

FINDING PARKING SOLUTIONS

Last year's competition winner on his ideas and big win.

PI's 2017 Parking Solutions Competition asked tomorrow's innovators to introduce the next big idea in parking. Competition was stiff, and in the end, Access MIT won with their idea for a commuting benefits program that provides free transit and reformed parking prices for staff and faculty at their university.



The team was headed up by student Adam Rosenfield, who recently shared his thoughts on the experience with us.

The Parking Professional: Tell us a bit about yourself. What brought you toward the parking industry?

Adam Rosenfield: Before I attended the IPI Conference, I had no idea of the sheer size and scope of the parking industry and never imagined that I would become so interested in it. But through two transportation-related internships and my undergraduate research at the University of Toronto, I realized that parking is one of those unglamorous yet crucial components of people's travel behavior and among the most important levers we have in changing travel patterns.

I'm now a third-year graduate student at Massachusetts Institute of Technology (MIT), pursuing dual master's degrees in transportation and city planning, and my thesis research centers on how we can use workplace-based commuting benefits and incentives to better manage parking demand while promoting the use of sustainable travel modes. When I learned about IPI's Parking Solutions Competition, I found my research fit closely with the objectives of the competition.

TPP: Tell us about your winning pitch in the IPI Parking Solutions Competition.

AR: My pitch is about taking the lessons learned from behavioral economics—the idea that we humans are not always fully rational, utility-maximizing agents—and using them to better inform transportation policy design. MIT has

long faced downward pressure on its parking supply and this past year launched a series of employee transportation benefits aimed at reducing parking demand while offering improved alternatives. The flagship element was a zero-cost transit pass provided to all employees. But with respect to parking, the most important policy was a shift from annual permits to daily, pay-as-you-park pricing. The idea here is that if we invert the mental cost equation (parking costs are perceived to be incurred as often as transit costs), more drivers might consider taking transit, even if occasionally.

I evaluated the attitudinal and behavioral effects of these changes and found that while many commuters were receptive to the new benefits (who doesn't like free transit?), many more might be swayed by small nudges. So during the last few months, I designed and conducted a randomized controlled experiment in which I gave different nudges to subsets of drivers and measured their change in attitudes and behavior. One subset received weekly "Commuter Digest" emails containing tips and tricks on how to make the most of MIT's benefits, with appeals to social norms and peer behavior. Another subset received weekly cash rewards proportional to how much they reduced their drive-alone commuting. A third subset received both informational digests and the small cash incentives.

I discovered that, in the six-week period, those receiving the combined incentives had the biggest drop in parking, and my exit survey showed that a lot of parkers really enjoyed participating in the campaign. My





takeaway is that sometimes we don't need to spend enormous sums of money motivating people to shift behavior; sometimes, all it takes is a small nudge and a bit of encouragement, drawing on psychology and behavioral science.

TPP: What surprised you the most during your research?

AR: Two aspects. First, I was worried that my pitch, which centered around reducing the demand for parking, would be contrary to the goals of most IPI conference-goers, whose businesses relied on growth in parking demand. I had nightmares of getting booed off-stage in a room of parking professionals! So what surprised me was how receptive people were to the ideas I presented, most centrally the goal of helping urban commuters travel in more sustainable ways and using creative incentives to help them do so. The parking industry recognizes that travel behavior is changing—TNCs are gaining market share, millennials are tending to be less car-oriented, and autonomous vehicles are bringing immense uncertainty to the future of urban mobility—and that the industry must adapt to remain ahead of these trends, rather than be caught trying to follow them.

The other biggest surprise was realizing how much human irrationality pervades both the planning and utilization of parking resources. Related to my research on behavioral science, I learned that even the most rational and logical thinkers among us struggle to objectively interpret parking availability and costs. My surveys (and intuition) showed me that parking is often an emotionally charged issue, and modifying its supply (or perception thereof) can generate significant controversy!

TPP: How did participating in IPI's competition help shape the future of your work?

AR: The competition gave me an opportunity to reframe my work from a purely academic exercise to something I hope will be of interest to governments, employers, and any stakeholder struggling to manage parking demand. I gained valuable insights from the three judges, who poked holes in my concepts and challenged me to think about how such a solution might be marketable beyond the confines of research.

And finally, as a student at the IPI Conference & Expo, I was able to make many industry connections that will be invaluable as I complete my master's studies at MIT this coming spring (and begin the job hunt!). 

Entries are now being accepted for the 2018 Parking Solutions Competition! University students who will be 18 or older on May 18, 2018, and who are actively enrolled in undergraduate or graduate studies are eligible to compete. Visit parking.org/parkingsolutions and encourage the next generation of innovators to apply!