Parking ticket reminders work, but not for all
4 November 2022, by Tom Fleischman

When most drivers see a slip of paper under their windshield wiper, they’re unhappy about it—and maybe a little angry, probably with themselves—but they pay the fine. Parking tickets are a fact of life. But there are some people who, for a variety of reasons, just don’t pay up—and wind up with additional fines or even the loss of their vehicle. And Ori Heffetz, associate professor in the Samuel Curtis Johnson Graduate School of Management, who studies the psychological, social and cultural aspects of economic behavior, is one of three economists who saw that as a challenge.

Why don’t they pay? And is there a way to change their behavior?


The key takeaway: People who would benefit the most from gentle "nudges" to pay their fines—those who are least responsive to tickets in the first place—respond least to those reminders. They do, however, respond to stern warnings that their cars may be "booted" (immobilized), towed or impounded.

Co-authors are Ted O'Donoghue, the Zubrow Professor of Economics in the College of Arts and Sciences; and Henry Schneider of Queen's University, Kingston, Ontario. Schneider was an assistant professor at Johnson from 2006 to 2016.

Eleven years ago, Schneider was doing unrelated work for New York City when he realized the city's trove of data on parking tickets offered opportunities for research.

"Whenever there is there an administrative dataset available, we love to jump on it," Heffetz said. "And in this case, we identified a beautiful dataset—the city issues 10 million tickets a year."

The 6.6 million tickets in their dataset, which ranged from June 2011 to August 2013, totaled $424 million in fines and $85 million in late penalties issued to 2 million non-commercial New York drivers.

"Because we got two years of data—and many of the license plates are repeat offenders—we actually were able to observe people's behavior over and over again," Heffetz said. "This enabled us to assign people a type—high-response, medium-response, low-response—and then see if you can use that to predict how they will respond to a ticket."

The time frame also gave the researchers a natural experiment condition: In June 2012, the Department of Finance (DOF) began sending reminder letters to ticket recipients on around day 20 following ticketing; previously, the first letter went out on roughly day 40.

The first deadline by which an offender must pay the ticket, or incur a $10 late fee, is at day 30.
Additional $10 fees are assessed the first Monday after day 61, and the first Friday after day 100.

The researchers found that the switch to earlier reminder letters in June 2012 markedly increased the cumulative rate of response to ticket reminders—by approximately 10 percentage points between days 20 and 40. However, most of the increase was found in high-response (HRs) and medium response (MRs) types. The low-response types (LRs) showed nearly zero increase in response rate to earlier letter reminders.

The LRs' response rate increased significantly, however, when later letters included references to their cars being booted or worse.

"For some of these people, you can send them reminders and penalties and whatever," Heffetz said. "It's only when they get this legal-looking letter that says, "We are in default judgment against you; you may get towed"—all of a sudden, you see their highest response rates."

City officials, seeking to improve the process, collaborated with the researchers to conduct an experiment in real time with ticket recipients. For a five-week period from July 13 to August 16, 2013, the city randomly sent different first letters to ticket recipients, with either additional information or forceful language; some were also sent an additional notification letter between the first and second deadlines. It turned out that the content of the first letter seemed not to matter at all, while in contrast adding an additional letter had a noticeable impact.

Heffetz noted that cross-referencing ticket recipients' addresses to U.S. Census data revealed that LRs tended to come from already disadvantaged populations—lower income, less education and higher proportions of Black or other racial groups.

"We find strong correlation between some socioeconomic and the chance that you will be a low-response type," Heffetz said. "So it's not just that your policy may help those who pay anyway much more than those who tend to incur large penalties; the latter often also happen to be from historically disadvantaged groups."

The researchers suggested a form of targeted reminders, based solely on past behavior, could be a low-cost method for inducing more timely payments from those least likely to pay on time.

"You don't need a lot of data and you don't need a lot of modeling; you really just look at the past few responses of people, and tailor your policy accordingly" Heffetz said. "This is information that the city already has."


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