students inform the instructor of any request no later than the end of the second week of the course.

## **Course Evaluation**

Students' evaluation of the course will use the new evaluation system, GatorEvals, designed to enhance teaching effectiveness and to be more seamlessly linked to UF's Canvas learning management system. Students can complete their evaluations through the email they receive from GatorEvals, by choosing the GatorEvals option in the Canvas course menu, or via <https://ufl.bluer.com/ufl/>.

Should you have any complaints with your experience in this course, please visit [Student Complaints](https://distance.ufl.edu/student-complaint-process/) at <https://distance.ufl.edu/student-complaint-process/> to submit your feedback.

## **Course Assignments and Grading**

<b>Assignment</b>	<b>Points Possible</b>
Policy Debates	120
Metropolitan Area Profile 1	120
Metropolitan Area Profile 2	120
Participation and Other Assignments (Introduce Yourself, Transportation-Related Data, Pedestrian Count Data,	120



Travel Diary)	
Transportation Meeting	20
Paper Topic Paragraph	10
Outline of the Paper	40
Research Paper Presentation	80
Research Paper Abstract	50
Research Paper	320
<b>Total:</b>	1000

All assignments should be submitted to E-learning in Canvas by 11:59 p.m. on the due date, unless otherwise specified.

“A” grades require performance beyond the minimum or average -- e.g., quality, depth, synthesis of ideas, originality, or creativity. Students at the graduate level should be prepared to write a critical argument, rather than simply describe relationships. If you have any questions about what is expected at the graduate level, please talk to the instructor.

Meeting deadlines matters, too! Each deadline must be honored, or the grade may be lowered accordingly. The instructor will also be more sympathetic to a request for an extension one week before a deadline than one day before a deadline.

The University of Florida allows instructors to give the following grades: A, A-, B+, B, B-, etc. A grade of “A-” on a specific assignment may indicate that the work is close to an “A,” but the “A-” will be averaged with other grades to determine the final grade. An “A-” means that a student almost, but not quite, achieved “A” work.

Requirements for class attendance, assignments, and other coursework are consistent with [UF policies](#).

<b>Letter Grade</b>	<b>Percentage</b>	<b>Grade Points</b>
A	93-100%	4.00
A-	90-92.9%	3.67
B+	87-89.9%	3.33
B	83-86.9%	3.00
B-	80-82.9%	2.67
C+	77-79.9%	2.33
C	73-76.9%	2.00
C-	70-72.9%	1.67
D+	67-69.9%	1.33
D	63-66.9%	1.00
D-	60-62.9%	0.67
F	Below 60%	0.00
E/WF/I/NG/S-U		0.00

## **Netiquette: Communication Courtesy**

All members of the class are expected to follow rules of common courtesy in all e-mail messages, threaded discussions and chats. Course communication should be civilized and respectful to everyone. The means of communication provided to you through e-Learning (e-mail, discussion posts, course questions, and chats) are at your full disposal to use in a respectful manner.

Abuse of this system and its tools through disruptive conduct, harassment, or overall disruption of course activity will not be tolerated. Conduct that is deemed to be in violation with University rules and regulations or the Code of Student Conduct will result in a report to the Dean of Students. Refer to the [Netiquette Guide for Online Courses](#) for more information.

Students will be expected to be prepared for class and participate in the class discussion. The following rules apply to the discussion in class:

- Be critical of ideas, not people
- Listen to everyone's ideas even if you don't agree
- Try to understand all sides of an issue
- Talk through issues, don't try to change other's minds
- Stay focused; stick to the subject
- Avoid overly long stories, anecdotes, or examples
- Don't dominate the conversation; let all participate
- Remember there are no right answers; most policies involve tradeoffs

In summary, good participation requires careful listening, responding, asking questions and making comments to others in the classroom. Each student should complete the readings prior to class and be prepared to clarify understanding in the class discussion or contribute to thoughtful discussion of issues. If you have problems with the readings, you should make an effort to talk to the instructor via electronic mail or to schedule a telephone call or videoconference.

