Parking Puzzle Pt. 1: The True Cost of Parking Requirements

Michael Manville Ph.D.:

Making some room for housing for people has to take precedence over making some room for housing for cars.

Alison Johnson:

Welcome back to Code 53, The Apartment Podcast, I’m your host, Alison Johnson with NMHC. On this show, we bring you into conversation with apartment industry executives, leading experts in the multifamily sector, and a diverse group of practitioners, all to help you learn everything it takes to create communities from business strategy to design to finance and leadership. And today on Code 53, we’re kicking off a special two-part series on the issues of parking in the multifamily sector.

There is no doubt that everyone who owns a car, including myself, feels like they're an expert when it comes to the costs and paying points of parking, at least in your own city or town. But actually, parking is an area of academic study that researchers have been working on for decades. And you might be surprised to learn that minimum parking requirements actually play a significant factor in the size of your rent payment, the length of your commute, and even how many friends live nearby. So today, we're joined by a scholar who will get us all up to speed on the history, economics, and policies at the intersection of land use and transportation. Coming up, The Costs of Parking with Dr. Michael Manville, associate Professor of Urban Planning at the UCLA Luskin School of Public Affairs.

Announcer:

The Code 53 Podcast is brought to you by NMHC, the National Multifamily Housing Council, the place where the leaders of the apartment industry come together to guide their future success. From owners to managers and developers, NMHCs members create thriving communities by providing apartment homes for 40 million people contributing $3.4 trillion annually to our nation's economy.

Alison Johnson:

Do you know that in America there are between four and nine parking spots for each car? Did you also know that there is more parking per car in America than there is housing per person? The statistics around parking are mind-blowing, especially when you realize that in most jurisdictions all that parking is required by law. For the last a hundred years or so, real estate development in the United States, particularly with the multifamily housing sector, has evolved in tandem with parking lot. Dr. Michael Manville, associate Professor of Urban planning at the UCLA Luskin School of Public Affairs is a leading expert in these matters and we are lucky to have him join us today. Professor, welcome to Code 53, The Apartment Podcast.
Michael Manville Ph.D.:

That's a pleasure to be here, Alison, thank you so much.

Alison Johnson:

Well, Michael, I just introduced you as a professor of urban planning, but your research specifically and your focus is on teaching the relationships between transportation and land use and on local public finance. So tell us, how do local policies tend to hide the public costs of driving and parking in the property market?

Michael Manville Ph.D.:

I'm going to borrow a line from my colleague, Dr. Donald Shoup, I think it summarizes this very nicely, the way he thinks about it, is that all transportation systems have three components, there's your vehicles, your route or your rights of way, and then what we call your terminal costs, which are how much it costs to store a vehicle when you're not using it. And so for air travel, for instance, your vehicles or airplanes, your route are the flight paths the different airlines use and your terminals are the airports themselves. For trains, it's the trains themselves, the tracks and the stations, et cetera. And what stands out for cars, and one of the things that makes cars so useful in fact, is the fact that their terminal costs are very high. And what I mean by that, is that part of what makes a car so appealing is that it liberates you from the constraint of having to only go places where other people are going when other people are going there.

The promise of the car is, it doesn't matter what the train schedule is, you can get in it and go where you want at the route you want, when you want and so forth. But that promise hinges on there being a place for you to put the car when you get there. And so that statistic you cited in the introduction, how many parking spaces there are per car really does make a lot of sense. For the car to really have its maximum potential, we have to have a lot of places to put it. So to get to your question now, how do we end up hiding that cost? Well, so that means the terminal cost of parking compared to other modes of traveler, really very high. Most trains are moving most of the time, most cars are parked most of the time, that's the nature of driving.

If you have a law like almost every city in the country has that says the way you're going to provide parking is by forcing developers to provide it when they build something, that's what minimum off-street parking requirements do. What you've basically done, is take in those very high terminal costs of parking and you pulled them away from the driver and put them in the development market. And so a cost that in principle should be paid by people who drive when they finish their trip is instead going to get paid by developers when they start a project. And so what that does, is it makes driving seem cheaper, what should be the biggest cost of automobility has now been hidden away from the driver and it makes development much more expensive. And so you get just very quietly through this innocuous zoning law, a situation where driving becomes less expensive and housing becomes more expensive.

Alison Johnson:
Interesting. So understanding that these costs are hidden in individual developments in a city, in a municipality, how do you as a researcher, how do you even begin to calculate or how does a local government even begin to calculate the real cost of parking?

