SAN JOSÉ STATE UNIVERSITY

URBAN AND REGIONAL PLANNING DEPARTMENT

URBP 256: SUSTAINABLE TRANSPORTATION PLANNING URBP 156: SUSTAINABLE TRANSPORTATION PLANNING

SPRING 2025

Instructors: Dr. Charles Rivasplata and Dr. Richard Lee

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Office hours: Tuesdays, 5:00-6:00 p.m.
Class time: Tuesdays, 6:00-8:15 p.m.
Classroom: Washington Square 111

Prerequisites: URBP 256: Instructor consent

URBP 156/ENVS 156: Upper division standing

Units: 4

Course Description

This course is designed to help the student better understand many of the local issues confronting transportation and learn ways of making these systems more efficient and sustainable. It will both acquaint the student with some of the key concerns of transportation planners working in local government and help them develop proficiency in the skills needed to improve urban mobility.

In addition, this course is intended to help prepare students for employment as a transportation professional. However, this course alone will not prepare students for specialized transportation positions (e.g., modeler or traffic engineer). These would require additional course work.

Most of the course focuses on local transportation policy and planning. While some transportation planning occurs at the regional level, transportation must be planned in coordination with land use planning, which is largely controlled at the local (e.g., city and county) levels. In order to appreciate the importance of regional planning and its importance in promoting sustainable transport, it is essential to understand city and community-level planning, including the General Plan process.

The engagement activity, a collaborative small group project, is a notable part of the course. This activity will provide students with first-hand (and hands-on) experience in the field of transportation planning. The goals for the engagement activity include: providing the student direct contact with the transportation planning profession, and people involved in and affected by transportation planning; and familiarizing the student with transportation planning concepts, skills and applications, thereby increasing your marketable skills.

Opportunities for engagement with practicing transportation planning professionals will become available during the traffic calming and walking audit assignments, as well as the small group project. These assignments are described in the Course Workload section of this syllabus (below).

For the one-unit engagement unit, the instructors will spend an additional 15 hours during the semester on activities such as: designing the engagement unit activities and the related assignments, coordinating with community partners to implement the activities, advising students outside of class on a weekly basis as needed, and grading the engagement unit activity assignments.

Course Learning Objectives (CLOs): URBP 256

Upon successful completion of the course, each URBP 256 student will be able to:

- 1. Discuss the principal critical mobility issues confronting local areas
- 2. List and describe relationships between the primary elements of transportation systems, such as modes, networks, controls and users
- 3. Characterize transportation system modes, including walking, bicycling, and transit options (rail, bus, paratransit, etc.), as well as the evolution of street, highway and transit systems
- 4. Describe the scope of transportation and its environmental impact, analysis and mitigations.
- 5. Describe the role of local planning in establishing transportation policies and priorities
- 6. Work as an assistant transportation planner

Course Learning Objectives (CLOs): URBP 156

Upon successful completion of the course, each URBP 156 student will be able to:

- 1. Discuss the principal critical mobility issues confronting local areas
- 2. List and describe relationships between the primary elements of transportation systems, such as modes, networks, controls and users
- 3. Characterize transportation system modes, including walking, bicycling, and transit options (rail, bus, paratransit, etc.), as well as the evolution of street, highway and transit systems
- 4. Describe the scope of transportation and its environmental impact and analysis
- 5. Describe the role of local planning in establishing transportation policies and priorities

Planning Accreditation Board (PAB) Knowledge Components

This course covers the following PAB Knowledge Components: 1d, 1e, 1f, 2a, 2b, 2c, 2d, and 3c.

- 1d) Human Settlements and History of Planning: understanding of the growth and development of places over time and across space.
- 1e) The Future: understanding of the relationships between past, present, and future in planning domains, as well as the potential for methods of design, analysis, intervention to influence the future.
- 1f) Global Dimensions of Planning: appreciation of interactions flows of people and materials, cultures, and differing approaches to planning across world regions.