## **Course Readings**

### ***Module 1***

1. Giuliano and Hanson, Chapters 1 and 2
2. Lay, J. (2015, July 7). Here to There: An Animated History of Transportation. *The Atlantic*. Retrieved from <https://www.theatlantic.com/video/index/397865/animated-history-transportation/> (Links to an external site)Links to an external site.
3. Tomer, A. & Gutman, J. (2016, May 31). The Avenue: Shifting gears to a new transportation model. Retrieved from <https://www.brookings.edu/blog/the-avenue/2016/05/31/shifting-gears-to-a-new-transportation-model/> (Links to an external site.)Links to an external site.
4. Tomer, A. & Kane, J. (2016, May 31). Moving to access. Retrieved from <https://www.brookings.edu/project/moving-to-access/> (Links to an external site.)Links to an external site.
5. Ralph, K. M. (2017). Multimodal millennials? The four traveler types of young people in the United States in 2009. *Journal of Planning Education and Research*, 37(2), 150-163. (on reserve)
6. National League of Cities Center. (2015). *City of the Future: Technology and Mobility*. Retrieved from <https://www.nlc.org/sites/default/files/2016-12/City%20of%20the%20Future%20FINAL%20WEB.pdf> (Links to an external site.).
7. Glass, D. (2014, October 2). A complete guide to the future of U.S. freight movement. *CityLab*. Retrieved from <https://www.citylab.com/life/2014/10/a-complete-guide-to-the-future-of-us-freight-movement/381012/> (Links to an external site.)

### ***Recommended Readings***

Federal Highway Administration (FHWA) (n. d.). *National Household Travel Survey*. Retrieved from <https://nhts.ornl.gov/> (Links to an external site.)

US Department of Transportation (USDOT), Federal Highway Administration. (n .d.). *National Household Travel Survey: Our Nation's Travel*. Retrieved from <http://nhts.ornl.gov/publications.shtml?keyword=brief> (Links to an external site.)

This search allows you to select a survey year and a category of publication (e.g., report, journal, conference, or brief) Please find one or more topics that interest you and skim them.

U.S. Department of Transportation. (2016, April 8). *The Fixing America's Surface Transportation Act or "FAST Act."* Retrieved from <https://www.transportation.gov/fastact>

## **Module 2**

1. Giuliano and Hanson, Chapters 3, 4 and 9
2. TransitCenter (2015). *A People's History of Recent Urban Transportation Innovation*. Retrieved from <http://transitcenter.org/publications/a-peoples-history-of-recent-urban-transportation-innovation/> (Links to an external site.)
3. Delucchi, M. & Kurani, K. (2015, Spring). Can we have sustainable transportation without making people drive less or give up suburban living? *Access*, 46. Retrieved from <http://www.accessmagazine.org/articles/spring-2015/can-we-have-sustainable-transportation-without-making-people-drive-less-or-giving-up-suburban-living/> (Links to an external site.)
4. Grabar, H. (2014, June 17). The triumphant return of private U.S. passenger rail. In *The Best of Citylab's The Future of Transportation*, 68-77. Retrieved from [http://cdn.theatlantic.com/assets/media/files/FOT\\_ebook.pdf](http://cdn.theatlantic.com/assets/media/files/FOT_ebook.pdf) (Links to an external site.)
5. Machek, E., Lewis, K., Peirce, S., Berthaume, A., Colton, P., & Morton, T. *Novel Surface Transportation Modes: Final Report*. Prepared for the Federal Highway Administration Office of Corporate Research, Technology, and Innovation Management. Retrieved from: <https://rosap.ntl.bts.gov/view/dot/12277> (Links to an external site.)
6. Shaheen, S., Cohen, A., & Zohdy, I. (2016, April). *Shared Mobility: Current Practices and Guiding Principles*. Prepared for the US Department of Transportation Federal Highway Administration. Retrieved from <http://www.ops.fhwa.dot.gov/publications/fhwahop16022/fhwahop16022.pdf> (Links to an external site.)
7. Jaffe, E. (2014, April 28). The first look at how Google's self-driving car handles city streets. In *The Best of Citylab's The Future of Transportation*, 24-40. Retrieved from [http://cdn.theatlantic.com/assets/media/files/FOT\\_ebook.pdf](http://cdn.theatlantic.com/assets/media/files/FOT_ebook.pdf) (Links to an external site.)
8. Bloomberg Philanthropies. (2017, March). *Taming the Autonomous Vehicle: A Primer for Cities*. Retrieved from <https://www.bbhub.io/dotorg/sites/2/2017/05/TamingtheAutonomousVehicleSpreadsPDF.pdf> (Links to an external site.)

