

URP6716 (Section 4790)
Transportation Policy and Planning

Class Meets:

Tuesdays (Period 8-10) 8:30 a.m.- 11:30 a.m. in Jonathan and Melanie Antevy Hall 439

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Office Hours: Tuesdays: 3:00-5:00 pm¹ and by appointment

E-learning in Canvas: <http://elearning.ufl.edu/>

COURSE OVERVIEW

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 several 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, transportation costs, transportation finance, social and environmental justice issues, environmental regulation of transportation and energy and air quality associated with the transportation sector. Case study examples from the United States and around the world are 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 an 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 a distribution requirement for students in the on-campus Master of Urban and Regional Planning. It is open to graduate students and advanced undergraduates in related disciplines.

Objectives of the Course

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.
- 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.

¹ Office hours are in-person or virtual through the Zoom platform. Office hour sign-up link: <https://calendly.com/rsteiner-2/office-hours-1>. The link to my personal meeting room: <https://ufl.zoom.us/j/7335356063?pwd=VWYxRlljcFV2RjZTSjJLVWVJnSE1zZz09>; Meeting ID: 733 535 6063; Passcode: P1E32h; One tap mobile: +1-312-626-6799,,7335356063# US (Chicago)

8) Evaluate, analyze, and collect data on a transportation planning policy or process in a real-world 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 five elements: reading assignments, lectures, class discussion and debates, in-class presentations, 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, the discussions, and the presentations.

In conjunction with the University of Florida's emphasis on technology in teaching, E-learning in Canvas is used in this class. Students should already be familiar with word processing, and Internet-browsing software. E-learning in Canvas (<http://elearning.ufl.edu>) is relatively simple to use. If you do not know how to use E-learning in Canvas or have trouble accessing materials or submitting assignments, contact the UF Computing Help Desk directly (<https://elearning.ufl.edu/student-help/student-help-faqs/>) or (352) 392-4357.

To further engage both online and on-campus students, we share an eLearning section with all students in this course. In this setting, online and on-campus students can get full involvement in the learning environment by participating in the class discussion and responding to comments and questions raised by their peers.

Teaching Philosophy

Transportation is a part of our daily lives. We often take for granted that the decisions we make about transportation apply across all populations. The framework for transportation planning has developed over several decades. Recent changes in cities – the emergence of the shared economy, e-commerce and autonomous mobility, the changes in employment to include the gig economy, the electrification of the economy in response to the climate crisis, and changes in location decisions – all affect the transportation sector in a variety of ways. More recently, the emergence of COVID-19 virus disrupted our way of life in many ways. That disruption has had both direct and indirect impacts on transportation. Throughout this course, I will challenge you to go beyond the changes in your own lives to consider how these short-term and long-term changes are affecting how we travel in communities, how certain subsets of the population travel, and ultimately how our transportation system operates.

The assignments of this course and all courses that I teach 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, except minor in-class exercises, 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 discussion of the readings and in the class discussion, 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 perspectives. All students will develop their presentation skills through the presentation of their research papers and the debate. In the weekly class discussions and debates, 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 the discussion of 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 the goals of the writing, develops the argument persuasively and is written in a manner that is easily understood.

Course Readings

The following book, which can be purchased at the University Bookstore and online, is the required text for the course:

Giuliano, G. & Hanson, S. 2017. *The Geography of Urban Transportation Fourth Edition*. New York: The Guilford Press.

Additional required readings, available online, are listed in the syllabus and are available in the Library Reserves.

Additional Readings

The field of transportation planning is well-documented on sources on the internet. In the Resources link in the course, there is a partial list of organizations that can provide a national perspective on certain aspects of transportation planning. This list is only partial but can be helpful in identifying best practices, research and policy documents, and diverse perspectives on transportation topics.

Student Responsibilities and Grading

Grades will be based upon five components: a policy/planning research paper, a metropolitan transportation profile, policy debates, class attendance and participation, and attendance at a transportation meeting, and weighted as follows:

Assignment and due date	Points
Planning/Policy Research Paper	
Paper Topic Paragraph – September 14 at 11:55 p.m.	10
Outline of Paper – October 5 at 11:55 p.m.	40
Paper (Introduction, Literature Review, and Methodology) – November 9 at 11:55 p.m.	160
Abstract – December 8 at 11:55 a.m.	40
Paper (with revised Introduction, Literature Review and Methodology) – December 8 at 11:55 a.m.	250
Presentation on Research Paper – December 1 at 11:55 p.m. (presentation in class on December 2)*	80
Policy Debates (1 debate @ 200 points) – as assigned; paper due on Monday evenings at 11:55 p.m.	200
Class Attendance and Participation – ongoing	
Transportation-Related Data – September 1 at 11:55 a.m.	10
Travel Diary – September 15 at 11:55 a.m.	10
Pedestrian/Bicycle Data Collection – October 13 at 11:55 a.m. (in-class exercise, as weather permits, for on-campus students)	20
Class Attendance and Participation	150
Transportation Meeting – December 12 at 11:55 a.m.	30
TOTAL POINTS	1000
* - Online students will have the option to do a live presentation during the week of December 1 (as scheduled) or to submit a recording by Wednesday, Dec. 3 at 11:55 a.m.	

Assignments

Unless otherwise specified, discussions and debates are due in E-learning in Canvas by **11:55 a.m.** and assignments related to the paper are due in E-learning in Canvas by **11:55 p.m.** on the due date. All assignments are due as specified, above. Like all professional work, all written assignments (except minor in-class assignments) must be type-written. 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.

Policy Debates: Students will be required to participate in a policy debate on a current transportation topic both as presenters/moderators and as participants in the discussion. The format for the debate is as follows. Presenters (and the instructor, as applicable) will provide an opening overview (a one-minute overview) that clearly states the debate question, and defines terms and its policy context, as needed. The overview is followed by a two-minute opening argument for the pro-side and a two-minute opening argument for the con-side followed by questions and discussion from class members. In the on-campus section, presenters will be allowed one minute to rebut the arguments of their opponent. For the online section, there is no rebuttal, except in responses to the comments and discussion of other students. Students should limit the debate to no more than six minutes.

During the week prior to the debate, on-campus students will be asked to volunteer to take part in the debate (online students sign up for a topic during the first week of the semester and receive the specific question during the week before the debate begins). Students in the online section will sign-up for a topic during the first module and receive the assignment a week before the start of the module in which they will moderate the discussion. Upon reading the required reading(s) associated with the class (and other authoritative sources available online), each participant in the debate will prepare a two-to-four-page, double-spaced position paper outlining the arguments **both for and against** the question of the debate. During the discussion, all students should be prepared to present their position and make arguments supporting or rebutting the debate positions. The presenters/moderators should respond to questions and comments. The grade for the moderators will be based equally on the written and oral arguments and the participation in the discussion.

Your research paper cannot be on the same topic as your debate paper unless you complete your debate before the start of the fourth module in the semester. Since the merger of online and on-campus students on eLearning, on-campus students are encouraged to review the debate discussion to prepare for a discussion during the class session on Tuesday mornings.

