

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 2023 1/1/2023 – 3/16/2023

Course and Contact Information

Instructors:	Susan Binder & Norma Ortega
Email:	Susan – sbinder@camsys.com Norma – norm7al@yahoo.com
Office Hours:	By appointment
Class Day/Time:	Thursdays, 5:30 – 9:30 PM, January 12 – March 16
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

Too Big to Fail: American's Failing Infrastructure and the Way Forward – Barry B. LePatner, Foster Publishing, New York. ISBN-10: 0984497803. Available at Amazon and other retailers for about \$26.00). Also available at the following link.

[https://sjsu-primo.hosted.exlibrisgroup.com/permalink/f/1cue0e3/01CAL\\$ALMA71377856370002901](https://sjsu-primo.hosted.exlibrisgroup.com/permalink/f/1cue0e3/01CAL$ALMA71377856370002901)

Other readings are listed on the attached schedule.

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. 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 *Too Big to Fail* and prepare a two to three page summary of your observations on this reading. Students will be assigned to a group 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 two to three page listing of possible new funding sources for transportation with pros/cons. Discuss particular challenges of securing these funds and the timing associated with implementation. *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.*

Assignment 3, Final Evaluation: Prepare a white paper on an alternative source of funding for transportation. Discuss the pro/cons, the timing of implementation, 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.*

Final Examination or Evaluation

Assignment 3, Final Evaluation: Prepare a white paper on an alternative source of funding for transportation. Discuss the pro/cons, the timing of implementation, 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
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Assignment 1, Paper and Group Presentation on Too Big to Fall	35%	LO1, LO2, LO3
Assignment 2, Identify Alternative Funding 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 16, 2023 as final grades need to be submitted.

Students will have an opportunity during Session 6 to discuss individual progress and 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 encouraged. Use of video 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	1/12	<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 Assignment 1, Class Participation, Too Big To Fall • Discussion of Final Paper: Identify a New Transportation Funding Alternative • Brief Review of Transportation System Structure • Overview of Transportation Funding <p>Reading: “California’s Transportation System”, Legislative Analyst Office, June 7, 2018 at: California's Transportation System</p> <p>“2022 Transportation Funding in California” Caltrans: Transportation Funding In California 2022</p>
2	1/19	<p>Session 2: Federal Transportation Funding</p> <p>Federal Transportation Funding Overview Reauthorization Act – From TEA21 to the Infrastructure and Jobs Act</p> <ul style="list-style-type: none"> • How Federal Funding is Managed in CA • Highway Funding • Transit Funding • Flexible Funding <p>Guest Lecturer – Vince Mammano, CA Division Administrator, FHWA</p> <p>Reading: Bipartisan Infrastructure Investment Act Summary https://www.ncsl.org/documents/statefed/IJA-Section-by-Section.pdf CRS Highway and Public Transit Funding Issues IF10495 (congress.gov)</p> <p>CRS Funding and Financing Highways and Public Transport Federal-Aid Highway Program (FAHP): In Brief (congress.gov)</p>
3	1/26	<p>Session 3: State Transportation Funding</p>

Week	Date	Topics, Readings, Assignments, Deadlines
		<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, CFO, Caltrans</p> <p>Reading: CTC’s 2022 Annual Report Summary to the California Legislature at https://catc.ca.gov/-/media/ctc-media/documents/ctc-reports/annual-reports/2022/2022-areport-final-all1y.pdf</p> <p>The following LAO transportation reports of the 2022-23 Transportation Infrastructure Package -</p> <p>Initial Assessment, 02/15/22 Report 4628 https://lao.ca.gov/reports/2022/4536/transportation-infrastructure-021522.pdf</p> <p>The 2022-23 California Spending Plan – Transportation, 9/29/22 https://lao.ca.gov/Publications/Report/4628</p> <p><u>Assignment 1 Due:</u> The first part of this assignment is due, a two to three page summary of your observations of Too Big To Fall. The second part of this assignment is the group presentations to be held during Sessions 5, 7, 8, and 9. Specific group assignments will be made in Session 1. This assignment plus group participation represents 35% of the overall grade.</p>
4	2/2	<p>Session 4: Local Transportation Funds: A Large Landscape</p> <p>The Local Picture</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 Lecturer – Dawn Vettese, Finance Director, SANDAG</p> <p>Reading: Local Funding Charts “Transportation Funding in California,” Caltrans 2022 at http://www.dot.ca.gov/-/media/dot-media/programs/transportation-planning/economics-data-management/-economics/transportation-funding-in-ca</p> <p>Local Option Sales Taxes: Analysis and Articles “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: journals.sagepub.com</p>