### *Recommended Readings*

National League of Cities Center. (2015). *City of the Future: Technology and Mobility*. Retrieved from <https://www.nlc.org/sites/default/files/2016-12/City%20of%20the%20Future%20FINAL%20WEB.pdf> (Links to an external site.)

### Module 3

1. Giuliano and Hanson, Chapters 5-7
2. Biemborn, Edward. (1995). *A Transportation Modeling Primer*. Milwaukee, WI: Center for Urban Transportation Studies. Retrieved from <http://www4.uwm.edu/cuts/primer.htm> (Links to an external site.)
3. Currans, K. (2017). Issues in trip generation methods for transportation impact estimation of land use development: a review and discussion of the state-of-the-art approaches. *Journal of Planning Literature* 32(4), 335-345. (on reserve)
4. Transportation Research Board (TRB) (2015). *Activity-Based Travel Demand Models: A Primer*. Retrieved from <https://www.nap.edu/download/22357> (Links to an external site.)

### *Recommended Readings*

Pihl, E. & Rousseau, G. *Introduction to Travel Demand Forecasting*. Travel Model Improvement Portal (TMIP). Retrieved from <https://tmip.org/content/introduction-travel-demand-forecasting> (Links to an external site.)

Transportation Research Board. (2010). *Advanced Practices in Travel Forecasting: A Synthesis of Highway Practice*. NCHRP Synthesis 406. Retrieved from [http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp\\_syn\\_406.pdf](http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_syn_406.pdf)

### **Module 4**

1. Giuliano and Hanson, Chapters 8, 9 (review), and 10
2. Anderson, M. L. (2017, Spring). Subways, strikes, and slowdowns. *Access*, 51. Retrieved from <http://www.accessmagazine.org/spring-2017/subways-strikes-and-slowdowns/> (Links to an external site.)
3. Boarnet, M. G. & DiMento, J. F. (2004, Fall). The private sector's role in highway finance: lessons from SR91. *Access*, 25. Retrieved from <http://www.accessmagazine.org/fall-2004/private-sectors-role-highway-finance-lessons-sr-91/>

4. Delucchi, Mark. (1996, Spring). Total cost of motor-vehicle use. *Access*, 8. Retrieved from <http://www.accessmagazine.org/spring-1996/the-total-cost-of-motor-vehicle-use/> (Links to an external site.)
5. Drennan, M. & Brecher, C. (2012, Spring). Can public transportation increase economic efficiency? *Access*, 40. Retrieved from <http://www.accessmagazine.org/spring-2012/can-public-transportation-increase-economic-efficiency/> (Links to an external site.)
6. Landis, J. & Cervero, R. (1999, Spring). Middle age sprawl: BART and urban development. *Access*, 14. Retrieved from <http://www.accessmagazine.org/wp-content/uploads/sites/7/2016/07/access14-01-BART-and-urban-development.pdf> (Links to an external site.)
7. Shoup, D. (2016, Spring). Cutting the costs of parking requirements. *Access*, 48. Retrieved from <http://www.accessmagazine.org/spring-2016/cutting-the-cost-of-parking-requirements/> (Links to an external site.)
8. Sorenson, P. (2013, Fall). From fuel taxes to mileage fees. *Access*, 43. Retrieved from <http://www.accessmagazine.org/fall-2013/fuel-taxes-mileage-fees/> (Links to an external site.)