Michael Manville Ph.D.:

Well, so those are two very different questions. The answer to the second one is that, for a long time, the local government never did calculate, where the minimum parking requirement came from was this desire to do something about the crisis of parking in American cities, particularly when households were adding automobiles at a very rapid clip. Basically, you had a situation where the curb was overwhelmed, there really weren't that many off-street parking facilities, but more and more households were buying cars. And so you had residents complaining that new buildings, new development were overwhelming the curb and taking 'their street parking spaces.'

How do you solve that problem in a way that keeps everyone who would be voting for you happy? Well, you push the cost onto newcomers. You don't say, well, we're going to meter the curb and start charging you to store your car here. What you say is, don't worry, anytime someone shows up and builds a new building, we're going to make sure they build parking with it. In the abstract, of course, there's a big cost to that, but it's not a cost that lands on the local government and it's not a cost that lands on current voters in a direct way. And so the local government doesn't have a huge incentive to figure out what that cost is, what they know is they just made a problem go away.

From a researcher's perspective, it's a totally different question, you can look at a minimum parking requirement and predict two consequences, you're going to get more driving, you're going to get less housing. How do we try and measure that? Without going too much into the weeds, what we look for like all social scientists is, areas where you have a variation in the laws themselves. Maybe you have a border between two cities and one of them has a higher parking requirement than the other. Maybe you have a situation where a certain class of buildings for reasons unrelated to parking itself has been exempted from parking requirements. And you try and look in those areas and say like, well, do we actually see more density? Is it easier for developers to build? Do we see lower levels of vehicle ownership? Do we see that people who live in buildings where the parking requirements were lower? Do they own cars less, and do they drive the cars that they own less?

And the answers to all those questions are, yes, the predictions that you would make by just looking abstractly at a minimum parking requirement through an econ 101 lens, that this is going to give you more driving and less housing are largely borne out by the empirical research.

Alison Johnson:

Thank you for letting the two for us because I want to go back to the local ordinance issue, the problem that was solved. Before parking became mandated, people were still moving about a city. How did local government officials really think about the introduction of the vehicle into their community and the mobility? Was it just like, it's a problem to think about another time and we'll just wait for the future to kick in down the road?

Michael Manville Ph.D.:
Alison, that's a great question and there's been a lot of really interesting history in the last 10 years or so written about it as well. Peter Norton's book, Fighting Traffic, which is about these controversies that arose when the car came to the city between 1900 and maybe 1925. The short version of it would be this, the car showed up, the city in its built form, in the way it governed its streets and the way it thought about its streets, the American city wasn't ready. And what's important to remember is, cars were adopted between 1900 and 1920 or 1900 and 1928, just an astonishing pace. You went from there being almost no cars in the US in 1900 to being by the early 1920s upwards of 20 million. And it's hard to fathom today how un suited the city was to deal with that.

If you look around wherever you live today, it's so common that you don't notice it, but all around us is infrastructure designed to help us navigate a world for cars. There are lane markings in the streets, there's traffic signals, there's gas stations, there's parking spaces, of course, there's signs, there's norms we understand about who has the right of way. There's a basic understanding of physics that we all get about how fast you can bring a vehicle around a corner without something terrible happening, no one knew any of that. And so what ensued was chaos, and one of the biggest sources of chaos really was the fact that there were no norms or rules around parking. And so people would get where they were going and they would just stop the car and get out. They might move it over to the curb, but there's all sorts of newspaper stories about double parking, triple parking, and it would get in the way of people walking, it would get in the way of horsecars, it would get in the way of street cars.

We look back often, there's a temptation to look back and say, my God, these people in the early days of urban planning, they just bought whole hog into the car and it was a huge mistake. But hindsight is always 2020, this really was legitimately a very difficult situation, and parking was a vexing problem. And I think that the decisions they made were understandable in that light, but the decisions they made in retrospect, they could have been better. And one of the most consequential ones was this idea that cities needed more car storage, they weren't sure how to pay for it. Then as now, the main power local governments have is not to raise huge sums of money, it's to regulate land use. And so they turns to the tool that was most readily at hand for them and that was most powerful and they said, when new development comes, we require it to provide off-street parking. And it really did solve the problem, that's not the issue, the issue is that it created a bunch of problems that were much worse.

Alison Johnson:

Let's talk about those problems, shall we? How has minimum parking requirements constrained multifamily housing development? Has it or is that an overstatement?