- 2a) Research: tools for assembling and analyzing ideas and information from prior practice and scholarship, and from primary and secondary sources.
- 2b) Written, Oral and Graphic Communication: ability to prepare clear, accurate and compelling text, graphics and maps for use in documents and presentations.
- 2c) Quantitative and Qualitative Methods: data collection, analysis and modeling tools for forecasting, policy analysis, and design of projects and plans.
- 2d) Plan Creation and Implementation: integrative tools useful for sound plan formulation, adoption, and implementation and enforcement.
- 3c) Sustainability and Environmental Quality: appreciation of natural resource and pollution control factors in planning and understanding of how to create sustainable futures.

A complete list of the Planning Accreditation Board Knowledge Components is available from the Department of Urban and Regional Planning.

Required Course Texts to Purchase

Peter Newman and Jeff Kenworthy, *The End of Automobile Dependence: How Cities are Moving Beyond Car-Based Planning*, Washington, D.C.: Island Press, 2015. ISBN: 978-1610914635

Jeffrey Tumlin, Sustainable Transportation Planning: Tools for Creating Vibrant, Healthy, and Resilient Communities First Edition, Hoboken, NJ: John Wiley and Sons, 2012. ISBN: 978-0470540930 Other readings are accessible on Canvas or via links in the Course Schedule, at the end of this syllabus. Importantly, all weekly course readings are listed in the Course Schedule.

Course Assignments and Grading Policy

Your grade for the course will be based on the following assignments and graded activities:

Assignments and Graded Activities	Percent of Course Grade	Course Learning Objectives Covered
Fortnightly Reading Memos	12	All
(1-2-page memos on readings)		
Class Participation	8	All
(regular class involvement)		
Walking Assessment	10	All
(summary of assessment done in the San Jose State area)		
Traffic Calming Assessment	10	All
(summary of assessment done in the San Jose State area)		
TED Talk	10	1 & 2
(8-10 or 5-7 min. talk on a topic chosen by the student)		
Small Group Project (Engagement Activity)	25	1e, 2a, 2b, 2c, 2d
(summary and presentation on one of the six topics)		
Term Paper	25	All
(paper on an approved local transportation topic)		

Additional details on each assignment will be distributed as class handouts.

Expectations of Graduate Students Compared to Undergraduate Students

Graduate students are expected to prepare a 15 to 20-page term paper; the requirement for undergraduates is a 10 to 12-page term paper.

Graduate student TED talks are expected to be from 8 to 10 minutes long; undergraduate TED talks need only be 5 to 7 minutes long.

Graduate student work will be graded in a more exacting manner than that of undergraduates since graduate students will have the advantage of more academic experience.

Calculation of Final Course Letter Grade

As indicated above, the final course grade incorporates seven graded activities: the reading memos and class participation are collectively worth 20 percent, the next three in the table are each worth 10 percent, the small group project is worth 25 percent, and the term paper is worth 25 percent.

The following scheme will be used to translate a total numeric score into a course grade:

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A+ (98 to 100); A (93 to 98); A- (90 to 93); B+ (87 to 90); B (83 to 87); B- (80 to 83); C+ (77 to 80); C (73 to 77); C- (70 to 73); D+ (67 to 70); D (63 to 67); D- (60 to 63); F (below 60).
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Other Grading and Assignment Issues

All late classwork will be marked down as follows.

<u>Fortnightly Reading Memos/Participation</u>: If received within 24 hours of each scheduled deadline, they will be marked down 0.2 point. Thereafter, they will be marked down as follows:

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1-4 days late: 0.4 point
4-7 days late: 0.6 point
Over 7 days: no credit given
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<u>Walking and Traffic Calming Assessments</u>: If received within 24 hours of the scheduled deadline, they will be marked down 1 point. Thereafter, they will be marked down as follows:

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1-4 days late: 2 points
Over 4 days: no credit given
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<u>TED Talk</u>: This presentation must be given on one of the two dates indicated.

