San José State University Lucas Graduate School of Business

Master of Science in Transportation Management

M 245: High-Speed Rail Management I

Fall-A 2018

Course and Instructor Contact Information

Instructor: Eric Eidlin

Office Location: Contact instructor

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Office Hours: By appointment

Class Day/Time: Tuesdays, 5:30 – 9:30 pm, from July 31 to October 2, 2018

Classroom: See information below in the "course format" section.

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

Course Format

Students attend class sessions via live video conferencing at the site most convenient to them, with sites at the Mineta Transportation Institute, Caltrans District headquarters, and other participating agencies. Students may also participate in the class remotely via an online platform called Zoom.

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 going in person to one of the MTM program videoconferencing sites *or* by joining online using Zoom, SJSU's online meeting application.

MTM Class Videoconferencing Sites:

Videoconference sites are located at the Mineta Transportation Institute, Caltrans district offices, and other participating agencies. For information about these options, contact the Education Director, Professor Asha W. Agrawal, at asha.weinstein.agrawal@sjsu.edu.

Online Access via Zoom:

You can join class using SJSU Zoom from any location, as long as you:

- Are 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/)

To access class sessions by Zoom, click on the following link from your computer or tablet: https://sjsu.zoom.us/j/169495918

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

Faculty Web Page and MYSJSU Messaging

Course materials such as syllabus, handouts, notes, assignment instructions, etc. can be found on my faculty web page at http://www.sjsu.edu/people/eric.eidlin and/or on Canvas Leaning Management System course login website at http://sjsu.instructure.com. You are responsible for regularly checking with the messaging system through MySJSU at http://my.sjsu.edu (or other communication system as indicated by the instructor) to learn of any updates.

Course Description

The course is designated for students interested in participating in the evolving high-speed rail program in the United States. The course will introduce students to the HS Passenger Rail mode and describe its attributes and technical components. The course will also deal with general enterprise management and the management competencies required. It will also introduce students to the issues of organizing for HSR project development and implementation.

MSTM Program Goals:

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

Goal One: Management of Transportation Organizations

Develop a system-level and global perspective on the management of transportation organizations.

Goal Two: Transportation Policy

Develop an awareness of the transportation policy environment, including fiscal mechanisms, legislative structures, and intergovernmental coordination.

Goal Three: Leadership

Develop potential for leadership in transportation organizations.

Goal Four: Communication Skills

Develop written and oral communication skills and techniques.

Goal Five: Analytical Skills

Develop ability to analyze management issues and situations using appropriate conceptual approaches.

Goal Six: Information Technology

Develop basic understanding of commonly used information technology applications used by the transportation industry.

Course Learning Outcomes

Background and Overview

The California high-speed rail (CHSR) project is one of the largest, most complex, costly, and controversial infrastructure projects in the state's history. While proponents of the project argue that high-speed rail (HSR) is an essential component of a more sustainable and low-carbon transportation future, opponents criticize it as a waste of taxpayer money, citing the lack of a historic tradition of rail travel in California and the lack of rail-supportive development patterns in the cities along the planned HSR route.

While the notion of HSR in California was initially proposed in the late 1980s, it was not until 2008 that the project moved from being a concept to a more tangible capital project. In that year, California voters passed Proposition 1A, a \$10 billion bond measure that generated the initial down payment to start the project. In 2015, construction on the project began in Fresno.

Today, progress on the project is visible at 17 active construction sites employing 1,700 workers are visible over a 119-mile corridor stretching from Madera to North of Bakersfield. Approximately \$3 billion have been invested. But construction on the project has been slower and costs have been higher than anticipated. CHSR's latest Business Plan acknowledges these realities and suggests a path toward implementation that is slower. Governor Jerry Brown, who has been an ardent supporter of the project, will end his term as governor in November 2018. His successor may not be as supportive of the project. Within this context of political and financial uncertainty, the project inches forward.

