

Transcript – Ways & Means Podcast – S4E2

Emily Hanford: From the Sanford School of Public Policy at Duke University, this is Ways & Means. I'm Emily Hanford. And this is the second episode of a four-part series on climate change.

Carol: OK, so here comes a bus, but that's not ours. That's the C3. It's a higher-end looking bus.

Joey: It looks like a spaceship. (laughter)

Emily: This is Joseph Sherlock. He is with one of our producers, Carol Jackson. They're standing at a bus stop on Duke University's campus on a cold winter evening. Joey's a behavioral researcher at Duke, and he's trying to figure out what would motivate people to take the bus more, rather than drive their cars.

While they wait, Carol and Joey open an app that follows the campus busses in real time.

Carol: And let's see, I'm looking down, going down to transportation, hitting that, OK and there's my bus.

Joey: There it is! Easy!

Carol: Yes, and we are three minutes away! Alright, and now we wait. It is cold, and dark...

Emily: Waiting – it's one of the reasons people don't want to take the bus. This app is meant to help—at least give people an idea *when* their bus is coming, maybe allow them to plan things out so they're not stuck waiting in the cold. But there are other reasons you might avoid the bus if you could otherwise drive—like what if something pops up during the day—your kid gets sick at school—and you need to pick her up? The car just *seems* so much more convenient.

But Joey says people often don't think about the benefits to taking the bus.

Bus door opens.

Joey: Catching the bus, there's something really nice about having your fate in someone else's hands, not having to worry about having to drive around, or make any decisions about how you're getting home...you're giving someone else power and control to get you home, which enables you to switch your brain off.

Emily: So, driving less may be good for your mental health. And it's good for the environment, too. That's what Joey's ultimately after. He wants fewer cars on the road because pollution from cars contributes to climate change.

(Music)

Coming up on Ways & Means what motivates people to get out of their cars. And then, going beyond individual action, are there things policymakers can do to nudge commuters to do the right thing when it comes to climate change.

Steve Schewel: Many people think that government can't innovate and that's certainly not true in local government in Durham. We're innovating all over the city.

Emily: Steve Schewel is the mayor of Durham, North Carolina. He used to be a professor at Duke's Sanford School of Public Policy and he loves to identify big problems—and do something about them. He set up an in-house innovation team at City Hall that has done things like come up with a program that welcomes felons back to the community.

But something the city wasn't sure how to tackle? The fact that 90% of people who work downtown commute to their jobs—alone—in their cars

Steve: We're trying to reduce the number of people who drive downtown by five percent. If we can do that, we can stop building parking decks and we really want to stop building parking decks.

Emily: Each new parking deck costs around \$20 million dollars. So the mayor was trying to solve a budget issue and an environmental one at the same time.

Enter Joey Sherlock – the guy we met earlier. Joey works at the Center for Advanced Hindsight at Duke. Yes, there really is a Center for *Advanced Hindsight*. Joey's expertise is behavioral science. He studies things like what role do emotions play in our decisions?

Joey was brought in to work with Steve and his innovation team that included people from city hall and the transportation department. They were going to try to tackle the commuting issue with behavioral economics in mind. Here's Joey:

Joey: Yeah, so what we're trying to do here is we're trying to find ways in which we can design interventions that leverage an understanding of human psychology and understanding of how humans think and how they and how they behave. And importantly we're looking to design interventions that are low or no cost and are trying to influence commuting decisions, but without costing a lot of money.

Emily: The team started with a huge brainstorming session. They got together in a room, with snacks and markers and sticky notes, and pretty much every idea that popped into their heads about what could get people to stop driving, they wrote it down.

Joey: Oh we've played with some really interesting ideas. So we've downright talked about paying people. What if we just gave people money to not drive?

Emily: They tossed out plain old-fashioned carpooling too. And what they brainstormed about is—why do people NOT like to carpool? Maybe it's that quiet people don't want to be with people who like to talk a lot. Or people who like to listen to talk radio don't want to listen to classical music. And that led to an idea.

Joey: What is the best way we can match people to others who are like them and want to carpool and what is the best way to design that journey? Is that we set it and we make it so that people don't talk or we make it so that you know they listen to a shared radio show? So we are sort of playing with ideas like this and in many ways you could you could call it, you know, Tinder for carpooling. We were trying to trying to create the perfect match.

