

Ideas to Accelerate Parking Reform in the United States

PERSPECTIVES FROM LEADING EXPERTS



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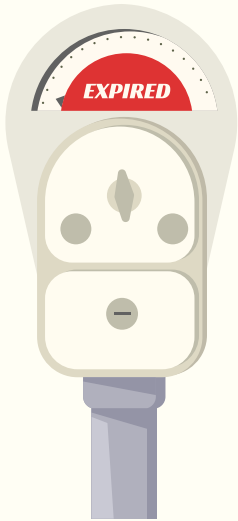
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INTRODUCTION

Updating Parking Policies for Cleaner, Greener and More Equitable Cities

BY JONAS HAGEN

This report contains the findings of Martha Roskowski's 2018–2020 investigation into ways to accelerate parking reform. It also includes the results of an online survey with 40 leading experts conducted in early 2020. A landscape analysis identified key stakeholders and opportunities that can spur progress on parking reform in the United States.

Since the mid-twentieth century, politicians, planners, engineers, building developers and financiers have contributed to a mobility landscape that keeps a large portion of the US population dependent on driving. People's mobility largely depends on urban freeways and huge swaths of land dedicated to parking through various regulatory mechanisms. These mechanisms for parking were crucial in creating the landscape of US cities, typified by low-density suburbs, strip malls, and big-box stores, where using public transit, walking, and cycling are nearly impossible, making driving the only reasonable way to get to destinations. This helped make the United States not only one of the most car-dependent countries in the world, but also one of the world's leading emitters of greenhouse gases contributing to climate change.

This mobility landscape also exacerbated existing income and racial inequalities. Car-owning suburbanites have good access to jobs, as well as health care and other basic needs, while urban populations with lower car ownership rates have decreased access to jobs. At the same time, residents of cities, who are more often low-income and communities of color, experience the negative consequences of car-based infrastructure including air pollution, road injuries, and space consumption for parking.

All car trips begin and end in a parking space. Prioritizing better use of space dedicated to parking for cars is critical to reducing greenhouse gas emissions from cities, making these cities more livable and equitable, a fact that leading urban practitioners and researchers have long recognized (Banister, 2011; Shoup, 2018). While plentiful parking encourages people to drive, well-managed parking can support walking, biking, and public transit use. Thousands of acres of land dedicated to parking in US cities could be used for other purposes such as housing, parks, supporting short distance trips, or improved bus service.

How important is parking reform to the fight against climate change?

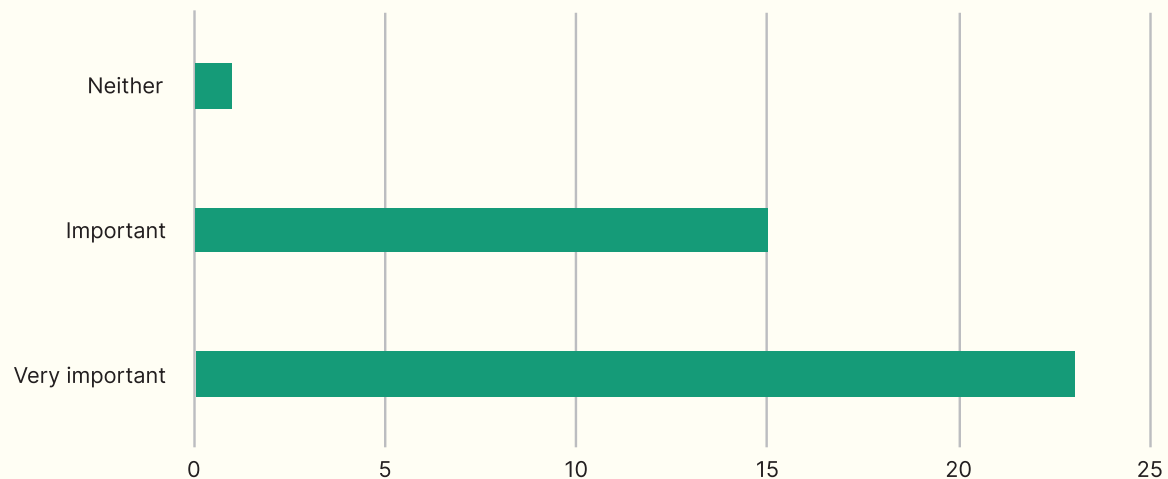


Table 1 – Experts who responded to our survey agreed that reforming parking was critical to tackling climate change.