This class will focus on the California High-Speed Rail Project. It will begin by providing students an overview of HSR as a transportation technology. It will focus on a number of questions and issues, including the following:

- Worldwide, in which contexts has HSR been most successful and why?
- Key concepts relating to HSR and urban development
- The interrelationship of HSR to conventional intercity rail and urban public transportation
- Models of HSR development at the statewide or national levels
- Models of national/statewide rail governance

Governance for station areas

Course Learning Objectives

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

- 1. Address the impacts of HSR on the operation of existing intercity rail and freight services.
- 2. Evaluate case studies of HSR projects worldwide that are currently being developed, including:
 - a. California High Speed Rail Project
 - b. Midwest High Speed Rail Project
 - c. Pacific Northwest High Speed Rail Project
 - d. European Projects: Spain, France, Italy, Germany, UK
 - e. Australian Speed Rail Project
- 3. Describe the key institutional, legislative, and funding mechanisms that have instrumental in the development of high-speed rail systems worldwide.
- 4. Explain the appropriate role of different levels of government (local, regional, state, federal), as well as the private sector, in HSR in California.
- 5. Explain the difference between accessibility and mobility as goals of transportation planning
- 6. Describe the relationships between transportation, land use and urban form.
- 7. Describe the critical components of managing public transportation organizations.
- 8. Gather quantitative data and use that as evidence in a presentation or report.
- 9. Present both sides of a policy argument and balance competing interests in coming up with a recommended approach.
- 10. Describe the potential of a high-speed rail system to shape or impact development and the barriers to achieving it.

Required Texts/Readings

Textbook

Blas Luis Pérez Henríquez and Elizabeth Deakin eds. (2018). High-Speed Rail and Sustainability: Decision-Making and The Political Economy of Investment. New York: Routledge. ISBN-13: 978-1138891975. You may purchase this book or access it for free via the SJSU library via the <u>following link</u>.

Other Readings

Other readings will be available via weblinks on a Dropbox folder set up for this class.

Other technology requirements / equipment / material

Students will be able to join the class remotely via Zoom. (See instructions above)

Library Liaison

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

Course Requirements and Assignments

In addition to the general guidance provided below, I will provide specific guidance on individual assignments over the course of the semester.

Weekly readings and class participation

You will be required to complete weekly readings, submit weekly reading responses, and participate in class discussion. The class size facilitates significant conversation and discussion of the topics in the readings and how they relate to examples in the Bay Area and statewide. Your weekly reading responses should address the following:

- What are the key takeaway points from the reading?
- What interesting or relevant news articles did you find on this topic?

Additionally, I would like for you to:

- Formulate two or three questions for class discussion based on the reading. This is due 48 hours before class.
- React to / reflect upon the questions posed by two other students. This is due before the beginning of class.

Toward the end of each class, I will preview the readings for the following class and give suggestions on what you may want to focus on in your reading responses.

Students will be assigned a pass/fail grade based on their participation in class. A passing grade means that a student regularly contributes to class discussion and submits thoughtful questions each week that demonstrate an understanding of assigned readings.

Assignment 1: Before and After Student Position Papers (pass/fail):

Each student will write a one-page position paper on California High Speed Rail at the start of the class, and another at the end of the class. You can support or oppose the project, or you can simply suggest what you think the project means for the future of California. These papers are mandatory and should be thoughtful and carefully edited, but they will not be graded. The point of this exercise is to assess whether the course affects your thinking about this important project and the ongoing policy debate that surrounds it. The "before" paper, must be turned in by 11:59pm on August 6, the evening before the second class via Canvas. The "after" paper is due on 11:59pm on October 1, the eve of the last class. Your position is personal and will be shared with others by the professor only if you grant permission to do so.

Assignment 2: Lead a Class Discussion

Each student is responsible for being a class discussion leader and helping set up the class discussion at least once during the semester. If you are the discussion leader for the day/week, you will begin the class with a short (five to ten minute) overview of some of the key themes in the week's readings that you felt were most important or compelling.