Emily: The innovation team members decided to test some of their ideas on city workers in a five week study. One was a lottery—with a twist. Here’s Mayor Steve Schewel again:

Steve: We had a weekly lottery. You could win \$163 dollars if you if you rode the bus.

Emily: Why 163? Because the researchers asked a bunch of people: “Imagine that, if you rode the bus, you were entered into a lottery. How much would the prize need to be to get you to ride?”

The researchers took all the answers, removed the outliers, like if someone said I’d only do it for a million bucks, and they averaged them all, and voila, a \$163 payout is the precise amount of money it would take to motivate people to get on the bus.

Now of course your chances of actually winning that money are probably slim. But here’s the thing – we don’t think our chances are slim. We tend to overestimate our chances.

Joey: This is how lotteries work, right, we all think that that were going to be the winner. We think we identify with the person that's won and we think that we have a chance of winning that. And so we wanted to take this very human insight and use it to try and encourage people to take the bus.

(Music)

Emily: So, idea number one was the “ride the bus because you might win the lottery” idea.

Idea number two was based on another observation about why people don’t take the bus—because they don’t know where the bus stops are. Seriously. If you’re someone who’s used to getting in your car every time you need to go somewhere, it’s possible you have no clue there’s a bus stop around the corner from you. And what about other alternatives to getting in your car? How about biking? Do you know where the bike lanes are?

So researchers sent each participant in the study an email showing them exactly how they could get to work without a car. Each route was personalized.

Joey: If the individual lived in an area where there was a good bus route they would receive a bus recommendation. If they lived somewhere where there was a nice bike lane they would receive a bike recommendation. If they lived somewhere where they had neither they would receive a carpooling recommendation.

Emily: These were not form letters. The headline on the email included your name. And it had a message just for you. For example, “Fred - you could be getting more out of your drive to downtown Durham,” and the email listed the benefits.

Joey: The benefits in terms of how much money they would save in terms of how much time they would gain and in terms of health how much more healthy it was.

Emily: A message like this – with clear, useable, and PERSONALIZED information gets at something in behavioral economics called the “intention/behavior gap.”

Joey: So where people are trying to lose weight they intend to lose weight but struggle to follow through. Where people are trying to stop smoking, they intend to stop smoking but struggle to follow through. And so this is just another one of those examples, and this personalized route acts as a means of making it easier for people to follow through on their existing intentions because we're reducing a knowledge gap. We're saying that people want to cycle to work but potentially they don't know how. And so sending them a personalized route with this route mapped out, which includes the benefits, makes it easier for them to follow through on that intention that they already had.

Squeaky door opens.

Shaundrelle Todd: Hi, how are you? I'm Shaundrelle....

Emily: 1,586 city workers participated in the study we've been telling you about. Shaundrelle Todd was one of them. We paid her a visit at work and she told our producer that before she'd even gotten that personalized email, she had switched to taking the bus because she had to.

Shaundrelle: My transmission went out on my vehicle! I said I'm not going to stress, why? So I had to catch the bus outside of my apartment complex, and it took me downtown to the terminal, and then I had maybe a 5 minute brisk walk to city hall. But I needed the exercise so it was OK. (Chuckle.)

Emily: Then she got the email.

Shaundrelle: With the study though I was able to verify not only if that was the best route for me to take, it also gave me routes to walk to work and if I wanted to bike to work.

Emily: The bike route showed her how to safely get from her apartment, through a busy area, to a long open bike trail built over railroad tracks.

Antony Wambui was also in the study. He usually commutes to work by car from the suburbs.

Anton: So my commute will take 30 minutes to 45 minutes depending on the day of the week and the time of the day. I have a Honda Civic that I would drive, and I never really thought much about taking alternative transportation, although I guess I knew about alternative transportation, I was not keen on using that.

Emily: But he didn't much like driving either. His commute was slow and irritating. Thirty traffic lights and other stops between his home and work. He knows there are 30 because he counted them.

Then he got the email. He took a look at his personalized route and it wasn't that great— it included switching busses midway, and he didn't want to do that. But the email piqued his interest. So he did some research on his own and found a route that worked better for him. A twenty-minute drive to a park and ride and then an express bus to work. Now he takes the bus, not every day, but sometimes.

