

PLAN 637- PUBLIC TRANSPORT



Mondays and Wednesdays
1:00-2:15pm
Alumni Hall 203

John Tallmadge
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Office Hours
Mondays and Wednesdays
2:30-3:30pm @ New East Rm 309
or
Fridays
9:30-10:30am
Via Zoom

Sign up @ plan637.youcanbook.me

Department of City and Regional Planning • University of North Carolina at Chapel Hill • Fall 2021

This is an elective graduate/upper-level undergraduate course that aims to introduce students to public transportation in the United States and abroad, taking into consideration governance, finance, planning, operations, and societal impacts. Throughout the course we will explore who benefits, who pays, who makes decisions, and for whom transit is planned and implemented.

The course is divided into three parts. Module 1 focuses on the types of public transportation, who rides them and who makes decision, exploring issues of social justice and accessibility. Module 2 focuses on public transit finance and some key policy issues. Module 3 will focus on public transit public engagement, the transportation-land use connection, system design, service analysis, and communications issues. This course uses some materials, such as slide decks and suggested readings and assignments, from the American Public Transit Association's (APTA) National Transit Curriculum.

We may have time during the semester to explore other issues of interest to students in the class.

Course Objectives

The overarching objective of this course is to provide students with an overview of public transit's evolving role in US urban and rural transportation systems. This course will also provide information on public transit in the UK, Europe, Asia, South America and Asia. Students will also learn how to measure and analyze transit performance and equity, transit costs, and the transportation and land use connection and its role in supporting public transit.

By the end of the course, students should be able to:

- Describe the roles of public transit in our transportation systems and for various constituencies
- Describe the different types of public transit, where to use them, and who will benefit
- Identify current challenges to providing public transit –at the national, regional, and local level.
- Discuss how public transit impacts different socio-economic and ethnic/racial groups.
- Evaluate public transit system service elements.

Expectations

As a student, you are expected to:

- Complete all readings prior to class and come prepared to discuss
- Complete five out of the ten reading responses, and comment on at least five of your classmates' reading responses.
- Prepare one or more discussion questions for five weeks of your choice
- Complete assignments on time. All work should be uploaded to Sakai unless otherwise directed.
- Ask questions of instructor or classmates in class, via email or at office hours, if you're unclear about a concept.

Assignment	Due Dates	% of grade
Reading responses (I) – 5 responses total, and 5 comments on classmates' responses	Your responses are due per the Semester-at-a-Glance schedule below at 12 pm. Upload to Sakai. Comments on classmates' responses must be completed within two weeks of initial posting.	5%
Discussion Questions (G) – 2-3 weeks assigned	Due Mondays at 12 pm. Submit to Sakai.	5%
Assignment #1: Service Equity Analysis	Handout: August 18 Analysis due: September 17 by midnight	15%
Assignment #2: Best practice Case Study (I) ; Recommendations (G) /Presentation + Poster Session (G)	Handout: September 8 Case Study Group: September 13 by end of class. Case Study Draft: September 29 Draft (ungraded –no late papers accepted; optional for graduate students); Returned: October 4 Presentations: October 11 Case Study reports: October 15 (10%)	25%
Assignment #3: Bus Stop Accessibility Analysis Tool; Analysis of accessibility to bus stops/transit stations	Handout: October 11 Analysis due: October 29 by midnight. Presentation of Results: November 1 Extra credit: +2% --partner with someone and collaborate on the tool.	15%
Assignment #3: Transit Network Design (G)	Handout: October 25 Draft Proposals Due: November 15 by noon Final Recommendations Due: December 1	30%
Participation		5%

COURSE REQUIREMENTS AND GRADING (I=INDIVIDUAL; G=GROUP)

Grading Scale for Undergraduate

A 93%+	C 74.99%-73%
A- 92.99%-89.5%	C- 72.99%-69.5%
B+ 89.49%-85%	D+ 69.49%-65%
B 84.99%-83%	D 64.99%-63%
B- 82.99%-79.5%	D- 62.99%-59.5%
C+ 79.49%-75%	F 59.49% or less

PLEASE NOTE: If you request that I regrade or review any assignment because you disagree with the grade, please be advised that it could result in a lower grade because of mistakes I may have missed.