You may choose to highlight an example of a project that is particularly relevant to the day's discussion, which can be a domestic or international example. Or if the week's readings were a case study, you may want to think about how the case applies to another city or region. At the end of your overview, you will pose questions for the class discussion. You may want to hand out the questions to the students or write them up on the board. You will not be responsible for facilitating the discussion thereafter.

While you will not receive a grade for your overview/discussion leading, this will be a part of your overall class participation grade.

Assignment 3: Track a project or part of the high-speed rail process

Each student will track a specific project or portion of the high-speed rail project over the course of the semester. The purpose is to gain a deeper understanding of California's present-day urban and regional planning opportunities and challenges and to understand the complexities and tradeoffs involved in a planning process. If possible, the project should be related to the group project that you will be working on throughout the semester. Some suggested projects to track include: the planning around Diridon Station in San Jose, the extension of BART to San Jose, the Pacheco Pass Tunnel, the extension of Caltrain to Transbay Terminal (DTX), the Caltrain Corridor Business Plan, decisions on where to site stations in Gilroy or Bakersfield, or other portions of the high-speed rail system. A meeting of the California High-Speed Rail Authority would also suffice. All students must attend at least one public meeting related to the project as part of this assignment.

To complete the assignment, each student will attend the public meeting, take notes and then share two observations, a lesson and question back to the class orally. This should be a 5-7 minute presentation without slides. Your observations might include:

- Who convened the meeting and for what purpose?
- Who attended the meeting (both public officials and agency staff as well as members of the public). What were their roles or perspectives? Who do they represent, if anyone other than themselves?
- What are key tensions and public choices and tradeoffs that were discussed in the meeting?
- Were there any public choices and tradeoffs that were not discussed?
- What was the role of this group, the broader public, the private sector, and elected and appointed officials in making decisions about these choices and tradeoffs?
- What observations do you have about the quality of the information, discussion and outcomes of the meeting?

Early in the semester, you will meet with the instructor to discuss what element of the CHSR project that you will choose to focus on. You will make an ultimate decision by the beginning of Class 4 on August 21.

Final Assignment: Memo Taking a Position on Project/Issue Tracked in Assignment 3

Propose and submit a memo, not to exceed 8 pages, in which the student argues a position, likely on the project tracked in Assignment 3, but not necessarily so.

This memo will be due by 11:59pm on the evening before the second last class, on September 25. In addition, you will give an overview of your memo, no longer than 10 minutes in length, either during class time, either during the September 25 or the October 2 session.

Grading Information

Detailed information on grading will be provided in separate handouts describing the grading for individual assignments.

Penalty (if any) for late or missed work not completed by the due date will be a third of a grade for each three days. For example, if a paper is submitted 1-3 days after the due date and earns a grade of A, the final grade after the penalty will be an A-.

Task	% of Course Grade	Learning Objectives Addressed
Assignment 4: Memo	40%	LOs 1-10
Presentation of memo	10%	L0s 9,10
In-class participation	25%	LOs 1-7,9,10
Reading responses	25%	LOs 1-7,9,10
Total	100%	

Determination of Grades

- A statement of how grades will be determined for the course, including +/- grades if they are used.
- Extra credit options, if available.
- List of the percentage weight assigned to various class assignments.
- Penalty (if any) for late or missed work.

Percentage	Grade
94% and above	A
93% - 90%	A-
89% - 87%	B+
86% - 84%	В
83% - 80%	B-
79% - 77%	C+
76% - 73%	C
72% - 70%	C-
69% - 67%	D+
66% - 63%	D
62% - 60%	D-
below 60%	F

Classroom Protocol for the Lucas College Graduate School of Business

http://www.sjsu.edu/cob/Students/policies/index.html

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/"

Lucas College and Graduate School of Business Mission

We are the institution of opportunity in Silicon Valley, educating future leaders through experiential learning and character development in a global business community and by conducting research that contributes to business theory, practice and education.

