

NEW YORK UNIVERSITY
ROBERT F. WAGNER GRADUATE SCHOOL OF PUBLIC SERVICE

URPL-GP2471: Transportation Behavior and Policy
Spring 2015 Syllabus (updated on 1/22/2015)

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Office Hours: Wed, 5:00-6:00pm or by appointment

Monday Lecture

4:55 – 6:35pm

25 West 4th Street, Room C-13

Introduction

This course examines the behavioral foundation for policy design, using urban transportation as examples. We introduce multiple frameworks of understanding travel behavior, rational or irrational, contrasting the perspectives of classic economic theory with behavioral economics and social psychology, and suggest corresponding policy interventions: a behavior--theory--policy mapping. Then we present a spectrum of instruments for positively influencing behavior and improving welfare: from manipulating information and changing perceptions of time and space, to pricing and framing, to inducing emotions of pride and shame, exploiting peer pressure or enhancing self-control and motivation, and to nudging and preference shaping. Most importantly the course challenges students 1) to critique, design, implement and interpret experiments that nudge travel behavior; and 2) to bring behavioral insights to creative design of transport policies, programs and plans—making them not only efficient and equitable but also simpler, consistent, transparent, acceptable, and adaptive to behavioral changes.

Recommended Books

- Daniel Kahneman (2011) *Thinking, Fast and Slow*
- Richard Thaler and Cass R. Sunstein (2008) *Nudge: Improving Decisions about Health, Wealth, and Happiness*
- Dan Ariely (2008) *Predictably Irrational*
- Eldar Shafir (2013) *The Behavioral Foundations of Public Policy*
- Cass Sunstein (2013) *Simpler: The Future of Government*
- Elinor Ostrom (1990) *Governing the Commons: The Evolution of Institutions for Collective Action*
- Tom Vanderbilt (2008). *Traffic: Why We Drive the Way We Do (and What It Says About Us)*

Class Participation in Discussion (25%)

The course expects significant student contribution. Students should read all listed readings and prepare to participate in class discussion extensively. There are 12 topics/classes and each counts 2% towards your class participation grade. The remaining 1% serves as a bonus. On March 2, March 23, and April 6, one third students will share their idea notes at each class, after class lecture and discussion.

Idea Notes (25%)

Students are required to write three idea notes to apply three concepts of behavioral economics to transportation policy-making: perception & bias, social norms, and salience of price. Under each concept, identify one transportation policy or program (national or local) that disregards the complexity of human behavior, and discuss the consequence of such ignorance or neglect. At the end, please offer 2 examples of nudge policies in transportation designed by yourself, based on that concept. Maximum words = 1,000

Idea note #1: Perception & Bias

Idea note #2: Social Norms

Idea note #3: Salience of Price

Class Project (50%)

Students should form a team of no more than 3 team members from the beginning of the class to conduct a behavioral experiment in transportation. They should collect, critique, design, and implement such experiments, and take active part in debates, dialogues and presentations in class. The final paper counts 30%, teamwork 10%, and final presentation 10%. Please limit the length to be within 5000 words.

Homework and Grading

Homework	Share	I/T
Class Participation 12 classes * 2% + 1%	25%	Individual
Idea Notes 3 notes * 8.33%	25%	Individual
Class Project		
Final paper	30%	Teamwork
Presentation	10%	Teamwork
Teamwork	10%	Individual
Total	100%	

Classes	Date (Monday)	Topics	Students Involvement	Assignment Due
1	February 2	Traditional Behavior-Policy Framework	Readings	
2	February 9	Rethinking Rationality	Readings	
3	February 16	From Behavior to Policy	Readings	
	February 23	No class		
4	March 2	Measuring Happiness/Sadness in Transportation	Readings	
5	March 9	Perception & Bias	Readings + Idea Sharing	Idea Note #1 due
6	March 16	The Nudge of Subway Map	Readings	
	March 23	Spring Break		
7	March 30	Social Norms	Readings + Idea Sharing	Idea Note #2 due
8	April 6	Car Pride under Plate Lottery/Auction in China	Readings	
9	April 13	Saliience of Price	Readings + Idea Sharing	Idea Note #3 due
10	April 20	Bad Example of Saliience-Parking Regulation I	Readings	
11	April 27	Bad Example of Saliience-Parking Regulation II	Readings	
12	May 4	Property Rights and Travel: Street Parking in NYC	Readings	
13	May 11	Class Project Presentation (team work)		Class paper due before class

Class 1: Traditional Behavior-Policy Framework in Transportation

- Small, Kenneth A. 1999. "Project Evaluation," in Gómez-Ibáñez, William B. Tye, and Clifford Winston, Editors, *Essays in Transportation Economics and Policy: A Handbook in Honor of John R. Meyer*. Washington, D.C.: Brookings Institution. Pages 137–177. (available online from NYU Library)
- Dean, Thomas B. 2003. "Policy Versus the Market: Transportation's Battleground," *Transportation Research Record*, 1839: 5–22 (available on course website)
- David Metz. 2008. The Myth of Travel Time Saving. *Transport Reviews: Volume 28, Issue 3*, 321-336
- 8 Comments on 'The Myth of Travel Time Saving'. *Transport Reviews: Volume 28, Issue 6*, page 685-715
- David Banister. 2011. The trilogy of distance, speed and time. *Journal of Transport Geography*. Volume 19, Issue 4, July 2011, Pages 950–959