Transportation Meeting: During the semester, each student is required to attend one meeting (or at least two hours of a longer meeting) of a transportation policy making body in the region where you live, have lived, would like to live, or are otherwise interested in, and summarize what happened during the meeting. Following COVID-19, some of these meetings offer a hybrid option (e.g., Zoom, GoToWebinar). Sometimes these meetings are canceled if the agenda is too short or if the committee does not have a quorum. As such, please be sure to plan to attend these meetings in advance and as early as possible in the semester. With this assignment, please submit a link to the meeting agenda (if available), or to the meeting minutes, a one- to two-page summary of what you observed, heard, or learned, and any other comments on what you observed in the meeting. While you could listen to a recording of the meeting, I strongly prefer that you attend the meeting in person or participate in the meeting at the time it takes place so that you can truly participate and observe interactions between participants, as appropriate. If attendance at a transportation meeting is a part of your work, I would prefer that you attend a meeting that is not directly related to your employment.

The policy making bodies could include a metropolitan organization (MPO), a regional planning organization (RPO), the Citizens Advisory Committee (CAC) to the MPO, the Technical Advisory Committee (TAC) to the MPO, a Community Traffic Safety Team (CTST), Bicycle/Pedestrian Advisory Board (B/PAB), an advisory board that works with a regional transit system, airport or other modal transportation organizations, and other meetings as approved by the instructor. For example, you may be able to attend a discussion by the County or County Commission on transportation issues associated with a project, a meeting on the transportation element of a local government comprehensive plan to meet this requirement, or a meeting on other transportation-related topics. Generally, you can find meeting agendas and other related information on the agency website.

Your instructor will not accept excuses at the end of the semester that you were not able to attend any of these meetings because you do not have any transportation organizations in your community, or you can't fit a meeting into your schedule. If you absolutely cannot attend any of these meetings, let the instructor know by the **end of the second module**, so we can make other arrangements. Failure to turn in a summary of a transportation meeting, or another approved assignment, by the end of the course will result in zero (0) for this assignment.

Class Attendance and Participation. An important requirement for this course is class attendance and participation. For on-campus students, attendance is mandatory on time. **Please arrive at class on time and stay until the end of the class. Tardiness or an early departure will count as a partial absence. Late submissions will receive reduced points depending upon when they are submitted.** Late arrivals and departures distract your colleagues and your instructor. If you expect to miss a class, please notify the instructor via e-mail (in Canvas) in advance of class time. Excessive absences may justify a lower grade, expulsion, or a failing grade. For online students, consistent participation in the discussion, debates and other assignments is essential to the learning experience. Requirements for class attendance and make-up assignments, and other work in this course are consistent with university policies that can be found at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

Students will be expected to be prepared for the course and participate in the discussion. The following rules apply to the discussion (whether in person or online):

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

In summary, good participation requires careful listening/reading, responding, asking questions, and making comments to others in the class. 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 see the instructor during office hours so that we can discuss this. If you are not comfortable talking in class, try to talk to the instructor during office hours.

In recent years, the instructor has used a flipped classroom for the on-campus section. To facilitate a flipped classroom for the on-campus students, and maintain a lively discussion in the online section, I need to trust that all students have completed, and are prepared to discuss, the required reading in each module. The recommended readings often provide greater detail or background on some topics in the module. The instructor recognizes that during some weeks, there are lots of readings. At the start of the first presentation in each module, the instructor explains the readings. You are not expected to read every word of every reading, however, be sure to read the chapters in the textbook to understand the concepts in each module. You should become familiar enough with the readings to get a general understanding of the topic. To assist the instructor in preparing for on-campus class during the second week of the module and to enhance the readings for next year, students will be required to submit questions, comments, or reflections on the readings for the module. COVID has changed many of our patterns of daily activity and with it our travel patterns. Additionally, the textbook is now eight years old and in some cases the materials are dated. As such, this is an opportunity to draw attention to materials (e.g., websites, podcasts) that address the topic for discussion in a specific module. Please submit your questions, comments or reflections by 11:55 a.m. on Monday for the discussion during the second week of the module (this is the case for all modules except Modules 1 (where the on-campus students will have extra time to submit after class meets) and Module 7, which is only one week long).. The instructors may ask students to clarify their comments and questions.

Distractions are a part of our daily activities, and they often result from electronic technology (e.g., laptops, tablets, cellphones). The challenge is to ensure that they take a proper role in teaching and learning. Because this course is designed to maximize participation, all students should plan to minimize the interference of technology during class. Students will turn off and put away cellphones and other handhelds, tablets and other devices that are not a direct part of the educational experience. For on-campus students: If you are expecting an urgent call, please let your instructor know so that you do not disturb the class when the call comes in. Any student who misuses technology may receive a lower or failing grade or be kicked out of the class. To facilitate learning, the instructor has learned about a variety of methods to engage students more actively. Nonetheless, we are all learning how to actively engage each other as we go along. If you have any ideas that would improve your learning experience, please do not hesitate to discuss it with the instructor.

Research Paper: Every student is required to complete a term paper on a transportation topic of his or her choice. The preparation of this paper will be a useful exercise in preparing for your thesis, research project, dissertation, and your professional work. Students will be required to define and investigate a topic of their choice in depth. Each student should plan to meet with the instructor before October 22 to discuss his/her paper topic. If you have a particularly complicated topic, or project, are using a topic that you have used to write a paper for another course, or you would like to write a paper with another member of the class, please let the instructor know so we can discuss these options. Papers are expected to be 18-25 double-spaced pages long (with margins no greater than 1 inch on each side and no larger than a 12-point font size), with citations of at least 8 different sources (not including Wikipedia or other websites used to define concepts).

A one-paragraph topic statement describing your research is due in September (see schedule on page 3, above). In the topic statement, state your research question and the data that you expect to use to explore that research question. A paper outline including a restatement of your research topic, an outline of your paper, and a properly formatted list of at least 5 references is due in October. The first three chapters (introduction, literature review/background, and methodology) are due in November. During the last week of classes, students will give a short presentation (no more than 15 minutes, or less depending upon the number of students in the course) about their paper. This presentation should include a description of the topic, the method used and a brief explanation of the principal findings and their implications for theory and practice. The final paper with an abstract is due during Exam week. As you prepare the final paper be sure to revise the first three chapters based upon comments from your instructors. PLEASE NOTE: On-campus students are required to submit an electronic copy of the final paper via Canvas AND, if possible, a hard copy in the departmental office (the instructor is susceptible to eye strain when she works for long hours on a computer).

The statement of the proposed research topic and the outline should include a clear statement of the research to be conducted, the importance of the research (it should answer the question, "so what?"), and the method you expect to use to gather the information (and/or the data source you expect to use). You may want to interview policymakers regarding the topic of your paper, you may manipulate data that is available through public sources, you may observe and count transportation activity, or you may choose to use a combination of these and other methods. For the paper, students will be required to do some original research and analysis. Summarizing someone else's books

or journal articles does not constitute graduate or advanced undergraduate work. If you choose to conduct interviews or surveys or other research that involves human subjects, you will be required to obtain permission to do so from the University of Florida Institutional Review Board (IRB-02). See <http://irb.ufl.edu/irb02/> for additional information on their requirements. If you collect information from public officials, you are likely to receive an exemption, but you will still need to complete a form with IRB to get the exemption. Here is the link to the information on getting an [automated determination for nonhuman and exempt research](#).