Course Schedule

Note: This schedule is subject to change with fair notice. I may need to rearrange the order of some classes in order to accommodate the schedules of guest speakers. When changes to the weekly schedule occur, I will give you as much advance notice as possible, but at least one week's advance notice.

Date	Class Activities, Readings, & Assignments	
7/31	Week 1: Introduction to Class	
	 Agenda Introductions by students (students introduce themselves, explain what they hope to learn from the class) Overview of syllabus Introduction to CA High Speed Rail and to Student Responsibilities 	
	Required Reading (in advance of class) Executive Summary of Eric Eidlin, Making the Most of High-Speed Rail in California: Lessons from France and Germany, June 11, 2015.	
	 Optional Materials: If you are new to the topic of High Speed Rail, you might enjoy and benefit from watching an informative and easy-to-watch series that appeared in 1982 on the PBS television network entitled "Tracking the Supertrains," A six-part series that is remarkably "current" given when it was made. See here. A nice comparison of views on California High Speed Rail was presented in ACCESS magazine in 1994 - Peter Hall was a strong proponent of the California HSR system and Adib Kanifani was a skeptic. See: Hall's "Time for Rail Again" and Kanafani's "No Rush to Catch the Train" 	
	Guest speaker: Ben Tripousis	
8/7	 Week 2: What is high-speed rail and how are we planning for it in California? Agenda Presentation by instructor: "Why High-Speed Rail and Who is it for?" Discussion of readings 	
	 Required Readings: Chapter 1 of textbook: Background on high-speed rail (Deakin) Chapter 12 of textbook: Background on high-speed rail in California (Deakin) Review the Web Site of the California HSR Authority, taking note of its Board membership, and its recent news releases. See: http://www.hsr.ca.gov/. Sign up for news updates. 	

8/14 Week 3: Development of HSR Systems Worldwide

Agenda

- Development of HSR systems worldwide (what were factors?)
- Role of different levels of government in funding and implementing those projects
- Relevance for the U.S.
- Students will select and summarize one of the chapters below, address the issues above

Readings

Textbook chapters on development of HSR worldwide:

- Chapter 2: "Realising the potential of HSR: the United Kingdom experience" (David Banister and Moshe Givoni)
- Chapter 3: "The Shinkansen and its impacts" (Yoshitsugu Hayashi, Aoto Mimuro, Ji Han and Hirokazu Kato)
- Chapter 4: "Where high-speed rail is relevant: the French case study" (Yves Crozet)
- Chapter 5: "Evidence from the Italian high-speed rail market: competition between modes and between HSR operators" (Ennio Casceta and Pierluigi Copola)
- Chapter 6 "High-speed rail in Spain: territorial management and sustainable urban development" (José M. de Ureña, Manuel Benegas and Inmaculada Mohíno)
- Chapter 7 "High-speed rail and air travel complementarity: the case of Germany" (Werner Rothengatter)
- Additionally, please read this report as background information that will be relevant for many classes throughout the semester: <u>SPUR Seamless Transit report</u> (Amin, Barz)

Guest speaker: TBD

Week 4: How is HSR being implemented in California?

Agenda

- What was the initial vision?
- How has the project evolved over time?
- California Proposition 1A, 2008
- CAHSR Business Plans

Required Readings

- Draft 2012 Business Plan, read
 - o Executive Summary
 - o Chapter 2, "A Phased Implementation Strategy"
- 2018 Business Plan, read
 - o Executive Summary
 - o Chapter 2, "Implementation and Delivery Strategy"
- Wikipedia page on California Proposition 1A (2008)

Guest speaker: Boris Lipkin, Acting Northern California Regional Director, CAHSR

8/21

8/28

Week 5: Development of other large infrastructure programs in the U.S. + Megaprojects and Risk

Agenda

While the California HSR project is unique in some respects, many of the issues and challenges that it faces are typical of large transportation megaprojects. In this week's class, we will discuss some key readings from the large body of literature on this topic.