<u>Small Group Project (Engagement Activity)</u>: If received within 24 hours of the scheduled deadline, it will be marked down two points (e.g., from a 23 out of 25 points to a 21 out of 25 points). Thereafter, it will be marked down according to the following schedule:

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1-4 days late: 5 points4-7 days late: 10 pointsOver 7 days: no credit given
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<u>Term Paper</u>: If received within 24 hours of the scheduled deadline, it will be marked down 2 points (e.g., from a 23 of 25 points to a 21 of 25 points). Thereafter, it will be marked down as follows:

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1-4 days late: 5 points
4-7 days late: 10 points
Over 7 days: no credit given
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Course Workload

Each student of this course is expected to spend, for each unit of credit, a minimum of 45 hours over the length of the course (normally, three hours per unit per week with one of the hours used for lecture) for instruction or preparation/studying or course-related activities including but not limited to internships, labs, and clinical practice. Other course structures will have equivalent workload expectations as described in the syllabus.

Because this is a four-unit class, you can expect to spend a minimum of nine hours per week in addition to time spent in class and on scheduled tutorials or activities. Special projects or assessments may require additional work for the course. Careful time management will help you keep up with readings and assignments and enable you to be successful in all of your courses. For this class, you will have to undertake additional activities outside the class hours such as work on your group project, or research for your term paper. Details on how to complete the larger activities will be provided in handouts distributed later in the semester.

The course workload will primarily be based on the following activities:

- Fortnightly Reading Memos consist of one- to two-page summaries of reading highlights and the student's own reflections on the readings. (<u>Due on Canvas at 6:00 p.m. on the following dates: Feb. 4, Feb 18, Mar. 4, Mar. 18, Apr. 8, Apr. 22</u>).
- Walking Assessment will encompass a summary of pedestrian conditions and access, employing a methodology provided in class. This assessment will take place in the vicinity of San Jose State University. (<u>Due on Canvas at 6:00 p.m. on Mar. 4</u>).
- Traffic Calming Assessment will involve a summary of traffic calming conditions, using a methodology provided in class. (Due on Canvas at 6:00 p.m. on Mar. 25).
- **TED Talk** will allow each student to give a presentation on a topic chosen by the student pertinent to the class subject matter (Scheduled for Apr. 15 and Apr. 22).
- The Small Group Project (Engagement Activity) will involve the collaboration of four to six students on one of a number of group assignments. Each student will be expected to actively participate in project development and submittal. Each group will choose a local transport topic, such as one of the following local transportation projects:
 - 1.) Providing transportation ideas and recommendations for an ongoing neighborhood plan for Alum Rock in the City of San Jose
 - 2.) Traffic calming plan for a neighborhood in the SJSU environs
 - 3.) Downtown San Jose Transportation Management Association and Transportation Demand Management Plan
 - 4.) Active Transportation (Pedestrian and Bicycle) for the San Jose State campus and environs within one-half mile of campus
 - 5.) Agency plans for improving transit coordination in downtown San Jose.
 - 6.) Santa Cruz Rail and Trail

This project is a student engagement activity and as such, requires that students engage with practicing urban and regional planners in completing the assignments. The instructors will assist the groups in establishing this engagement. Small groups will submit a brief project

outline on Canvas by February 18, will present a summary of their engagement activity and lessons learned on April 29 and will place the written version on Canvas by April 29.

• For the **Term Paper** each student will research and write a paper on a topic related to the course, i.e., a policy paper discussing a local or sustainable transportation planning topic. Each student topic must be approved by the instructors. <u>The Term Paper outline is due on Canvas Mar. 11, and a final version of the Term Paper is due on Canvas at 6:00 p.m., May 6.</u>

Here are some possible subject areas from which to narrow down your term paper topic:

- 1. Sustainability and Local Transportation
- 2. Transportation, Land Use and Climate Change at the Local Level
- 3. Improving Access to San José State and its Environs.
- 4. Local Active Transport Planning
- 5. Policy Analysis of Gender, Aging and Other Demographic Transportation Issues
- 6. Policy Analysis of Road and Parking Pricing Options
- 7. Assessing the San Jose Downtown Transportation Plan
- 8. Land Use and Urban Form Policy in Relation to Travel Demand
- 9. The Future of Local Public Transport
- 10. The Integration of Public Transport and the Bicycle
- 11. Transportation and the Local Environment
- 12. The Transportation/Circulation Element as a Component of the General Plan
- 13. Planning for Autonomous Vehicles
- 14. Other Subject Areas by Agreement with the Instructors

University Policies

Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on Office of Graduate and Undergraduate Programs' Syllabus Information web page at http://www.sjsu.edu/gup/syllabusinfo/.