Parking reform has three major components—pricing, requirements, and space. Below is a brief description of these components, followed by US cities that are showing the way forward in these areas:

Use Pricing

Free or underpriced public parking not only encourages people to drive to their destinations, but also to circulate to find an unoccupied spot. This increases needless CO₂ emissions, decreases air quality, and increases congestion. Market-based, on-street fees can be set at a price so there is always a vacancy of roughly 1–2 parking spaces during peak periods. Funds generated from

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market-priced parking have been used in many part of the world to improve streets and enhance more sustainable, equitable transport options.

SAN FRANCISCO, CALIFORNIA

Using smart meters and variable pricing ranging from \$0.25–\$7.00, the SFpark program reduced cruising for parking 50% by keeping occupancy rates at 60–80%.

SEATTLE, WASHINGTON

Using a low-tech method with manual counts, Seattle adjusts prices of paid public parking annually to achieve optimal occupation rates. Adjusting prices for parking part of a holistic approach that aims to increase affordable housing as well as transit and bike use in the city.

Drivers in my city overuse parking because it is free or cheap.

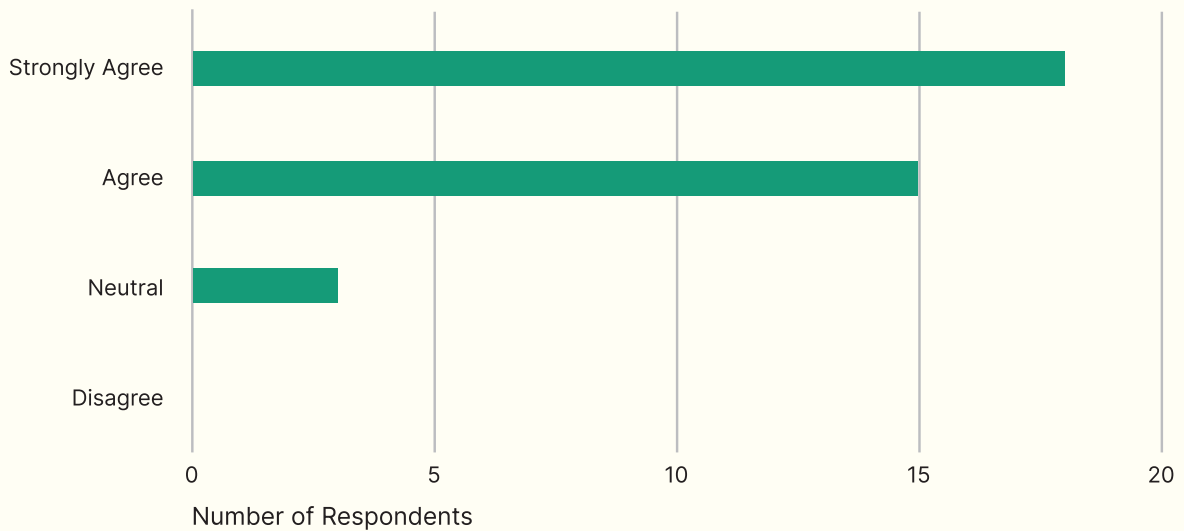


Table 2 - Experts agree that more appropriate pricing would lead to better use of parking in US cities.

Remove Requirements

Municipal zoning laws have parking minimums that require developers to provide parking in any new buildings. These requirements are steeped in pseudoscience and are often bizarrely specific. For example, for a golf club, San Jose, California, requires 8 spaces per hole plus 1 per employee (Shoup, 2018). By removing requirements for off-street parking, municipalities can let businesses and developers decide how many spaces they need to provide for their customers. Allowing housing and retail uses instead can lead to more tax revenue for municipal coffers.

BUFFALO, NEW YORK

In 2017, Buffalo became the first US city to remove all parking requirements for any kind of development. The city's center, which had been ailing for decades, has since witnessed a surge in apartment construction (Epstein, 2020).