The paper, like all good research, should contain the following sections: (1) abstract or executive summary; (2) introduction – a summary of the topic and a brief introduction to the project; (3) background and literature review – explains the framework for understanding the research question; (4) methodology – explain the methodology used to gather your data for your project; (5) results/finding – explains what you learned when you conducted your research; (6) discussion – interprets the results in light of previous research (included in your literature review) on this topic (it may also include recommendations, if you have any); and (7) conclusion – summarizes the research and explains what the reader should do to respond to your results.

The literature review should categorize the previous research according to the results or arguments made by the authors. The literature review does not need to summarize every applicable article in detail (that would be an annotated bibliography). It should, however, define the terms of the debate on this topic and hint at the direction the paper will take. If you are using a different methodology than is usually used to understand well-documented relationships, be sure to include a discussion of methodologies in your literature review. If the paper is on a topic on which there is little literature but there are several policy studies, these prior studies should be summarized. The literature review should NOT focus on the case study used in your research; that material should be included in your results/findings. If you have a topic that requires an explanation of the existing regulations or other similar (but not your literature review) information, you might include a Background section before or after the literature review. Like the literature review, the background section should NOT include specific information on the case study of your research.

The data used in this paper can come from a variety of sources, including interviews with policymakers, analysis of primary or secondary data, observations of the situation being explored, or other forms of data that support the argument that you are arguing. If you would like some assistance in the development of your topic or the data collection, please see the instructor or the teaching assistant. The topic of this paper can range from practical to theoretical. Local governments and the University of Florida often have topics of interest for research. Please see your instructor if you would like to discuss potential paper topics. For students who are struggling to define a topic, we can offer an alternative policy analysis with a defined framework. You may take a transportation planning concept and make recommendations about how that concept would be applied in practice in a selected region. If you are interested in this option, please discuss it with your instructor.

Use of Reference Material

In written work, the format of all references should follow the format used by the *Journal of the American Planning Association* (JAPA) and based upon *Publication Manual of the American Psychological Association, Seventh Edition* (2010) (see also, <https://apastyle.apa.org/>), and *The Chicago Manual of Style, Online* (see <http://www.chicagomanualofstyle.org/home.html>). If you use the *Chicago Manual* use the *author-date* system. Citations should appear in the text as follows: (Giuliano & Hanson, 2017) when using an idea from the text; or (Hanson, 2017: 10) when using a specific quote on the indicated page (in this case, page 10²). A good source of information on the APA format can be found on the website of the Writing Center at the University of Wisconsin – Madison: <http://writing.wisc.edu/Handbook/DocAPA.html>, under the “Styles and Grammar Guidelines” on the American Psychological Association (<https://apastyle.apa.org/about-apa-style>) website (the links to References and In-text Citations are particularly useful). Students from departments other than Urban and Regional Planning may use a commonly accepted format for citations from their own field. Please discuss this option with the instructor before you complete the outline of the paper.

Assistance for Writing Papers

The online resources to assist you in writing are extensive. The Dial Center for Speech and Communication Studies (<http://cwoc.ufl.edu/>) and the University Writing Program (<https://writing.ufl.edu>) at the University of Florida can assist you in different aspects of writing. You can use the Writing Center to get one-on-one help on every area of composition from basic grammar and mechanics to topics like essay organization, style, and argument. The Dial Center provides

² Also, note that because the course textbook is an edited volume, the author of the chapter (Hanson) is used in the citation rather than the editors of the book (Giuliano & Hanson). See <https://apastyle.apa.org/style-grammar-guidelines/references/examples/edited-book-chapter-references> for additional information.

assistance on oral communications through their Public Speaking Lab. Library Support (<http://cms.uflib.ufl.edu/ask>) provides a variety of resources on conducting research through a variety of methods (e.g., chat, text, email, and phone).

Many other universities offer online handbooks on writing. The following are particularly useful: the University of North Carolina at Chapel Hill (<http://writingcenter.unc.edu/handouts/>), the University of Wisconsin (<https://writing.wisc.edu/handbook/>), and Purdue University (<http://owl.english.purdue.edu/>). The following handouts are particularly helpful while editing papers: <http://writing.wisc.edu/Handbook/CommonErrors.html> and <https://writing.wisc.edu/handbook/style/>. The online handbooks described above discuss many aspects of writing papers. 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 speak to the instructor.

Grading

I expect that all graduate students should be able to accomplish the basic requirements for the course -- a "B" grade, but do not hesitate to mark lower when a student does not meet the expectation of adequately showing understanding of the material. "A" grades require performance beyond the minimum or average -- e.g., quality, depth, synthesis of ideas, originality, or creativity. 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 and assignments and other work in this course are consistent with university policies that can be found at: <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>.

University of Florida Grade Policy

Percentage or points earned in class	94%-100%	90%-93.9%	87%-89.9%	84%-86.9%	80%-83.9%	77%-79.9%
Letter grade equivalent	A	A-	B+	B	B-	C+
Percentage or points earned in class	74%-76.9%	70%-73.9%	67%-69.9%	64%-66.9%	60%-63.9%	Below 60%
Letter grade equivalent	C	C-	D+	D	D-	F

Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E	WF	I	NG	S-U
Grade Points	4.0	3.67	3.33	3.0	2.67	2.33	2.0	1.67	1.33	1.0	0.67	0.0	0.0	0.0	0.0	0.0

For greater detail, see the Registrar's Grades and Grading Policies at: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>.

Guidelines for using generative artificial intelligence (AI) tools

As a powerful tool, generative AI tools (e.g., ChatGPT, Bing Chat, Gemini) can potentially help students collect, organize, and master knowledge from a broad scope of topics. This course welcomes students to use generative AI tools as an assistant for out-of-class assignments, and the instructors propose AI-related policies that should be followed by all the students enrolled in this course. However, as is discussed below, you may NOT directly use the language generated by GenAI tools in your assignments.

UF Privacy policy regarding ChatGPT: ChatGPT is currently being assessed for regulatory concerns related to the privacy and confidentiality of data within the United States and internationally. Please be advised that data may be retained by ChatGPT and provided as responses to other users. Individuals have limited control over their data and the parent company, OpenAI, offers no process to amend or delete data that has been submitted. Putting data into ChatGPT or similar services is equivalent to disclosing the data to the public. Any data classified as sensitive or restricted should not be used. This includes, but is not limited to the following data types:

- Social Security Numbers
- Education Records

- Employee Data
- Credit Card Numbers
- Protected Health Information
- Human Subject Research Data
- Unpublished Research Data
- Personal Identifiable Information

1. Overview: generative AI tools are allowed in this course to facilitate students to learn and understand the course material. Students have the responsibility for using generative AI tools appropriately.