Academic Integrity Statement, Plagiarism, and Citing Sources Properly

SJSU's Policy on Academic Integrity states: "Your commitment, as a student, to learning is evidenced by your enrollment at San Jose State University." The University Academic Integrity Policy S07-2 at http://www.sjsu.edu/senate/docs/S07-2.pdf requires you to be honest in all your academic course work. Faculty members are required to report all infractions to the office of Student Conduct and Ethical Development. The Student Conduct and Ethical Development website is available at http://www.sjsu.edu/studentconduct/.

Plagiarism is the use of someone else's language, images, data, or ideas without proper attribution. It is a very serious offense both in the university and in your professional work. In essence, plagiarism is both theft and lying: you have stolen someone else's ideas, and then lied by implying that they are your own.

Plagiarism will lead to grade penalties and a record filed with the Office of Student Conduct and Ethical Development. In severe cases, students may also fail the course or even be expelled from the university.

If you are unsure what constitutes plagiarism, it is your responsibility to make sure you clarify the issues <u>before</u> you hand in draft or final work.

Learning when to cite a source and when not to is an art, not a science. However, here are some common examples of plagiarism that you should be careful to avoid:

- Using a sentence (or even a part of a sentence) that someone else wrote without identifying the language as a quote by putting the text in quote marks and referencing the source.
- Paraphrasing somebody else's theory or idea without referencing the source.
- Using a picture or table from a webpage or book without reference the source.
- Using data some other person or organization has collected without referencing the source.

The University of Indiana has developed a very helpful website with concrete examples about proper paraphrasing and quotation. See in particular the following pages:

- Overview of plagiarism at https://plagiarism.iu.edu/overview/index.html
- Patterns of plagiarism at https://plagiarism.iu.edu/plagiarismPatterns/
- Plagiarism tutorials and tests at https://plagiarism.iu.edu/tutorials/

If you still have questions, feel free to talk to the instructors personally. There is nothing wrong with asking for help, whereas even unintentional plagiarism is a serious offense.

Citation style

It is important to properly cite any references you use in your assignments. The Department of Urban and Regional Planning uses Kate Turabian's *A Manual for Writers of Research Papers, Theses, and Dissertations*, Eighth Edition (University of Chicago Press, 2013, ISBN: 978-0226816388), so please follow this style. Copies are available in the SJSU King Library. Additionally, the book is relatively inexpensive, and you may wish to purchase a copy. Please note that Turabian's book describes two systems for referencing materials: (1) "notes" (footnotes or endnotes), plus a corresponding bibliography, and (2) in-text parenthetical references, plus a corresponding reference list. In this class, students should use the second system, i.e., in-text parenthetical references.

Accommodation for Disabilities

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with the instructors as soon as possible, or see us during office hours. Presidential Directive 97-03 requires

that students with disabilities requesting accommodations register with the Accessible Education Center or AEC (formerly known as the Disability Resource Center or DRC) to establish a record of their disability.

You can find information about the services SJSU offers to accommodate students with disabilities at the AEC website at https://www.sjsu.edu/aec/

Accommodation to Students' Religious Holidays

San José State University shall provide accommodation on any graded class work or activities for students wishing to observe religious holidays when such observances require students to be absent from class. It is the responsibility of the student to inform the instructor, in writing, about such holidays before the add deadline at the start of each semester. If such holidays occur before the add deadline, the student must notify the instructor, in writing, at least three days before the date that he/she will be absent. It is the responsibility of the instructor to make every reasonable effort to honor the student request without penalty, and of the student to make up the work missed. See University Policy S14-7 at https://www.sjsu.edu/senate/docs/S14-7.pdf.

Consent for Recording of Class and Public Sharing of Instructor Material

Common courtesy and professional behavior dictate that you notify someone when you are recording him/her. You must obtain the instructor's permission to make audio or video recordings in this class. Such permission allows the recordings to be used for your private study purposes only. The recordings are the intellectual property of the instructor; you have not been given any rights to reproduce or distribute the material.