ASSIGNMENTS AT-A-GLANCE

Reading Responses (10%)

Reading responses are due at noon on Mondays starting August 30, 2021. You will submit five reading responses over the semester. There will be a total of ten reading responses opportunities; you are only required to do five of them.

The first reading response is required of all students. After August 30, you can choose which four out the remaining nine reading responses you want to do. You will be given a grade of 0, 1, or 2. Look for what you find interesting, provocative, or contradictory in the readings, rather than simply critiquing them. Responses should be no longer than one page long or 500 words and should comment on *any of that week's reading prompts, which* will be provided by a group of your peers. You do not need to respond to all of the questions in the prompts.

Discussion Questions ad Participation (5%)

I expect each of you to attend and participate in discussion during each class. If you miss a class without notifying me in advance, or you do not participate during class, you will lose one of five points each time it occurs.

You will be assigned to a group on two (2) different weeks to develop discussion questions that will serve as reading response prompts. Your group should submit 3-4 discussion questions by Mondays at noon on Sakai. Your group should submit questions that apply to all the readings or to a specific reading for that week. It can be a question your group may have about the reading. I'll use them to guide group discussions for that week's classes. You will not be called on to answer the question(s). This is a way to participate and also reflect on the reading.

Assignment #1: Service Equity Analysis (15%)

This assignment will be completed using the online transit analysis and route planning tool by Remix. With one or two other student(s) you will analyze the population of a city or county that you select, identifying concentrations of people across several demographic characteristics (income, race, age, and automobile ownership). You will summarize your findings and display them using Remix mapping tools. You will also analyze access via transit to important destinations from multiple Census geographies, noting whether there are differences between your selected geographies. You will present your analysis and findings in a brief report and presentation to the class.

Assignment #2: Case Study Report and Poster Session (25%)

You and one or two other student(s) will conduct a comparative case study on any transit system in the world which is attempting to address an identified problem through a change in policy or technology. For example, you could all look at strategies to address long travel times, or falling ridership, or unreliable schedules, or mismatch between where service levels are highest and where demand is greatest. Other potential topics can be related to ability to pay fares, accessibility gaps, complicated or outdated technology, aging staff, inadequate funding, etc. Each team will be responsible for identifying a problem statement that is common to the case study transit agencies. Each student in the group will be responsible for researching a case study transit agency. The team will then prepare a group report discussing how well the case study agencies addressed the identified problem. You will present as a group and submit a single short paper that synthesizes your findings and makes recommendations.

Assignment #3: Evaluating Accessibility of a Transit Stop (15%) (+2% optional extra credit)

For this assignment, you will grade the streets/built environment adjacent to two public transportation stops or stations according to pedestrian-friendly design criteria. First, you will develop your own tool to measure walkability/transit accessibility. Criteria can include: human scale (signs, height to width ratio), buffering (trees, parking distance to street), street furniture, space (wide, long views, complex scenes), etc. Once the tool is developed you will select two stops or stations in a transit service area, one in a predominantly white Census block group and one in a predominantly Black, Indigenous, People of Color (BIPOC) Census block group. You should score the street(s) closest to the transit stop on all of your indicators on a scale from 1 to 5 (5 is best). You can evaluate the street in person or via street view features of Google, or others. You will need to justify your score. You will also have a score sheet (excel). Make recommendations for improvements (realistic). Evaluate the tool and discuss weakness/strengths. This stops/stations can be anywhere in the world. If you choose stops in another nation, then one stop should be in a high-income area, one in a low-income area. You will present your accessibility assessment tool and findings to the class in a brief presentation.

