

Probable Causation, Episode 99: Ben Feigenberg

Jennifer [00:00:08] Hello and welcome to Probable Causation, a show about law, economics and crime. I'm your host, Jennifer Doleac. I'm an academic economist by training and the executive vice president of criminal justice that Arnold Ventures. My guest this week is Ben Feigenberg. Ben is an associate professor of economics at the University of Illinois, Chicago. Ben, welcome to the show.

Ben [00:00:27] Thanks so much for having me on today.

Jennifer [00:00:29] I should say upfront that everything you and I say today represents our own views and not necessarily those of our employers. Is that accurate?

Ben [00:00:37] Yes.

Jennifer [00:00:38] Excellent. Okay, let's dive in. Today we're going to talk about your research on socioeconomic disparities in which motorists police choose to search, but before we get into that, could you tell us about your research expertise and how you became interested in this topic?

Ben [00:00:53] Sure, I'd be happy to. So my training is in economics, and I think, uh, sort of the unifying theme of my work has just been a focus on marginalized, disadvantaged groups in you know, across a range of settings. So looking at, you know, schools, the immigration landscape and more recently focused on the criminal legal system. My interest has been in trying to understand, you know, sources of disparate treatment across these settings as a function of policies and practices, and then really trying to, you know, identify and rigorously evaluate policies that might help to remedy some of those disparities. And, you know, I do that with a combination of randomized control style experiments as well as more quasi experimental work like the project we're going to talk about today.

Jennifer [00:01:38] Great. So your paper is titled to "Class Disparities and Discrimination in Traffic Stops and Searches" and it's coauthored with Conrad Miller. So you and Conrad focus on disparities in who gets searched during traffic stops, particularly what you call pretext stops. What are pretext stops and how common are they?

Ben [00:01:58] Yeah. So it's a great question. The first part of the question is easier to answer in the second part. So a pretext stop, you know, is typically thought to be a stop where the violation itself is, you know, not particularly serious so we're not so worried about public safety. I think a classic example would be like an expired registration sticker. And the idea is that there's, you know, a trooper, a police officer who observes a motorist and vehicle, you know, is suspicious about some underlying criminal conduct and so he's using that stop basis to further investigate the motorist. So to get a chance to, you know, speak to them, take a look at their vehicle and then potentially, if they have justification, to actually go ahead and search them.

Ben [00:02:37] In terms of their prevalence you know, I think there's no great data that gives us a sense of how frequent these are. I think most, uh, analysis of pretextual stops, uh, like analysis in our paper is really focused on, uh, documenting disparate exposure to pretextual stops, in our case, based on socioeconomic status. You know what I can say, though, is that, uh, I think anecdotally and particularly among members of minority communities, there's a sense that these pretext stops play an important role in driving overall disparities in exposure to, you know, interactions with troopers to stops the ticketing

behavior. And, you know, to the extent that we think a substantial share of nonmoving violations so that's like equipment and regulatory violations are you know, driven by pretextual factors we see in Texas in our study sample, that nearly half of all stops are either equipment or regulatory.

Jennifer [00:03:28] So elaborating on that a little bit, why does this matter. What is the cost of that extra search?

Ben [00:03:34] Yeah. So I think there are a few important costs to have in mind. You know, first, just from an equity perspective, I mean, tickets impose financial burdens, right? That's going to be, you know, particularly painful when we're thinking about the disparate impact on individuals who are already low income to start. You know, searches themselves that lead to contraband discovery and, of course, have life altering impacts, right, leading to arrest, incarceration and all of the sort of negative downstream consequences of those outcomes. I think, you know, more generally, being stopped and searched in the first place is just a really stressful experience, particularly for those coming from communities where, you know, there's reason to be somewhat fearful of engaging with the police. And stops are also, you know, particularly in recent years, in as an important driver of disparate exposure to police violence.

Ben [00:04:21] And so, for all those reasons, I think, you know, it's reasonable to suspect that to the extent there's discrimination and stops and searches, that has the potential to give rise to lower trust in the police, lower trust in criminal justice institutions more broadly, and ultimately to make policing less effective because, you know, there's less community buy in.