HARTFORD, CONNECTICUT

Freeways and expansive parking lots from the 1960s to the 1990s hollowed out downtown Hartford, once a thriving urban center. After initially removing parking minimums downtown in 2015, Hartford eliminated the requirements across the entire city in 2017. Developers are now able to rehab downtown buildings more quickly, and new developments are contributing to improving the city's fiscal situation.

MIAMI, FLORIDA

A code passed in 2015 did away with parking requirements for smaller developments near transit. This encouraged smaller developers that could previously not compete with larger developers who had the financial clout to build the required parking.

The parking problem in the United States is a result of:

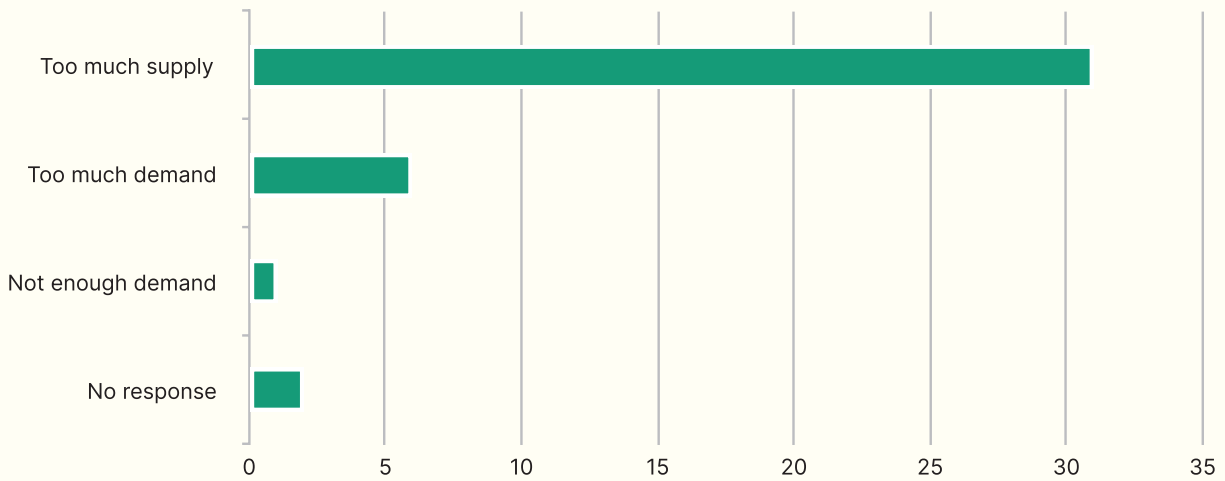


Table 3 – Most experts found that a glut of parking spaces has created a problematic situation in US cities.

Transform Space

The space previously devoted to storing large privately owned vehicles can be transformed for everyone's benefit. Asphalt deserts can become green parks, lively plazas, or travel lanes for cleaner mobility such as buses and bikes.

CHICAGO, ILLINOIS

The Windy City has been successful in transforming on-street parking into bike lanes. To make sure these spaces are accessible to those who need it most, the city subsidizes its public bike system, Divvy, for low-income residents, who can access the system for \$5 a year.

NEW YORK CITY

The city's Plaza Program transforms underused public spaces into vibrant, social plazas. These often include tables and seats, lighting, trees and plants, and public art. The program prioritizes low-income areas that lack open space.

What is the top reason you are a champion of parking reform?

