

**San José State University
Lucas Graduate School of Business**

Master of Science in Transportation Management

MTM 202: Introduction to Transportation Funding & Finance

DRAFT Spring-A 2025 1/9/2025 – 3/13/2025

Course and Contact Information

Instructors:	Susan Binder & Norma Ortega
Office Hours:	By appointment
Class Day/Time:	Thursdays, 5:30 – 9:30 PM, January 9 – March 13
Classroom:	Online via Zoom
Course website:	Canvas (https://sjsu.instructure.com)

Course Format

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

Students attend class sessions by using Zoom, SJSU's online meeting application. Zoom identifies those who have logged in. Therefore, attendance (and participation) will be documented and contribute to your grade.

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 ten minutes before 5:30 pm, to make sure you are ready when class begins, guest lecturers are scheduled early in each class. (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>

Course Description

Introduces financial and managerial uses of accounting information systems and concepts. Includes standard costs, cost-volume-profit relationships, contribution analysis, budgeting, performance measurement, variance analysis, working capital, valuing capital costs and financing investment decisions. Explores use of complex information decision systems.

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 (CLO)

Over a ten week period, students completing this class will gain a basic knowledge of transportation funding at the federal, state, and local levels, Course objectives include learning the fundamental concepts, history and evolution of transportation finance in the United States and California; understanding the sources, mechanisms and applications associated with highway, transit and rail funding; exploring the development and implementation of innovative funding approaches; and examining the workings of financial transportation programs and projects. Students will demonstrate this knowledge and progress will be measured through a class assignment involving the proposal for a new funding source.

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

CLO1: Identify the basic transportation funding sources, how this funding flows, and how it is applied for all major transportation modes.

CLO2: Apply the knowledge gained to assess and determine funding opportunities and strategies for transportation projects in a real-world situation.

CLO3: Assess, through the assigned funding proposal, the scope of transportation needs compared to available funding and identify option for closing the gap between these parameters, as well as the challenges to achieving that closure. Required Texts/Readings

Textbook: *The Drive for Dollars: How Fiscal Politics Shaped Urban Freeways and Transformed American Cities* by [Brian D. Taylor](#) (Author), [Eric A. Morris](#) (Author), [Jeffrey R. Brown](#) (Author). Oxford University Press. Available at Amazon and other retailers for about \$30. The book is also available through the SJSU at [https://csu-sjsu.primo.exlibrisgroup.com/permalink/01CAL\\$SJO/tu4ck5/alma991014230698402919](https://csu-sjsu.primo.exlibrisgroup.com/permalink/01CAL$SJO/tu4ck5/alma991014230698402919)

Other readings are listed below on the attached schedule. Preferrable to read in advance of the class.

Library Liaison

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 for instruction, preparation/studying, or course related activities.

This class is intended to be interactive. Guest speakers are included to provide hands on experience on that particular class topic. Student participation is highly encouraged. Students will be given the opportunity to ask questions, offer opinions, present and/or question ideas, and to interact with the instructors, guest lecturers and fellow students. Please notify instructor in advance of class if you are unable to attend a session, however multiple absences will affect your grade.

Assignment 1: Read the entire textbook, *The Drive for Dollars*, and prepare a two to three page outline of your observations on this reading, concentrating on one of the three historic eras (pre-freeway, early freeway, freeway). Students will then be assigned to one of 6 groups to develop a joint 15-minute presentation of their observations in Sessions 4 and 5. Specific group assignments will be made in Session 1. This assignment represents 35% of the overall course grade: 15% for the PowerPoint, and 20% for the group presentation. *Group presentations on February 6, and February 13, 2025, PowerPoints are due by 5pm on the day of your group presentation.*

Assignment 2: Prepare a whitepaper of at least 3 pages in length listing 2-3 possible **new** funding mechanisms/sources for transportation consistent with the conclusions in *The Drive for Dollars* chapters 10 and 11 concerning the post-freeway era, including pros/cons for each potential source. Discuss particular challenges of securing these funds and the timing associated with implementation. Based upon this preliminary research, one of those mechanisms will be the basis for Assignment 3. *This assignment is Pass/Fail representing 10% of the grade and is due February 10, 2025. This paper will be discussed in your mandatory one-on-one meeting with the professor between February 17 and 21, 2025. This assignment can be considered your preliminary research for your final assignment.*

Final Examination/Evaluation: Assignment 3: Prepare an in-depth white paper on an alternative or supplemental mechanism/source for funding surface transportation. Identify, analyze, and discuss the pro/cons, yield, timing of implementation, probability of success, and the impact on key stakeholders. The project and format will be discussed at the opening session with the instructors. *This assignment represents 50% of the final grade. Assignment is due March 13, 2025. Extra credit can be earned for the last assignment if the completed paper is submitted no later than March 6.*