2. Suggested use of generative AI tools: Students can use generative AI tools to enhance their understanding of the topics and questions in this course. Students can use AI tools for the following purposes: (1) brainstorming, idea generation, and refining your ideas; (2) providing background knowledge (with the understanding that ChatGPT and other GenAI tools are often wrong – always fact-check to ensure accuracy); (3) searching for tools and materials while conducting out-of-class assignments; and (3) drafting an outline to organize your thoughts, and (4) language polishing.

3. Quality control when using generative AI tools: When students use generative AI tools to facilitate the development of assignment submissions (e.g., discussion posts and research papers), students have the responsibility to verify if the outputs of generative AI tools are from verified sources and the trustfulness of the output content. Students are not suggested to directly trust all the outputs from generative AI tools without critical thinking and verification.

4. Specifying the contribution of generative AI tools in assignments: Students must cite the generative AI tools they use and specify all the assignment contents that are generated or developed from the generated AI tools (how to cite ChatGPT: <https://apastyle.apa.org/blog/how-to-cite-chatgpt>). Particularly for the final research paper of this course, students should provide appendices containing the conversations with generative AI tools as the reference for the course instructor to understand how students transformed the outputs of generative AI tools into the manuscript content.

5. Use of GenAI tools for assignments. If you use GenAI for any of the assignments in this class, please keep the following in mind. There is a good possibility that using tools like these are going to become an important skill for careers in the near future. In the meantime, though, it's going to take a while for society to figure out when using these tools is or isn't acceptable and under what conditions.

There are four primary reasons why:

- Work created by AI tools is not considered original work. It is derived from previously created texts from other sources that the models were trained on but does not cite those sources.
- AI models have built-in biases (i.e., they are trained on limited underlying sources; they reproduce, rather than challenge, errors in the sources).
- AI tools have limitations (i.e., they lack critical thinking to evaluate and reflect on criteria; they lack abductive reasoning to make judgments).
- AI fabricates or “hallucinates” seemingly credible data all the time. It can generate wholly inaccurate content that is nonetheless highly persuasive. This is especially true when asking it for references, quotations, citations, and calculations.

Presenting material in any assignment as if it is your own, when it is not, whether generated by AI, copied from a text, or copied from a website, is considered plagiarism in this class and in many other contexts. The writing exercises and assignments in this class must be your original work. Remember, I expect you to use class and other relevant resources, particularly the course readings, as evidence to reinforce your points, and when you do so to properly cite those sources as outlined, below. GenAI is not permitted as a means to generate your writing in this class for any assignment. Do not quote it. Do not use it for this purpose.

If students have further questions regarding using generative AI tools in this course, please contact the instructor or teaching assistant for further advice.

ACADEMIC POLICIES AND RESOURCES

To support consistent and accessible communication of university-wide student resources, the University of Florida has put developed academic policies and resources. The academic policies address class attendance and make-up exams, assignments and other work, resources for students with disabilities, grading policies, student feedback through GatorEvals, and the UF Honesty Policy. The academic resources include e-learning technical support, library support academic resources, the Writing Studio, academic complaints, student success resources, and campus wellness resources. These resources are updated on an ongoing basis. Below, I highlight some of the specific requirements for this course or indicate when I have adopted the same language as you will find on the following website: <https://syllabus.ufl.edu/syllabus-policy/uf-syllabus-policy-links/>

Academic Honesty

Students MUST follow the University's policy regarding unauthorized use of materials (i.e., cheating), prohibited collaboration, and the use of copyrighted materials. Furthermore, students are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you directly quote someone or use an idea from another source, you must attribute that idea or those words to the original author. If you use the same material in two courses without discussing this with your instructor, you may be engaging in self-plagiarism. If you are unclear about what constitutes plagiarism or other forms of academic dishonesty, please make an appointment with the instructor to discuss this. You can also consult the above website on the Academic Policies & Resources website, and the graduate catalog for further information.

In-Class Recording

Please review the UF policy on in-class recording in the [Academic Policies & Resources website](#).

Accommodations for Students with Disabilities

The instructor will respect the needs for accommodations for students with disabilities consistent with the University's policy on such accommodations. Students requesting accommodation should follow the procedure outlined in the Academic Policies & Resources [website](#) as early as possible in the semester. I am happy to provide reasonable accommodation for students who register with the Disability Resources Center (DRC) and ask that students inform the instructor of any request no later than the end of the second week of the course.

Academic Resources, and Campus Health and Wellness Resources.

Please review the resources listed on the [Academic Policies & Resources website](#).

Contacting the Instructor

Please send all communication with the instructor with a copy to the teaching assistant through Canvas by selecting the "Instructor Role" from the address book. Any e-mails received outside of Canvas will not receive a response. Your instructor will attempt to respond to your emails within 24 hours on weekdays and within 72 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 Canvas email to arrange an appointment or sign up on the Calendly page during regularly scheduled office hours.

COVID and other Health Considerations

COVID and other related practices: We will have face-to-face instructional sessions to accomplish the student learning objectives of this course. COVID, and other respiratory and communicable diseases present an ongoing challenge because of the need to prevent the spread of infections. In response to COVID and other communicable diseases, the following policies and requirements are in place to maintain your learning environment and to enhance the safety of our in-classroom interactions. If you are experiencing COVID-19 or other respiratory symptoms, please do not come to class. If you are isolating/quarantining and are healthy enough to participate in class, please notify your instructors in advance of class time so that we can set up a Zoom meeting for you to join the activities. Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up the work. For other students who are well, please plan to join the class in person like any other class period. The link to the Zoom meeting is NOT an invitation to work from home. We are providing the link as a convenience for a student who needs accommodation. This is not a course with hybrid delivery.

Changes

As the course develops, I may make changes in the readings or assignments, and scheduling. If there are topics that you are interested in that you do not feel are adequately covered in the course, let the instructor know. This is your course, and we will make time for the exploration of new ideas, within the limits of time and reason. You should also be willing to invest some of your time into finding materials and leading discussions on those new ideas. If you define a new topic, this presentation will substitute for the required presentation.

Course Outline

MODULE 1: The Context of Urban Transportation (Weeks of August 21 and August 25)

Readings

Giuliano & Hanson, Chapters 1 and 2

Transportation-related data assignment due on September 1.

Readings for Week of August 21 [No class for on-campus students]

Giuliano & Hanson, Chapter 1

Lay, J. (2015, July 7) *Here to There: An Animated History of Transportation*.

<http://www.theatlantic.com/video/index/397865/animated-history-transportation/>

Tomer, A. & Kane, J. W. (2020, December 17). *We should design cities for shorter distances, not faster speeds*.

Brookings Institution. <https://www.brookings.edu/articles/we-should-design-cities-for-shorter-distances-not-faster-speeds/>

Tomer, A., Kane, J. W. & Fishbane, L. (2019, June 21) Connecting people by proximity: A better way to plan metro areas. Brookings Institution. <https://www.brookings.edu/articles/connecting-people-by-proximity-a-better-way-to-plan-metro-areas/>

Zhang, M. & Li, Y. (2022). Generational travel patterns in the United States: New insights from eight national travel surveys. *Transportation Research Part A: Policy and Practice*, 156, 1–13. <https://doi.org/10.1016/j.tra.2021.12.002>

National League of Cities Center. (2015). *City of the Future: Technology and Mobility*.

