UP 434: Pedestrian and Bicycle Planning

Department of Urban and Regional Planning University of Illinois at Urbana-Champaign Spring 2024

Instructor: Kyuhyun Lee (<u>klee181@illinois.edu</u>)

Course Sessions: Mondays and Wednesdays 09:30 AM – 10:50 AM

Temple Hoyne Buell Hall (TBH) 227

Credit Hours: 3.00/4.00

Office Hours: Thursdays 4:00 PM – 4:50 PM, In-person in ARCH 210C or via Zoom.

https://illinois.zoom.us/j/84037062065?pwd=cDdKUlJxb0NWVy96RVIFMDlHNTdBZz09)

Or you can email me.

TA: Josh Riebe (<u>jriebe2@illinois.edu</u>)

TA Office Hours: Tuesdays 11:30 AM – 12:30 PM, TBH 224 or via Zoom.

https://illinois.zoom.us/j/85683926093?pwd=bjh0S2xuUUlnQkJjM1JWUVBtc0M0Zz09

Course Description

Walking and cycling are becoming increasingly important in efforts to promote health, sustainability, and livability in cities across the globe. Planning for pedestrian and bicycle transportation is complex: these modes of travel are influenced by micro-scale environmental characteristics such as sidewalks, bike lanes, traffic safety, and urban design, and by macro-scale conditions such as regional land use patterns. Supporting pedestrian and bicycle transportation therefore requires collaboration across multiple disciplines, including urban planning, civil engineering, design, public health, and others. UP 434 introduces key concepts and methods that will help this collaboration to take place in support of healthier, more sustainable communities. The course is divided into four major sections:

- Section I. Introduction to Pedestrian and Bicycle Planning. The first section of the course describes the context of pedestrian and bicycle planning in the United States, including its motivations, history, recent trends, and key policies and decision makers. This section also introduces foundational concepts such as the determinants of travel behavior, the diverse benefits of walking and cycling, and the value of a comprehensive approach to pedestrian and bicycle planning.
- Section II. Design and Planning: Fundamentals and Innovations. The second section of the course introduces the fundamentals of multimodal facility design and plan creation/evaluation. This section covers both basic design approaches and recent innovations, with a consideration of implementation costs.
- Section III: Data Collection and Analysis. The third section of the course focuses on technical issues in pedestrian and bicycle planning, including data collection, safety evaluation, and methods for assessing facility performance and user demand.

• Section IV: Plan Implementation and Emerging Issues. The final section of the course addresses issues of plan implementation, including funding and institutionalization, advocacy and outreach, and social equity. This section also introduces describes international approaches to facility design and explores the impacts of autonomous vehicles on pedestrian and bicycle planning.

Course Format

This course will be taught through a combination of interactive lectures, discussions, and hands-on activities both within and beyond the classroom. A series of individual and group assignments will engage students in relevant issues, encourage critical thinking, build written and oral communication skills, and provide opportunities to apply course concepts to real-world community projects and needs.

Course Objectives

By the end of the semester, students in this course will be able to:

- Summarize the benefits and challenges of planning for walking and cycling
- Describe the roles of plans, policies, and infrastructure in supporting walking and cycling
- Understand the fundamentals of pedestrian and bicycle facility design, as well as emerging innovations
- Implement methods to assess pedestrian and bicycle use, safety, and facility performance
- Explain the processes of creating, implementing, and evaluating plans and programs
- Recognize both national and international perspectives on planning and facility design

Course Requirements

<u>Attendance and participation</u>. Active participation in class and effective collaboration with classmates is essential in this course. Students are expected to complete the assigned readings prior to class and to come prepared for thoughtful discussion. Lectures will be interactive and students will be expected and encouraged to contribute their questions, ideas, and experiences to a rich discussion of the course content.

<u>Assignments</u>. Students will complete four assignments designed to provide an enhanced understanding of planning, data analysis, and facility design. Three of these assignments will be one-time submissions (A1, A2, A3), while the final assignment will be a semester-long project (SP). These assignments are described in the table below; peer evaluations of individual contributions will form part of the grade for each group assignment. All assignments are due to Compass at 11:59 PM on the date indicated.

