# Q&A...

with Chris Severen, an economist here at the Philadelphia Fed.



## Chris Severen

Chris grew up in rural Texas and Tennessee, and, after graduating from the University of Texas at Austin with a degree in Latin American studies and economics, he worked at an energy efficiency consultancy. In 2017 he completed his PhD at the University of California, Santa Barbara, where he was advised by faculty in both the Department of Economics and the Bren School. His research interests span urban, environmental, and development economics. You can learn more about Chris at https://cseveren.github.io/.

**How did you become interested in urban transportation?**

I've always been interested in transportation systems. I mostly lived in small towns until I went to college, and throughout high school I'd drive 40 or more miles in a day. That was just normal. Living in Austin [for college] showed me the other side of that. Austin is where I began to use bikes and busses. It was easier when I was a student, because the busses that served central student corridors ran frequently. Once I moved away from campus, I did that less. In most cities, busses designed to serve workers don't function as well as busses designed to serve students.

**You're currently working on a paper about transportation in Mexico City. What are you learning about Mexico City's transit system?**

The private automobile is becoming an increasingly common mode of transportation in middle-income cities like Mexico City. When that happens, there's lots of problems associated with congestion, air pollution, automobile safety. Mexico City has tried to respond to these problems. It's invested massively in infrastructure, building rail and bus rapid transit lines. When you provide good transit, people like it, and that's true even if it's a bus rather than a train.

**What makes transit "good"?**

The most important things are headways [waiting time between vehicle arrivals], safety, and whether it goes where you want it to go.

**Why are you building a dataset of historical county-level vehicle registration data in the U.S.?**

Before World War II there was a lot of regional variation in how and whether cars were adopted. Los Angeles in the 1920s had something like 2 to 3 times as many cars per capita as Chicago. And this is in an era where both cities had extensive transit networks. It seems that this early adoption [of automobiles in Los Angeles] paved the way for what happened later. In the absence of a public transit system or a walkable city, cars represent access to opportunity and mobility. So it's interesting to understand how that early access played out before we fully shifted to being an automobile nation [after World War II].

**Another paper you're currently working on is "Driving, Dropouts, and Drive-throughs: Mobility Restrictions and Teen Outcomes." What have you learned so far in this research?**

We're looking at how the adoption of graduated driver's license laws may limit mobility for some teenagers. There might be these substitute activities where, if I now have to be in school [because I'm no longer old enough to get a license], maybe I won't work, but maybe it was the work that was really valuable to me. Preliminarily, we find that things go in the direction that you would expect. People are more likely to complete high school and work less. But we're trying to nail down the exact degree of substitution.

**What did you learn from your study of the effect of climate change predictions on current land markets?**

There is evidence that people are beginning to associate specific shocks they are experiencing in their life with climate change. Asset prices should reflect people's expectations about the future, not just the past, so we wanted to test whether land, an important asset, reflects forward-looking beliefs and expectations regarding climate. We found evidence that there is actually a fair amount of weight put on future climate forecasts, and that weight had been increasing over time, and it was stronger where people believed in climate change.

**If you were teaching urban economics to college students, what would you make the course's key takeaway?**

Cities are incredible engines of productivity because people come together and have new ideas and create things, but there are costs to being so close together. Forward progress comes from developing the technologies and institutions that allow people to benefit from exchanging ideas and being in proximity without facing, you know, the Bubonic Plague—or sitting in traffic for two hours.