# Department of Urban Planning Luskin School of Public Affairs University of California, Los Angeles

# UP256/PP222: Transportation Economics, Finance, and Policy

Quarter: Spring 2023

Room: 2232 Public Affairs Building

Class sessions: Tuesdays and Thursdays 9:30 - 10:45 am

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Office hours: Mondays and Wednesdays: 11am – 12 pm and by appointment

# **Course Description**

This course examines transportation finance—how we pay for our transportation infrastructure—and transportation economics—how well those systems perform, and how they influence our larger economy. These topics overlap, but they are distinct. They are also broad: this is a survey course that tries to introduce multiple important ideas. In ten weeks, we can only touch the surface of these issues, and it may be hard to stitch them together seamlessly. The goal, however, is to have students emerge with a sense of what the large ideas and debates in transportation economics and finance are. To that end, we will examine debates about the best ways to finance our transportation infrastructure, and about why some of our infrastructure is in such sore need of repair. We will also explore the tension between system finance and system performance. Governments often choose to finance transportation in ways that are politically popular but that ultimately make the systems perform worse than they otherwise might. For example, cities are often reluctant to charge users of transportation directly for transportation services, and as a result our systems are simultaneously overused and under-financed. Cities also often use transportation prices, such as tolls, as tools to raise revenue rather than to manage performance. Finally, we will discuss why transportation is economically valuable: policymakers regularly (and mistakenly) think of transportation's contributions to the economy in terms of the jobs that are created by building transportation infrastructure, rather than the jobs that are created when that infrastructure works well.

#### Assessment

Attendance and Participation: 15% of your final grade

5 Critical Reading Summaries: 35%

Take-home final Exam: 50%

## **Five Critical Summaries of the Required Readings**

Counts for 25% of final grade (7% per paper)

Planners and policy analysts are frequently asked to synthesize detailed and sometimes technical work clearly and concisely, and critically analyze these findings. Accordingly, the critical summaries are designed to improve your critical writing skills. Think of these summaries as policy briefs for a busy and uninformed city mayor. The critical summaries should: (1) introduce the mayor to a particular topic area (what is congestion pricing?); (2) summarize what is known about the topic area and (3) identify shortcomings in what we know about a subject and the challenges presented by the particular policy area (in this last part, you should provide an "editorial" view of the readings, namely, offer comments, criticisms, or insights on their collective content).

The summaries should be submitted via the course website by the day of the session which discusses the readings you choose to summarize. So for instance: if we spend two sessions discussing highway finance and you choose to write about that, your response would be due by the end of the second class on that topic. (You can, of course, turn it in earlier). You are not required to do any external research. The five topics you choose are entirely up to you. The summaries should be about 750 to 1,000 words (3 to 4 pages) each, double-spaced with 1-inch margins and 12-point type. Write in the active voice, and use minimal jargon. The papers should also clearly indicate the course topic being reviewed.

Please do not write summaries for the following sessions:

An Infrastructure Bill, Finally How Sticky is the Work from Home Trend? Rethinking Globalization

#### **Late Submission Penalties**

Reading summaries turned in after a deadline has passed will be deducted one third of a letter grade, without exception. Reading summaries will not be accepted a week after the submission deadline has passed.

#### **Take-Home Final Exam**

At the end of week 10 (Friday 9<sup>th</sup> June), I will post a take-home final exam to the course website. You will be required to return your exams to me one week later (Friday 16<sup>th</sup> June). You will be required to write five short essays about topics covered in the class. More information about the exam will be provided in class.

## **Academic Integrity**

UCLA's policy about plagiarism is clear: the sources of all ideas, text, pictures, or graphics that are not your (or your team's) own must be fully cited, all passages copied from other sources must be in quotation marks with the source cited, and you absolutely cannot submit materials that have previously been submitted by other students in previous iterations of this course, even if you have re-worked this material for your submission. Being in this class constitutes an acknowledgment and willingness to abide by UCLA's academic integrity policies. Should you have any questions about these policies, go to: http://www.studentgroups.ucla.edu/dos/students/integrity/.

## **Weekly Topics and Required Readings**

Note: The schedule is subject to change depending on how quickly or slowly we move. Students should complete the reading for each class before the class meets. Most of the readings are available on the course website.

## **Weekly Topics and Required Readings**

## Week 1

Tuesday, April 4: Introduction and Course Overview

Course outline and requirements, student introductions.

Thursday, April 6: Economic Geography and Transportation Costs

Required readings:

Chapter 1 of Moretti, E. (2012). The new geography of jobs. Houghton Mifflin Harcourt.

Chapter 1 and pages 29-41 of chapter 3 of Storper, M., Kemeny, T., Makarem, N., & Osman, T. (2015). The Rise and Fall of Urban Economies: Lessons from San Francisco and Los Angeles. Stanford University Press.