Assignment		Purpose	Format	Due
A1	Make the Case	Summarize the benefits of walking and cycling	Group (oral)	Feb. 4
A2	Talk Strategy	Evaluate/critique a pedestrian or bicycle plan	Individual (written)	Mar. 10
A3	Dig in the Data	Analyze local pedestrian and/or bicycle data	Individual (written)	Apr. 1
SP	Design a Change	Design improvements to a high-crash intersection	Group (written + oral)	May. 5

Note: Graduate students will serve as group leaders for the semester-long project (SP), and the specific requirements for Assignment 3 (A3) will differ for undergraduate and graduate students.

<u>Labs</u>. Students will complete four labs during the course of the semester. For students who are able to participate in the synchronous sessions, these labs will be completed in small breakout groups during class. For students who are unable to participate synchronously on lab days, work may be completed either individually or in self-arranged small groups outside of class. All students will upload their completed lab documents to Compass on the Sunday following the lab session for a basic check of completion and understanding.

<u>Walking and Bicycling in the News.</u> Staying engaged in the "real world" of pedestrian and bicycle planning is essential to making informed arguments and decisions. To bring this engagement into the classroom, we will devote the beginning of each class session to brief (2–3 minutes maximum) student updates about recent news items related to pedestrian and bicycle planning. News items may include events, policy decisions, planning efforts, projects, studies, or any other updates relevant to the course content.

Each student will provide a news brief once during the semester (sign-ups during first week of class). News briefs should be informal (no PowerPoint presentations needed) and designed to convey (1) concise background information, (2) a description of the event, decision, effort, project, study, etc., (3) a summary of the major implications for pedestrian and bicycle planning, potentially with the student's critique. To keep the discussion current, students should focus on a news item that occurred in the week prior to their update. Students should send a link to an online article about their news item to the instructor by 5:00 PM the day before their update for dissemination to the class.

Below is a list of organizations that often feature relevant news (feel free to share others with the class):

- Association of Pedestrian and Bicycle Professionals
- National Center for Bicycling and Walking
- Transportation For America
- Smart Growth America
- CityLab
- Planetizen
- Mobility Lab

Grading

Weights. Course requirements will be weighted in the final grade as follows:

Course Requirements	Weight (%)	
Engagement	10	
A1: Make the Case (group)	10	
A2: <i>Talk Strategy</i> (individual)	15	
A3: Dig in the Data (individual)	20	
SP: Design a Change (group)	30	
Labs	10	
Waking & Cycling in the News	5	

<u>Grading scale.</u> Numeric grades will be converted into letter grades using the scale outlined below. The course will not be graded on a curve, and there will be no rounding applied to numeric grades.

```
A+: 97.0–100.0 B+: 87.0–89.99 C+: 77.0–79.99 D+: 67.0–69.99 F: Less than 60.0 A: 94.0–96.99 B: 84.0–86.99 C: 74.0–76.99 D: 64.0–66.99 A-: 90.0–93.99 B-: 80.0–83.99 C-: 70.0–73.99 D-: 60.0–63.99
```

Detailed instructions for completing each assignment will be provided. Submitted assignments will be graded and returned promptly with detailed feedback. The general grading rubric is as follows:

- An "A" assignment demonstrates original thought and synthesis of ideas and sophisticated, cogent analysis. It is clearly written and presented. Outstanding work.
- A "B" assignment includes above average analysis with appropriate evidence to support ideas. It is clearly written and presented. Good work.
- A "C" assignment shows a basic level of understanding, with analysis limited to obvious arguments. Writing is competent. Developing but adequate work.
- A "D" assignment misunderstands or misrepresents the material, or is so poorly written or presented as to obscure the analysis. Inadequate work.

<u>Late Assignments.</u> Students are expected to turn in all deliverables (assignments, labs, etc.) on time. However, I understand that challenges, unanticipated obligations, and illnesses will arise. If you are unable to meet a particular deadline, it is your responsibility to **make prior arrangements** with me regarding the deliverable. Otherwise, work submitted past the deadline will receive a five-percentage-point deduction, and work submitted later than five days past the deadline may not be considered for grading unless consent has been given by the instructor. Please communicate with me proactively about any challenges, illnesses, or emergencies that arise—I am here to work with you and help you do your best!