Jennifer [00:04:39] Okay. So you're interested in class disparities and who gets searched. So what do we know about disparities in who is stopped or searched by police more broadly.

Ben [00:04:50] Yeah. Great. So, you know, sort of going back to your first question of how I became interested in, you know, this area of research. Uh, so Conrad Miller and I have a previous project which was looking at racial disparities in search in the same context and basically documenting that minority motorists, uh, are more likely to be searched and that there's no efficiency gains associated with those disparities.

Ben [00:05:14] And so, you know, we find that you can basically make search rates equitable across groups without reducing contraband yield, but we had this interesting finding in that paper that was pretty tangential to, you know, our main narrative, which was this evidence that higher income motorists were searched less frequently than their lower income counterparts and so that's really what gave rise to the study. In terms of positioning it, you know, within this broader literature, I think there's sort of a really rich body of work documenting, you know, profiling discrimination in the form of race and ethnicity based disparities essentially across all stages of the criminal justice process. So looking at, you know, traffic stops, officer ticketing, uh, traffic searches, arrests, pretrial detention, you know, you name it pretty much there's evidence of disparities in outcomes along that margin.

Ben [00:06:01] I think we know much less about class disparities and in particular the evidence we do have is mostly about, uh, neighborhood characteristics. So we know that in more disadvantaged neighborhoods, we see higher rates of police presence, uh, higher stop rates, higher arrest rates, but that's difficult to interpret because contextual factors,

uh, might differ as well. And so that's sort of the impetus for our project is to say, look, we're going to come as close as we can to holding these contextual factors fixed and ask how a motorist's class or their perceived class influences the way that they're treated by police.

Jennifer [00:06:36] So why hasn't there been more research on the effect of class on stops and searches? Has the hold up in a data challenge or an identification challenge, or have we just been so focused on other demographic factors, that we are not thinking about class when we should be?

Ben [00:06:54] Yeah, that's an important question. I think, uh, you know, maybe it's a cop out, but the answer is somebody all of the above.

Jennifer [00:07:00] Mhmm.

Ben [00:07:00] I think, you know, one key data challenge is that, you know, many most law enforcement agencies are regularly reporting information on stop searches and arrests by race. And there's sort of no parallel reporting of data by motorist class or based on information that would allow you to construct a proxy for class. Uh, and so that makes it hard to look at this margin, you know, as we may talk about, as, uh, our discussion goes on, right for this work, we had to construct our own class measure. And that required, you know, merging in a variety of different data sources. So it was sort of a, you know, a fairly challenging process. I think, uh, sort of getting back to the fact that we have evidence mostly based on neighborhood characteristics.

Ben [00:07:41] Another key challenge is just that, you know, in the context of looking at area level disparities, uh, there's what's called this high crime area doctrine, which basically says that, you know, police can use these neighborhood contextual factors when they're deciding whether it's reasonable to suspect criminal activity in the first place and so I think that makes it hard to interpret disparities across areas. And, you know, the, uh, traffic stop context is sort of a natural one to really try to isolate what we're interested in. And we're really fortunate that, uh, you know, in recent years, uh, the Stanford Open Policing Project has made this, uh, you know, impressive effort to make public data on traffic stops that allowed us to conduct this research.

Jennifer [00:08:25] Okay. So in this paper, you consider stops made by the Texas Highway Patrol. Tell us a little bit about what Highway Patrol troopers do and in particular, when are they allowed to search someone's vehicle?

Ben [00:08:38] Yeah, sure. So in Texas, Highway Patrol troopers, you know, are primarily focused on enforcing state traffic laws. But, uh, they have pretty broad purview working on highways, state roads to enforce criminal law as well. And so basically, when they have reasonable suspicion, uh, they can conduct a traffic stop, give a warning or citation for that original violation, but then they can also make a decision, you know, in real time regarding whether they want to investigate further, uh, if they're making or suspecting there's some, uh, you know, criminal activity taking place or in particular that the motorist is carrying contraband, which in our setting is typically going to be weapons or illegal drugs. And so in terms of the basis upon which they can conduct a search, uh, they're basically four ways that they can go about searching, uh, a motorist and vehicle.