Library Liaison

The SJSU Library Liaison for the Urban and Regional Planning Department is Ms. Lauren De Celle. If you have questions, you can contact her at: lauren.decelle@sjsu.edu or 408-808-2621.

SJSU Writing Center

The SJSU Writing Center is located in Room 126 in Clark Hall. It is staffed by professional instructors and upper-division or graduate-level writing specialists from each of the seven SJSU colleges. Our writing specialists have met a rigorous GPA requirement, and they are well trained to assist all students at all levels within all disciplines to become better writers. To make an appointment or refer to the numerous online resources offered through the Writing Center, visit the Writing Center website at http://www.sjsu.edu/writingcenter.

SJSU Counseling and Psychological Services

The SJSU Counseling and Psychological Services office is located on the corner of Seventh Street and San Fernando Street, in Room 201, Administration Building. Professional psychologists, social workers, and counselors are available to provide consultations on issues of student mental health, campus climate or psychological and academic issues on an individual, couple, or group basis. To schedule an appointment or learn more information, visit Counseling and Psychological Services website at http://www.sjsu.edu/counseling.

Dropping and Adding

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness and related topics. Refer to the current semester's Policies and Procedures - San José State University - Modern Campus Catalog. Add/drop deadlines can be found on the current SJSU academic year calendar document on the SJSU Academic Calendars page, at: https://www.sjsu.edu/provost/resources/academic-calendars/index.php. The Late Drop Policy is available at Late Drops and Semester Withdrawals | Undergraduate Education for undergraduate students and at: Forms | Graduate Admissions and Program Evaluations for graduate students. All students should be aware of the current deadlines and penalties for dropping classes.

Information about the latest changes and news is available at the <u>Advising Hub</u> at http://www.sjsu.edu/advising/.

Classroom Protocol

Students are expected to arrive on time to class, be courteous to other students and the instructors and refrain from using a cell phone, texting and the internet in class, except as permitted by the instructors. In the event that you need to be absent, please notify both instructors at your earliest convenience. We recognize that illness, personal emergencies and other legitimate conflicts may occur, however please remember that each class meeting represents a substantial fraction of the total course. Be sure to check with the instructors regarding any materials or information given out at the session you were absent from, and if possible, obtain class notes from a classmate.

URBP 256 / URBP 156 Spring 2025 Course Schedule

Date	Topic	Reading	Assignments Due
Jan. 28, 2025	Welcome and Introduction (Rivasplata /Lee)	1) Tumlin, Chapters 1, 2	- None
Feb. 4, 2025	Cities and Transport (Lee)	1) Newman & Kenworthy, Chapters 1, 4, 5	- Reading Memo #1
Feb. 11, 2025	Active Transport (Rivasplata)	1) Tumlin, Chapters 6, 7	
Feb. 18, 2025	Transport, the Envir.t and Health (Lee)	 Tumlin, Chapter 3 Black, Chapter 4 	- Reading Memo #2 - Small Group Project Outline
Feb. 25, 2025	Urban Transport Abroad (Rivasplata)	 Newman & Kenworthy, Chapters 2, 3 Cervero & Golub, Chapter 17 World Resources Institute (article) TED Talk: E. Peñalosa Enrique Peñalosa: Why buses represent democracy in action 	
Mar.4, 2025	TOD & Access to Public Transport (Lee)	1) Tumlin, Chapter 12	Reading Memo #3Walking Assess.Assignment
Mar. 11, 2025	Public Transport (Rivasplata)	 Tumlin, Chapter 8 White (article) Rivasplata et al. (article) TED Talk: R. Cervero https://www.youtube.com/watch?v=rgd8tWIMhbs 	- Term Paper Outline
Mar. 18, 2025	Traffic Calming (Rivasplata)	1) ITE, Traffic Calming Measures	- Reading Memo #4
Mar. 25, 2025	Parking Reform (Lee)	1) Tumlin, Chapter 10	- Traffic Calming Assignment
Apr. 1, 2025	Spring Break		
Apr. 8, 2025	Streets (Rivasplata)	1) Tumlin, Chapter 5 2) Kott TED Talk: C. Downey https://www.ted.com/talks/chris_downey_design_with_the_blind_in_mind?language_en =en	- Reading Memo #5
Apr. 15, 2025	Goods Movement and Local Planning	 Dablanc & Rodrigue Panero et al. Lee (article) 	- Student TED Talks