Glaeser, E. L., & Kohlhase, J. E. (2004). Cities, regions and the decline of transport costs. Papers in regional Science, 83(1), 197-228.

Pages 1-8 of Redding, S. J., & Turner, M. A. (2014). Transportation costs and the spatial organization of economic activity (No. w20235). National Bureau of Economic Research.

## Week 2

Tuesday, April 11:

**Economic Geography and Transportation Costs Cont...** 

Required readings:

Same as before

Thursday, April 13: Globalization and Supply Chains

Required readings:

Chapter 6. Transportation Costs and Specialization. World Development Report (2009): Reshaping Economic Geography. World Bank, 2009.

Mckinsey Global Institute (2019). Executive Summary Of Globalization In Transition: The Future Of Trade And Value Chains January 2019

https://www.mckinsey.com/~/media/mckinsey/featured%20insights/innovation/globalization%20in%20transition%20the%20future%20of%20trade%20and%20value%20chains/mgi-globalization-in-transition-the-future-of-trade-and-value-chains-executive-summary.pdf

## Week 3

# Tuesday, April 18: Rethinking Globalization

## Required readings:

"Why the Pandemic Has Disrupted Supply Chains" By Susan Helper and Evan Soltas, June 17, 2021

 $\frac{https://www.whitehouse.gov/cea/written-materials/2021/06/17/why-the-pandemic-has-disrupted-supply-chains/$ 

Is It Time to Rethink Globalized Supply Chains? By Willy Shih March 19, 2020 <a href="https://sloanreview.mit.edu/article/is-it-time-to-rethink-globalized-supply-chains/">https://sloanreview.mit.edu/article/is-it-time-to-rethink-globalized-supply-chains/</a>

How the Supply Chain Crisis Unfolded By <u>Lazaro Gamio</u> and <u>Peter S. Goodman</u>, Dec. 5, 2021

 $\underline{https://www.nytimes.com/interactive/2021/12/05/business/economy/supply-chain.html}$ 

# Thursday, April 20:

#### **Transportation Investment and Economic Development**

## Required readings:

Glaeser, E. (2016). "If You Build It . . . Myths and realities about America's infrastructure spending," City Journal, Summer 2016

Christine Cooper and Somjita Mitra. 2016. Measure M Economic Impact Study. LA Economic Development Commission.

Chatman, D. G., & Noland, R. B. (2011). Do public transport improvements increase agglomeration economies? A review of literature and an agenda for research. Transport Reviews, 31(6), 725-742.

Giuliano, G. and A. Agrawal. (2017) "Land Use Impacts of Transportation Investments: Highway and Transit." In The Geography of Urban Transportation

Susan Hanson and Genevieve Giuliano, Editors. New York: The Guilford Press, The Geography of Urban Transportation.

#### Week 4

## Tuesday, April 25: Urban Form and the Pandemic

## Required readings:

Muller, Peter O. 2004. "Transportation and Urban Form: Stages in the Spatial Evolution of the American Metropolis," in *The Geography of Urban Transportation*, Third Edition, Susan Hanson and Genevieve Giuliano, Editors. New York: The Guilford Press. Pages 59-85.

To recover from COVID-19, downtowns must adapt by Tracy Hadden Loh and Joanne Kim Thursday, April 15, 2021 <a href="https://www.brookings.edu/research/to-recover-from-covid-19-downtowns-must-adapt/">https://www.brookings.edu/research/to-recover-from-covid-19-downtowns-must-adapt/</a>

Florida, R., Rodríguez-Pose, A., & Storper, M. (2021). Cities in a post-COVID world. *Urban Studies*, 00420980211018072.

Sablik, T. "Has the Pandemic Changed Cities Forever? COVID-19 transformed how we work and socialize, which could put the future of cities on a new path" The Federal Reserve Bank of Richmond <a href="http://bit.ly/pandemic-cities">http://bit.ly/pandemic-cities</a>

# Thursday, April 27: How Sticky is the Work from Home Trend?

#### Required readings:

Barrero, Jose Maria, Nicholas Bloom, and Steven J. Davis, 2021. "Why working from home will stick," National Bureau of Economic Research Working Paper 28731.

Covid-19 Pandemic Continues To Reshape Work In America. Pew Research Center february 16, 2022

https://www.pewresearch.org/social-trends/2022/02/16/covid-19-pandemic-continues-to-reshape-work-in-america/

Bloom, N. "How working from home works out". Stanford Institute For Economic Policy Research. June, 2020 https://siepr.stanford.edu/publications/policy-brief/how-working-home-works-out

## Tuesday, May 2:

How We Finance Transportation: An Overview

## Required readings:

Jonathan Gifford. 2009. Transportation Finance. In the Oxford Handbook on State and Local Public Finance. Oxford University Press.

