

**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 2024 1/11/2024 – 3/14/2024**

**Course and Contact Information**

**Instructors:** Susan Binder & Norma Ortega

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Norma – [norm7al@yahoo.com](mailto:norm7al@yahoo.com)

**Office Hours:** By appointment

**Class Day/Time:** Thursdays, 5:30 – 9:30 PM, January 11 – March 14

**Classroom:** Online via Zoom

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

**Course Format**

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

Students attend class sessions by 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 ten 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>

## 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.

Other readings are listed below on the attached schedule. Preferable 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](mailto: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. Students will be given the opportunity to ask questions, offer opinions, present and/or question ideas, and to interact with the instructors and fellow students.

**Assignment 1:** Read *The Drive for Dollars* and prepare a two to three page summary of your observations on this reading, concentrating on one of the three historic eras (pre-freeway, early freeway, freeway). Students will be assigned to one of 3-4 groups (depending on size of class) to develop a joint 15-minute presentation of their observations in Sessions 4, 5, 7, 8, and 9. Specific group assignments will be made in Session 1. This assignment represents 35% of the overall course grade: 15% for the individual written summary, and 20% for the group presentation. *Due January 26, 2023.*

**Assignment 2:** Prepare a discussion paper 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, with pros/cons. 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 represents 15% of the grade and is due February 16, 2023. 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 16, 2023.*

## Grading Information

Task	% of Course 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	15%	LO1, LO2, LO3
Assignment 3, Preparation of New Funding Proposal	50%	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 14, 2024 as final grades need to be submitted on time.

Students will have an opportunity during Session 6 7 to discuss Assignment 2 and individual progress 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	1/11	<p><b>Session 1: First Day of Class – Welcome, Course Outline &amp; Assignments Review</b></p> <ul style="list-style-type: none"> <li>• Discussion of Class Structure and Assignments</li> <li>• Discussion of Assignments, Class Participation, Book to be used as text</li> <li>• Discussion of Final Paper: Identify and Analyze a New Transportation Funding Alternative</li> <li>• Brief Review of Transportation System Structure</li> <li>• Overview of Transportation Funding</li> </ul> <p><b>Reading:</b>  “California’s Transportation System”, Legislative Analyst Office, June 7, 2018 at:  <a href="#">California's Transportation System</a></p> <p>“2022 Transportation Funding in California” Caltrans:  <a href="#">Transportation Funding In California 2022</a></p>
2	1/18	<p><b>Session 2: Federal Transportation Funding</b></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"> <li>• Highway Funding</li> <li>• Transit Funding</li> <li>• Flexible Funding</li> <li>• Overview -- How Federal Funding is Managed in CA</li> </ul> <p>Guest Lecturer – Elissa Konove, Acting CA Division Administrator, FHWA</p> <p><b>Reading:</b>  Bipartisan Infrastructure Investment Act Summary  <a href="https://www.ncsl.org/documents/statefed/IIJA-Section-by-Section.pdf">https://www.ncsl.org/documents/statefed/IIJA-Section-by-Section.pdf</a>  CRS Highway and Public Transit Funding Issues  <a href="#">IF10495 (congress.gov)</a></p> <p>CRS Funding and Financing Highways and Public Transport  <a href="#">Federal-Aid Highway Program (FAHP): In Brief (congress.gov)</a></p>
3	1/25	<p><b>Session 3: Passenger Transit Funding</b></p>

		<ul style="list-style-type: none"> <li>• <b>Passenger Transit Capital and Operating Needs and Budgeting</b></li> <li>• <b>Transit Funding Programs – Federal, State, Local</b></li> <li>• <b>Passenger Transit Funding Issues – bus, commuter systems, intercity rail, BRT, shared mobility</b></li> </ul> <p><b>Guest Lecturer –Arthur Guzzetti, VP for Policy and Mobility, APTA</b></p> <p><b>Reading:</b></p> <p><b>CBO’s Federal Financial Support for Public Transit, March 2022</b>  <a href="https://www.cbo.gov/system/files/2022-03/57636-Transportation.pdf">https://www.cbo.gov/system/files/2022-03/57636-Transportation.pdf</a></p> <p><b><u>Assignment 1 Due</u></b></p>
4	2/1	<p><b>Session 4: State Transportation Funding</b></p> <ul style="list-style-type: none"> <li>• Understanding transportation funding at the state level</li> <li>• Flow and process for securing transportation funds</li> </ul> <p><b>Guest Lecturer – Steven Keck, CFO, Caltrans</b></p> <p><b>Reading:</b>  California Transportation Commission's 2023 Annual Report  <a href="https://catc.ca.gov/-/media/ctc-media/documents/ctc-reports/annual-reports/2023/ctc-129-23-full-annual-report-dor.pdf">https://catc.ca.gov/-/media/ctc-media/documents/ctc-reports/annual-reports/2023/ctc-129-23-full-annual-report-dor.pdf</a></p> <p>The LAO transportation report on Transportation  <a href="#">The 2023-24 California Spending Plan: Transportation</a></p> <p><b><i>GROUP 1 presentation of Assignment 1</i></b>  <b><i>GROUP 2 presentation of Assignment 1</i></b></p>
5	2/8	<p><b>Session 5: Local Transportation Funding: A Broad Landscape</b></p> <p>The Local Picture: counties, MPOs, communities.</p> <ul style="list-style-type: none"> <li>• Subvention Funds</li> <li>• Local Tax Measures (Self-help)</li> <li>• Funding for Transit</li> <li>• Funding for Local Streets and Roads</li> </ul> <p><b>Guest Lecturer – Dawn Vettese, Finance Director, SANDAG</b></p> <p><b><i>GROUP 3 presentation of Assignment 1</i></b>  <b><i>GROUP 4 presentation of Assignment 1</i></b></p> <p><b>Reading:</b>  <b>Local Funding Charts</b>  “Transportation Funding in California,” Caltrans 2022 at</p>