Ben [00:09:24] The two most common are probable cause and consent based searches. And so probable cause searches are, uh, you know, when the trooper has a probable

cause, which is an evidentiary standard to believe that, you know, there's some underlying criminal conduct, and that gives them a basis to conduct the search, you know, so an example of probable cause would be you suspect that someone is driving under the influence, you pulled them over and they're slurring their words and you smell alcohol on their breath. Another basis for a search would be, uh, consent. So you ask the motorist directly, you know, do I have your consent to search your vehicle? And they say yes. And then the two less common reasons that are going to allow a trooper to conduct a search are either the vehicle's already been impounded, in which case they have sort of broad ability to conduct searches as they see fit based on local policy, or when the motorist has already been arrested for some other reason and they want to conduct a search after that.

Jennifer [00:10:13] Okay. And the meat of this paper is this amazing data that you have on these state troopers and and stops they make. So tell us more about these data. What do you know about the stops and the drivers and where did you get the data from.

Ben [00:10:25] So as you noted, this state is pretty incredible in its breadth and also in the level of detail it provides on stops, on drivers. We accessed it through the Stanford, uh, Open Policing Project, which, you know, has gone about basically conducting this exercise of pulling in, cleaning up, making publicly available data on millions of traffic stops across uh states and specific jurisdictions in the United States. And so, in terms of the Texas data that we're leveraging here, uh, what we see are sort of standard fields like, you know, the date and time of stop, the location of the stop, but also some really rich information related to the motorist. We see their full name, their home address, race, ethnicity, the gender, we know the type of motor vehicle they're driving that's the make model and the year of the vehicle. We see the violation for which they're stopped, whether a search takes place, whether the search results in contraband discovery as well as the identity so a unique identifier for the trooper who conducted the search. Uh, the data are covering all stops so those that, you know, result in warnings also citations with 16 million stops in the sample conducted by the Texas Highway Patrol, uh, between 2009 and 2015. We have some data restrictions, that we imposed to make sure that we can identify locations of residents. So we end up with about 11 million stops in our main sample.

Jennifer [00:11:46] Texas is a big state, lots of drivers.

Ben [00:11:51] Fortunately for us.

Jennifer [00:11:52] And then you're going to be, um, because your focus is on socioeconomic class. You're going to be trying to figure out what the class is of the drivers in your sample. So how do you do that?

Ben [00:12:04] Sure. So the first class measure that we're going to focus on is going to be based on residential address and so here we're going to make use of a couple of complementary data sources. So as I mentioned we have the motorist residential address from the stop data. We're going to use some commercial address history data so that we can match, you know, motorists across stops when they're potentially changing addresses and so this address, this data just lets us confirm that we see the same name at two different addresses it's indeed the same individual. Then we're going to draw in American Community Survey data. So the ACS publishes these data files that cover, you know, five years of survey responses and basically give us some interval based distributions of income, what's called the block group level. So it's a really small geography, typically has about 600 to 3000 people in it and so we can see, you know, a rough income distribution for both homeowners and for renters. And so, you know, we already have sort of the

median income at the block group if we just stop there, you know, we find that qualitatively our results look quite similar.

Ben [00:13:10] What we ultimately do in the paper, though, is go one step further and say, okay, let's next merge in some property assessment data. And we're going to use that first to identify the property type and say, well, if someone lives in a single family residence, we know it's likely that they're a homeowner. If someone lives in another type of property, like an apartment complex, they're likely to be a renter. For homeowners we're then going to assign them to a position within the income distribution based on the value of their property relative to other properties within that geography, within that block group. For renters, we're just going to assign them to the median income interval for renters within that same block and so that's essentially how we're going to construct our measure of motorist income using residential address.

Jennifer [00:13:55] Okay. So with the data on the stops and the drivers and your estimates of what their incomes are, you move on to the analysis. So the first thing you do is consider class disparities in the search rate. So starting with the sample of all stops drivers in Texas, how does the likelihood that a driver is searched vary with their income?