	(Lee)		
Apr. 22, 2025	The Auto in Cities; Carsharing (Lee)	 Tumlin, Chapters 9, 11 Schiller 	Reading Memo #6Student TED Talks
April 29, 2025	TDM and Accessibility (Rivasplata)	 Tumlin, Chapter 13 Litman Rivasplata & LeRoux (article) 	Small GroupProject Report/Presentation
May 6, 2025	Wrap Up: Putting Pieces Together (Rivasplata/Lee)	 Tumlin, Chapter 4 Newman & Kenworthy, Chapters 6, 8 EU Evidence Project 	- Term Paper - Informal discussion

Assigned Readings:

- *Black, William R. 2010. Sustainable Transportation: Problems and Solutions. New York: Guilford Press, Chapter 4.
- *Cervero, Robert and Aaron Golub. 2007. Informal Transport: A Global Perspective, *Transport Policy*, Vol. 14, 445-457.
- *Dablanc, Laetitia and Jean-Paul Rodrigue. 2017. The Geography of Urban Freight, in Giuliano, Genevieve and Susan Hanson, eds., *The Geography of Urban Transportation*, Fourth Edition.
- *DeRobertis, Michelle, Richard Lee and Bhanu Kala. 2017. How Should Public Transit Be Evaluated for a Regional Attractor? *ITE Journal*, January.
- *EU Evidence Project. 2016. World Transport Policy and Practice. 22 (1/2), 4-225.
- Institute of Transportation Engineers (ITE). 2017. Traffic Calming Measures. Available at: https://www.ite.org/technical-resources/traffic-calming/traffic-calming-measures/
- *Kott, Joseph. 2016. Streets of Yesterday, Today, and Tomorrow. World Transport Policy and Practice, 21(4): 42-51.
- *Lee, Richard W. 2002. The General Plan Process and Sustainable Transportation Planning. Mineta International Institute for Surface Transportation Policy Studies (MTI), MTI Research Report 01-18, 2002 (pp. 1-32).
- *Litman, Todd. 2015. Why Manage Transportation Demand? Online TDM Encyclopedia. Available at: http://www.vtpi.org/tdm/
- **Newman, Peter and Jeffrey Kenworthy. 2015. The End of Automobile Dependence: How Cities are Moving Beyond Car-Based Planning. Island Press Washington DC: Island Press.
- *Panero, Marta, Hyeon-Shic Shin and Daniel Polo. 2011. Urban Distribution Centers: A Means to Reducing Freight Vehicle Miles Traveled. Rudin Center, New York University (pp. 1-36).
- *Rivasplata, Charles, Hiro Iseki, and Adam Smith. 2012. Transit Coordination in the U.S.: A Survey of Current Practice in *Journal of Public Transportation*, 15 (1): 53-73.

- *Rivasplata, Charles and Marlene Le Roux. 2018. Improving the Provision of Transport for Youth with Disabilities in Cape Town, 37th Southern African Transport Conference, Pretoria.
- *Schiller, Preston L., 2016. Automated and Connected Vehicles: High Tech Hope or Hype? World Transport Policy and Practice, 22 (3): 28-44.
- **Tumlin, Jeffrey. 2012. Sustainable Transportation Planning. Hoboken NJ: Wiley.
- *Vuchic, Vukan R. 2007. Urban Transit Systems and Technology. Hoboken, NJ: Wiley, Chapter 2.
- *White, Peter. 2002. Public Transport: Its Planning, Management and Operation. Fourth Edition. London, Spon, Chapter 2.
- *World Resources Institute (2010). Modernizing Public Transportation: Lessons Learned from Major Bus Improvements in Latin America and Asia. WRI, Washington, D.C. Available at: http://pdf.wri.org/modernizing-public transportation.pdf
- * Available on URBP 256/URBP 156 class site on SJSU Canvas.
- ** Denotes URBP 256 Course Text.

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