Class 2: Rethinking Rationality in Travel Decisions

- Mokhtarian and Salomon 2001, How derived is the demand for travel? Some conceptual and measurement considerations, *Transportation Research Part A*: 35 (8)
- Metcalfe and Dolan (2012) Behavioral Economics and its Implications for Transport, *Journal of Transport Geography*, V24, P503-511
- Daniel McFadden. 2007. The behavioral science of transportation. *Transport Policy* 14 (2007) 269–274
- Kahneman, Daniel; Tversky, Amos (1984) Choices, values, and frames, *American Psychologist*, Vol 39(4)
- Kahneman, Daniel, and Amos Tversky. Prospect Theory: An Analysis of Decision Under Risk". *Econometrica*. XLVII (1979): 263-291.
- Ajzen, I., The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 1991. 50: p. 179-211.

Class 3: From Behavior to Policy

- Winter Mason and Siddharth Suri (2012) Conducting Behavioral Research on Amazon's Mech Turk, *Behavior Research Method* 44(1)
- Cass Sunstein (2013) *Simpler: The Future of Government*, Introduction, Chapter 1, 5, 8 and 10, Epilogue
- Eldar Shafir (2013) *The Behavioral Foundations of Public Policy*, Forward, Introduction
- Paul Brest (2013) Debiasing the Policy Makers Themselves, Chapter 29 in Eldar Shafir (2013) *The Behavioral Foundations of Public Policy*
- Jinhua Zhao and Tim Baird (2013) 'Nudging' Active Travel: A Framework For Behavioral Interventions Using Mobile Technology (available on course website)
- Joseph Henrich, Steven J. Heine, Ara Norenzayan. 2009. The Weirdest People in the World. http://www2.psych.ubc.ca/~henrich/pdfs/Weird_People_BBS_final02.pdf

Class 4: Measuring Happiness/Sadness in Transportation

- Abou-Zeid et al 2012 Happiness and travel mode switching: Findings from a Swiss public transportation experiment, *Transport Policy* 19 (1)
- Guo, Z and N H M Wilson. 2011. Assessing the cost of transfer inconvenience in public transport systems: A case study of the London Underground. *Transportation Research Part A: Policy and Practice*, 45 (2), 91-104
- Guo, Z. 2009. Does the built environment affect the utility of walking? A case of path choice in downtown Boston. *Transportation Research D: Transport and Environment*, 14 (5), 343-352

Class 5: Perception & Distortion

- Richard Larrick and Jack Soll (2008). "The MPG Illusion." *Science*, 320(5883)
- Shahzeen Attari, Michael DeKay, Cliff Davison and Wandu Bruine de Bruine (2010). "Public Perceptions of Energy Consumption and Savings," *PNAS* 107(37)
- Eyal Peer. 2011. The time-saving bias, speed choices and driving behavior. *Transportation Research Part F: Traffic Psychology and Behavior*. Volume 14, Issue 6, November 2011, Pages 543–554
- DC Feiler, JB Soll. 2010. A blind spot in driving decisions: How neglecting costs puts us in overdrive. *Climatic change*, 98, 285-290

Class 6: Case Study: Nudge of Subway Maps

- Guo 2011 Mind the Map! Impact of Transit Maps on Travel Decisions in Public Transit Systems, *Transportation Research Part A* 45(7)
- Vertesi, J., 2008. Mind the gap: the London underground map and users' representations of urban space. *Social Studies of Science* 38 (1), 7–33.
- Raghubir, P., & Krishna, A. (1996). As the crow flies: Bias in consumers' map-based distance judgments. *Journal of Consumer Research*, 23, 26 - 39.
- The Muller-Lyer Illusion, <http://www.rit.edu/cla/gssp400/muller/muller.html>
- Krishna, Aradhna, 2007, " Spatial Perception Research: An Integrative Review of Length, Area, Volume, and Number Perception", in "Visual Marketing: From Attention to Action", Michel Wedel and Rik Pieters, Eds., Lawrence Erlbaum Associates, Mahwah, New Jersey. Chapter 8 (available online from NYU Library)

Class 7: Social Norms

- Dan Ariely, Anat Brach and Stephen Meier. 2009, "Doing Good or Doing Well? Image Motivation and Monetary Incentives in Behaving Prosocially." *American Economic Review*. 99 (1): 544-555
- Allcott, Hunt (2011). Social Norms and Energy Conservation. *Journal of Public Economics*, Vol. 95, No 9-10 (October), pages 1082-1095.
- Judd B. Kessler, Alvin Roth (2014), Organ Donation Loopholes Undermine Giving: An Experiment Motivated By Priority Loopholes in Israel, *Journal of Public Economics*