<https://www.nlc.org/sites/default/files/2016-12/City%20of%20the%20Future%20FINAL%20WEB.pdf>

Transportation for America. (n. d.) *2021 Infrastructure law: What's in it, how to use it*. Transportation for America.

Retrieved August 15, 2023, from <https://t4america.org/ijja/>.

Araya, A. (2022, August 11). Here's what you need to know about the inflation reduction act. *Transportation For America*. <https://t4america.org/2022/08/11/inflation-reduction-act/>

Shrank, D., Albert, L., Jha, K. & Eisele (2024, June) 2023 Urban mobility report.

<https://static.tti.tamu.edu/tti.tamu.edu/documents/mobility-report-2023.pdf>

Recommended Readings:

Federal Highway Administration (FHWA) (n. d.). *National Household Travel Survey*. Retrieved on August 15, 2023, from: <https://nhts.ornl.gov/>

Federal Highway Administration (FHWA) (2023, September.) *NHTS Compendium of Uses*. U.S. Department of Transportation, Federal Highway Administration. <https://nhts.ornl.gov/compendium>. (This website summarizes results from various studies that have used the NHTS by year published and topic.)

US Department of Transportation (USDOT), Federal Highway Administration. (n. d.) *NHTS Publications*. . U.S. Department of Transportation, Federal Highway Administration. Retrieved August 15, 2023, from <http://nhts.ornl.gov/publications.shtml>. (This search allows you to select a survey year (most are from 2001 and 2009) and a category of publication (e.g., report, journal, conference, or brief).

Federal Highway Administration (FHWA). (2025, August 5). *Infrastructure Investment and Jobs Act*.

<https://www.fhwa.dot.gov/infrastructure-investment-and-jobs-act/>.

U.S. Department of Transportation. (n. d.). *Bipartisan Infrastructure Law*. Retrieved August 18, 2023, from

<https://www.transportation.gov/bipartisan-infrastructure-law>

Gutman, J. & Tomer, A. (2016, December) *Developing a Common Narrative on Urban Accessibility: Overview*. Brookings Institution. <https://www.brookings.edu/wp-content/uploads/2017/01/overview-digital.pdf>

Venter, C. (2016, November) *Developing a Common Narrative on Urban Accessibility: A Transportation Perspective*. Brookings Institution. <https://www.brookings.edu/wp-content/uploads/2017/01/transportation-digital.pdf>

Federal Highway Administration (FHWA). (n. d.) Planning Glossary. U.S. Department of Transportation, Federal Highway Administration. Retrieved July 30, 2024, from <https://www.fhwa.dot.gov/Planning/glossary/>.

Florida Department of Transportation (FDOT). (2024, March 1) The FDOT Source book Acronyms and Glossary. <https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/planning/fto/sourcebook/source-book-acronyms-and-glossary.pdf>

Readings for the Week of August 25:

Giuliano & Hanson, Chapter 2

Glass, D. (2014 October 2). "A Complete Guide to the Future of U.S. Freight Movement." CityLab. <https://www.citylab.com/life/2014/10/a-complete-guide-to-the-future-of-us-freight-movement/381012/>

Ha, N. T., Akbari, M., & Au, B. (2023). Last mile delivery in logistics and supply chain management: a bibliometric analysis and future directions. *Benchmarking: An International Journal*, 30(4), 1137-1170. <https://doi.org/10.1108/BIJ-07-2021-0409>

Iacobacci, E., McDonald, N., Edwards, C. H. W., Steiner, R., & Griffith, J. (2022). Stemming the Tide: Approaching Urban Freight in the Era of e-Commerce. *ITE Journal*, (August), 27–32. <https://ite.ygsclicbook.com/pubs/itejournal/2022/august-2022/live/index.html/#p=27>

MODULE 2: Transportation and Urban Form (Week of September 1)

The Impact of Communications and Information Technologies (Week of September 9)

Readings for Week of September 1:

Giuliano & Hanson, Chapters 3 and 9

TransitCenter (2015). A People's History of Recent Urban Transportation Innovation. <http://transitcenter.org/publications/a-peoples-history-of-recent-urban-transportation-innovation/>

Delucchi, M. & Kurani, K. (2015, Spring). Can We have Sustainable Transportation without Making People Drive Less or Give up Suburban Living? *Access 46*. <http://www.accessmagazine.org/articles/spring-2015/can-we-have-sustainable-transportation-without-making-people-drive-less-or-giving-up-suburban-living/>

Rowlands, D.W. & Loh, T.H. (2023, August 8). Ensuring the intertwined post-pandemic recoveries of downtowns and transit systems. Brookings Institution. <https://www.brookings.edu/articles/ensuring-the-intertwined-post-pandemic-recoveries-of-downtowns-and-transit-systems/>

School of Cities, University of Toronto. (2023). *How will our downtown recover from the pandemic?* [Video]. YouTube. <https://www.youtube.com/watch?v=K2E1uvWqSH8>

Bernstein, Larry. (2022, October 8) The Future of Work from Home with Larry Bernstein. [Interview of Nicholas Bloom]. <https://www.whathappensnextin6minutes.com/p/the-future-of-work> (listen to the first 9:12 minutes)

Wang, X., Kim, S. H., & Mokhtarian, P. L. (2023). Teleworking behavior pre-, during, and expected post-COVID: Identification and empirical description of trajectory types. *Travel Behaviour and Society*, 33. <https://doi.org/10.1016/j.tbs.2023.100628>.

Rayasam, R. (2021, October 21) . Policy Hackathon: Recreating America's downtowns. <https://www.politico.com/news/2021/10/21/recreating-americas-downtowns-post-covid-515999>

Recommended Readings:

School of Cities, University of Toronto. (2023, July 7). Death of Downtown? Exploring pandemic recovery trajectories across 63 North American cities. <https://downtownrecovery.com/>

Duranton, G. & Guerra, E. (2016, November). *Developing a Common Narrative on Urban Accessibility: An Urban Planning Perspective*. Brookings Institution. <https://www.brookings.edu/wp-content/uploads/2017/01/landusage-digital.pdf>

Bloom, N. (2023, September) The Future of WFH (Working from Home) [PowerPoint presentation] <https://www.dropbox.com/scl/fi/kvh0jghr61ago7qm63t7m/September2023.pptx?rlkey=8zg1k6kq72n0em1sy4vmyenkp&e=1&dl=0>

Readings for the Week of September 8:

Giuliano & Hanson, Chapter 4

Machek, E., Lewis, K., Peirce, S., Berthaume, A., Colton, P. & Morton, T. (2015). Novel Surface Transportation Modes: Final Report. Prepared for the Federal Highway Administration Office of Corporate Research, Technology, and Innovation Management. rosap.nhtl.bts.gov/view/dot/12277/dot_12277_DS1.pdf

Machado, C., de Salles Hue, N., Berssaneti, F., & Quintanilha, J. (2018). An Overview of Shared Mobility. *Sustainability*, 10(12), 4342. <https://doi.org/10.3390/su10124342>

MaaS Alliance. (n. d.). What is MaaS: Mobility as a Service. Retrieved August 2, 2024 from <https://maas-alliance.eu/homepage/what-is-maas/>

National Association of City Transportation Officials (NACTO). (n. d.) Blueprint for autonomous urbanism: Second Edition. <https://nacto.org/publication/bau2/>.

