

# San José State University

Lucas Graduate School of Business

Master of Science in Transportation Management

MTM 215: Transportation Planning and Project Development

Fall-B 2025

## Course and Instructor Contact Information

Instructor: Doug Johnson

Email: Doug.Johnson@jacobs.com

Office Hours: By appointment

Class Day/Time: Mondays, 5:30-9:30 pm, **October 13 – Dec 15, 2025**

Course website: Canvass (<http://sjsu.instructure.com>)

*“How to accommodate city transportation without destroying the related intricate and concentrated land use? – this is the question. Or, going at it another way, how to accommodate intricate and concentrated land use without destroying the related transportation.” – Jane Jacobs*

*“Transportation and cities are codependent, mutually influencing each other in often complex and dynamic ways. It is less the hardware characteristics of roads and transit lines and more the software characteristics – notably the accessibility benefits provided – that shape urban environments.” – Robert Cervero*

## Course Format

Students must have regular access to email and the internet in order to attend classes, communicate with the instructor, submit assignments, and engage in other class activities.

Students attend class sessions online using Zoom, SJSU's online meeting application. During classes, students should:

- Be in a quiet room without distractions (e.g., no family members or colleagues walking through or asking questions)
- Have stable internet access
- Use a video camera and good quality microphone so that you are seen as well as heard
- Follow good "meeting etiquette" principles (one such list:  
<https://blog.gotomeeting.com/7-rules-virtual-meeting-etiquette-every-professional-know/>)

Plan to join at least five minutes before 5:30 pm, to make sure you are ready when class begins. (The very first time you join from a computer or device, allow extra time for set-up.)

The university has many useful tutorials on how to use Zoom here:  
<http://www.sjsu.edu/ecampus/teaching-tools/zoom/index.html>

## Faculty Web Page and MYSJSU Messaging

Course materials such as syllabus, handouts, notes, assignment instructions, etc. can be found on [Canvass Learning Management System course login website](http://www.sjsu.edu/ecampus/teaching-tools/zoom/index.html) at <http://sjsu.instructure.com>. You are responsible for regularly checking with the messaging system through [MySJSU](http://my.sjsu.edu) at <http://my.sjsu.edu> (or other communication system as indicated by the instructor) to learn of any updates.

## Course Description

Examines transportation planning and project development processes, including regional and state system-wide planning; city-county-transit agency planning; project-level planning; environmental review; obtaining governmental approvals; contract management; and project management. Most classes will include a guest speaker with real-world planning experience and advice on the state of the practice.

## MSTM Program Learning Goals:

(Note: Not all program learning goals are covered in every course)

**Goal 1: Transportation Systems and Society:** Craft management decisions that integrate knowledge of multi-modal transportation, social, and environmental systems

**Goal 2: Innovation:** Develop innovative solutions to transportation management challenges

**Goal 3: Leadership:** Develop high-impact leadership styles and competencies (traits, skills, behaviors)

**Goal 4: Communications:** Communicate effectively with a diverse workforce and citizenry

**Goal 5: Analytical skills:** Identify and evaluate transportation management issues using appropriate data and methods

## Course Learning Outcomes

In this course students will explore the planning and development of surface transportation systems in the context of current and past government goals, policies and regulations. The goal is for students to begin to understand the complex interrelationships that exist between transportation, land use, and the environment, the balancing of competing interests in the multi-faceted and multi-jurisdictional intergovernmental settings that are characteristic of states and major metropolitan areas, and the processes followed to develop consensus on transportation strategies.

Upon successful completion of this course, students will be able to:

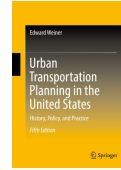
1. Explain the general history of transportation planning in the US and the importance of transportation planning to the transportation system
2. Explain current processes and theories for state, regional, local, and project planning including their relative strengths and weaknesses
3. Explain best practices in public engagement across all type of communities, with a special focus on underserved and historically marginalized groups; discuss how this engagement and environmental review influence planning processes
4. Design effective and feasible performance frameworks; understand some of the tools available to complete necessary analysis including relatives strengths and weaknesses
5. Explain the basic tenants of project management as it relates to the successful development of transportation plans and resulting projects

## Required Texts/Readings

**Textbooks (available online from the SJSU library)**

- Roadways for People: Rethinking Transportation Planning and Engineering by Lynn Peterson (2022)
- The Geography of Urban Transportation Fourth Edition by Genevieve Giuliano and Susan Hanson (2017)
- Inclusive Transportation by Veronica Davis (2023)
- Urban Transportation Planning in the United States: History, Policy, and Practice, Fifth Edition (Spring Publishing) by Ed Weiner (2016)

*Image to the right shows the PDF copy of the book for download*



All other readings will be online and available via Canvas. Students will use the course's Canvas page to confirm all readings and assignments for this class.