- Tom Vanderbilt (2008). Traffic, Chapter 4 Why Ants Don't Get into Traffic Jams (and Humans Do)
- Nicholas A. Christakis, and James H. Fowler. 2007. The Spread of Obesity in a Large Social Network over 32 Years. *New England Journal Medicine*; 357:370-379

Class 8: Case Study: Car Pride under Plate Lottery and Auction in China

- Zhao and Zhao (2013) Understanding Car Pride: Psychological Structure and Behavioral Implications (To be added)
- Jinhua Zhao, Tracy Chen and David Block-Schachter (2014) Superficial Fairness of Beijing's Vehicle License Lottery Policy (available on course website)
- Chen X, Zhao J. 2012. Bidding to Drive: Car License Auction Policy in Shanghai and Its Public Acceptance. *Transport Policy*. 27

Class 9: Salience of Price

- Amy Finkelstein, 2009. E-Z Tax: Tax Salience and Tax Rates. *The Quarterly Journal of Economics*, 969-1010
- Chetty, Raj, Adam Looney, and Kory Kroft. 2009. "Salience and Taxation: Theory and Evidence." *American Economic Review*, 99(4): 1145-77.
- Elbel B, Kersh R, Brescoll V, Dixon LB. Calorie Labeling and Food Choices: A First Look at the Effects on Low-Income People in New York City. *Health Affairs*. 2009; 28(6): w1110-21.
- Hunt Allcott. 2014. Gasoline Prices, Fuel Economy, and the Energy Paradox. *The Review of Economics and Statistics*. Vol. 96, No. 5, Pages 779-795

Class 10: Case Study: Bad Example of Salience-Parking Regulation I

- Shoup, D. 1999. "The Trouble with Minimum Parking Requirements." *Transportation Research Part A* 33 (7-8): 549-74.
- Kristina Shampanier, Nina Mazar, and Dan Ariely (2007), "Zero as a Special Price: The True Value of Free Products." *Marketing Science*. Vol. 26, No. 6: 742-757.
- Guo, Z and S Ren. 2013. From minimum to maximum: The impact of parking standard reform on residential parking supply in London from 2004-2010. *Urban Studies*, 50 (6), 1181 – 1198
- Cato Institute, 2011. Debate on Parking Policy by Shoup, D., Manville, M., O'Toole, R., Cowen, T., Ikeda, S., Kuznicki, S., at Cato Unbound in April, 2011. Washington DC <<http://www.cato-unbound.org/>>
- Lisa Heiser. 2013. Cup size effects on soda consumption. Masters Thesis, Eastern Illinois Univ. <http://thekeep.eiu.edu/theses/1189/>
- Amy L. Fairchild, 2013. Half Empty or Half Full? New York's Soda Rule in Historical Perspective. *New England Journal Medicine*; 368:1765-1767

Class 11: Case Study: Bad Example of Salience-Parking Regulation II

- Guo, Z and L Schloeter. 2013. Street standards as parking policy: Rethinking the provision of residential street parking in American suburbs. *Journal of Planning Education and Research*, 33 (4), 456-470
- Southworth, M., and E. Ben-Joseph. 1995. "Street Standards and the Shaping of Suburbia." *Journal of the American Planning Association* 61 (1): 65–81.
- Grant, J., and A. Curran. 2007. "Privatized Suburbia: The Planning Implications of Private Roads." *Environment and Planning B: Planning and Design* 34: 740–54.
- Ewing, R., T. Stevens, and S. Brown. 2007. "Skinny Streets and Fire Trucks." *Urban Land* August: 121–23. (available on course website)
- Evan McKenzie. 2006. Emerging trends in state regulation of private communities in the U.S. *GeoJournal* (2006) 66:89–102
- Eran Ben - Joseph (2004): Double standards, single goal: private communities and design innovation, *Journal of Urban Design*, 9:2, 131-151

Class 12: Property Rights and Travel: Street Parking in New York City

- Epstein, R. A. 2002. "The Allocation of the Commons: Parking on Public Roads." *Journal of Legal Studies* 31 (S2): S515-44.
- Ostrom, E., T. Dietz, N. Dolsak, P. C. Stern, S. Stonich, and E. U. Weber. 2005. *The Drama of the Commons*. Washington, DC: Committee on the Human Dimensions of Global Change, National Research Council. (available on course website)
- Rose, C. 1986. "The Comedy of the Commons: Custom, Commerce, and Inherently Public Property." *University of Chicago Law Review* 53 (3): 711-81.
- Guo, Z and P Xu. 2013. Duet of the commons: Impact of street cleaning on household car usage in New York City. *Journal of Planning Education and Research*, 33, 1, 34-48
- Guo, Z. 2013. Home parking convenience, household car usage, and implications to residential parking policies. *Transport Policy*, 29, 97-106
- Guo, Z and S McDonnell. 2013. Curb parking pricing for local residents: an exploration in New York City based on willingness to pay. *Transport Policy*, 30, 186-198

Class 13 Class Project Presentation