Assignment #4: Transit Network Design and Analysis (30%)

This assignment will be completed using the online route planning tool by Remix. This will be an opportunity for you to demonstrate your understanding of transit network design, and analysis of costs vs. access provided. We will do Remix route planning demonstrations in class. I will provide you with login credentials, and the parameters for your transit network, including your budget and the variables that you should consider. The objective of this is to give you some exposure to how route planning is done, and how to analyze costs and access. You will write a memo explaining your goals, objectives, and analysis. You will work with one other student.

SEMESTER AT-A-GLANCE AND IMPORTANT DATES

Module 1. Public Transit and its Role in Communities		
Aug 18	Introduction to Course. Overview of Public Transportation definitions	Distribute Assignment #1: Transit Service Equity Analysis Distribute Reading Response Prompts
Aug 23	Who Rides Public Transit?	
Aug 25	Public Transit Governance - Who Makes Decisions?	
Aug 30 & Sept 1	Social Justice, Transportation Equity, and Public Transit	Guest Speaker (8/30): Lynise DeVance, FHWA DUE August 30 @ noon - Reading Response #1
Sept 6	Labor Day Holiday - NO CLASS	
Sept 8	Public Transit and Accessibility for Those with Disabilities	DUE @ noon/Sakai - Reading Response Week #3 Distribute Assignment #2 Case Study Analysis
Sept 13	Public Engagement in Transit Decision-Making	DUE Sep 13 @ noon/Sakai - Reading Response Week #4
Sept 15	Presentations of Assignment #1	DUE Sep 17 @ 11:59p - Assignment #1
Sept 20	Public Engagement in Transit Decision-Making	Guest Speaker: Aidil Ortiz DUE @ noon/Sakai - Reading Response Week #5
Module 2: Public Transit Financing & Policy		
Sep 22	Public Transit Finance - Who Pays for Public Transportation?	
Sep 27	Public Transit Fare Policy	DUE @ noon/Sakai - Reading Response Week #6
Sep 29	Public Transit Policing and Safety	DUE @ noon / Sakai – Assignment #2 DRAFT (feedback returned by Monday, October 4)
Oct 4 & 6	Public Transit and Sustainability	DUE Oct 4 @ noon/Sakai - Reading Response Week #7 Oct 6 – Tour of Chapel Hill Transit Operations Facility
Oct 11 & 13	Assignment #2 Case Study Presentations	DUE Oct 11 @ noon/Sakai - Reading Response Week #8 Oct 11 Distribute Assignment #3 Bus Stop Accessibility Audit DUE Oct 15 @ 11:59p Assignment #2 Final Report
Module 3. Transit Planning and Analysis		
Oct 18	Public Transit Planning	DUE Oct 18 @ noon/Sakai - Reading Response Week #9
Oct 20 & 25	Improving Access to Transit - Land Use Connection	DUE Oct 25 @ noon/Sakai - Reading Response Week #10 Oct 25 Guest Speaker: Mark Kirstner, PART
Oct 27 & Nov 1	Fundamentals of Transit Service and Networks	Oct 27 Handout Assignment #4 Transit Network Design and Analysis DUE Oct 29: Assignment #3 DUE Nov 1 @ noon/Sakai - Reading Response Week #11 DUE Nov 1 @ noon: Case Study Final (Individual)

Nov 3	Public Transit and Micro-mobility	
Nov 8 & 10	Public Transit Communications	
Presentations, End of Semester Wrap-up		
Nov 15	Feedback Session on Assignment #4 Draft Transit Network Proposals	
Nov 17	In-class Working Time on Assignment #4	
Nov 22	Final Transit Network Recommendation Presentations (First 3-4 Teams)	
Nov 24	Thanksgiving holiday – NO CLASS	
Nov 29	Final Transit Network Recommendation Presentations (Second 3-4 Teams)	
Dec 1	Class wrap up/ Celebration	DUE: Assignment #4 Final Recommendations

OTHER ACADEMIC BUSINESS

Late Assignments

Assignments are marked down 20% per day.