Readings

There are no required textbooks for this course; all readings will be posted on Canvas. Readings for each session are listed at the conclusion of this syllabus.

Course Policies and Other Items/Resources

<u>Attendance</u>. "Attendance," defined this semester as active engagement with the course material and activities, is necessary for adequate performance in this course. It is the instructor's decision as to when a student's "absences" (e.g., missed deadlines, non-participation in discussion board, lack of engagement), without proactive communication with the instructor, become excessive and should be reported. If in the opinion of an instructor the attendance of a student becomes so irregular that their scholarship is likely to be impaired, the instructor may submit an irregular attendance form to the Associate Dean of the student's college. A copy is forwarded to the student, who should contact the instructor immediately to work out a solution. If irregular attendance continues without excuse, the instructor may request the student be withdrawn from the course. This request for withdrawal would result in a grade of E for the course. Extenuating circumstances will always be considered when supporting evidence is presented. See Rule 1-501 and Rule 1-502 in the Student Code for more information.

<u>Academic Accommodations.</u> This course will accommodate students with documented disabilities. To obtain disability-related academic adjustments and/or auxiliary aids, students should contact both the instructor and the Disability Resources and Educational Services (DRES) as soon as possible. You can contact DRES at 1207 S. Oak Street, Champaign, by phone at (217) 333-1970, or via email at <u>disability@illinois.edu</u>.

<u>Academic Integrity</u>. This course follows the guidelines set forth by the University Student Code. See http://www.admin.uiuc.edu/policy/code/article_1/a1_1-401.html for specific guidelines, examples, and punishment associated with academic dishonesty. In written work, any ideas that are not your own must be properly cited. The consequences for plagiarism may include receiving no credit for an assignment or, at the discretion of the instructor, failure of the course.

<u>Counseling.</u> The University Counseling Center is committed to providing a range of services intended to help students develop improved coping skills in order to address emotional, interpersonal, and academic concerns. The Counseling Center provides individual, couples, and group counseling. All of these services are paid for through the health services fee. The Counseling Center offers primarily short term counseling, but they do also provide referrals to the community when students could benefit from longer term services. https://counselingcenter.illinois.edu/.

<u>Class Climate.</u> The Department of Urban and Regional Planning (DURP) is committed to maintaining a learning environment that is rooted in the goals and responsibilities of professional planners. By enrolling in a class offered by the Department of Urban and Regional Planning, students agree to be responsible for maintaining an atmosphere of mutual respect in all DURP activities, including lectures, discussions, labs, projects, and extracurricular programs. See Student Code Article 1-Student Rights and Responsibilities, Part 1. Student Rights: §1-102.

<u>Electronic devices</u>. Research shows that students who use laptops in the classroom are distracting not only to themselves, but also to the students around them (Sana, Weston, and Cepeda, 2013). Furthermore, students who take notes by hand tend to retain information better than those who take notes by laptop (Mueller and Oppenheimer, 2014). To create a mutually beneficial learning environment, students are encouraged not to use their laptops in class. However, recognizing that everyone learns differently, I will allow laptops for classroom purposes only; all other programs, including Internet browsers and email, **must be turned off** before class begins. Students who use their laptops for non-classroom purposes will be asked to stop using them during class time. Additionally, students must silence or turn off their cell phones before the beginning of class.

<u>Netiquette</u>. In any social interaction, certain rules of etiquette are expected and contribute to more enjoyable and productive communication. The following are tips for interacting online via email or discussion board messages, adapted from guidelines originally compiled by Chuq Von Rospach and Gene Spafford (1995):

- Remember that the person receiving your message is someone like you, deserving and appreciating courtesy and respect.
- Be brief; succinct, thoughtful messages have the greatest effect.
- Your messages reflect on you personally; take time to make sure that you are proud of their form and content.
- Use descriptive subject headings in your emails.
- Think about your audience and the relevance of your messages.
- Be careful when you use humor and sarcasm; absent the voice inflections and body language that aid face-to-face communication, internet messages are easy to misinterpret.
- When making follow-up comments, summarize the parts of the message to which you are responding.
- Avoid repeating what has already been said; needless repetition is ineffective communication.
- Cite appropriate references whenever using someone else's ideas, thoughts, or words.