Barnett, J. & Lin, Z. (2023). 10 Principles for managing autonomous vehicles on city streets. *Planning Magazine*. <https://www.planning.org/planning/2023/winter/10-principles-for-managing-autonomous-vehicles-on-city-streets/>

Recommended Readings:

National Academies of Sciences, Engineering, and Medicine (NASEM). (2024). Critical Issues in Transportation for 2024 and Beyond. Washington, DC: The National Academies Press. <https://doi.org/10.17226/27432>. (Read pages 1 to 21 (To Road Safety) and pages 31 (Infrastructure Systems) to page 39)

Bloomberg Philanthropies. (2017, March). Taming the Autonomous Vehicle: A Primer for Cities. <https://www.bbhuh.io/dotorg/sites/2/2017/05/TamingtheAutonomousVehicleSpreadsPDF.pdf>

Assignment: *** Travel Diary due at start of Module 3.

MODULE 3: The Urban Transportation Planning Process/Characteristics of Travel and Techniques for Estimating Travel Demand/Activity-based Models (Week of September 16 and Week of September 23)

Readings for the Week of September 15

Giuliano & Hanson, Chapters 5 and 6

Biemborn, Edward. 1995. *A Transportation Modeling Primer*. Milwaukee, WI: Center for Urban Transportation Studies. <http://www.its.uci.edu/~mmcnally/reports/Primer-Beimbom-Mar09.pdf>

Transportation Research Board (TRB) (2015). Activity-Based Travel Demand Models: A Primer. <https://doi.org/10.17226/22357>. Chapters 1, skim Chapters 4 – 7.

Readings for the Week of September 22

Giuliano & Hanson, Chapters 7

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. <https://doi.org/10.1177/0885412217706505>

Currans, K. M., & Stahl, K. A. (2024). Are Traffic Studies “Junk Science” That Don’t Belong in Court?. *Journal of the American Planning Association*, 90(1), 77-85. <https://doi.org/10.1080/01944363.2022.2136735>

Tomer, A., Kane, J., Vey, J.S. (2020). Connecting people and places: Exploring new measures of travel behavior. <https://www.brookings.edu/articles/connecting-people-and-places-exploring-new-measures-of-travel-behavior>.

Recommended Readings:

National Academies of Sciences, Engineering, and Medicine (NASEM). 2018. *Integrated Transportation and Land Use Models*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/25194>. Chapter 1. Slim Chapters 4-7.

National Academy of Sciences, Engineering, and Medicine (NASEM). (2010) “Advanced Practices in Travel Forecasting: A Synthesis of Highway Practice. NCHRP Synthesis 406. Washington, DC: Transportation Research Board, page 1-56. National Academies Press. <https://doi.org/10.17226/22950>.

National Academies of Sciences, Engineering, and Medicine. 2018. *Updating Regional Transportation Planning and Modeling Tools to Address Impacts of Connected and Automated Vehicles, Volume 2: Guidance*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/25332>.

National Academies of Sciences, Engineering, and Medicine (NASEM). 2024. *New Mobility Options in Travel Demand Forecasting and Modeling: A Guide*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/27827>.

MODULE 4: Transportation Investments, Subsidy and Finance (Weeks of September 29 and October 6)

Readings for Week of September 29

Giuliano & Hanson, Chapters 8 and 9 (review)

DeLucchi, Mark. (1996, Spring). “Total Cost of Motor-Vehicle Use,” Access 8: 7- 13, Available at: <https://www.accessmagazine.org/spring-1996/the-total-cost-of-motor-vehicle-use/>

Landis, John. 1999. “Middle Age Sprawl: BART and Urban Development,” Access 14, pp. 2-15 (see <http://www.accessmagazine.org/wp-content/uploads/sites/7/2016/07/access14-01-BART-and-urban-development.pdf>

Institute for Transportation and Development Policy (ITDP). (2024) *The High Cost of Transportation in the United States*. <https://itdp.org/2024/01/24/high-cost-transportation-united-states/>

Drennan, M. & Brecher, C. (2012, Spring) Can Public Transportation Increase Economic Efficiency? Access 40. <http://www.accessmagazine.org/spring-2012/can-public-transportation-increase-economic-efficiency/>

Anderson, M. L. (2017, Spring) Subways, Strikes, and Slowdowns. Access 51. <http://www.accessmagazine.org/spring-2017/subways-strikes-and-slowdowns/>

Shoup, D., (2016, Spring). Cutting the Costs of Parking Requirements. Access 48. <http://www.accessmagazine.org/articles/spring-2016/cutting-the-cost-of-parking-requirements/>

Barro, J. (2019 July 24). Here’s why we’ve failed to figure out why infrastructure costs so much. *New York. nymag.com/intelligencer/2019/07/why-we-cant-figure-out-why-infrastructure-is-so-expensive.html*

U.S. Government Accountability Office. (2019, July 22). Rail transit: Federal Transit Administration could improve information on estimating project costs. <https://www.gao.gov/products/gao-19-562>

Transit Center. (2023, December 15). Finale: Crisis and Opportunity: Transforming How We Fund Transit with Yonah Freemark. *High Frequency* [podcast]. <https://high-frequency.simplecast.com/>

Freemark, Y. & Rennert, L. (2023, November). Surmounting the Fiscal Cliff: Identifying Stable Funding Solutions for Public Transportation Systems. *The Urban Institute*.

<https://www.urban.org/sites/default/files/2023-11/Surmounting%20the%20Fiscal%20Cliff.pdf>

Recommended Readings:

Delucchi, M. A. (2018, March). *DEEP GREEN: Detailed Environmental and Economic Projections for Global Renewable Energy and Emissions scenarios DEEP GREEN Documentation: Overview of DEEP GREEN*. University of California, Berkeley. <https://escholarship.org/uc/item/9mx9v6xh>

Delucchi, M. & McCubbin, D. (2010). External Costs of Transport in the U.S. In A. de Palma, R. Lindsey, E. Quinet, & R. Vickerman *Handbook of Transport Economics*. <https://escholarship.org/uc/item/13n8v8gg>

Gwilliams, K. (2017, June) Transport Pricing and Accessibility. Brookings Institution. https://www.brookings.edu/wp-content/uploads/2017/07/pricing-and-accessibility-paper_web.pdf

Levy, A. (2018 January 26). Why it's so expensive to build urban rail in the U.S. *CityLab*.