Michael Manville Ph.D.:

I think it has. Nuance can be applied to everything, and so when we think about land use regulations, the term that we often use is the regulation binding. And what we mean by that is, any given developer, I'm sure you have developers who listen to your program and they know this better than me because their money rides on it, but at any given development is going to face a whole bunch of regulations. Some of them are going to represent a real constraint on the type of development that they're able to put up and some won't. And the ones that represent a real constraint are the ones we say are binding. And so, one thing about parking requirements is that once you get outside areas where land's pretty expensive, they probably don't matter that much in the sense that probably the developer would build a
bunch of parking anyways and they would just provide it through a relatively inexpensive big surface lot next to their building.

So it would not be correct to just say that every time you see a parking requirement, what you’re seeing is a law that’s constraining the supply of multifamily housing. In areas where land is more valuable though, which means like you're getting closer to a center city, things like that, the parking requirement becomes a big deal. And I think one way to understand that is just to look at the older areas of cities that have buildings that predate World War II or so, because in most of the country, parking requirements didn’t come into gear until after World War II. And if you look at those buildings, what do you see? You often see a structure that really comes up to all of its lot lines and comes right up to the street. And for a developer, that's great, the land is what's valuable, and you want to convert that land into income generating uses and so that means more housing units. So the more of that land you can use, the better.

And then if you just fast-forward 10 years and look at buildings that went up in the 1950s, you immediately notice a much less efficient use of those parcels because somehow or another, they had to put parking on that lot. And so either the building was pushed back from the street, this is how we got the strip mall, a strip mall does not exist because sometime in the post-war years, Americans lost all of their sense of aesthetic ambition. It exists because it was the cheapest way to comply with a one space per 800 square foot commercial parking required. Or you'll see apartment buildings that have to carve out a driveway and the driveway that goes around the back, and so you're only using about 40 or 50% of your lot because you have a driveway and a parking lot tucked in the back, or you're seeing the first floor has now become a parking deck.

And so all of that has a cost, it’s a cost either in space, it’s like taking some of the land itself, or it’s a huge capital cost because you're digging or you're using one floor for a first level garage or both. And that means that you're either going to get fewer housing units and or the housing units that you're going to build are going to be a little bit bigger and more expensive, you have to market them to a slightly higher price point than you might have originally thought. And so what that means, is that your housing is a little more expensive to the consumer. And I really want to emphasize, that’s for two reasons, one is that you're going to build a slightly different type of housing, but the really big one is that parcel by parcel, as the city becomes redeveloped, you're going to build a little bit less on that parcel than you would have without the parking requirement.

And I think that's one reason why these have been so costly, is that if you look at any given parcel, it doesn't seem like a big deal. Here's a parcel in the middle of a city that if you just looked at the zoning and didn't consider the parking requirement, you could have put 16 units of housing on it. But then because of the parking requirement, maybe the developer figures that it's only going to a pencil if he can build 12, you've lost four housing units. It’s easy to look at that and say, well, how's that going to matter? But if that happens parcel after parcel, decade after decade, it adds up to a lot of under building.

Alison Johnson:

Your answer makes me start to think about quality life concerns and current development practices, revitalization, or moving into the Urban corp. We know the concept or heard the concept of the 15 to 18 minute city of a walkable community. You describe a situation of constraint on these minimum parking
requirements, how has this historic reliance on parking requirements created problems that we're dealing with today, particularly around mobility and maybe public transit initiatives?

**Michael Manville Ph.D.:**

It's a great question, and I think there's a couple of different angles to the answer. One is, what I just mentioned in terms of one of the costs of product requirements was like, you just get a little bit less housing on a given parcel. The flip side of that, which comes right along with it, is that that parcel is now quite car oriented. And what I mean by that, is that the building is pushed back from the street most likely and or there's a driveway and so you have a situation where the car is now by law right there for you when you live there. So resident of that building, when they're deciding how to take any given trip, the car really is a much more convenient option for them than it would've been if they had parked in a garage half a block down, if they'd parked on the street, et cetera, et cetera.

The other side of that is that, if you do choose to go out and make that trip by foot, the landscape is now less amenable to you walking because the street is now broken up by driveways. And so anyone who has ever walked in Manhattan or Paris or Vienna or something like that, Americans go to these places, Americans obviously go to Manhattan, but go to European cities and they come back and they say, I just walked all day and it was wonderful. And there's a lot of reasons why walking in these places is wonderful, but one of them is that you can go blocks and blocks and blocks and not encounter a curb cut. Whereas, if I leave my building in Los Angeles and go for a walk, chances are every 50 feet or so there's going to be a driveway which makes my walk intrinsically a little more stressful, I'm always watching out to make sure a car doesn't slide out and run me over.