## Library Liaison (Optional)

The Library Liaison for the Lucas Graduate School of Business is Christa Bailey (christa.bailey@sjsu.edu).

## Course Requirements and Assignments

Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of 45 hours over the length of the course on instruction, preparation/studying, or course related activities.

The following activities/assignments are required in this course and will be graded:

1. Weekly posts on the assigned readings on the course Canvas page. Approximately 150 words each week. Your weekly reading responses should address the following:
  - a. What are the key takeaway points from reading?
  - b. What interesting or relevant news articles did you find on this topic?
  - c. At the end of your reading response, please also formulate two questions for class discussion based on the reading.
  - d. Reading responses are due by 9:00 pm **PST** on the Sunday before class. No reading response is due for the first or last class.

2. Written assessment of a recent transportation plan from your current or past home city or region. Approximately 2000 words. The use of images is encouraged. More detailed information will be available from Canvas.
3. Written assessment of a planning process and engagement. Attend a public meeting that is part of a transportation planning study. Describe the purpose of the study and how it fits with related planning documents. Summarize what you heard at the meeting from the hosts and from meeting attendees. Describe what methods were used and what recommendations you would have to improve the meeting in the future. It is recommended you reach out to the staff contacts for the meeting to hear what observations they had regarding the meeting and how the input will be used. Approximately 1500 words. More detailed information will be available on Canvas.
4. Team assignment – students will be assigned to a team of 3-4 students to research and analyze transportation data and present findings to the class for a region in the county of the team's choosing. Each team should prepare data files, narrative, and a presentation to be submitted the same day as the presentation. More detail will be available on Canvas.
5. In class efforts, including partner brainstorming on assigned work and group work related to projects.

Tentative course calendar including assignment due dates, date of final exam is “subject to change with fair notice are included below. All work must be submitted via Canvas. Students should clearly identify all of their work with the student’s name clearly indicated on all submitted work and each document title: last name first, first name last and the title of the assignment. Late paper and project assignments will be accepted but the score will be reduced one full letter grade for missing the due date and/or time. In-class assignments may be made up if issues leading to their not being completed are discussed with the professor before or shortly after the time of the missed class. Missed assignments will result in a score of zero. Students who turn assignments in on time will normally receive comments from me within 7-10 days.

## **Grading Information**

The following chart lists the value of each graded assignment and its relationship to overall course grading. Each graded assignment will be returned to students within 7-10 days of submission with comments indicating areas for improvement and to show how specific grades were determined and assigned. Students will have an opportunity to contact the instructor at any time to discuss grades, progress, or other issues as necessary. Should a student wish to speak directly with the instructor a mutually beneficial time will be identified, and the student will contact the instructor by phone at the number provided on the first page of this syllabus.

## **Determination of Grades**

Success in this course is based on the expectation that students will attend each scheduled class and engage with cameras on. Grading will be determined through a combination of scoring weekly write ups and discussion, two papers, and a Course Project.

<b>Assignments and Other Graded Activities</b>	<b>Due</b>	<b>% of Course Grade</b>	<b>Course Learning Objectives Addressed</b>
Weekly reading write-up (8)	Weeks 2-9 Due Sundays at 9 PM PST	30%	1, 2, 3, 4, 5
Hometown Planning Assignment	11/10/25 5:30 PM PST	25%	1, 2, 4, 5
Public Meeting Planning Assignment	12/1/25 5:30 PM PST	25%	1, 2, 3, 4, 5
Team Data & Planning Assignment & Presentation	Outline: Week 7 Final: Week 10 5:30 PM PST	20%	1, 3, 4, 5

- Class Discussion/Current Events: Students are expected to have read assignments completed and be prepared, on the date indicated in the schedule of assignments (below), to discuss the assigned readings and additional readings assigned or as required for the full development of classroom discussions. Students are required to bring with them to every class one current event that they may be asked to present to and analyze for the class. Attendance and readiness to discuss current events will be noted.

