

UCLA ECONOMIC LETTER

REAL ESTATE AND THE MACROECONOMY



A partnership between the UCLA Ziman Center for Real Estate and the UCLA Anderson Forecast sponsored by the Ziman Center's UCLA Rosalinde and Arthur Gilbert Program in Real Estate, Finance and Urban Economics

APRIL 2019

Monthly condensed analyses of crucial real estate and economic issues offered by UCLA Anderson Forecast and UCLA Ziman Center for Real Estate. Here, UCLA Luskin School of Public Affairs Associate Professor of Urban Planning [Michael Manville](#) summarizes his [recent research](#) into the assumptions and possible benefits of congestion pricing. Professor Manville's original paper was co-written by [Emily Goldman](#), Director, Civic Innovation Fellowship Program, BetaNYC.

Congestion Pricing is a Two-Way Street Would Fees on Driving Unfairly Harm the Poor?

By [Michael Manville](#)

Congestion pricing – charging fees to drive during high-use periods to reduce traffic – is taking place in London and Stockholm, has been approved in New York, and is being proposed in Los Angeles. Pricing is a proven way to reduce urban congestion, but a common concern is that it might disproportionately benefit the affluent and burden the poor.

“Would congestion pricing harm the poor? Look at the question another way: Do free roads help the poor?”

Is this true? On the surface it appears so, and this makes congestion tolls seem to exemplify the tension between efficiency and equity. Traffic congestion, a perpetual problem of urban life, is an inefficiency. Congestion occurs because roads are underpriced—they are free to use even when demand is high. Underpriced goods often suffer shortages, and congestion is essentially a shortage of road: at peak times drivers want more road space than there is space available. As a result they must wait, and in waiting they lose time, cause pollution, and increase the risk of crashes.

Charging market prices to access roads—for instance, charging more at 8 a.m. than 8 p.m., and more on Monday than Sunday—could correct this inefficiency. But because market prices ignore people’s ability to pay, the poor would pay the same toll as the rich, and solving the efficiency problem might create an equity problem. Thus while transportation scholars generally support pricing as a way to reduce congestion, elected officials and the public often worry that tolls would burden low-income drivers. On these grounds opponents have disparaged priced roads as “Lexus Lanes” for the rich and described pricing as a tax on the poor.

How valid is this concern? In recent research with Emily Goldman, I examined that question. Undeniably, congestion prices could be a burden for some low-income drivers, and any good pricing program would need to carve out some revenue to help protect the poor. Overall, however, we conclude that congestion pricing is not an inherent affront to equity. Neither logic nor existing evidence suggests that equity and tolling must be incompatible.

To begin, and perhaps to state the obvious, few equity agendas in other areas of social policy suggest that all goods be free. Almost no one, for example, suggests that all food be free because some people are poor. Society instead identifies poor people and helps them buy food. It is thus unclear why all roads should be free because some drivers are poor. This question is all the more relevant in the United States, where most drivers are not poor, many poor people do not drive, and most miles are driven by the affluent, because driving involves other substantial expenses (vehicles, gasoline, and insurance) that are easier for the affluent to afford. While half of non-poor households drove more than ten thousand miles in 2009, only 30 percent of poor households did the same.

Put another way, equity concerns about congestion pricing often assume, implicitly or explicitly, that free roads are an important subsidy to the poor. But free roads might be more accurately described as a subsidy to the affluent that some poor people enjoy. Unpriced roads are a government benefit subject to a reverse means test: people with enough money to pay for vehicles, fuel, and insurance get to use valuable urban land for free. Because both vehicle ownership and driving rise with income, the benefits of free roads flow more up than down. If we look at driving during peak times, either through the U.S. Census’ data on commuting or the National Household Travel Survey’s data on travel overall, we see that the rich are consistently over-represented, and the poor consistently under-represented. Across the ten most congested urban areas in the U.S., for example, the poor are on average 14 percent of the population, but account for only 4 percent of peak hour drive commutes. Households earning over \$150,000 per year, in contrast, are 15 percent of the population but account for 28 percent of peak hour drive commutes.