Ben [00:14:16] So big picture it goes down and it goes down significantly. I can give you a regression estimate. So you know our regression says uh, you increase household income by ten log points so that's about 10%, that's associated with a 0.05 percentage point decrease in the search rate. That's a little tough to, you know, interpret I think. So I find sort of a more compelling way to summarize those differences by income is just to look at folks who are in the top quintiles, the top 20% by income and the bottom quintile by income and you see that those in the top quintile are searched in 1.1% of stops. Those in the bottom quintile are searched in 2.5% of stock. So more than twice as often and so those are big gaps.

Jennifer [00:14:55] Okay. And then next you look at what happens, uh, what the result of those searches are. So you look at the hit rate. So that's the share of searches where contraband was found. How does the hit rate vary with drivers income?

Ben [00:15:10] Yeah. So for us this is really sort of the smoking gun troopers here aren't operating efficiently if their objective is purely to maximize contraband yield. So to make sure that no searches result in the discovery of drugs, weapons, what have you at the highest possible rate, because we find the exact opposite pattern. So as incomes go up, hit rates are also increasing. So higher income motorists are searched less frequently, but they're more likely to have contraband when they are searched. And so relating, you know, to the comparison I gave you by income quintile of the search rates, we see that for the top quintile, the top 20%, the motorist contraband is detected when they're searched, uh, about 41% of the time and for the bottom quintile, it's about 33% of the time that contraband is found after a search.

Jennifer [00:15:57] Yeah. So if officers were operating super efficiently and using their time in the the best way possible, if their goal is to find contraband, then we would expect that I'm imagining a graph now then you'd expect the line to be flat, right? So there'd be like there'd be no difference in the hit rate between poorer drivers and richer drivers. Is that right?

Ben [00:16:20] Exactly. Here we're drawing on a finding from our prior study, actually where we're showing that, you know, in practice the hit rate is pretty similar regardless of

how frequently troopers are searching. So, you know, getting a little wonky here, but you might worry that, right troopers are really good at identifying contraband in their first few searches, but as they search more and more, they find it less and less frequently and that doesn't turn out to be the case in our settings so your description was exactly right.

Jennifer [00:16:45] Yeah. So you kind of imagine like, you know, you've got if you have a car and you've got like and you can see the guns on the back seat, like any cop that pulls that person over is going to search the car because they can see that they've got, you know, all this illegal contraband with them and then there are other cars that it's much less clear what they're going to find. And so there's going to be some kind of gradients of cars and drivers that they're going to want to search and so the question just becomes who they choose to search along that gradient. And it sounds like they are over searching the poor drivers in your sample.

Ben [00:17:25] Yeah, that's exactly right. And so we have sort of a more formal test of this where we're basically trying to directly evaluate the marginal search rates. So for rich versus poor drivers, we ask, you know, for the searches that are only conducted because they happen to be driving a car that makes them, uh, sort of particularly suspicious in the view of troopers. Right. What's the likelihood they have contraband on that search? And we find that that marginal hit rate is higher for the higher income motorists than the lower income one. So that's sort of reaffirming this finding that, you know, indeed, it looks like the distribution of searches here is not only inequitable but also just inefficient.

Jennifer [00:18:03] Yeah. Okay. So next use a different, more salient measure of the driver's income the car they drive, if they're actually are trying to discriminate based on class, they don't know the person's income when they're driving down the road, but they can see what car they're driving and that car um maybe they have a really nice car it might signal if they're rich and if they have a, you know, a really old beat up car, then they might not have as much income. So, um, so your car is signaling your socioeconomic class to police, but you can easily change the signal by driving a different car on different days, which is different from other kinds of demographic characteristics that we try to measure discrimination based on. So you're going to use this in a clever way, but first, how common is it for the same driver to be stopped multiple times in different cars in your sample?