IF YOU HAVE A MEDICAL OR PERSONAL EMERGENCY, LET ME KNOW ASAP.

My purpose is to help you to excel in this learning environment. Should you need further assistance beyond my help, please consult the following on-campus resources:

Academic Success Program (for students with learning disabilities (LD) and/or attention-deficit/hyperactivity disorder (ADHD): <http://www.unc.edu/depts/lds/> /

Counseling and Wellness Services: <http://campushealth.unc.edu>

Attendance Policy

University Policy: No right or privilege exists that permits a student to be absent from any class meetings, except for these University Approved Absences:

1. Authorized University activities
2. Disability/religious observance/pregnancy, as required by law and approved by [Accessibility Resources and Service](#) and/or the [Equal Opportunity and Compliance Office](#) (EOC)
3. Significant health condition and/or personal/family emergency as approved by the [Office of the Dean of Students](#), [Gender Violence Service Coordinators](#), and/or the [Equal Opportunity and Compliance Office](#) (EOC).

Class Policy: Please let me know in advance if you expect to be absent from class. I will try to work with you to make sure that you have access to all relevant information that is not available on the Course Sakai page.

Honor Code

All students are expected to follow the guidelines of the UNC honor code. In particular, students are expected to refrain from “lying, cheating, or stealing” in the academic context. If you are unsure about which actions violate the honor code, please see me or consult honor.unc.edu.

Mask Use (In-Person Instruction Modes)

This semester, while we are in the midst of a global pandemic, all enrolled students are required to wear a mask covering your mouth and nose at all times in our classroom. This requirement is to protect our educational community—your classmates and me—as we learn together. If you choose not to wear a mask, or wear it improperly, I

will ask you to leave immediately, and I will submit a report to the [Office of Student Conduct](#). At that point you will be disenrolled from this course for the protection of our educational community. Students who have an authorized accommodation from Accessibility Resources and Service have an exception. For additional information, see [Carolina Together](#).

Acceptable Use Policy

By enrolling as a student in this course, you agree to abide by the University of North Carolina at Chapel Hill policies related to the acceptable use of IT systems and services. You may be asked to participate in online discussions or other online activities that may include personal information about you or other students in the course. The rights and protection of other participants are protected under the UNC-Chapel Hill [Information Technology Acceptable Use Policy](#), which covers topics related to using digital resources, such as privacy, confidentiality, and intellectual property. Consult the University website "[Safe Computing at UNC](#)" for information about the data security policies, updates, and tips on keeping your identity, information, and devices safe.

Accessibility Resources and Services

The University of North Carolina at Chapel Hill facilitates the implementation of reasonable accommodations, including resources and services, for students with disabilities, chronic medical conditions, a temporary disability or pregnancy complications resulting in barriers to fully accessing University courses, programs and activities. Accommodations are determined through the Office of Accessibility Resources and Service (ARS) for individuals with documented qualifying disabilities in accordance with applicable state and federal laws. See the ARS Website for contact information: <https://ars.unc.edu> or email ars@unc.edu.

Counseling and Psychological Services

CAPS is strongly committed to addressing the mental health needs of a diverse student body through timely access to consultation and connection to clinically appropriate services, whether for short or long-term needs. Go to their website: <https://caps.unc.edu/> or visit their facilities on the third floor of the Campus Health Services building for a walk-in evaluation to learn more.

Title IX Resources

Any student who is impacted by discrimination, harassment, interpersonal (relationship) violence, sexual violence, sexual exploitation, or stalking is encouraged to seek resources on campus or in the community. Reports can be made online to the EOC at <https://eoc.unc.edu/report-an-incident/>. Please contact the University's Title IX Coordinator (Elizabeth Hall, interim-titleixcoordinator@unc.edu), Report and Response Coordinators in the Equal Opportunity and Compliance Office (reportandresponse@unc.edu), Counseling and Psychological Services (confidential), or the Gender Violence Services Coordinators (gvsc@unc.edu; confidential) to discuss your specific needs. Additional resources are available at safe.unc.edu.