- Course Project and Assignments/Papers: Please see above. The teacher is available to review outlines and discuss these with you four or more days before they are due.

- Assignments turned in late, will result in a full grade reduction. For example, if a paper were awarded an A, but was turned in late, the assigned grade would be a B. Unless cleared by the instructor, all assignments are due on the date of the last day of class.

\* Extra credit is NOT available on this course

### Letter grade calculation

<b>Percentage</b>	<b>Grade</b>	<b>Percentage</b>	<b>Grade</b>
98% - 100%	A+	76% - 74%	C

97% - 94%	A	73% - 70%	C-
93% - 90%	A-	69% - 67%	D+
89% - 87%	B+	66% - 64%	D
86% - 84%	B	63% - 60%	D-
83% - 80%	B-	below 60%	F
79% - 77%	C+		

## University Policies

Per [University Policy S16-9](#), relevant university policy concerning all courses, such as student responsibilities, academic integrity, accommodations, dropping and adding, consent for recording of class, etc. and available student services (e.g. learning assistance, counseling, and other resources) are listed on this [Syllabus Information web page](#). Make sure to visit this page to review and be aware of these university policies and resources.

## Course Schedule

*Note:* This schedule is subject to update with fair notice. As necessary, the instructor will provide all information regarding schedule and reading changes in class and through messages sent via Canvass.

Week	Date	Discussion Topics, Reading assignments, and Assigned Work
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1	10/13/2025	<p><b>Discussion Topics</b></p> <ul style="list-style-type: none"> <li>o Student Introductions</li> <li>o Student/Instructor Expectations</li> <li>o Discussion of Class Assignments</li> <li>o Transportation Planning in Perspective <ul style="list-style-type: none"> <li>- Overview</li> <li>- Key planning pursuits</li> <li>- Types of Plans</li> </ul> </li> </ul> <p><b>Reading</b></p> <p>Chapter 1 - The Geography of Urban Transportation Fourth Edition by Genevieve Giuliano and Susan Hanson (2016)</p> <p>Chapter 1: Urban Transportation Planning in the United States: An Historical Overview by Ed Weiner (2016)</p>
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2	10/20/2025	<p><b>Discussion Topics:</b></p> <ul style="list-style-type: none"> <li>o Transportation Planning history</li> <li>o Federal perspectives on planning</li> <li>o Transportation Planning - Regional transportation planning;</li> <li>o Performance Planning for Transportation Planning</li> </ul> <p><b>Reading</b></p> <p>Pages 1 - 12: Model Long-Range Transportation Plans: A Guide for Performance-Based Planning (2023)  <a href="https://rosap.ntl.bts.gov/view/dot/67101/dot_67101_DS1.pdf">https://rosap.ntl.bts.gov/view/dot/67101/dot_67101_DS1.pdf</a></p> <p>Chapter 6 - The Geography of Urban Transportation Fourth Edition by Genevieve Giuliano and Susan Hanson</p> <p>California Transportation Commission, Regional Transportation Plan Guidelines for Metropolitan Planning Organizations <a href="#">2024 RTP Guidelines Update   Caltrans</a></p> <p><b>Learn More:</b></p> <p>USDOT / FHWA – Statewide Transportation Planning  <a href="http://www.fhwa.dot.gov/planning/processes/statewide/index.cfm">http://www.fhwa.dot.gov/planning/processes/statewide/index.cfm</a></p> <p>Infrastructure Investment and Jobs Act, 2021. <a href="#">H.R.3684 - 117th Congress (2021-2022): Infrastructure Investment and Jobs Act   Congress.gov   Library of Congress</a></p> <p>Caltrans: <a href="https://dot.ca.gov/programs/transportation-planning">https://dot.ca.gov/programs/transportation-planning</a></p> <p><b><i>Speaker: Therese Trivedi, Metropolitan Transportation Commission</i></b></p>
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3	10/27/ 2025	<p><b>Discussion</b></p> <ul style="list-style-type: none"> <li>• Performance Frameworks for Transportation Planning: goals &amp; performance measures</li> <li>• County Planning <ul style="list-style-type: none"> <li>○ How do regional and local plans affect county work?</li> </ul> </li> </ul> <p><b>Reading</b></p> <p>Pages 23 - 51: Model Long-Range Transportation Plans: A Guide for Performance-Based Planning (2023)  <a href="https://rosap.ntl.bts.gov/view/dot/67101/dot_67101_DS1.pdf">https://rosap.ntl.bts.gov/view/dot/67101/dot_67101_DS1.pdf</a></p> <p>Scan (no writing): this landing page: <a href="#">Performance Measures - Programs   Office of Intermodal Planning and Investment (virginia.gov)</a></p> <p>Scan (no writing): Pages 1 - 8: Countywide Transportation Plans in the SF Bay Area: <a href="#">Countywide Transportation Plans   Metropolitan Transportation Commission</a></p> <p><b>Learn More:</b></p> <p>Performance Management Under MAP 21/FAST  <a href="http://www.fhwa.dot.gov/map21/pm.cfm">http://www.fhwa.dot.gov/map21/pm.cfm</a></p> <p><b>Speaker: Carolyn Clevenger, Alameda County Transportation</b></p> <p><b>Hometown writing assignment: identified plan &amp; relevance for discussion</b></p>
4	11/3/2025	<p><b>Discussion</b></p> <ul style="list-style-type: none"> <li>• Performance Frameworks for Transportation Planning <ul style="list-style-type: none"> <li>○ System Performance</li> <li>○ Identification of Needs</li> </ul> </li> <li>• Land Use Planning and Economic Development <ul style="list-style-type: none"> <li>○ How do regional and local plans affect county work?</li> </ul> </li> </ul> <p><b>Reading</b></p> <p>Pages 52 - 66: Model Long-Range Transportation Plans: A Guide for Performance-Based Planning (2023)  <a href="https://rosap.ntl.bts.gov/view/dot/67101/dot_67101_DS1.pdf">https://rosap.ntl.bts.gov/view/dot/67101/dot_67101_DS1.pdf</a></p> <p>Chapter 9, Land Use Impacts of Transportation Investments, The Geography of Urban Transportation</p> <p><b>Speaker: Egon Terplan, Consultant</b></p> <p><b>Hometown writing assignment Outline review in class</b></p>