Required Readings

- Bent Flyvbjerg, What You Should Know about Megaprojects and Why: An Overview
- Bent Flyvberg Megaprojects and Risk (selection of chapters, students may need to purchase)
- Karen Frick: <u>Pursuing the Technological Sublime</u>: How the Bay Bridge Became a Megaproject

Guest speaker: Dr. Marty Wachs

9/4

Week 6: Other Large Transportation Infrastructure Projects in Recent U.S. History

Agenda

Most HSR projects worldwide benefited from strong and clear support from the highest levels of government. The California project, by contrast, is being implemented in a context of much greater uncertainty.

In this class, we will compare the HSR project to other large transportation infrastructure projects that have successfully been implemented in the U.S., including the Interstate Highway Program and BART.

We will ask:

- How were these other large infrastructure programs discussed and evaluated when they were first being considered?
- How is the California HSR project similar and/or different from these?

Readings

- Excerpts from: McNichol, Dan (2006). The Roads That Built America: The Incredible Story of the U.S. Interstate System. New York: Sterling.
- BART, excerpts from Michael Healy, BART: The Dramatic History of the Bay Area Rapid Transit System. Podcast here.

9/11 Week 7: Best practices in station development Enhancing local and regional accessibility at HSR stations Best practices and worst practices worldwide Examples of (a) large central city stations; (b) mid-sized city stations; (c) peripheral and exurban stations What were main factors for success and/or failure? Case studies San Pancras Station **Denver Union Station** French High-Speed-Rail-Oriented Development (e.g. Lyon, Lille, Bordeaux) Readings On High-Speed Rail, City Building, and a Visionary French Mayor: The Case of Lille (Eidlin) • Remainder of Making the Most of High-Speed Rail in California: Lessons from France and Germany (Eidlin). Chapter 20 of textbook: High-speed rail stations as transportation nodes and places (Loukaitou-Sideris and Peters). *Guest speaker: Nicole Soultanov* Week 8: What is HSR-Oriented Development and how to Maximize it in California? 9/18 Agenda Governance models and financial tools necessary to make the most of the economic development potential of HSR? Governance models and legal powers from abroad to facilitate project delivery o Case study: the French Societé Publique Locale The death of redevelopment in California: what now? Legislative proposals in California to address these issues (e.g. David Chiu's AB 3037) **Readings** Harnessing High-Speed Rail (Terplan) Chapter 15 of textbook: High-speed rail and economic development: business agglomerations and policy implications Guest speaker: Egon Terplan 9/25 Week 9: Project Evaluation Methods for Large Capital Projects **Agenda** • High-speed rail and environmental review in U.S. CEQA/NEPA often used as de-facto project evaluation tool. Is this appropriate? Alternative models from abroad that place a greater emphasis on strategic planning **Required Readings** Chapter 16 from textbook: Environmental impact of HSR in California (Deakin)

Additional readings to be provided by guest speaker ahead of class

Guest speaker: Lou Thompson

10/2

Week 10: The Role of Cities in Megaproject Development + Prospects for California HSR: What is the Best Path Forward?

Transportation infrastructure projects have long defined urban neighborhoods and entire cities. Historically, these projects have been designed without a full appreciation of the ways in which they shape the communities that they go through. Bearing this history in mind, some of the large cities along the California High-Speed Rail route have taken an active role in shaping the transportation infrastructure that goes through their communities.

In this class, we will hear from representatives of the City of San Jose who will discuss steps that San Jose is proactively taking to ensure that the many large transportation infrastructure projects that are currently being planned there are planned and designed so as to be as compatible and beneficial for the city as possible.

- March 30: Diridon Station Area/Regional Rail Project (City Council) <u>Agenda</u>
- Memorandum
- Powerpoint Presentation

Guest speakers: John Ristow, Acting Director, San Jose Department of Transportation (SJDOT) + the SJDOT San Regional Rail Team, Leslie Rogers, Former FTA Regional Administrator

Guest speaker: TBD