<https://www.citylab.com/transportation/2018/01/why-its-so-expensive-to-build-urban-rail-in-the-us/551408>

Readings for the Week of October 6

Giuliano & Hanson, Chapters 10

Federal Highway Administration (FHWA). (n. d.) Center for Innovative Finance Support. Retrieved on August 12, 2024, from <https://www.fhwa.dot.gov/ipd/>

Sorenson, P. (2013, Fall). From Fuel Taxes to Mileage Fees. Access 43. <http://www.accessmagazine.org/fall-2013/fuel-taxes-mileage-fees/>

Boarnet, M. G. & DiMento, J. F. (2004, Fall) The Private Sector's Role in Highway Finance Lessons from SR91. Access 25: 26-31. Available at :<http://www.accessmagazine.org/fall-2004/private-sectors-role-highway-finance-lessons-sr-91/>

Congressional Research Service. (2018). Transportation Spending Under an Earmark Ban. <https://fas.org/sfp/crs/misc/R41554.pdf>

Van Doren, P. & Weisman. (2025, Summer). The Political Economy of Congestion Pricing. *Cato Institute*. <https://www.cato.org/regulation/summer-2025/political-economy-congestion-pricing>.

Manville, M., Pierce, G. & Graveline, B. (2022). Guardrails on Priced Lanes: Protecting Equity While Promoting Efficiency. University of California Institute of Transportation Studies. <https://escholarship.org/uc/item/2rj35891>

Garrett, M., Manville, M. & Taylor, B. (2023). A Quiet Revolution in California Transportation Planning and Finance. UCLA Institute of Transportation Studies. <https://escholarship.org/uc/item/9qs524sb>

Recommended Readings:

Ley, A. (2023, July 31). How a Congestion Pricing windfall could upgrade the subways. *New York Times*. <https://www.nytimes.com/2023/07/31/nyregion/nyc-mta-subway-upgrade.html>

Winston, C. (2021). Comment on "Can America reduce highway construction costs? Evidence from the states." National Bureau of Economic Research. <https://www.nber.org/books-and-chapters/economic-analysis-and-infrastructure-investment/comment-can-america-reduce-highway-construction-costs-evidence-states-winston>

Yusuf, S. (2017, January 11). Developing a common narrative on urban accessibility: A fiscal/finance perspective. Brookings Institution. <https://www.brookings.edu/articles/developing-common-narrative-urban-accessibility-finance/>

Review:

Readings from Module 1 on the Infrastructure Investment and Jobs Act/Bipartisan Infrastructure Law.

MODULE 5: Measure for Achieving Multimodal and Intermodal Balance: Planning for All Modes of Travel (Weeks of October 13 and 20)

Assignment

*** Bicycle and pedestrian data collection assignment due for online students. Please refer to Canvas “discussion” module for detailed requirements.

Readings for the Week of October 13:

Giuliano & Hanson, Chapter 14

Taylor, B. (2017) The Access Almanac: Traffic Congestion is Counter-Intuitive, and Fixable. Access 51.

<http://www.accessmagazine.org/spring-2017/the-access-almanac-traffic-congestion-is-counter-intuitive-and-fixable/>

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*, No 2163, pp. 89-96.

<https://doi.org/10.3141/2163-10>.

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.

<https://ops.fhwa.dot.gov/publications/fhwahop16022/fhwahop16022.pdf>

National Academies of Sciences, Engineering, and Medicine. 2021. The Role of Transit, Shared Modes, and Public Policy in the New Mobility Landscape. Washington, DC: The National Academies Press.

<https://doi.org/10.17226/26053>

Wang, K., Qian, X., Fitch, D. T., Lee, Y., Malik, J., & Circella, G. (2023). What travel modes do shared e-scooters displace? A review of recent research findings. *Transport Reviews*, 43(1), 5-31.

<https://doi.org/10.1080/01441647.2021.2015639>.

American Public Transportation Association (APTA). (n. d.). Mobility Innovation Hub. APTA. Retrieved on August 9, 2025, from <https://www.apta.com/research-technical-resources/mobility-innovation-hub/>

West, D. M. (2025, May 20). How autonomous vehicles could change cities. Brookings Institution.

<https://www.brookings.edu/articles/how-autonomous-vehicles-could-change-cities/>

Hebbale, C., & Urpelainen, J. (2022). The moment for EVs: Strategies to transform American roads. Brookings Institution. <https://www.brookings.edu/articles/the-moment-for-evs-strategies-to-transform-american-roads/>

Leonard, D. (2020, February 4). Can lemon-scented stations and billions of dollars get Americans into trains?

Bloomberg Green. <https://www.bloomberg.com/features/2020-brightline-railroad/>

Gordon, A. (2020, March 8). Why the U.S. sucks at building public transit.

https://www.vice.com/en_us/article/884kvk/why-the-us-sucks-at-building-public-transit

Recommended Readings:

Paris, M. (2024, November 18). How robotaxis are trying to win passengers' trust. *BBC*.

<https://www.bbc.com/future/article/20241115-how-robotaxis-are-trying-to-win-passengers-trust>

National Academies of Sciences, Engineering, and Medicine. 2016. Between Public and Private Mobility: Examining the Rise of Technology-Enabled Transportation Services. Washington, DC: The National Academies Press.

<https://doi.org/10.17226/21875> (Chapters 2-4).

An, Z., Heinen, E., & Watling, D. (2022). Multimodal travel behaviour, attitudes, and cognitive dissonance.

Transportation Research Part F: Traffic Psychology and Behaviour, 91, 260–273.

<https://doi.org/10.1016/j.trf.2022.10.007>

Gössling, S. (2020). Integrating e-scooters in urban transportation: Problems, policies, and the prospect of system change. *Transportation Research Part D: Transport and Environment*, 79, 102230.
<https://doi.org/10.1016/j.trd.2020.102230>

Marsden, G., Frick, K. T., May, A. D. & Deakin, E. (2010). How do cities approach policy innovation and policy learning? A study of 30 policies in Northern Europe and North America. *Transport Policy* (2010)
<http://dx.doi.org/10.1016/j.tranpol.2010.10.006>

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*, pp. 111-15. http://cdn.theatlantic.com/assets/media/files/FOT_ebook.pdf

Basu, R., & Ferreira, J. (2021). Sustainable mobility in auto-dominated Metro Boston: Challenges and opportunities post-COVID-19. *Transport Policy*, 103, 197-210. <https://doi.org/10.1016/j.tranpol.2021.01.006>

Williams, K. (2018). *Model Access Management Policies and Regulations for Florida Cities and Counties*, 2nd Ed. Center for Urban Transportation Research, University of South Florida.
https://digitalcommons.usf.edu/cgi/viewcontent.cgi?article=1024&context=cutr_tpppfr

Grabar, H. (2014, June 17). The Triumphant Return of Private U.S. Passenger Rail. In *The Best of Citylab's The Future of Transportation*, pp. 68-77. http://cdn.theatlantic.com/assets/media/files/FOT_ebook.pdf

Lazo, L. (2022, July 7). The battle that will determine the future of American Passenger Rail. *The Washington Post*.
<https://www.washingtonpost.com/transportation/2022/07/06/amtrak-expansion-freight-rails/>