5	11/10/ 2025	<p><b>Discussion</b></p> <ul style="list-style-type: none"> <li>• Outreach &amp; Engagement – what is at the table?</li> <li>• Who to involve and how?</li> <li>• Project scoping – getting going</li> </ul> <p><b>Reading</b></p> <p><u>Scan, no writing:</u> four sections on page: <a href="#">Public Involvement - Transportation Planning Capacity Building Program</a></p> <p>Chapter 1: Roadways for People, Peterson</p> <p>Chapter 1: Inclusive Transportation, Veronica Davis</p> <p><b>Learn More:</b></p> <p>Santa Clara Valley Transportation Authority (VTA) <a href="#">Public Participation Plan EXECUTIVE SUMMARY (vta.org)</a></p> <p><b>Speaker:</b> <i>Winter Consulting</i></p> <p><b>Hometown writing assignment due 11/10/25 5:30 pm PST</b></p>
6	11/17/ 2025	<p><b>Discussion –</b></p> <ul style="list-style-type: none"> <li>• Planning Outcomes</li> <li>• The tie to Funding <ul style="list-style-type: none"> <li>○ Strategies and Investments</li> </ul> </li> </ul> <p><b>Reading</b></p> <p>Elements 6 &amp; 7, Pages: 67 - 84 Model Long-Range Transportation Plans: A Guide for Performance-Based Planning (2023)  <a href="https://rosap.ntl.bts.gov/view/dot/67101/dot_67101_DS1.pdf">https://rosap.ntl.bts.gov/view/dot/67101/dot_67101_DS1.pdf</a></p> <p>Chapter 7, The Geography of Urban Transportation Fourth Edition by Genevieve Giuliano and Susan Hanson, Travel Modeling and Forecasting</p> <p><b>Speaker: Kansai Uchida, Director Systemwide Planning and Policy</b></p>

