Planning and Regional Development Department

Subscribe to newsletter by clicking here.

Need a Nudge?

In San Francisco, they've tried incentivizing early bird commuting. In Chicago, they built an app that nudges people away from the L Train right before Cubs games. And in Singapore, they're using gamification to get more more people to travel off-peak.

The idea is to use more of what Stanford Professor Balaji Prabhakar calls "nudge engines." In some cases, the goal might be to make for safer streets and sidewalks. In others, policymakers might want to shift travelers away from using the busiest travel modes at the busiest times. Instead of transportation agencies building bigger to help commuters escape congestion, these solutions - developed with policies and pricing strategies instead of concrete and steel – would aim for lower-cost solutions. Could greater use of transportation nudges help clear the roads of peakhour trucks, which are less nimble than other autos and have outsized contributions to congestion once they slow down (and have trouble picking up speed again)? Could smarter policies delay the need for new rail cars or bigger platforms on subway lines?



Yes, this is the same behavioral economics (or, from a public policy angle, behavioral interventions) that's become a prominent part of mainstream economics. Yale's Robert Shiller counts six Nobel Prize winners, including himself and last year's winner, Richard Thaler, as having won for their work as "behavioral economists."

THE WATCHLIST

Economic Variables		Current	- One Year Trend						
UNITED STATES			Apr 2017 - Apr 2018						
Real GDP [Annual Rate]	Q1 2018	2.2%							
Unemployment Rate	Apr-18	3.9%	IIIIII						
Consumer Price Index [Annual]	Apr-18	2.4%							
Gasoline Price [Regular]	Apr-18	\$2.76							
PORT AUTHORITY REGION									
Regional Employment [NY MSA]	Apr-18	9,761							
Consumer Price Index [Annual]	Apr-18	1.9%	Inadia						
Port District Exports [\$Bill]	Mar-18	\$13.77	\sim						
Port District Imports [\$Bill]	Mar-18	\$23.46							
Case-Shiller Home Price Index	Mar-18	5.2%	111111						
Commercial Real Estate Asking Rent									
Midtown	Q1 2018	\$83.17							
Downtown	Q1 2018	\$62.28							

As the Royal Swedish Academy of Sciences, which awards the Nobel Prize, put it last fall: The assumption that people are generally rational "has enabled economists to build powerful models to analyze a multitude of different economic issues and markets. Nevertheless, economists and psychologists have documented systematic deviations from the rational behavior assumed in standard neoclassical economics. Incorporating insights from psychology into traditional economic analysis has spawned the field of behavioral economics, a flourishing area of research with significant impact on many subfields of economics."

Its applications have crossed from household finance and utility choices to transportation and organ donation. Some public agencies have already been trying these types of innovative programs out. It's been a full quarter-century since California started requiring some firms and public agencies to offer workers cash to cover commuting costs instead of giving them free parking, a move observers say helped nudge many solo commuters to try biking, carpooling or transit instead. The City of Chicago's late-2017 congestion pilot program zeroed in on passengers traveling the Transit Authority's Red Line specifically, those traveling between 5-6 p.m. on nights when there was a game at Wrigley Field. They employed a mix of information and cash to encourage riders to shift travel times or modes. A manager for Microsoft, one of a handful of partners in the Chicago program, said, "the lens that we're looking through here is: OK, what are we doing in Chicago that we can apply globally?"

The broader research community has investigated similar applications on many fronts, including but not limited to the role behavioral design can have on safety, travel times and transportation-related household finance.

[Continued on next page]