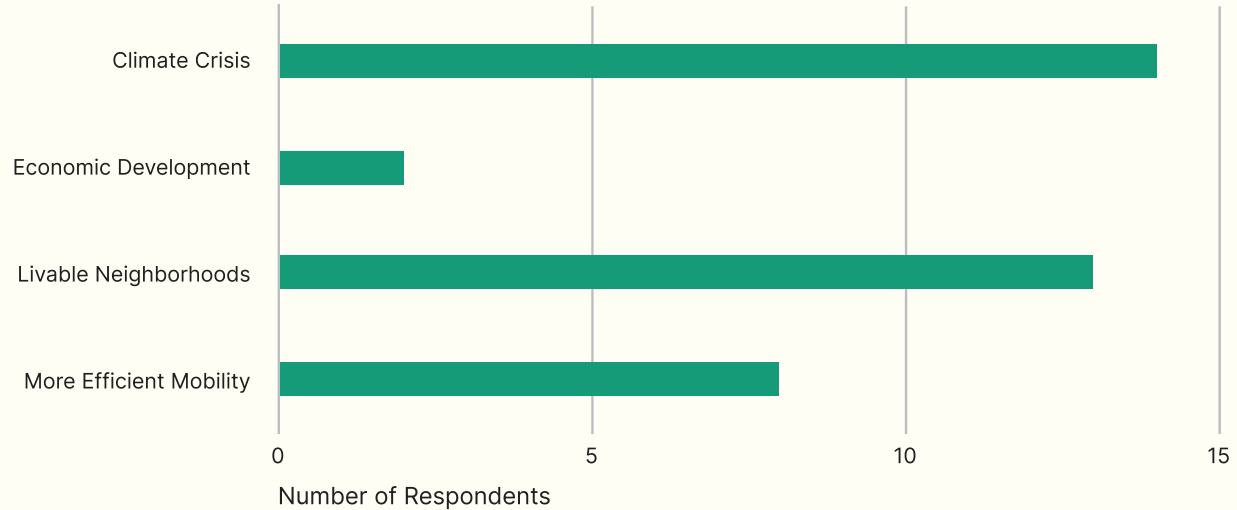


Table 4 - Experts supported parking reform primarily to fight climate change and create more livable neighborhoods.

Responding to the COVID Pandemic

Parking reform is critical to addressing the challenges presented by the COVID pandemic. Those with compromised immune systems may rely on car travel for safety. With looming service cuts to public transit, car travel may become an ever more reasonable alternative to get around. At the same time, parking spots can become vibrant open spaces, which is a big need in dense urban places. Since people are spending more time in their neighborhoods, parking spaces can be used to support short-distance travel. More urban residents have embraced biking as a safe, affordable way to get around during the pandemic. Outdoor seating, often in place of parking, has become a lifeline for restaurants as they struggle to survive in the pandemic. These are just some examples of how good parking management can be responsive to all the realities presented by the pandemic.

Tackling Historic Inequalities

When applied thoughtfully, parking reform can contribute to reducing historic inequalities in the United States. Black, Latinx, immigrant, and low-income people are much more likely to use public transit. For example, while 37% and 27% of Black and Latinx urban residents, respectively, report using transit daily or weekly, the corresponding figure for whites is 14% (Andersen, 2016). Similarly, the percentage of people who walk and bike to work in the United

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States is closely correlated to income, with low-income people more likely to walk and bike than wealthier people (McKenzie, 2014).

As such, freeing space dedicated to and using funds generated from parking to improve access to safe, affordable travel options can help reduce inequities and improve access to jobs, education, and healthcare in underinvested communities. Yet in many US cities, jobs, schools, and health care providers are most reachable by car. Charging for parking is a regressive tax (not adjusted for income), meaning that it puts a larger burden on low-income drivers.

A proactive policy that seeks economic equity and improves access for low-income drivers can address this reality. Chicago provides an excellent example of such a policy by subsidizing memberships to its public bike system for qualifying low-income residents. Underinvested, low-income neighborhoods could benefit from better transit, walking, and cycling. However, municipalities need to be sensitive to the needs of the local populations when implementing parking management so that low-income residents benefit to the greatest extent possible.