Policy on Non-Discrimination

The University is committed to providing an inclusive and welcoming environment for all members of our community and to ensuring that educational and employment decisions are based on individuals' abilities and qualifications. Consistent with this principle and applicable laws, the University's [Policy Statement on Non-Discrimination](#) offers access to its educational programs and activities as well as employment terms and conditions without respect to race, color, gender, national origin, age, religion, creed, genetic information, disability, veteran's status, sexual orientation, gender identity or gender expression. Such a policy ensures that only relevant factors are considered and that equitable and consistent standards of conduct and performance are applied.

If you are experiencing harassment or discrimination, you can seek assistance and file a report through the Report and Response Coordinators (see contact info at safe.unc.edu) or the [Equal Opportunity and Compliance Office](#), or online to the EOC at <https://eoc.unc.edu/report-an-incident/>.

Diversity Statement

I value the perspectives of individuals from all backgrounds reflecting the diversity of our students. I broadly define diversity to include race, gender identity, national origin, ethnicity, religion, social class, age, sexual orientation, political background, and physical and learning ability. I strive to make this classroom an inclusive space for all students. Please let me know if there is anything I can do to improve. I appreciate suggestions.

Undergraduate Testing Center

The College of Arts and Sciences provides a secure, proctored environment in which exams can be taken. The center works with instructors to proctor exams for their undergraduate students who are not registered with ARS and who do not need testing accommodations as provided by ARS. In other words, the Center provides a proctored testing environment for students who are unable to take an exam at the normally scheduled time (with pre-arrangement by your instructor). For more information, visit <http://testingcenter.web.unc.edu/>.

Learning Center

The UNC Learning Center is a great resource both for students who are struggling in their courses and for those who want to be proactive and develop sound study practices to prevent falling behind. They offer individual consultations, peer tutoring, academic coaching, test prep programming, study skills workshops, and peer study groups. If you think you might benefit from their services, please visit them in SASB North or visit their website to set up an appointment: <http://learningcenter.unc.edu>.

Writing Center

The Writing Center is located in the Student and Academic Services Building and offers personalized writing consultations as well as a variety of other resources. This could be a wonderful resource to help with your writing assignments in this course (and any assignments in your other courses). You do not need a complete draft of your assignment to visit; they can help you at any stage! You can chat with someone in the writing center or set up an appointment on their website: <http://writingcenter.unc.edu>.

Grade Appeal Process

If you feel you have been awarded an incorrect grade, please discuss with me. If we cannot resolve the issue, you may talk to our departmental director of undergraduate studies or appeal the grade through a formal university process based on arithmetic/clerical error, arbitrariness, discrimination, harassment, or personal malice. To learn more, go to the [Academic Advising Program](#) website.

Readings

The lectures will not cover all of the material in the reading, so it is essential that you keep up with the required reading. If you have any questions on the readings or if certain concepts are unclear, please let me know either in class or via email.

REQUIRED TEXTBOOKS: THESE ARE ALL AVAILABLE ONLINE.

1. Walker, Jarrett. 2011. *Human Transit: How clearer thinking about public transit can enrich our communities and our lives*. Washington, DC: Island Press. (e-book).
2. Bruun, E. 2014. *Better Public Transit Systems*, 2d Ed. New York: Routledge. (e-book)
3. Cervero, R. et al. 2017. *Beyond Mobility: Planning Cities for People and Places*. (e-book)
4. Steinfeld, et al. 2018. *Accessible Public Transit: Designing Service for Riders With Disabilities*. (e-book)
5. Attoh, Kafui Ablode. 2019. *Rights in Transit: Right to the City in California's East Bay*. (e-book)

COURSE OUTLINE AND READINGS

All readings should be completed before class (except August 18).