## **Module 5**

1. Giuliano and Hanson, Chapter 14
2. Taylor, B. (2017, Spring). The Access Almanac: traffic congestion is counter-intuitive, and fixable. *Access*, 51. Retrieved from <http://www.accessmagazine.org/spring-2017/the-access-almanac-traffic-congestion-is-counter-intuitive-and-fixable/> (Links to an external site.)
3. Marsden, G., Frick, K. T., May, A. D. & Deakin, E. (2011). How do cities approach policy innovation and policy learning? A study of 30 policies in Northern Europe and North America. *Transport Policy*, 18(3), 501-512. <http://dx.doi.org/10.1016/j.tranpol.2010.10.006> (Links to an external site.)
4. Marsden, G., Frick, K. T., May, A. D. & Deakin, E. (2010). Transfer of innovative policies between cities to promote sustainability. *Transportation Research Record: Journal of the Transportation Research Board*, 2163, 89-96. (on reserve)
5. National Association of City Transportation Officials (NACTO). (2012). *Urban Streets Design Guide*. Retrieved from <https://nacto.org/publication/urban-street-design-guide/> (Links to an external site.)
6. Badger, E. (2014, March 6). America's cities are still too afraid to make driving unappealing. In *The Best of Citylab's The Future of Transportation*, 111-15. Retrieved from [http://cdn.theatlantic.com/assets/media/files/FOT\\_ebook.pdf](http://cdn.theatlantic.com/assets/media/files/FOT_ebook.pdf) (Links to an external site.)
7. King, D. (2016, October 6). What do we know about the "first mile/last mile" problem for transit? *Transportist*. Retrieved from

<https://transportist.org/2016/10/06/what-do-we-know-about-the-first-milelast-mile-problem-for-transit/> (Links to an external site.)

8. Stewart, J. (2016, December 16). 7 “Last mile” solutions that don’t look unacceptably stupid. *Wired*. Retrieved from <https://www.wired.com/2016/12/7-last-mile-solutions-dont-look-unacceptably-stupid/> (Links to an external site.)

### *Recommended Readings*

Hall, P. (2007, Fall). Beyond the automobile? *Access*, 30. Retrieved from <http://www.accessmagazine.org/spring-2007/beyond-automobile/> (Links to an external site.)

Williams, K. M. & Marshall. M. A. (1996). *Managing Corridor Development: A Municipal Handbook*. Center for Urban Transportation Research, University of South Florida. Retrieved from <http://www.cutr.usf.edu/pdf/corridor.pdf> (Links to an external site.)

Williams, K. M. & Sokolow, G. (n.d.). *Ten Ways to Manage Access in Your Community*. Center for Urban Transportation Research, University of South Florida. Retrieved from <https://www.cutr.usf.edu/wp-content/uploads/2012/08/10ways.pdf> (Links to an external site.)

Transportation Research Board (TRB). (2012). *National Cooperative Highway Research Program (NCHRP) Synthesis 436: Local Policies and Practices that Support Safe Pedestrian Environments*. Retrieved from [http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp\\_syn\\_436.pdf](http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_syn_436.pdf) (Links to an external site.)

Black, A. (1993). The recent popularity of light rail transit in North America. *Journal of Planning Education and Research*, 12(3): 150-159. (on reserve)

Moore, J. E. (1993). Commentary on ‘The recent popularity of light rail transit in North America,’ *Journal of Planning Education and Research*, 13(1): 50-52. (on reserve)

Black, A. (1993). Author’s response. *Journal of Planning Education and Research*, 13(1): 53-54. (on reserve)

Richmond, J.E.D. (1998). The mythical conception of rail transit in Los Angeles. *Journal of Architectural and Planning Research*, 15(4): 294-320. (on reserve)

Vock, D. (2017, September). Buses, yes buses, are 'the hottest trend in transit.' *Governing*. Retrieved from <http://www.governing.com/topics/transportation-infrastructure/gov-big-city-bus-systems.html>

## Module 6

1. Giuliano and Hanson, Chapters 8 (review) and 13
2. Litman, T. & Brenman, M. (2012). *A New Social Equity Agenda for Sustainable Transportation*. Victoria Transport Policy Institute. Retrieved from <http://www.vtpi.org/equityagenda.pdf> (Links to an external site.)
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