<u>Safety and security in the classroom.</u> Emergencies can happen anywhere and at any time. It is important that we take a minute to prepare for a situation in which our safety or even our lives could depend on our ability to react quickly. When we're faced with any kind of emergency—like fire, severe weather, or if someone is trying to hurt you—we have three options: run, hide, or fight. For more information please refer to the General Emergency Response Recommendations at http://police.illinois.edu/emergency-preparedness/run-hide-fight/resources-for-instructors/.

Course Schedule

(Subject to revision)

Week	Date	Торіс	Notes			
Section I. Introduction to Pedestrian and Bicycle Planning						
1	Jan 17	Course Overview				
2	Jan 22	Motivations and History				
2	Jan 24	Institutions and Key Trends				
3	Jan 29	Pedestrian and Bicycle Travel Behavior				
	Jan 31	Land Use, Connectivity, and Urban Design				
4.1	Feb 5	Making the Case: Benefits of Walking and Cycling	A1 due (Feb 4)			
Section II. Design and Planning: Fundamentals and Innovations						
4.2	Feb 7	eb 7 Pedestrian Design				
5	Feb 12	Pedestrian Design + Bicycle Design				
3	Feb 14	Bicycle Design				
6	Feb 19	Guest Speaker: Cynthia Hoyle, FAICP (CUMTD)				
	Feb 21	Multimodal Design				
7	Feb 26	Anatomy of a Pedestrian/Bicycle Master Plan	Lab 1			
,	Feb 28	Anatomy of a Pedestrian/Bicycle Master Plan (continued)				
8.1	Mar 4	Connections with Other Plans and Policies	Lab 2			
		Section III. Data Collection and Analysis				
8.2	Mar 6	Data Sources and Collection Methods	A2 due (Mar 10)			
9	Mar 11	No Class – Spring Break				
	Mar 13	No Class – Spring Break				
10	Mar 18	Pedestrian and Bicycle Demand Estimation				
10	Mar 20	Pedestrian and Bicycle Safety				
11	Mar 25	Guest Speaker: Jeff Yockey (Champaign County Bikes)				
	Mar 27	Facility Analysis Tools: Audits and Measures	Lab 3*			
12.1	Apr 1	Facility Analysis Tools: Audits and Measures (continued)				
Section IV. Plan Implementation and Emerging Issues						
12.2	Apr 3	Funding and Institutionalization	A3 due			
13	Apr 8	Guest Speaker: Lily Wilcock, AICP (City of Champaign)				
	Apr 10	Advocacy, Outreach, and Social Equity				
14	Apr 15	Autonomous Vehicles				
	Apr 17	International Approaches				
15	Apr 22	Addressing Common Misconceptions/Concerns	Lab 4			
	Apr 24	SP Presentations				
16	Apr 29	SP Presentations				
	May 1	No Class – SP Group Work	CD I			
_	May 5	SP Report due at 11:59 PM CT	SP due			

^{*} denotes sessions that may be held in person (outdoors), if weather conditions allow

Readings

Motivations and History

- Buehler, R., Gotschi, T., and M. Winters. (2016) "Moving Toward Active Transportation: How Policies Can Encourage Walking and Bicycling." Active Living Research Review.
 https://www.zora.uzh.ch/id/eprint/128504/1/4-ALR Review ActiveTransport Jan2016.pdf.
- FHWA. (2016). "Strategic Agenda for Pedestrian and Bicycle Transportation." FHWA-HEP-16-086. https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/strategic_agenda/ (read pages 8-21).

Institutions and Key Trends

• Pucher, J., R. Buehler, and M. Seinen (2011). "Bicycling Renaissance in North America? An Update and Re-Assessment of Cycling Trends and Policies." *Transportation Research Part A* 45 (6), 451-474.