Module 1: Public Transit and its Role in Communities

Week 1.

August 18: Overview of Class. Short introduction

Brief overview of Public Transit types and key concepts for the course.

Distribute Assignment #1 and Reading Response Prompts

APTA Public Transportation Fact Book 2020. Review “Key Facts” first 5 pages. You can skim the rest of the report that goes into more detail.

Walker, Jarrett. 2011. Human Transit: How clearer thinking about public transit can enrich our communities and our lives. Washington, DC: Island Press. (e-book). Chapters 1-3. (You can skim Ch.2)

Week 2.

August 23: What is Public Transit’s Role and Who Rides It?

Reading Response #1 Prompts (due August 30th at noon). What role has public transit played in the US transit system? How has it evolved? What role should public transit play in the future? What are some preconceived notions about public transit? Why is public transit important?

The Geography of Urban Transportation, Fourth edition, Lisa Schweitzer, Ch. 8—Mass Transit, pp.187-217 (scanned) This reading provides a nice overview of public transit and its role in the US and abroad.

APTA (2017), Who Rides Public Transportation

CJI Research (2018), An On-Board Survey of GoDurham Customers

TransitCenter (2019), Who's on Board 2019: How to Win Back America’s Transit Riders

August 25: Public Transit Governance: Who Makes Decisions?

Bruun, E. Better Public Transit Systems, Chap 11, 298-321.

Butler, T. (2020). To tackle pandemic racism, we need to take action, not just take to social media. <https://kinder.rice.edu/urbanedge/2020/09/14/transportation-transit-tackle-pandemic-racism-we-need-take-action-not-just-take-social-media>

Eno Center for Transportation and TransitCenter (2014), “Getting to the Route of It: The Role of Governance in Regional Transit.” (pp. 2-5, 72-82)

Optional Resources

[The Movement Podcast: From Fragmented to Seamless with Ian Griffiths from Seamless Bay Area](#)
[The Movement Podcast: Everybody Has a Ministry with Lateefah Simon](#), president of BART Board of Directors
Ellison, J.W. Everyman: foot Prince in the snow, (2006), pp. 7-28, 33-38, 41-74

Week 3.

August 30 & September 1: Public Transit and Social Justice

August 30 Guest Speaker: Lynise DeVance, FHWA North Carolina Division office

FHWA Environmental Justice Website: https://www.fhwa.dot.gov/environment/environmental_justice/index.cfm
Read the description; Read also: DOT EJ Strategy.

Buchanan, Mary and Natalee Rivera. (2020). What transit agencies get wrong about equity, and how to get it right. <https://kinder.rice.edu/urbanedge/2020/08/31/what-transit-agencies-get-wrong-about-equity-and-how-get-it-right>

Spieler, Christof. (2020). Racism has shaped public transit, and it's riddled with inequities. <https://kinder.rice.edu/urbanedge/2020/08/24/transportation-racism-has-shaped-public-transit-america-inequalities>

Karner, A., Golub, A., Martens, K., & Robinson, G. (2018). Transportation and Environmental Justice: History and Emerging Practice. In R. Holified, J. Chakraborty, and G. Walker (Eds.), *The Routledge Handbook of Environmental Justice* (pp. 400-411).

Optional Readings

Attoh, Kafui Ablode. 2019. Rights in Transit: Right to the City in California's East Bay. (e-book)

Grengs, J. 2002. Community-Based Planning as a Source of Political Change: The Transit Equity Movement of Los Angeles' Bus Riders Union, *Journal of the American Planning Association*, 68:2, 165-178.

Week 4.

September 6: Labor Day Holiday - No Class/ No readings assigned

September 8: Improving Accessibility for People with Disabilities: Paratransit Handout of Assignment #2

Steinfeld, et al. (2018). Accessible Public Transit: Designing Service for Riders with Disabilities (e-book). Chapters 12, then Chapters 1 and 3. Chapter 12 provides an overview of all the problems they identified.