Readings for the Week of October 20:

National Association of City Transportation Officials (NACTO). (2012) *Urban Streets Design Guide*.
<https://nacto.org/publication/urban-street-design-guide/>

Federal Highway Administration. (2020). *Proven Safety Countermeasures*.
<https://safety.fhwa.dot.gov/provencountermeasures/>

Federal Highway Administration. (2016). *Achieving Multimodal Networks: Applying Design Flexibility and Reducing Conflicts*. https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/multimodal_networks/

National Association of City Transportation Officials (NACTO). (2022) *Move! That! Bus! Tactics for Transforming Transit in Two Years*. <https://nacto.org/wp-content/uploads/2022/08/MoveThatBus-FINAL.pdf>

Kronenberg, C. Woodward, L., DuBose, B. & Weissman, D. (2019). Achieving Vision Zero: Data-Driven Investment Strategy to Eliminate Pedestrian Fatalities on a Citywide Level. *Transportation Research Record: Journal of the Transportation Research Board*, 2519, 146-156. <https://doi.org/10.3141/2519-16>

National Academies of Sciences, Engineering, and Medicine. 2019. *Microtransit or General Public Demand Response Transit Services: State of the Practice*. Washington, DC: The National Academies Press.
<https://doi.org/10.17226/25414> (Chapter 3, pp. 13-41)

National Cooperative Highway Research Program. (2020). NCHRP Report 926: *Guidance to Improve Pedestrian and Bicyclist Safety at Intersections*. <http://www.trb.org/Main/Blurbs/180624.aspx>

King, D. (2016, October 6) What Do We Know About the “First Mile/Last Mile” Problem for Transit? *Transportist* [Blog.] <https://transportist.org/2016/10/06/what-do-we-know-about-the-first-milelast-mile-problem-for-transit/>.

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MODULE 6: Achieving Multimodal and Intermodal Balance: Planning for All Populations (Weeks of October 27 and November 3)

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Giuliano & Hanson, Chapter 13

National Association of City Transportation Officials (NACTO). (2017). Designing for All Ages and Abilities. <https://nacto.org/publication/urban-bikeway-design-guide/planning-and-developing-a-bikeable-city/designing-for-all-ages-and-abilities/>

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Immergluck, D. (2023, January 23) Atlanta's Beltline shows how urban parks can drive 'green gentrification' if cities don't think about affordable housing at the start. *The Conversation*. <https://theconversation.com/atlantas-beltline-shows-how-urban-parks-can-drive-green-gentrification-if-cities-dont-think-about-affordable-housing-at-the-start-193204>

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MODULE 7: Environmental Impacts of the Transportation System – Overview and Regulations (Week of November 10)

Readings for the Week of November 10

Giuliano & Hanson, Chapter 11

United States Department of Agriculture. (2011, July) "Towards Understanding the Ecological Impact of Transportation Corridors." Available at: <https://doi.org/10.2737/PNW-GTR-846>.

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Recommended Readings

Federal Highway Administration. (2024, June 6). Wildlife Crossing Program. U. S. Department of Transportation, Federal Highway Administration. <https://highways.dot.gov/federal-lands/wildlife-crossings>

National Cooperative Highway Research Program (NCHRP). (2024, March 29) Transportation Pooled Fund – Study Detail: Wildlife Vehicle Collision Reduction and Habitat Connectivity. <https://pooledfund.org/Details/Study/610>

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MODULE 8: Environmental Impacts of the Transportation System – Energy and Air Quality (Weeks of November 17 and December 1)

Readings for Week of November 17

Giuliano & Hanson, Chapter 12

U.S. Department of Energy (USDOE). (n. d.) Alternative Fuels. Retrieved on August 9, 2023, from <http://www.fueleconomy.gov/feg/current.shtml>

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- Negin, E. (2023, April 13). Grid operator and the challenges to putting electric vehicles on the grid. Union of Concerned Scientists. <https://blog.ucsusa.org/elliott-negin/electric-car-power-grid-shared-future/>
- Transportation for America. (2023, October 6). Charging up EVs: Bridging the apartment gap. *T4America Blog*. [Blog.] <https://t4america.org/2023/10/06/charging-up-evs-bridging-the-apartment-gap/>
- Sorensen, P., Light, T., Samaras, C., Ecola, L., Daehner, E. M., Ortiz, D. S., Wachs, M., Enarson-Hering, E. and Pickrell, S. (2014). Strategic Issues Facing Transportation, Volume 5: Preparing State Transportation Agencies for an Uncertain Energy Future (No. Project 20-83 (04)) http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_750v5.pdf
- Enterprise Holdings. (2022, February). Equitable Electric Mobility Playbook. <https://www.nlc.org/wp-content/uploads/2022/08/NLC-ENTERPRISE-PLAYBOOK-20220603.pdf>
- Winer, A., Zhu, Y. & Paulson, S. (2014, Spring). Carmageddon or Carmaheaven? Air Quality Results of a Freeway Closure. <http://www.accessmagazine.org/spring-2014/carmageddon-carmaheaven-air-quality-results-freeway-closure/>
- Gross, S. & Perron, J. (2020). Heavy transport is a big carbon emitter — how can we change course? Brookings Institution. <https://www.brookings.edu/articles/heavy-transport-is-a-big-carbon-emitter-how-we-can-change-course/>
- Gross, S. (2020, October) . The challenge of decarbonizing heavy transport. Brookings Institution. https://www.brookings.edu/wp-content/uploads/2020/09/FP_20201001_challenge_of_decarbonizing_heavy_transport.pdf
- Nahlik, M. & Chester, M. (2015, Fall) Lifecycle Impacts of Transit-Oriented Development. Access 47. <http://www.accessmagazine.org/wp-content/uploads/sites/7/2015/11/access47.3nahlik.pdf>
- Small, Kenneth A.& Kurt Van Dender. 2008. “If Cars Were More Efficient, Would We Use Less Fuel?” Access 31: 8-13. <http://www.accessmagazine.org/wp-content/uploads/sites/7/2016/04/Access-31-03-Cars-More-Efficient.pdf>
- Recommended Reading*
- Ku, A., Kammen, D. M.& Castellanos, S. (2021). A quantitative, equitable framework for urban transportation electrification: Oakland, California as a mobility model of climate justice. *Sustainable Cities and Society*, 74, 103179. <https://doi.org/10.1016/j.scs.2021.103179>
- Berg, N. (2014, June 17). How Running Out of Power in a Tesla on the Side of a Highway Taught Me About the Road Trip of Tomorrow. In *the Best of Citylab's The Future of Transportation*, pp. 55-67. http://cdn.theatlantic.com/assets/media/files/FOT_ebook.pdf
- Páez, D. E. (2025, March 5). Staying in the fast lane: Why North America can't afford to slow down on electric vehicles. <https://www.brookings.edu/articles/staying-in-the-fast-lane-why-north-america-cant-afford-to-slow-down-on-electric-vehicles/>

END OF SEMESTER (Week of December 1)
Student Presentations during class

***Papers due in E-learning by noon on Monday, December 8