Week	Date	Topics, Readings, Assignments, Deadlines
5	2/9	<p>Session 5: Changing Environment. Alternative Approaches to Revenue Generation – Congestion Pricing & Road Charge</p> <ul style="list-style-type: none"> • VMT policy implications • EV policy • CA Road Charge Pilot Program • Executive Order Transportation Funding and Climate Goals • Group 1 Presentation of Assignment 1. <p>Guest Speakers – Tilly Chang, Executive Director, SFTCA and Lauren Prehoda, Road Charge Manager, Caltrans</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>California Road Charge Pilot Program Summary Report, June 2017 https://dot.ca.gov/-/media/dot-media/programs/road-charge/documents/final-report-summary-a11y.pdf</p> <p>CRS MBU Charges https://www.everycrsreport.com/files/20160622_R44540_c6fef98de3dec148fe4c4ec21bf16a5c8aa08887.pdf</p>
6	2/16	<p>Session 6: Class Progress Discussions</p> <p>Instructors will contact students during this four-hour block to discuss individual progress and answer any questions and concerns about the class.</p> <p><u>Assignment 2 Due:</u> Prepare a two-three page listing of possible new funding sources for transportation. Discuss particular challenges of securing these funds and timing associated with implementation. <i>This assignment represents 15% of the grade. This serves as your preliminary research for your final assignment.</i></p>
7	2/23	<p>Session 7: Changing Environment. Alternative Approaches to Revenue - Tolling, Bonding, P3 and other Financing Mechanisms</p> <ul style="list-style-type: none"> • Funding Mega Projects • TIFIA, P3 • Group 2 Presentation of Assignment 1 <p>Guest Lecturer – Anne Mayer, Executive Director, RCTC and Morteza Farajian (Invited) Executive Director, BATIC</p> <p>Reading: Financing Transportation Infrastructure in California at:</p>

Week	Date	Topics, Readings, Assignments, Deadlines
		<p>http://www.rand.org/pubs/testimonies/2009/RAND CT322.pdf</p> <p>The Transportation Infrastructure Finance and Innovation Act (TIFIA) Program (congress.gov)</p> <p>Assignment 2 Due: Prepare a two-three page listing of possible new funding sources for transportation. Discuss particular challenges of securing these funds and timing associated with implementation. <i>This assignment represents 15% of the grade. This serves as your preliminary research for your final assignment.</i></p>
8	3/2	<p>Session 8: Regulatory Requirements for Transportation Funds</p> <ul style="list-style-type: none"> • Accountability and Transparency • Reporting Requirements • Performance Measures • “Timely Use of Funds” and other Expenditure requirements • Group 3 Presentation of Assignment 1 <p>Guest Lecturer – Mitch Weiss, Executive Director, CTC</p> <p>Reading: Executive Summary, 2022 Annual Report to the California Legislature at: https://catc.ca.gov/-/media/ctc-media/documents/ctc-reports/annual-reports/ctc-12152021-ar-final-web-dor.pdf</p>
9	3/9	<p>Session 9: Passenger Transit Funding - High Speed Rail Funding and Public Transit</p> <ul style="list-style-type: none"> • Review of High-Speed Rail (HSR) staging plan and funding approach • Transit Funding Programs • Passenger Transit Funding • Group 4 Presentation of Assignment 1 <p>Guest Lecturer - Brian Annis, CFO, HSRA</p> <p>Reading: High Speed Rail 2022 Business Plan at: https://hsr.ca.gov/about/business-plans/2020/</p> <p>https://lao.ca.gov/handouts/transportation/2022/High-Speed-Rail-Draft-2022-Business-Plan-030822.pdf</p> <p>CBO’s Federal Financial Support for Public Transit, March 2022 https://www.cbo.gov/system/files/2022-03/57636-Transportation.pdf</p>

Week	Date	Topics, Readings, Assignments, Deadlines
10	3/16	<p>Session 10: Review of Class Highlights and “Take Aways”</p> <ul style="list-style-type: none"> <li>• Funding Sources – Federal, State, and Local <li>• Other Funding Alternatives – Sales Tax Measures, Bonding, Tolling, Congestion Pricing, High Speed Rail Funding and P3s <li>• Final “Quiz” (ungraded) <p><u>Assignment 3, Final Paper Due:</u> Prepare a white paper on an alternative source of funding for transportation. Discuss the pro/cons, the timing of implementation, and the impact on key stakeholders. The project and format will be discussed at the opening session with the instructors. <i>This assignment represents 50% of the final grade. Assignment is due March 16, 2023</i></p>