7	11/24/ 2025	<p><b>Discussion</b></p> <ul style="list-style-type: none"> <li>• Multimodal Planning</li> <li>• Planning for Alternative Modes: <ul style="list-style-type: none"> <li>○ demand management,</li> <li>○ bicycles, and pedestrians</li> </ul> </li> </ul> <p><b>Reading</b></p> <p>Pages 1-12: Pages 1 - 12, Introduction to Multimodal Planning, Todd Litman, Victoria Transport Policy Institute (2024) <a href="http://www.vtpi.org">www.vtpi.org</a></p> <p>“Introduction” <a href="#">DRCOG Denver Active Transportation Plan Executive Summary</a></p> <p>Pages 2 – 6 <a href="#">Met Council Regional Travel Demand Management Study Action Plan (metrocouncil.org)</a></p> <p><b>Learn More</b></p> <p><a href="#">Designing for All Ages &amp; Abilities   National Association of City Transportation Officials (nacto.org)</a></p> <p><a href="#">Mobility Lab   What is transportation demand management, actually?</a></p> <p><b>Speaker: Matt Haynes, Fehr and Peers</b></p> <p><b>Review Public meeting outlines</b></p>
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8	12/1/ 2025	<p><b>Discussion</b></p> <ul style="list-style-type: none"> <li>• From Plans to Projects</li> <li>• Project Development</li> <li>• Environmental Processes</li> </ul> <p><b>Reading</b></p> <p><u>Scan only:</u> slides from Federal transit administration <a href="#">FTA New Starts and Small Starts Program Overview (dot.gov)</a></p> <p>Pages 15 - 25, Funding, Design, and Construction overview  <a href="http://www.transportation.gov/sites/dot.gov/files/2023-02/OSTX-Momentum-Toolkit-01-BuildingGreatInfrastructure-Edition2.pdf">www.transportation.gov/sites/dot.gov/files/2023-02/OSTX-Momentum-Toolkit-01-BuildingGreatInfrastructure-Edition2.pdf</a></p> <p>On this webpage <a href="#">Transportation Planning Business Cases - Province of British Columbia (gov.bc.ca)</a> read this pdf <a href="#">Overview Guidelines for Preparing Business Cases (gov.bc.ca)</a>; I encourage you to scan other pdfs on this page</p> <p><b>Learn More:</b></p> <p><b>For More information</b> this podcast series on the Big Dig in downtown Boston is highly recommended, one of the most ambitious transport projects completed in the last 20 years in the U.S.</p> <p><b>Podcast :</b> <a href="#">The Big Dig   GBH (wgbh.org)</a></p> <p>Caltrans Project Development Procedures Manual (PDPM)  <a href="https://dot.ca.gov/programs/design/manual-project-development-procedures-manual-pdpm">https://dot.ca.gov/programs/design/manual-project-development-procedures-manual-pdpm</a></p> <p>SEA-TAC AIRPORT MASTER PLAN <a href="#">160322_SAMP_Brochure.pdf (portseattle.org)</a></p> <p><b>Public Meeting assignment due</b></p> <p><b>Speaker: Susan Gygi, WSP Vice - President</b></p>
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9	12/8/ 2025	<p><b>Discussion:</b></p> <ul style="list-style-type: none"> <li>• Review Peterson’s planning process modifications and lessons</li> <li>• Scenario Planning</li> <li>• Planning for the Future of Transportation</li> <li>• Considering the Role of the Planner</li> </ul> <p><b>Reading</b></p> <p>Pages 136 – 190 Breaking Down the Community-Based Solutions Approach - Roadways for People: Rethinking Transportation Planning and Engineering by Lynn Peterson; you may skip the section on “community benefits”</p> <p>Chapter 14. Looking to the Future, Genevieve Giuliano with Susan Hanson</p> <p><b>Dream More:</b></p> <p><a href="http://www.futuristspeaker.com/future-scenarios/2050-and-the-future-of-transportation/">http://www.futuristspeaker.com/future-scenarios/2050-and-the-future-of-transportation/</a></p> <p><b>Speaker: Tent: Alex.Kenefick, Caltrans</b></p>
10	12/15/ 2025	<p><b>Presentation of Class Projects – Discussion/ Assessments</b></p> <p>Turn in projects <u>before class begins</u></p>