Ben [00:18:53] You know, more common than I would have thought going into this project. Uh, so we see about 60% of stops involve motorists who were stopped multiple times, and about 20% of stops involve motorists who were previously stopped in that different vehicle. And, you know, after we sort of started working through this research, you know, introspectively, I thought back to being a high school student and realized, you know, I was essentially part of the sample where sometimes I would go out and, you know, drive our family minivan, which was relatively new, would be pretty good other times I would take, you know, my dad's beat up Toyota Corolla, which was sort of in desperate need of a paint job and so that's the natural experiment we had in mind here.

Jennifer [00:19:34] Okay, great. So how do you use the vehicle characteristics, what car you're driving to test for discrimination based on socioeconomic class?

Ben [00:19:44] Sure. So first we need to come up with, you know, essentially a summary measure of class based on the vehicle that we see. And so we do that by predicting your household income using a set of vehicle attributes so we use the vehicle make. We use the age of the vehicle, and then we use sort of a broad measure of vehicle type so whether it's a passenger car or a pickup truck or an SUV. And so in the paper we call that our

measure of vehicle status, which we're thinking of, as you know, conveying this class signal. So, you know, you should think of sort of newer luxury cars are going to be might high status, have high predicted income associated with them, older economy cars are going to be lower status lower or associated predicted income. And so what we're going to do once we've built up this vehicle status measure, is then just look at sequential stops for the same motorist and ask essentially how the change in search rates across those pairs of stops is related to the change in the vehicle status of the vehicles that they're driving across that same pair of stops. And we're going to use a similar logic to look for pretext stops as well, which we discussed earlier.

Ben [00:20:50] And so, you know, the key challenge here, and as you alluded to, this is sort of a, you know, first order challenge in any work, trying to look at disparities and understand the extent to which they're driven by discrimination is that it's really hard to understand the extent to which, you know, differences in treatment, in our case, based on income. So for high income versus low income motorists, are driven by discrimination on income versus some correlated feature that we can't actually observe. Right and so that could be something like bumper stickers, what have you. Here we have an opportunity to change the class signal so change the perceived class of the motorist but hold the motorist themselves fixed and so hold fixed you know their beliefs right, their demeanor, their general behavior, their way of speech. And so the idea is that as long as, you know, the changes in other search determinants, so other things that might lead to a trooper believing that they're carrying contraband are unrelated to the status of the vehicle they're driving, then this approach is going to allow us to identify how troopers are responding to or discriminating on class directly. We have a bunch of robustness checks in the paper, uh, where we're basically trying to provide support for this assumption.

Jennifer [00:21:59] Okay. So what do you find? How do search rates change when the same driver is stopped in a different car?

Ben [00:22:06] Yeah. So, you know, broadly speaking, qualitatively, we find patterns that look a lot like the patterns we see when we look at the overall relationship between, uh, search and uh, motorist income. And so we find that, you know, troopers are profiling on class when motorists are stopped in higher status vehicles, they're less likely to be searched. The estimate that we get from this within motorists design so using the variation in vehicle is about a quarter of the size of the overall relationship we find. But we think of that as sort of a lower bound on the share of that overall relationship explained by discrimination, since troopers might also be using, you know, other correlated status signals so things like the clothing that someone wears, uh, when they're deciding who to search and of course, you know, that's going to be relatively more invariant within an individual.

Jennifer [00:22:55] Okay, so these results suggest that state troopers are searching to many low income drivers, and their searches would be more productive in terms of finding contraband if they searched high income drivers instead. So why did troopers do this? Did they just like giving low income drivers a hard time? Or is it something about the way different drivers respond to a search that might lead them to go easier on the wealthier drivers? So tell us about the hassle costs that you and Conrad describe in the paper and how you measure them.

Ben [00:23:26] Sure. So I think this is a really interesting question, and one we don't have a lot of evidence on in terms of understanding trooper incentives, but we think these hassle costs are, you know, playing a potentially important role in driving these disparities.