National Academies of Sciences, Engineering, and Medicine 2018. ADA Paratransit Service Models. Washington, DC: The National Academies Press. https://doi.org/10.17226/2509_2. Summary, Conclusions sections.

Coughlin, J. and Lacombe, A. "10 Myths About Transportation for the Elderly" *Transportation Quarterly* (1997) 51(1), 91-100.

Week 5.

September 13: Public Engagement in Transit Decision-Making
Groups formed for Assignment #2

Creger, Espino, and Sanchez (2018). *Mobility Equity Framework: How to Make Transportation Work for People*

[TCRP Synthesis 89. Public Participation Strategies for Transit](#)

[Transit Center Blogpost: Public Engagement in the Era of COVID-19](#)

Optional Resources

[FHWA \(2006\). "How to Engage Low-Literacy and Limited-English-Proficiency Populations"](#)

[Transit Center Blogpost: "What Transit Agencies Get Wrong About Equity and How to Get it Right"](#)

September 15: Presentations of Assignment #1

Each student group prepares a 5-7 minutes presentation explaining their accessibility analysis approach and findings. Presentations should include visuals to illustrate the findings. You may prepare a video presentation in lieu of a live, in-person presentation.

Week 6.

September 20: Public Engagement in Transit Decision-Making

Guest Speaker: Aidil Ortiz, SpiritHouse Tribe Member, Durham Bicycle & Pedestrian Advisory Committee (BPAC), Co-Founder of Blackity Bikes

Module 2: Public Transit Financing and Key Policy Considerations

September 22: Public Transit Funding - Who Pays for Public Transportation?

APTA Public Transportation Fact Book 2020. Pages 24-28.

Bruun, E. Better Public Transit Systems, Ch. 9, 240-247; Chap 10, 258-274. (You can skim these.)

Litman, T. "Evaluating Public Transportation Local Funding Options." *Journal of Public Transportation*, Vol. 17, No. 1, 2014. Pages 43-74.

TCRP Report 129, Local and Regional Funding Mechanisms for Public Transportation (2009), pages 9-34.

Week 7.

September 27: Public Transit Fare Policy

Walker, Ch. 11 "Can Fares be Fair?"

TransitCenter (2019), "A Fare Framework: How Transit Agencies Can Set Fare Policy Based on Strategic Goals"

September 29: Public Transit and Policing

TransitCenter (2019), Safety for All

September 23: Assignment #2 Case Study Draft due. Optional for graduate students.

Week 8.

October 4: Sustainability and Livability/Transit-oriented Development

Assignment #2 Case Study Feedback will be returned by Monday, October 4 at noon. Start meeting with your group to compare case studies and draft recommendations!

Ian Carlton (2007). Histories of Transit-Oriented Development: Perspectives on the Development of the TOD Concept Real Estate and Transit, Urban and Social Movements, Concept Protagonist. (IURD Working Paper).

Cervero, et al: Chapters 1, 3, 7.

October 6: Tour of Chapel Hill Transit Operations and Maintenance Facility with director Brian Litchfield

This is a field trip to the Chapel Hill Transit Operations and Maintenance Facility at 6900 Millhouse Rd. Logistics to be shared closer to the date.

Week 9.

October 11 & 13: Assignment #2 Case Study Presentations **no readings assigned**

You will present on your case study topic and transit system, including a discussion of the criteria you are considering for comparison with your group. You should also ask questions and provide feedback on other

students' presentations. Each person should present for 2-3 minutes allowing 3-5 minutes for questions and discussion per group. Each presentation can be informal, without visual aids, but should be well-organized.

Handout Assignment #3 – Bus Stop Accessibility Audit

Module 3: Transit Planning and Analysis

Week 10.