The other thing the parking requirement does, is it pushes things apart from each other to the extent the developer accommodates the parking requirement with a surface lot, then buildings become a little further apart from each other. And again, it just becomes aesthetically and psychologically a less pleasant walking environment, it also just means more distance. And so what you start to get as a result of this is, on any given block, you have more distance between places, you have less density on that parcel, you have an environment where walking is less pleasant and enjoyable. All of those things end up being a quiet poison for public transportation because what does transit need? Transit is best at moving a bunch of people very rapidly in a straight line. And so what it needs is density all along its corridor, and it needs to have an environment where getting to that corridor is pleasant people.

The simplistic guideline that you'll hear about transit oriented development is like, you need to be within a quarter mile of a transit hub. And I think that's fair, but it's important to remember what that quarter mile looks like when you're walking down, it matters a lot. If you're walking down a New York City street where all the buildings come right up to the sidewalk and you can window-shop or take a little peek in someone's beautiful studio as you're going by on a wide sidewalk, that's very different from if your quarter mile is sidewalks constantly interrupted by driveways, on one side I've used the street, and on the other side is a surface parking lot, it's unpleasant, it's noisy. That is the situation in a lot of Los Angeles and a lot of American cities and I think it depresses transit use, and we owe it in many ways to our parking requirements.

**Alison Johnson:**
Dr. Manville, we've talked about the historical context and the legacy that has created modern day challenges. Is there any reason to be optimistic that we here in America can turn this parking situation around?

Michael Manville Ph.D.:

I am optimistic, the first thing I'll say is, I really want to emphasize it took us a long time to get into this situation, the built environment does change pretty slowly. So saying that I’m optimistic should not be mistaken for me saying, I think that in the next 10 years we're going to see everything change. Part of the reason parking requirements have done so much damage is that, they were allowed to quietly do their work for the better part of a century. And so we have to be realistic when we think about what's going to change, it's going to change slowly. But the first step to changing it is just repealing the requirements, as long as they are still in place, the problem is going to get worse.

And we are seeing the requirements getting repealed, my colleague, who's the academic rockstar parking studies, Donald Shoup, he published a book in 2005 called The High Cost of Free Parking. This became a book that acquired a unlikely cult following, this is a 880-page book on the economics of parking, but there was a yearning for it. And in short order, there was a Facebook group devoted to these ideas, an organization formed, a great organization up in Portland, Oregon, run by a guy named Tony Jordan called the Parking Reform Network. And there's been a lot of advocacy across the country to just, at the very least, reduce and in some cases abolish these parking requirements.

And I think one of the most promising developments in this space took place last year in California where assembly member Laura Friedman carried a bill that abolished parking requirements in California for areas near public transportation. Now look, all acts of a legislature, it's not as simple as that, there's nuances, there's loopholes, we'll have to see how it plays out, but that is basically what the bill did. And I can tell you that when I first started studying this as a graduate student 20 years ago, a development like this was unimaginable. When you went into a room, a seminar with some elected officials or something and started talking about ending parking requirements, the reaction you got was like, look, don't let the door hit you on the way out. And now people are doing it and I think that's very encouraging.

Alison Johnson:

On that point of encouragement, it's 2023, we're talking a lot about the urban housing crisis, how big a role can these reforms play in addressing new development in housing in urban communities?

Michael Manville Ph.D.:

I think this can be very consequential for urban housing development. There's all sorts of different ways that local regulations can make it hard to build housing that there's demand for. But some of the biggest ones, if you just asked me to catalog the biggest obstacles to housing production in California, a number of them would not really apply in the middle of our biggest cities, large minimum watt sizes, single family zoning, single family zoning applies in more places than I wish it did. But these tend to be suburban constraints with some important exceptions. But the parking requirement really is a big constraint once you get past that single family restriction.
If you looking at places that allow apartments, the parking requirement really is often the binding constraint to density. I have certainly talked to many apartment developers and in the numbers we look at too suggest this as well, that there's pieces of land in lots of cities that you look at them and you say, I could put a building here but the parking doesn't pencil. Or I could put 15 units here, but the parking's only going to let me do 10, and so I'm going to do 10. And that's like you've lost 50% of your capacity to build and you don't get that back because the building probably lasts for a while.