Pedestrian and Bicycle Travel Behavior

- Schneider, R.J. (2013). "Theory of Routine Mode Choice Decisions: An Operational Framework to Increase Sustainable Transportation." *Transport Policy* 25, 128-137.
- Dill J. and N. McNeil. (2016). "Revisiting the Four Types of Cyclists: Findings from a National Survey." *Transportation Research Record* 2587, 90-99.
- Safe Routes to School National Partnership. (2020). "The 6 E's." https://www.saferoutespartnership.org/safe-routes-school/101/6-Es.

Land Use, Connectivity, and Urban Design

- Frank, L., Kavage, S., and T. Litman. (2006). "Promoting Public Health through Smart Growth." Vancouver, BC: SmartGrowthBC. http://www.vtpi.org/sgbc_health.pdf (read "Land Use Impacts on Travel Behavior," pages 10-20).
- Ewing, R., and R. Cervero. (2010). "Travel and the Built Environment: A Meta-Analysis." *Journal of the American Planning Association* 76(3), 265-294 (skim).
- McConville, M.E., Rodriguez, D.A., Clifton, K., Cho, G., and S. Fleischhacker. (2011). "Disaggregate Land Uses and Walking." *American Journal of Preventive Medicine* 40(1), 25-32.

Making the Case: Benefits of Walking and Cycling

• Group presentations; see Assignment 1 prompt for suggested readings for your group's specific benefit.

Pedestrian Design

- Zegeer, C.V., Sandt, L., Scully, M., Ronkin, M., Cynecki, M., and P. Lagerwey. (2008). "How to Develop a Pedestrian Safety Action Plan." https://safety.fhwa.dot.gov/ped_bike/ped_focus/docs/fhwasa0512.pdf (read pages 54-67).
- Thomas, L., Thirsk, N., and C.V. Zegeer. (2016). "Application of Pedestrian Crossing Treatments for Streets and Highways." NCHRP Synthesis 498. http://www.trb.org/Publications/Blurbs/175419.aspx (read pages 35-60).
- McGrane, A., and M. Mitman. (2013). "An Overview and Recommendations of High-Visibility Crosswalk Marking Styles." Pedestrian and Bicycle Information Center. http://www.pedbikeinfo.org/resources/resources details.cfm?id=4874.
- Zegeer, C.V., Stewart, J.R., Huang, H., Lagerwey, P., Feaganes, J., and B.J. Campbell. (2005). "Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations." FHWA-RD-04-100. https://www.fhwa.dot.gov/publications/research/safety/04100/04100.pdf (read pages 1-11, 51-61).

Bicycle Design

- AASHTO. (2012). "AASHTO Guide for the Development of Bicycle Facilities." Fourth Edition (read "Chapter 4: Design of On-Road Facilities").
- NACTO. (2014). "NACTO Urban Bikeway Design Guide." https://nacto.org/publication/urban-bikeway-design-guide/ (browse designs).
- Boldry, J., Anderson, M., and M. Roskowski. (2017). "Defining Connected Bike Networks."
 Pedestrian and Bicycle Information Center.
 http://www.pedbikeinfo.org/resources/resources details.cfm?id=5083.
- APBP. (2015). "Essentials of Bike Parking."
 http://c.ymcdn.com/sites/www.apbp.org/resource/resmgr/Bicycle_Parking/EssentialsofBikeParking_FI
 NA.pdf.
- FHWA. (2015). "Separated Bike Lane Planning and Design Guide." FHWA-HEP-15-025. https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/separated_bikelane_pdg/page_00.cfm (read pages 11-17 [Ch.1] and 25-34 [Ch.3]; skim other sections).

Multimodal Design

- NACTO. (2013). "NACTO Urban Street Design Guide." http://nacto.org/publication/urban-street-design-guide/ (browse designs).
- FHWA. (2014). "Road Diet Informational Guide." FHWA-SA-14-028. https://safety.fhwa.dot.gov/road_diets/guidance/info_guide/rdig.pdf (read pages 1-12, 19-20; skim rest).
- Thomas, L. (2013). "Road Diet Conversions: A Synthesis of Safety Research." Pedestrian and Bicycle Information Center. http://www.pedbikeinfo.org/resources/resources details.cfm?id=4873.
- AASHTO. (2012). "AASHTO Guide for the Development of Bicycle Facilities." Fourth Edition (read "Chapter 5: Design of Shared Use Paths").