October 18: Public Transit Planning

Walker, Chapters 5-8

Ewing, Reid. 1993. "Transportation Service Standards—As If People Matter," *Transportation Research Record: Planning and Administration*, 1400: 10-17.

Ewing, Reid. 1995. "Measuring Transportation Performance," *Transportation Quarterly*, Winter, 49(1): 91- 104.

TCQSM manuals and handouts. [Fixed route; Bus Capacity; Demand Responsive Transit; Rail Transit; Ferry Transit; Station capacity]

October 20: Improving Access to Transit—Land Use Connection

Walker, Chapter 9: Density Distractions

Ewing, R., Cervero, R., 2010. "Travel and the Built Environment: A Meta-Analysis". *Journal of the American Planning Association*, 76(3), 265 - 294.

Higashide, Steven. 2019. *Better Buses, Better Cities*. Chapter 4 (pp. 59-75)

Week 11.

October 25: Improving Access to Transit—Land Use Connection

Guest Speaker: Mark Kirstner, AICP, Director of Planning, Piedmont Authority for Regional Transportation (PART)

The Geography of Urban Transportation, Peter O. Muller: Ch. 3 "Transportation and Urban Form: Stages in the Spatial Evolution of the American Metropolis", pp.56-85.

Brookings Institute (2011), "Missed Opportunity: Transit and Jobs in Metropolitan America". Pp. 1-28.

Cervero, R. (2013) "Linking urban transport and land use in developing countries" *Journal of Transportation and Land Use* Vol 6(1), 7-24.

October 27: Fundamentals of Transit Network Design

Walker, Chapter 4, Chapters 9 and 10

Higashide, Steven. *Better Buses, Better Cities*. Chapter 2 (pp. 23-37)

Week 12.

November 1: Fundamentals of Transit Network Design

Walker, Chapters 12 and 13.

TCQSM manuals and handouts. [Fixed route; Bus Capacity; Demand Responsive Transit; Rail Transit; Ferry

Transit; Station capacity]

Handout Assignment #4 –Transit Network Design and Analysis
October 29: Assignment #3 due

November 3: Public Transit and Micromobility. No reading responses after November 1.

Joel Volinski (2019). Microtransit or General Public Demand Response Transit Services: State of the Practice (TCRP Synthesis 141). Pages 13-42.

Terra Curtis, et al. (2019). Partnerships Between Transit Agencies and Transportation Network Companies (TCRP Research Report 204). Pages 68-82.

TransitCenter (2019). The Limits of MicroTransit

Week 13.

November 8 & 10: Public Transit Communications

[USDOT: Communication Technologies Fact Sheet \(webpage\)](#)

[National Rural Transit Assistance Program: Fundamental Customer Communications \(webpage\)](#)

Optional Resources

[Liu, Shi, Elrahman, Ban, Reilly. \(2016\) Understanding social media program usage in public transit agencies](#)

[TCRP Synthesis 68. \(2006\) Methods of Rider Communication](#)

Week 14.

November 15 & 17: Work on Assignment #4 Transit Network Analysis

Feedback Session with Transit Planners on Assignment #4 Draft Transit Network Proposals

Week 15.

November 22 & 29: Presentations of Transit Networks

Groups will present their transit network recommendations through a timed poster session. Groups not presenting will provide feedback on the posters and presentations. Each group should prepare a 10-15 minute presentation to be followed by 5-10 minutes of discussion.

Government and Non-government Public Transit websites

American Public Transportation Association (APTA) www.apta.com

Link to transit agencies in the US by state: <https://www.apta.com/resources/links/unitedstates/Pages/default.aspx>

US DOT Public Transit <https://www.transportation.gov/public-transit>

Federal Transit Administration: www.fta.dot.gov

National Transit Database: <https://www.fta.dot.gov/ntd>

TransitCenter, www.transitcenter.org

National Association of City Transportation Officials (NACTO): www.nacto.org