		<p><a href="https://www.dot.ca.gov/-/media/dot-media/programs/transportation-planning/economics-data-management/-economics/transportation-funding-in-ca">https://www.dot.ca.gov/-/media/dot-media/programs/transportation-planning/economics-data-management/-economics/transportation-funding-in-ca</a></p> <p><b>Local Option Sales Taxes: Analysis and Articles</b>  “Lessons Learned from 40 Years of Local Option Transportation Sales Taxes in California” by Jaime Lederman, Anne Brown, Brian D. Taylor, Martin Wachs. June 30, 2018 at: <a href="https://journals.sagepub.com">journals.sagepub.com</a></p>
6	2/15	<p><b>Session 6: Alternative Approaches to Revenue Generation Part 1 – Congestion Pricing &amp; Road Charge</b></p> <ul style="list-style-type: none"> <li>• 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</li> <li>• Policy implications of pricing in its various forms (corridor or facilities tolling, VMT charges, cordon pricing)?</li> <li>• Interaction with EV policy</li> <li>• CA Road Charge Pilot Program</li> </ul> <p>Guest Speakers – Tilly Chang, Executive Director, SFTCA (Invited) and Lauren Prehoda, Road Charge Manager, Caltrans (Invited)</p> <p><b>Readings:</b>  Congestion Pricing: Q&amp;A’s – UCLA Institute of Transportation Studies, <a href="https://www.its.ucla.edu/for-the-press/congestion-pricing/">https://www.its.ucla.edu/for-the-press/congestion-pricing/</a></p> <p>California Road Charge Pilot Program Summary Report, June 2017  <a href="https://dot.ca.gov/-/media/dot-media/programs/road-charge/documents/final-report-summary-al ly.pdf">https://dot.ca.gov/-/media/dot-media/programs/road-charge/documents/final-report-summary-al ly.pdf</a></p> <p>CRS MBU Charges  <a href="https://www.everycrsreport.com/files/20160622_R44540_c6fef98de3dec148fe4c4ec21bfl6a5c8aa08887.pdf">https://www.everycrsreport.com/files/20160622_R44540_c6fef98de3dec148fe4c4ec21bfl6a5c8aa08887.pdf</a></p> <p><b><u>Assignment 2 Due</u></b></p>
7	2/22	<p><b>Session 7: Class Progress Discussions</b></p> <p>Instructors will contact students during this four-hour block to discuss individual progress, their conclusions from assignment #2, plans for assignment #3, and answer any questions and concerns about the class.</p>
8	2/29	<p><b>Session 8: Alternative Approaches to Revenue Part 2 - Tolling, Bonding, P3 and other Financing Mechanisms</b></p> <ul style="list-style-type: none"> <li>• What is the distinction between “funding” and “financing” and why does it matter?</li> <li>• What is the concept and role of Public-Private-Partnerships (P3’s)?</li> <li>• Where do loan programs such as TIFIA fit in?</li> </ul> <p>Guest Lecturers –  Jonathan Gifford, Professor, George Mason University and Director, Center for Transportation Public-Private Partnership Policy  Darrell Johnson, Chief Executive Officer, OCTA (Invited)</p>

		<p><b>Reading:</b> Financing Transportation Infrastructure in California at: <a href="http://www.rand.org/pubs/testimonies/2009/RAND_CT322.pdf">http://www.rand.org/pubs/testimonies/2009/RAND_CT322.pdf</a></p> <p><a href="#">The Transportation Infrastructure Finance and Innovation Act (TIFIA) Program (congress.gov)</a></p>
9	3/7	<p><b>Session 9: High Speed Rail Funding and Advancing Policy through Regulation</b></p> <ul style="list-style-type: none"> <li>• Review of High-Speed Rail (HSR) staging plan and funding approach</li> <li>• Governance: Requiring-Accountability and Transparency</li> <li>• Reporting Requirements and Performance Measures</li> <li>• “Timely Use of Funds” and other Expenditure requirements</li> </ul> <p>Guest Lecturers – Brian Annis, CFO, HSRA Tanisha Taylor, Executive Director, CTC</p> <p><b>Reading:</b> High Speed Rail 2022 Business Plan at:  <a href="https://lao.ca.gov/handouts/transportation/2022/High-Speed-Rail-Draft-2022-Business-Plan-030822.pdf">https://lao.ca.gov/handouts/transportation/2022/High-Speed-Rail-Draft-2022-Business-Plan-030822.pdf</a></p> <p>CBO’s Federal Financial Support for Public Transit, March 2022 <a href="https://www.cbo.gov/system/files/2022-03/57636-Transportation.pdf">https://www.cbo.gov/system/files/2022-03/57636-Transportation.pdf</a></p> <p>Executive Summary, 2022 Annual Report to the California Legislature at: <a href="https://catc.ca.gov/-/media/ctc-media/documents/ctc-reports/annual-reports/ctc-12152021-ar-final-web-dor.pdf">https://catc.ca.gov/-/media/ctc-media/documents/ctc-reports/annual-reports/ctc-12152021-ar-final-web-dor.pdf</a></p>
10	3/14	<p><b>Session 10: Review of Class. Highlights and “Take Aways”</b></p> <ul style="list-style-type: none"> <li>• Funding Sources – Federal, State, and Local</li> <li>• Other Funding Alternatives – Sales Tax Measures, Bonding, Tolling, Congestion Pricing, High Speed Rail Funding and P3s</li> <li>• Final “Quiz” (ungraded)</li> <li>• Discussion of future funding challenges</li> </ul> <p><b><u>Assignment 3, Final Paper Due</u></b></p>