And I think that a misconception here sometimes is that, if you abolish parking requirements, the developer's not going to build any parking at all. And I don't think that's right, some developers will, there's some developers out there who really think that they have a market for people who just don't need parking on site at all. But I think it's important to understand that the constraint to development represented by the parking requirement really comes in the form of the marginal parking space. And what I mean by that, is that the problem arises, maybe you've got room to do five spaces with your little 10 unit building, but the law tells you you have to do six and you just can't make that sixth one work. More often than we care to think about, situations like that arise and they either scuttle developments entirely or force the developer to really scale them back.

And so I think what we'll see without parking requirements is not an epidemic of development with no parking at all, we are a car oriented country, most consumers, most tenants do want a place to put their car. But we'll see enough flexibility afforded to developers that they'll find ways to do more building with less park.

Alison Johnson:

Let's end on an uplifting note, we talked about a lot of challenges and historic context here, you mentioned earlier that you work with Dr. Don Shoup at UCLA, but for new entrants into the marketplace, new professionals, they're probably just learning about these challenges and the cost of parking, and they're learning it from public media, they're learning it from school and academics. But there are quite a few major newspapers and magazines that are frequently publishing investigative articles on this exact problem that we're discussing right now.

There's a journalist, Henry Grabar at Slate who has done some work and has recently published a book that I'd like to get your take on a quote. His book is called Paved Paradise : How Parking Explains the World, and I think it might get to a little bit of what we've talked about here thematically, but his quote is, 'a first principle when approaching this issue is acknowledging that most people would like to be able to leave the car behind once in a while to travel on foot, on a bike, with a kid on rollerblades or a baby in a stroller on a bus that comes when you need it and goes somewhere you want to be.' Is this a new first principle we need to consider when it comes to mobility?

Michael Manville Ph.D.:

I think Henry's book is great, and I really do encourage people to read it. I would never send anyone away from Don Shoup's 900-page academic book, Don is a great writer, but this is a great narrative piece of journalism that explains a lot of these concepts, really is a wonderful achievement. And I really agree with that quote, and I think what it gets at is, that occasionally people hear about the effort to abolish parking requirements and they think of, this is a war on cars, the pointy-headed planners just want us to be crammed onto buses and live in thousand story towers. No, I own a car and I understand that most
people do, I see the American landscape, cars are important. But I think another way to say what Henry is saying, if I'm reading him correctly, is that a car is a good servant, but a bad master.

And one thing that parking requirements have done, is they have cemented cars as our masters in urban development. But if you talk to developers and you talk to architects who try and work in places with parking requirements, what they basically say is, I get to build whatever's left over after I figure out where to put the required parking. And we get a landscape that is built and constructed of the structures that emerge after the developers and the architectures and the financiers have figured out where to put and pay for the required part. And that's not a landscape that is very good for any of us who want to do anything besides drive.

And Henry's point is that most of us really do sometimes want to do things besides drive, but a landscape where everything is pushed apart, where the buildings are smaller, where the density is lower, and there are people who love that. And maybe that is just the archetypical ex-urban desire, and no one is saying that should be outlawed, ending a mandate is not the same as enacting a ban. But if you have a situation where land is very valuable and lots of people want to live there and you are forcing everyone who wants to build something to put parking in at a number you have specified and a location you have specified, what you are basically saying whether you intend to or not, is that everything becomes secondary to where you can store a car.

And I think Henry's point, and I agree with it wholeheartedly, is like, that is not the recipe for a good city or a good life where everything is secondary to storing your car when you're not using it. And we can have cities that have ample room for car storage, but also have even more room for everything that actually makes our cities worthwhile. And the first component of that is getting people places to live, that making some room for housing for people has to take precedence over making some room for housing for cars.

Alison Johnson:

Dr. Manville, it has been a great pleasure to talk with you and hear your insights on this paradigm shift that needs to take place in parking planning. Thank you so much for joining us today on Code 53, The Apartment Podcast.

Michael Manville Ph.D.:

Well, thank you for having me, Alison, it's been fun.

Alison Johnson:

Coming up on the next episode of the podcast is part two of our special series on parking in the multifamily space, where we'll lay out the future of parking and how technology breakthroughs are impacting the marketplace. Don't forget to subscribe and meet us right back here for another new episode of Code 53.