Anatomy of a Pedestrian/Bicycle Master Plan

Roughton, C., van Hengel, D., Duncan, A., Weigand, L., and M. Birk. (2012). "Creating Walkable & Bikeable Communities: A User Guide to Developing Pedestrian and Bicycle Master Plans." Initiative for Bicycle and Pedestrian Innovation. Center for Transportation Studies, Portland State University. https://ppms.trec.pdx.edu/media/project_files/IBPI%20Master%20Plan%20Handbook%20FINAL.pdf.

Connections with Other Plans and Policies

- Aytur, S.A., Rodriguez, D.A., Evenson, K.R., Catellier, D.J., and W.D. Rosamond. (2007).
 "Promoting Active Community Environments through Land Use and Transportation Planning." *Health Promotion* 21(4), 397-407.
- Additional readings assigned as part of in-class activity/lab

Data Sources and Collection Methods

- Nordback, K., O'Brien, S., and K. Blank. (2018). "Bicycle and Pedestrian Count Programs: Summary of Practice and Key Resources." Pedestrian and Bicycle Information Center. http://www.pedbikeinfo.org/resources/resources_details.cfm?id=5101.
- FHWA. (2016). "Strategic Agenda for Pedestrian and Bicycle Transportation." FHWA-HEP-16-086. https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/strategic_agenda/ (read pages 24-25).

 Zegeer, C.V., Sandt, L., Scully, M., Ronkin, M., Cynecki, M., and P. Lagerwey. (2008). "How to Develop a Pedestrian Safety Action Plan." https://safety.fhwa.dot.gov/ped_bike/ped_focus/docs/fhwasa0512.pdf (read pages 26-37).

Pedestrian and Bicycle Demand Estimation

- Aoun, A., Bjornstad, J., DuBose, B., et al. (2015). "Bicycle and Pedestrian Forecasting Tools: State of the Practice." Pedestrian and Bicycle Information Center. <a href="http://www.pedbikeinfo.org/resources/resources/tesour
- Clifton, K.J., Singleton, P.A., Muhs, C.D., and R.J. Schneider. (2016). "Representing Pedestrian Activity in Travel Demand Models: Framework and Application." *Journal of Transport Geography* 52, 111-122.
- Schneider, R.J., T. Henry, M.F. Mitman, L. Stonehill, and J. Koehler. (2012). "Development and Application of the San Francisco Pedestrian Intersection Volume Model." *Transportation Research Record* 2299, 65-78.

Pedestrian and Bicycle Safety

- Zegeer, C.V., Sandt, L., Scully, M., Ronkin, M., Cynecki, M., and P. Lagerwey. (2008). "How to Develop a Pedestrian Safety Action Plan." https://safety.fhwa.dot.gov/ped_bike/ped_focus/docs/fhwasa0512.pdf (read pages 38-53).
- Jacobsen, P.L. (2003). "Safety in Numbers: More Walkers and Bicyclists, Safer Walking and Bicycling." *Injury Prevention* 9, 205-209.
- Marshall, W.E. and N.W. Garrick. (2011). "Evidence on Why Bike-Friendly Cities Are Safer for All Road Users." *Environmental Practice* 13(1), 16-27.
- Ferrier, K., Shalum, L., Gag, L., and S. Thompson. (2017). "Vision, Strategies, Action: Guidelines for an Effective Vision Zero Plan." https://visionzeronetwork.org/project/roadmapforaction/.
- (optional) Poole, B., Johnson, S., and L. Thomas. (2017). "An Overview of Automated Enforcement Systems and Their Potential for Improving Pedestrian and Bicyclist Safety." Pedestrian and Bicycle Information Center. http://www.pedbikeinfo.org/resources/resources details.cfm?id=4779.