And Antony says he kind of enjoys the bus. At the time of the study, he was preparing for a professional certification exam, so he used the time on the bus to review the material. It's especially nice to be on

the bus when there's a traffic jam. The bus drives on the shoulder past all the cars, and he takes great pleasure in looking down and waving at people sitting alone in their cars, stuck.

Anton: Yes, it felt good, I didn't have to worry about traffic lights, I didn't have to worry about finding parking when I come to work, it was really good. I should mention that at that time I was study for exams, so it really helped that I could get on the bus and do some studying, so for me it was a win-win.

Emily: Since the study ended, Antony decided to take a new job. So he's not on the express bus anymore, but his new job is much closer to home and he says he's going to commute by bike as often as he can.

So—did the personalized commuting routes and the bus lottery work? Did city workers in Durham drive their cars less during the five-week study?

Yes, in fact, they did. The city innovation team wanted to reduce driving by five percent and they say they tripled that. The researchers did the math, and they found that the study participants all together drove an estimated 28,492 fewer miles—and THAT reduced carbon emissions by 18 metric tons.

That's equivalent to taking four cars off the road for an entire year. And remember - the study only lasted five weeks, and it was only about 1500 people. Imagine what the impact could be if a government offered incentives not to drive all the time, to everyone.

Oh—and there was something else. The people who got out of their cars and took other forms of transportation were about 20 percent more likely to report being very or completely happy with their commute compared to the control group who stayed in their cars. The people in the study group reported exercising more, and saving money too.

(Music)

The study results got the attention of the Bloomberg Philanthropies. Joey Sherlock's research team won a million-dollar prize. The money will allow the team to expand the project city-wide, and the long-term goal is to bring this project to other cities in the United States.

Joey thinks there's a lot of promise in the idea that policymakers can use behavioral economics to nudge people toward good behavior.

Now maybe the thought of elected leaders using behavioral economics to nudge you into doing something kind of creeps you out. It doesn't bother Mayor Steve Schewel.

Steve: Well, I don't think it's creepy, I find it really interesting and really compelling research. And yeah sure our, behavior is conditioned in ways that we don't understand all the time and that's one of the critical insights of behavioral economics, but I think it's fascinating and I think it's really important to use it for our advantage instead of, to our society's advantage instead of to our society's disadvantage.

Emily: Steve says it's really important—especially now—for local governments and for citizens to do what they can to reduce the carbon emissions that cause climate change.

Steve: Well we have to do this locally now because with the U.S. government pulling out of the Paris Accords, we have to begin to take these things into our own hands at those at the state and local level. And in Durham we have a very strong sustainability plan and we're doing so many things now to try to support this sustainability work and to battle climate change. We have to do it at a local level.

(Music)

Coming up next time on Ways & Means. We continue our series on innovative-approaches to dealing with the changing climate—with a trip overseas.

Subhrendu Pattanayak: Here we are, at the highest hotel, it's called Eco Lodge, getting ready for our second day on this field visit.

A Duke University researcher traveled to Nepal to see how entire communities of people not near any government power grid are getting electricity. Locals are tapping the rivers and streams of the Himalayas to meet their energy needs.

Subhrendu: What we saw was a clean source of power—this is hydro, this is green, this is not dirty. The fact that it's still small-scale, and micro, and not the main source is a puzzle.

Now we are walking back, actually down, 500 feet in the pitch darkness, so hard...community members have cell phones with flashlights, and that's making it somewhat easier...

Micro-hydro minigrids—what they mean for Nepal, and perhaps, for other developing countries, too. That's next time.

(Music)

Ways & Means is produced by Carol Jackson, Alison Jones and Karen Kemp. Our associate producer and graphic designer is Melissa Carrico. Production assistance by Sydney Colopy and Deandrea Newsome.

As always, you can find out more about the research we feature at our website, waysandmeansshow.org. The class Joey Sherlock teaches at the Sanford School of Public Policy at Duke is called Behavioral Economics for Municipal Policy.

And if you like what we're doing on this podcast, we hope you will show us some love. Leave a review at Apple Podcasts, or tell your friends about us.

Our engineer is Johnny Vince Evans.

We are a production of the Sanford School of Public Policy at Duke University.

Thanks for listening. I'm Emily Hanford.