And I'll I'll tell you what we do and then talk about sort of a few other ways that might come into play as well. What we have in mind are basically hassle costs related to what happens after a driver is found with contraband and arrested and the basic idea is that, you know, after the arrest takes place, a trooper may have to show up in court, you know, pretrial pleadings, at trial itself if a given case goes to trial. And there's evidence suggesting that from the troopers perspective, that, you know, a stressful, adversarial experience, that it's also logistically challenging so it might be in the middle of their day off and so isn't very attractive, even if, you know they're getting some amount of overtime pay. And we also know that low income motorists are more likely to rely on publicly assigned counsel through the indigent defense system and there's some evidence from prior work in Texas suggesting that those relying on publicly assigned counsel have higher rates of conviction via guilty or no contest plea.

Ben [00:24:36] And so the basic idea, right, is that, you know, if you show up at court and you plead guilty or no contest, the troopers no longer going to have to come in and testify, right there's less scope for their testimony to be discredited, you know, for some procedural violation to be uncovered and so I'll I'll say what we think you know, that's one reason why troopers may prefer searching low income drivers in the first place. You know, we see the same pattern in our data when we look at the guilty, no contest plea rate by income that higher income motorists, uh, are less likely to plead guilty, no contest, more likely to ultimately have their cases dismissed. And you know, as I alluded to, we're focused on sort of one measurable version of these hassle costs. But you might imagine they show up in different sort of unobserved dimensions as well.

Ben [00:25:20] So maybe high income motorists are more likely to be videotaping the interaction and that stressful from the perspective of troopers, maybe they're more likely to file complaints against what they perceive to be, uh, sort of procedural violations and that also could potentially deter troopers on the margin from conducting these searches. So, you know, I think there are several potential pathways through which these hassle costs could influence trooper behavior.

Jennifer [00:25:43] So you're able to test this at least in, you know, using this proxy for for these hassle costs so do you find that has a cost affects search rates?

Ben [00:25:53] Yeah so to make the case that uh that they do seem to predict searching we do is basically we look across Texas so across all of the counties and this is building on some prior work that Conrad Miller and I did where for each county, we essentially try to isolate a measure of these hassle costs where we say, all right, let's condition on everything we can observe in terms of defendant characteristics, case characteristics, and then just try to identify differences in the rate at which defendants, uh, plead guilty or no contest.

Ben [00:26:21] And so, you know, counties in which there are lower rates of guilty no contest pleading, uh, are going to be those counties that for various institutional factors, seem to impose higher hassle costs so troopers are going to be more likely, in our view, to ultimately have to appear in court. And then we go back to the stop's data, and we show that it's precisely in those counties, uh, where guilty, no contest plea rates are lower, that we see that, uh, search rates again, conditioning on, uh, you know, where the search takes place, the time the motorist characteristics that the search rates themselves are also lower. So when hassle costs are higher, we do see this evidence that troopers seem to be deterred from conducting searches in the first place.

Jennifer [00:26:59] So what are the policy implications of these results? What should policymakers and practitioners who are listening take away from your study?

Ben [00:27:05] Sure. So I think that, you know, from our perspective, the most obvious policy takeaway is that, uh, making these search decisions on the basis of motorist class and particular based on the vehicle a motorist is driving is a bad idea from, you know, both an equity and an efficiency standpoint. And, um, as you well know, you know, in economics, we often face this tradeoff where we want more equity, but that's going to come at some cost in terms of efficiency. So that doesn't seem to be the case here this is sort of, uh, you know, an easy solution, right, is basically to say, look, if troopers were just to treat everyone as though they were driving the same vehicle, right, the distribution of searches would be more fair, and it would also be the case that they'd find contraband at higher rates.

Ben [00:27:46] I think, you know, sort of a second takeaway that, uh, is a little less direct is that, uh, we're finding, you know, this interconnectedness across different dimensions of the criminal legal system. So in particular, this notion that how low-income defendants are treated behave within, you know, after arrest, once court proceedings have begun, is in turn predicting how low income motorists are treated right on the search basis, you know, before any criminal conduct has been identified or taken place. And so that suggests to us that, uh, you know, one avenue for producing more equitable treatment in the context of stops and searches would be to do something like improve the quality of indigent defense, because, again, that wouldn't just benefit, you know, the low income defendants, uh, who might, would directly, uh, see improved outcomes through the provision of higher quality counsel, but it could also potentially benefit all low income drivers, uh, who are being, you know, exposed to searching, right these sort of negative downstream consequences of search at higher rates because of these inequalities in, uh, the court adjudication process.