The idea that priced roads will harm the poor further rests on the assumption that free roads (and the congestion they cause) will not harm poor people. But not all of congestion’s costs fall on people in vehicles. Certainly the largest, best-known, and most visible costs of congestion are costs drivers impose on each other: wasted time and fuel and, to a lesser extent, crashes. Congestion also creates air pollution, and the burden of this pollution often lands on people who live and work near congested roads. These near-road residents tend to have lower incomes, and drive less, than the average urban resident. Across the ten most congested urban areas in the United States, 20 percent of the people who live within 1,000 feet of a freeway are poor, compared to 13 percent of people who do not. These freeway-adjacent areas account for only 0.3 percent of total land, but well over 2 percent of the total poor population. And households in these areas are over twice as likely to lack automobiles as households further away. The minority of people near busy roads bear more of free roads’ costs and enjoy fewer of their benefits.

So while it may be true that priced roads will benefit higher-income people and burden lower-income people, it’s important to remember that *free* roads do the same. Free urban highways primarily subsidize richer people, and the resulting congestion creates pollution that disproportionately burdens poorer people. Our work, moreover, suggests that the number of low-income drivers burdened by congestion charges would be not just a small minority of total peak-hour drivers, but also a minority of the total poor population. This fact suggests that the revenue generated by pricing could easily compensate any poor drivers harmed. Free roads, in contrast, generate no revenue at all, and therefore offer no way to compensate the people who suffer as a result of them.

Most conversations about congestion pricing ignore the costs of free roads, because humans have a tendency to assume that the status quo is fair. This tendency, which psychologists sometimes call omission bias, manifests as an implicit belief that failures to act (omissions) carry less weight than actions themselves (commissions), even if those failures to act result in equal or greater harm. As a result, people strictly scrutinize harms that arise from changing the status quo, and downplay or overlook harms that arise from the status quo itself.

Omission bias probably plays a large role in responses to congestion pricing. Our transportation status quo is deeply inequitable, but that inequity is also our everyday experience. Tolls are more visible, literally and figuratively, than air pollution. Congestion prices would be new and noticeable, while pollution is quietly normal. When a government tolls a road and burdens low-income drivers, the harm arises from something government *does*. When a government fails to price a road and people living near it become sick from pollution as a result, that is a harm the government *allows*. We tend to notice, and be offended, by the former more than the latter, regardless of which one is actually more harmful.

CONCLUSIONS

The balance of evidence suggests that free roads primarily benefit affluent drivers, and that the congestion these disproportionately affluent drivers create imposes costs on low-income people living nearby. At the same time, there is no denying that introducing tolls would burden some poor drivers. One virtue of pricing, however, is that it comes with a built-in solution to this equity problem: revenue. Society regularly charges fees for access to infrastructure—we use water meters, electric meters, and so on—and then uses some of the revenue to ease the burden for low-income users. There is no reason we could not do the same with congestion tolls, and indeed we should.

So we have choice. Certainly the equity question in pricing would be easier to answer if it involved choosing between one alternative that was plainly fair and another that was plainly not. Unfortunately, this is not the case. We are instead confronted with a decision about what type of unfairness we are willing to tolerate, which makes for a more difficult ethical puzzle.

One way to approach this puzzle is to imagine a counterfactual world where all freeways are priced, and where some revenue is used to mitigate burdens on poor drivers. Then imagine an attempt to depart from this status quo and make all priced roads free. In this scenario, supporters of free roads would need to introduce and defend a program that would primarily benefit the affluent.

Such a program would eliminate one potential harm to the poor (high peak-hour tolls), but increase another (air pollution near roads). And where the poor harmed by congestion pricing would receive not only a benefit (driving on an uncongested road) but also compensation (from the toll revenue), the poor harmed by free roads would get no benefit (they suffer for living near the road, not for using it) and no compensation (without tolls, there is no revenue to redistribute). Finally, the low-income people who would benefit from free roads would be, on average, not just financially better off than those who would be harmed but also less vulnerable. Free roads benefit low-income adults with enough resources to drive, while pollution's largest and longest-lasting harms fall on children and the unborn.

Congestion prices could harm some low-income drivers, and dedicating toll revenue to offset that burden would be essential. But it is not only priced roads that could harm the poor while helping the rich. Free roads do the same. Consistency would seem to require equal concern in both scenarios. People who worry about harms to the poor when roads are priced, and not when roads are free, may be worried more about the prices than the poor.