Grading Information

Task	% of Grade	Course Learning Objective(s) Addressed
Assignment 1, Paper and Group Presentation on The Drive for Dollars	35%	LO1, LO2, LO3

Assignment 2, Identify and Analyze Multiple Alternative Funding Mechanisms and Sources	10%	LO1, LO2, LO3
Assignment 3, Preparation of New Funding Proposal	50%	LO1, LO2, LO3
Attendance/Class Participation	05%	LO1, LO2, LO3

Determination of Grades

Late work will be assessed a penalty of 10% of the percentage of the assignment to the overall grade for every day late, and late work will not be accepted after 4 days past the due date. There will be no credit for missed assignments. For Assignment 3, late work will not be accepted beyond March 13, 2025 as final grades need to be submitted on time. Final grades are determined based on the total points accumulated over the three assignments. Final grades are posted in the Official Transcript system, not on Canvas.

Students will have an opportunity during Session 7 to discuss individual progress and your final assignment in order to map out any remedial strategies to ensure successful completion of the class.

<i>Grade</i>	<i>Percentage</i>
<i>A plus</i>	<i>97 to 100%</i>
<i>A</i>	<i>93 to 96%</i>
<i>A minus</i>	<i>90 to 92%</i>
<i>B plus</i>	<i>87 to 89 %</i>
<i>B</i>	<i>83 to 86%</i>
<i>B minus</i>	<i>80 to 82%</i>
<i>C plus</i>	<i>77 to 79%</i>
<i>C</i>	<i>73 to 76%</i>
<i>C minus</i>	<i>70 to 72%</i>
<i>D plus</i>	<i>67 to 69%</i>
<i>D</i>	<i>63 to 66%</i>
<i>D minus</i>	<i>60 to 62%</i>
<i>F</i>	<i>Below 60%</i>

Classroom Protocol

Participation in class is strongly encouraged. Use of camera is desired. Please mute your cell phone.

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 [Syllabus Information web page \(https://www.sjsu.edu/curriculum/courses/syllabus-info.php\)](https://www.sjsu.edu/curriculum/courses/syllabus-info.php). Make sure to visit this page to review and be aware of these university policies and resources.

Course Number / Title, Semester, Course Schedule

Note: This schedule is subject to change with fair notice. Students will be notified in class and/or via email of any changes.

Course Schedule

Week	Date	Topics, Readings, Assignments, Deadlines
1	1/09	<p>Session 1: First Day of Class – Welcome, Course Outline & Assignments Review</p> <ul style="list-style-type: none"> • Discussion of Class Structure and Assignments • Discussion of Assignments, Class Participation, Book to be used as text • Discussion of Final Paper: Identify and Analyze a New Transportation Funding Alternative • Brief Review of Transportation System Structure • Overview of Transportation Funding <p>Reading: “California’s Transportation System, an LAO Primer” Legislative Analyst Office, June 7, 2018 at: California's Transportation System</p> <p>“Transportation Funding in California 2024” Caltrans: https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/new-state-planning/transportation-economics/transportation-funding-booklet/2024-transportation-funding-in-california-a11y.pdf</p>
2	1/16	<p>Session 2: Federal Transportation Funding</p> <p>Federal Transportation Funding Overview Emphasis on latest Reauthorization Acts – From TEA21 to the Infrastructure and Jobs Act</p> <ul style="list-style-type: none"> • Highway Funding • Transit Funding • Flexible Funding • Overview -- How Federal Funding is Managed in CA <p>Guest Lecturer – Elissa Konove, CA Division Administrator, FHWA</p> <p>Reading: Bipartisan Infrastructure Investment Act Summary https://www.ncsl.org/documents/statefed/IIJA-Section-by-Section.pdf</p> <p>CRS Funding and Financing Highways and Public Transport Federal-Aid Highway Program (FAHP): In Brief (congress.gov)</p> <p>Funding Federal Aid Highways https://www.fhwa.dot.gov/policy/olsp/fundingfederalaid/</p>
3	1/23	<p>Session 3: Passenger Transit Funding</p>