Jennifer [00:28:48] Have any other papers related to this topic come out since you first started working on the study?

Ben [00:28:53] You know, as far as I know, I don't think there are any other papers that I've sort of directly touched on the sorts of class disparities in the criminal justice context that, uh, we're interested in, but there is, you know, a lot of new work related to disparities in the criminal justice system more broadly and work that's new to us. Um, there's a really nice recent paper by Keith Chen and coauthors, which is using this sort of creative approach to drawing on smartphone data to look at racial disparities and, uh, where police are patrolling across several large cities in the US. I guess we both actually just saw this, uh, neat paper, uh, by, uh, graduate student at University of Michigan, James Reeves, who is looking at highway trooper incentives in the context of Washington state and I found that super interesting. Um, and then there's also this body of work that I've sort of only learned about in the process of writing this paper, uh, much of it from psychology, uh, looking at how people infer class cues and then how that, you know, can trigger stereotyping, lead to discrimination.

Ben [00:29:49] Uh, and then also some work, uh, looking at hassle cost, but, uh, along a very different dimension. So this project by Brad Nathan and coauthors in Dallas County, Texas, basically showing that wealthier households are more likely to file tax protests, uh, to reduce what they own property taxes and this is sort of, you know, another dimension along which you're seeing these class disparities arising out of parcel costs. Of course, you know, very different from the one we're studying. So nothing directly speaking to, you

know, our, uh, specific research question of interest, but I think lots of work that, uh, sort of more broadly informs what we're doing and, uh, the questions we're trying to answer.

Jennifer [00:30:26] Always more, more answers being generated in on, off the margins all the time.

Ben [00:30:31] Yeah, absolutely.

Jennifer [00:30:32] So what's the research frontier? What are the next big questions in this area that you and others will be thinking about going forward?

Ben [00:30:38] Sure. So, you know, I think as you alluded to earlier, really trying to better understand what motivates what drives decision making. And, you know, not just in the context of traffic stops, but more broadly, seems to me to be really first order. Um, and I think, you know, part of this is understanding what officer incentives are so what's determining, uh, you know, whether they're promoted, whether they receive bonuses, whether they get demerits, complaints are filed against them, and so forth. And I think, you know, this is useful because that's sort of a necessary first step to then understand, right what are the sorts of policies and practices we could put in place to alter those incentives or those determinants of decision making? If we think, you know, the the status quo is undesirable? And hopefully I've made the case that at least in the context we're looking at related to these discriminatory, uh, stop and search patterns that it is. I think, you know, also just sort of a plug in circling back to our earlier discussion for more data related to motorist, defendant and economic class, um, you know, in the context of traffic stops, but also in the criminal justice context more broadly, because I think, uh, the lack of that data is sort of really hampering our ability to, you know, dig in to the set of questions related to disparities, banking on the class and, uh, what we can do to try and mitigate them.

Jennifer [00:31:56] Awesome. My guest today has been Ben Feigenberg from the University of Illinois at Chicago. Ben, thanks so much for talking with me.

Ben [00:32:03] Oh, thanks so much for having me on.

Jennifer [00:32:09] You can find links to all the research we discussed today on our website probablecausation.com. You can also subscribe to the show there or wherever you get your podcasts, to make sure you don't miss a single episode. Big thanks to Emergent Ventures and or other contributors for supporting the show. Probable Causation is produced by Doleac Initiatives, a 501(c)3 nonprofit. If you enjoy the podcast, consider leaving us a rating and review on Apple Podcasts this helps others find the show, which we very much appreciate. Our sound engineer is Jon Keur, with production assistance from Nefertari Elshiekh. Our music is by Werner and our logo was designed by Carrie Throckmorton. Thanks for listening and I'll talk to you soon.