MONTHLY ECONOMIC INDICATORS

THE PORT AUTHORITY OF NY & NJ

Planning and Regional Development Department

May 2018									
AVIATION	Mar '18	YTD	Mar '18/'17	YTD '18/'17	PORT COMMERCE	Mar '18	YTD	Mar '18/'17	YTE '18/'17
Revenue Passengers (000's)	11,026.3	29,794.0	3.7%	2.3%	Port Trade				
John F. Kennedy International Airport (JFK)	4,832.5	13,030.5	3.6%	0.6%	Container Imports (TEUs)	288,462	872,103	15.5%	12.8%
LaGuardia Airport (LGA)	2,422.0	6,344.4	0.0%	-0.1%	Container Exports (TEUs)	132,105	361,700	14.8%	9.0%
Newark Liberty International Airport (EWR)	3,724.0	10,288.5	5.7%	5.5%	Containers lifted on/off Express Rail	52,993	150,796	18.4%	17.8%
Stewart International Airport (SWF)	47.8	130.7	104.5%	99.5%	TUNNELS, BRIDGES & TERMINALS	Mar '18	YTD	Mar '18/'17	YTD '18/'17
Revenue Freight (Short Tons)	200,904	551,464	7.2%	8.3%	Eastbound Vehicle Volumes (000's)	9,604	27,199	1.8%	0.8%
Domestic	68,570	196,102	3.0%	8.3%	George Washington Bridge	4,104	11,659	1.0%	0.1%
International	132,334	355,362	9.5%	8.2%	Lincoln Tunnel	1,573	4,427	1.6%	0.3%
Flights	118,019	343,590	-1.9%	0.4%	Holland Tunnel	1,221	3,437	1.3%	-0.6%
Domestic Air Carrier	75,415	219,917	-2.7%	0.7%	Bayonne Bridge	221	639	28.3%	48.0%
International Air Carrier	23,760	69,950	0.5%	3.1%	Goethals Bridge	1,278	3,588	4.0%	0.6%
General Aviation	18,844	53,723	-1.6%	-4.5%	Outerbridge Crossing	1,207	3,449	-1.0%	-0.4%
Paid Parked Cars	538,327	1,506,910	-2.7%	-5.4%	Eastbound Volumes by Vehicle Type (000's)				
Revenue AirTrain Passengers	1,658,029	4,445,720	0.8%	-2.5%	Autos	8,751	24,765	2.0%	0.7%
					Trucks	611	1,743	-0.7%	1.6%
FERRY OPERATIONS	Mar '18	YTD	Mar '18/'17	YTD '18/'17	Buses	243	693	0.4%	1.4%
Passengers (000's)									
New Jersey Ferries	721.1	2,006.8	9.1%	8.3%					
PATH	Mar '18	YTD	Mar '18/'17	YTD '18/'17	U.S. TRANSPORT. SERVICES INDEX	Mar '18	Feb '18	Change	
Passengers (000's)	6,757.0	19,365.0	-1.7%	1.2%	(Prelim., Seasonally Adj., 2000=100)				
Average Weekday	265.0	811.3	-0.7%	1.4%	TSI - Combined Index	129.9	128.6	1.0%	
Average Saturday	118.7	321.1	10.3%	2.0%	TSI - Freight	130.8	129.0	1.4%	
Average Sunday	83.4	228.5	7.7%	-3.3%	TSI - Passenger	128.0	127.7	0.2%	

TRANSPORTATION FOCUS

(from page 1)

A group of researchers and cartographers let by New York University's Zhan Guo recently found simple redesigns of Washington, DC subway maps significantly impacted riders' choice of routes. Teams at Texas A&M University and the University of Pennsylvania are studying the prospects of using behavioral economics to, respectively, understand managed lane use and reduce cellphone use while behind the wheel. Those projects have attracted significant funding from federal transportation researchers, who in 2015 published a deep literature review that recognized "the role of behavior in transportation choices" and the psychology behind "transportation, including pay-as-you-drive insurance, finance, mode choice, congestion, and tolling."

Solutions that ultimately emerge from these efforts may wind up resting heavily on information campaigns, such as passenger-fed "crowding apps" that relay indications of crowding on transportation systems in near-real time. If these apps do not yet exist, it could be due to any of a number of factors: the absence of compelling business cases, for example, or more technical challenges related to data availability and processing. But at the rate things are going,



insights are positioned to influence the design of policies and programs and, through that, to nudge our transportation networks toward improved efficient, cost-effective and equitable service for the long run.

Port Authority of NY & NJ
Planning & Regional Development Department
4 World Trade Center] 150 Greenwich St., 16th Floor
New York, NY 10006

Alexander Heil, Ph.D., Chief Economist; aheil@panynj.gov Maria Enache, Forecasting & Regional Economics Christopher Eshleman, Forecasting & Cost-Benefit Analysis Matthew W. Jacobs, Forecasting & Regional Economics Graciela Ramirez, Input-Output Modeling & Regional Economics Huajing Shi, Ph.D., Transportation Statistics