		<ul style="list-style-type: none"> • Passenger Transit Capital and Operating Needs and Budgeting • Transit Funding Programs – Federal, State, Local • Passenger Transit Funding Issues – bus, commuter systems, intercity rail, BRT, shared mobility <p>Guest Lecturer – Arthur Guzzetti, Vice President for Policy and Mobility, American Public Transportation Association (APTA)</p> <p>Reading:</p> <p>CBO’s Federal Financial Support for Public Transit, March 2022 https://www.cbo.gov/system/files/2022-03/57636-Transportation.pdf</p> <p><u>Assignment 1 Due</u></p>
4	1/30	<p>Session 4: State Transportation Funding</p> <ul style="list-style-type: none"> • Understanding transportation funding at the state level • Flow and process for securing transportation funds <p>Guest Lecturer – Steven Keck, Chief Financial Officer, Caltrans</p> <p>Reading:</p> <p>The CTC’s Annual Report to the Legislature, 2024 – Funding section only https://catc.ca.gov/-/media/catc-media/documents/ctc-reports/annual-reports/2024/ctc-131-2024-annual-report-final.pdf</p> <p>“Transportation Funding in California 2024” Caltrans - A Simplified Overview of Transportation Funding only https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/new-state-planning/transportation-economics/transportation-funding-booklet/2024-transportation-funding-in-california-a11y.pdf</p>
5	2/6	<p>Session 5: Local Transportation Funding: A Broad Landscape</p> <p>The Local Picture: counties, MPOs, communities.</p> <ul style="list-style-type: none"> • Subvention Funds • Local Tax Measures (Self-help) • Funding for Transit • Funding for Local Streets and Roads <p>Guest Lecturers – Tilly Chang, Executive Director, SFTCA (Invited) Dawn Vettese, Chief Financial Officer, SANDAG</p> <p><i>GROUP 1 presentation of Assignment 1</i> <i>GROUP 2 presentation of Assignment 1</i></p> <p>Reading:</p>

		<p>Local Funding Charts “Transportation Funding in California, 2024” - See Local Street and Road Funding County Transportation Sales Tax Measures https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/new-state-planning/transportation-economics/transportation-funding-booklet/2024-transportation-funding-in-california-a11y.pdf</p>
6	2/13	<p>Session 6: Alternative Approaches to Revenue Generation Part 1 – Congestion Pricing & Road Charge</p> <ul style="list-style-type: none"> • What is congestion pricing, what are its goals, where is it being advanced, and what forms might it take? Executive Order Transportation Funding and Climate Goals • Policy implications of pricing in its various forms (corridor or facilities tolling, VMT charges, cordon pricing)? • CA Road Charge Pilot Program <p>Guest Lecturer –Jonathan Peters, Professor of Finance and Data Analytics, The City University of New York Lauren Prehoda, Road Charge Program Manager, Caltrans (Invited)</p> <p><i>GROUP 3 presentation of Assignment 1</i> <i>GROUP 4 presentation of Assignment 1</i></p> <p>Readings: Congestion Pricing: Q&A’s – UCLA Institute of Transportation Studies, https://www.its.ucla.edu/for-the-press/congestion-pricing/</p> <p>CRS MBU Charges Mileage-Based Road User Charges (everycrsreport.com)</p> <p><u>Assignment 2 Due</u></p>
7	2/20	<p>Session 7: Class Progress Discussions (To be conducted between February 17 – 21 in lieu of class session</p> <p>Instructors will work with students to arrange a mutually convenient time during this week to discuss individual progress, their conclusions from assignment #2, plans for assignment #3, and answer any questions and concerns about the class.</p>
8	2/27	<p>Session 8: Alternative Approaches to Revenue Part 2 - Tolling, Bonding, P3 and other Financing Mechanisms</p> <ul style="list-style-type: none"> • What is the distinction between “funding” and “financing” and why does it matter? • What is the concept and role of Public-Private-Partnerships (P3’s)? • Where do loan programs such as TIFIA fit in? <p>Guest Lecturer – Jonathan Gifford, Professor, George Mason University and Director, Center for Transportation Public-Private Partnership Policy</p>

		<p>Reading: Financing Transportation Infrastructure in California at: http://www.rand.org/pubs/testimonies/2009/RAND CT322.pdf</p> <p>The Transportation Infrastructure Finance and Innovation Act https://crsreports.congress.gov/product/pdf/R/R45516</p>
9	3/6	<p>Session 9: High Speed Rail Funding and Advancing Policy through Regulation</p> <ul style="list-style-type: none"> • Review of High-Speed Rail (HSR) staging plan and funding approach • Governance: Requiring-Accountability and Transparency • Reporting Requirements and Performance Measures • “Timely Use of Funds” and other Expenditure requirements <p>Guest Lecturers – Jamey Matalka, CFO, HSRA (invited) Tanisha Taylor, Executive Director, CTC</p> <p>Reading: High Speed Rail 2024 Business Plan at: 2024 Business Plan - California High Speed Rail</p> <p>Executive Summary, 2024 CTC Annual Report to the California Legislature at: https://catc.ca.gov/-/media/catc-media/documents/catc-reports/annual-reports/2024/catc-131-2024-annual-report-final.pdf</p>
10	3/13	<p>Session 10: Review of Class. Highlights and “Take Aways”</p> <ul style="list-style-type: none"> • Funding Sources – Federal, State, and Local • Other Funding Alternatives – Sales Tax Measures, Bonding, Tolling, Congestion Pricing, High Speed Rail Funding and P3s • Final “Quiz” (ungraded) • Discussion of future funding challenges <p><u>Assignment 3, Final Paper Due</u></p>