Introduction to Abbott, W. W., Detwiler, P. M., Jacobsen, M. T., Sohagi, M., & Steiner, H. A. (2012). Exactions and Impact Fees in California. Point Arena, CA: Solano Press Books.

Chapter 20, Transportation Finance and Planning, in Fulton, W. B., & Shigley, P. (2012). Guide to California planning. Point Arena, CA: Solano Press Books.

Taylor, Brian D. (2017) "The Geography of Urban Transportation Finance," in the fourth edition of Susan Hanson and Genevieve Giuliano, Editors. New York: The Guilford Press, The Geography of Urban Transportation.

# Thursday, May 4:

How We Got Here (I): The Crisis of Highway Finance.

## Required Readings:

Brown, J. R., Morris, E. A., & Taylor, B. D. (2009). Paved with Good Intentions: Fiscal Politics, Freeways and the 20th Century American City. ACCESS Magazine, 1(35).

Nigro, N. and Burbank C. (2012). A Primer On Federal Surface Transportation Reauthorization and The Highway Trust Fund. Center for Climate and Energy Solutions.

Jaffe, Eric. 2013. "The End of Federal Transportation Funding as We Know it" The Atlantic Cities. 1 page.

Goldberg, David. 2013. "Rethinking the gas tax: Suddenly it's the theme of 2013," Transportation for America.

#### Tuesday, May 9:

How We Got Here (II): The Crisis of Transit Finance

## Required readings:

Brown, J. (2005). Paying for Transit in an Era of Federal Policy Change. Journal of Public Transportation, 8(3), 1.

Hess, D. B., & Lombardi, P. A. (2005). Governmental subsidies for public transit history, current issues, and recent evidence. Public Works Management & Policy, 10(2), 138-156.

Bent Flyvbjerg, Mette Skamris Holm, and Søren Buhl, "Underestimating Costs in Public Works Projects: Error or Lie?" Journal of the American Planning Association, vol. 68, no. 3, Summer 2002, pp. 279-295.

Gordon, Aaron. 2018. The trains are slower because they slowed the trains down. Village Voice. March 13.

2017. The Most Expensive Mile of Subway Track on Earth. New York Times. December 28.

# Thursday, May 11: Transit Finance and the Pandemic

## Required readings:

Siddiq, F., Wasserman, J. L., Taylor, B. D., & Speroni, S. (2023). Transit's Financial Prognosis: Findings from a Survey of US Transit Systems during the COVID-19 Pandemic. *Public Works Management & Policy*, 1087724X231160097.

Blumgart, J. (2022). For Mass Transit Agencies, a Fiscal Cliff Looms: While a Handful of the Largest Agencies Have Funding Sources that Don't Make the Future Immediately Dire, Others Are Looking at Hard Decisions Next Year as City Transit Ridership Remains Depressed, Cutting into Revenue Streams. Governing.

Calvert, S., & Vielkind, J. (2022). Commuter Railroads Face Murky Future after Pandemic. Wall Street Journal.

Speroni, S., Taylor, B., & Hwang, Y. (2023). Pandemic Transit: A National Look at the Shock, Adaptation, and Prospects for Recovery. In A. Loukaitou-Sideris, A. Bayen, G. Circella, & R. Jayakrishnan (Eds.), Pandemic in the Metropolis:

Transportation Impacts and Recovery (1st ed., pp. 267–281). Cham, Switzerland: Springer. Up to part 3, Survey of and Interviews with Transit Managers, only

## Week 7

Tuesday, May 16: An Infrastructure Bill, Finally

## Required readings:

America has an infrastructure bill. What happens next? By Adie Tomer, Caroline George, Joseph W. Kane, and Andrew Bourne. Tuesday, November 9, 2021 <a href="https://www.brookings.edu/blog/the-avenue/2021/11/09/america-has-an-infrastructure-bill-what-happens-next/">https://www.brookings.edu/blog/the-avenue/2021/11/09/america-has-an-infrastructure-bill-what-happens-next/</a>

The bipartisan infrastructure law is both historic and not nearly enough By <u>Li Zhou</u> November 15, 2021 <a href="https://www.vox.com/22770447/infrastructure-bill-democrats-biden-water-broadband-roads-buses">https://www.vox.com/22770447/infrastructure-bill-democrats-biden-water-broadband-roads-buses</a>

# Thursday, May 18: Why is Transit Ridership Falling?

## Required readings:

Manville, M, BD Taylor and E Blumenberg. 2020. Vehicle Access and Falling Transit Ridership. UCLA ITS Working Paper.