Facility Analysis Tools

- Boldry, J., and R. Davies. (2019). "Using Connectivity Measures to Evaluate and Build Connected Bicycle Networks." Pedestrian and Bicycle Information Center. http://www.pedbikeinfo.org/resources/resources_details.cfm?id=5173.
- Dowling, R., D. Reinke, A. Flannery, et al. (2008). "Multimodal Level of Service Analysis for Urban Streets." NCHRP Report 616. http://www.trb.org/Publications/Blurbs/160228.aspx (read pages 82-91).
- Mekuria, M.C., Furth, P.G., and H. Nixon. (2012). "Low-Stress Bicycling and Network Connectivity."
 Mineta Transportation Institute, Report 11-19, http://transweb.sjsu.edu/PDFs/research/1005-low-stress-bicycling-network-connectivity.pdf (read pages 1-29).

Funding and Institutionalization

- FHWA. (2015). "Bicycle and Pedestrian Funding, Design, and Environmental Review: Addressing Common Misconceptions." https://www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/misconceptions.cfm.
- Roughton, C., van Hengel, D., Duncan, A., Weigand, L., and M. Birk. (2012). "Creating Walkable & Bikeable Communities: A User Guide to Developing Pedestrian and Bicycle Master Plans." Initiative for Bicycle and Pedestrian Innovation. Center for Transportation Studies, Portland State University. https://ppms.trec.pdx.edu/media/project_files/IBPI%20Master%20Plan%20Handbook%20FINAL.pdf (read pages 69-76).

 Zegeer, C.V., Sandt, L., Scully, M., Ronkin, M., Cynecki, M., and P. Lagerwey. (2008). "How to Develop a Pedestrian Safety Action Plan."
 https://safety.fhwa.dot.gov/ped_bike/ped_focus/docs/fhwasa0512.pdf (read pages 117-124).

Advocacy, Outreach, and Social Equity

- Roughton, C., van Hengel, D., Duncan, A., Weigand, L., and M. Birk. (2012). "Creating Walkable & Bikeable Communities: A User Guide to Developing Pedestrian and Bicycle Master Plans." Initiative for Bicycle and Pedestrian Innovation. Center for Transportation Studies, Portland State University. https://ppms.trec.pdx.edu/media/project_files/IBPI%20Master%20Plan%20Handbook%20FINAL.pdf (read pages 31-39).
- Zegeer, C.V., Sandt, L., Scully, M., Ronkin, M., Cynecki, M., and P. Lagerwey. (2008). "How to Develop a Pedestrian Safety Action Plan."
 https://safety.fhwa.dot.gov/ped_bike/ped_focus/docs/fhwasa0512.pdf (read pages 141-143).
- League of American Bicyclists. (2014). "The New Majority: Pedaling Towards Equity." https://bikeleague.org/sites/default/files/equity_report.pdf (skim).
- People For Bikes and Alliance for Biking and Walking. (2015). "Building Equity: Race, Ethnicity,
 Class, and Protected Bike Lanes: An Idea Book for Fairer Cities." https://peopleforbikes.org/wp-content/uploads/2017/07/EquityReport2015.pdf (skim).

Autonomous Vehicles

- Sandt, L., and J.M. Owens. (2017). "Discussion Guide for Automated and Connected Vehicles, Pedestrians, and Bicyclists." Pedestrian and Bicycle Information Center. <a href="http://www.pedbikeinfo.org/resources/reso
- Millard-Ball, A. (2018). "Pedestrians, Autonomous Vehicles and Cities." *Journal of Planning Education and Research* 38 (1), 6-12.
- Combs, T., Sandt, L., Clamann, M., and N. McDonald. (2019). "Automated Vehicles and Pedestrian Safety: Exploring the Promise and Limits of Pedestrian Detection." *American Journal of Preventive Medicine* 56 (1), 1-7.
- Schlossberg, M., et al. (2018). "Rethinking the Street in an Era of Driverless Cars." Urbanism Next.

International Approaches

- Fischer, E.L., Rousseau, G.K., Turner, S.M., et al. (2009). "International Scan Summary Report on Pedestrian and Bicyclist Safety and Mobility." http://www.pedbikeinfo.org/data/international scantours.cfm.
- Pucher, J. and R. Buehler. (2008). "Making Cycling Irresistible: Lessons from the Netherlands, Denmark, and Germany." *Transport Reviews* 28, 1-56.

Addressing Common Misconceptions/Concerns

No readings