Steve Polzin 2018. Just Around the Corner...The Future of Public Transportation. Journal of Public Transportation. 21 (1): 43-52.

Taylor, B. D., Miller, D., Iseki, H., & Fink, C. (2009). Nature and/or nurture? Analyzing the determinants of transit ridership across US urbanized areas. Transportation Research Part A: Policy and Practice, 43(1), 60-77.

Litman, T. (2004). Transit price elasticities and cross-elasticities. Journal of Public Transportation, 7(2), 3.

Jeffrey Brown, Daniel Hess and Donald Shoup. Fare-Free Public Transit. Journal of Planning Education and Research.

## Tuesday, May 23:

**Equity in Public Transportation: More Funding for Buses, for Rails, or for Cars?** 

## Required readings:

Garcia, Robert and Thomas A. Rubin. 2004. "Crossroad Blues: The MTA Consent Decree and Just Transportation," in Running on Empty: Transport, Social Exclusion, and Environmental Justice, Karen Lucas, Editor. Bristol, UK: The Policy Press. Pages 221–256.

Elkind, Ethan. Of Race and Rail. From Railtown.

Levine, Jonathan. Is Bus vs Rail a Zero-Sum Game? Journal of the American

Planning Association. 9:1, 5-15.

David King, Michael Smart and Michael Manville. 2018. The Poverty of the

Carless. Journal of Planning Education and Research.

Molly Castelazo and Thomas Garrett. 2004. Light Rail: Boon or Boondoggle? The Regional Economist.

# Thursday, May 25:

#### **Alternative Forms of Transportation Finance (I): Local Option Taxes**

#### Required readings:

Executive Summary of The Equity Challenges and Outcomes of California County Transportation Sales Taxes. By Maxwell Albrect, Anne Brown, Jaimee Lederman, Brian Taylor and Martin Wachs.

Executive Summary of Measure M and the Potential Transformation of Mobility in Los Angeles. M. Manville, UCLA ITS.

Michael Manville. 2019. Measure M: Lessons from a Successful Ballot Campaign. Eno Center for Transportation.

Manville, Michael and Benjamin Cummins.\* Why Do Voters Support Public Transportation? Public Choices and Private Behavior. Transportation. 42(2):303-332.

Manville, Michael and Adam Levine. 2018. What Motivates Public Support for Public Transportation? Transportation Research Part A.

# Tuesday, May 30:

# Alternative Forms of Transportation Finance (II): VMT Fees

# Required readings:

P. Sorensen, L. Ecola, and M. Wachs. Mileage Based User Fees for Transportation Funding: A Primer for State and Local Decision Makers. RAND Corporation, December 2012, 36 pages.

Sean Slone, Vehicle Miles Travelled Fees: A Trends in America Special Report. The Council of State Governments, March 2010

Martin Wachs. "The Future of Transportation Finance: A New Generation of User Fees," in Resources, No. 175 (Summer 2010), pp. 11-12.

## Thursday, June 1:

## The Congestion Problem, and Prices for Performance

## Required readings:

Manville, Michael. 2009. Access Moves to Los Angeles. Access. Fall. 1.

Hymel, Kent. "Does traffic congestion reduce employment growth?." Journal of Urban Economics 65.2 (2009): 127-135.

Sweet, M. (2011). Does traffic congestion slow the economy?. Journal of Planning Literature, 26(4), 391-404.

Brian Taylor. Rethinking Traffic Congestion. Access.

Brian Taylor. Congestion in Non-Intuitive, and Fixable. Access.

Downs, Anthony. 2004. "Peak Hour and Other Road Pricing," Still Stuck in Traffic: Coping with Peak-Hour Traffic Congestion. Washington, D.C.: The Brookings Institution. Pages 152–179.

#### Week 10

#### **Tuesday, June 6:**

The Equity and Acceptability of Congestion Charges

## Required readings:

King, David, Michael Manville, and Donald Shoup. 2007. "For Whom the Road Tolls: The Politics of Congestion Pricing," Access, 31: 2–7.

Manville, Michael and David King. Credible Commitment and Congestion Pricing. Transportation. 40(2):229-249.

Hårsman, Björn and John M. Quigley. 2011. "Political and Public Acceptability of Congestion Pricing: Ideology and Self-Interest in Sweden," Access, 38: 2-7.

Manville, Michael and Emily Goldman. 2017. Would Congestion Pricing Harm the Poor? Do Free Roads Help the Poor? Journal of Planning Education and Research.

Schweitzer, Lisa and Brian D. Taylor. 2010. "Just Pricing," Access, 36: 2-7.

Manville, Michael and Jonathan Williams. "Parking without Paying", Access. 42 (Spring):10-13.

Thursday, June 8: Course Summary