REFERENCES

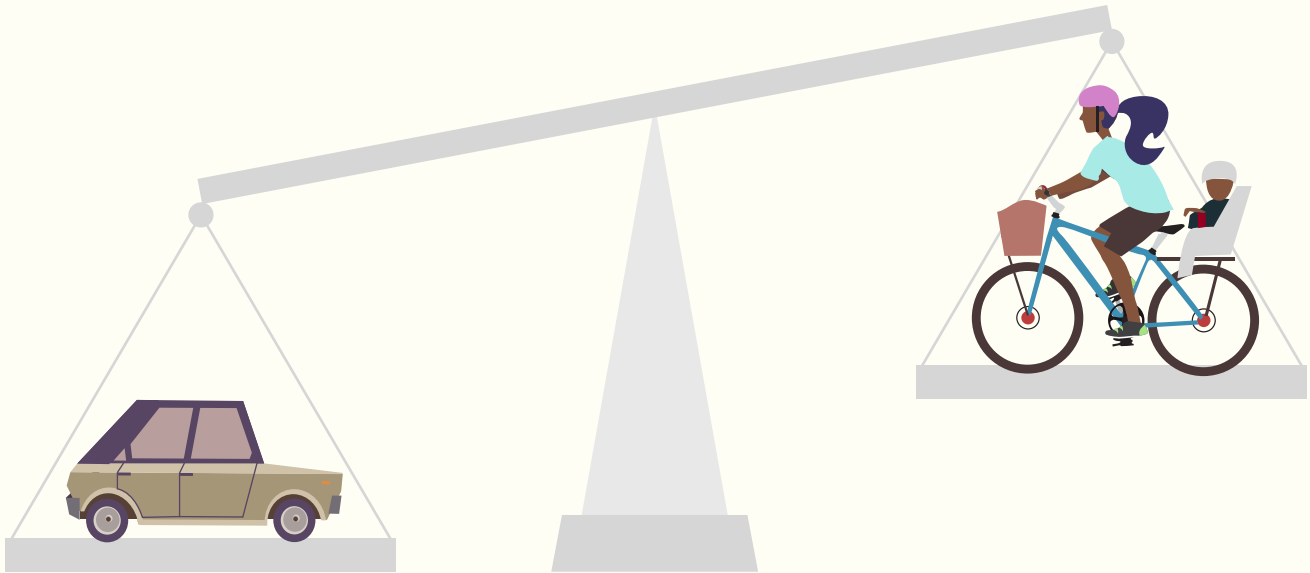
Anderson, Monica. "Who Relies on Public Transit in the U.S." *Pew Research Center*, May 30, 2020. <https://www.pewresearch.org/fact-tank/2016/04/07/who-relies-on-public-transit-in-the-u-s/>.

Banister, David. "Cities, Mobility and Climate Change." *Journal of Transport Geography*. Pergamon, August 18, 2011. <https://www.sciencedirect.com/science/article/pii/S0966692311001244?via=ihub>.

Epstein, Jonathan D. "Buffalo Apartment Boom Prompts Question: Time for Condos?" *The Buffalo News*, February 11, 2020. https://buffalonews.com/news/local/buffalo-apartment-boom-prompts-question-time-for-condos/article_52aa5437-bbba-599c-a4ac-91ec23390201.html.

McKenzie, B. "Modes less traveled: Bicycling and walking to work in the United States: 2008–2012." *United States Census Bureau*, May 8, 2014. <https://www.census.gov/library/publications/2014/acs/acs-25.html>

Shoup, Donald. *Parking and the City* (Abingdon, UK: Routledge, 2018).



Catalyzing Change in a Dynamic Landscape

BY MARTHA ROSKOWSKI

This is not a technical report. It is about building political support and catalyzing change for a challenging issue in a dynamic landscape. This report looks at parking through a campaign filter.

Jay Primus,
former SFpark manager

Cities are finally recognizing that how they manage parking is a powerful tool to achieve goals for the city, not just balance budgets.

Alan Durning,
founder and executive
director of Sightline
Institute in Seattle,
Washington

For our goals around urban sustainability, off-street parking requirements and the failure to manage on-street parking are a huge barrier to reform. It is a source of some amount of puzzlement to me why we can't get more progress. I think a lot about why there isn't more activism.

In 2018, with support from the Summit Foundation's Sustainable Cities Program, 40 leading experts shared their observations on what is changing in the world

of parking policy. A refresh in 2020 with additional survey results on parking attitudes from the leading experts adds new insights, including on the effects of the pandemic and rising concerns about racial injustice.

The historic and systemic inequality and racism that weave throughout transportation and land use extends to the world of parking. Parking reformers must be aware of the tensions and the work to center equity in process, policy, and programs by finding new allies, listening carefully, developing better data, and honoring lived experiences.

This investigation found opportunity, allies, and progress in communications, messaging, and unraveling the complex cultural attachments to parking. The report shares the major findings of the interviews and offers ten recommendations to advance parking reform that could be the basis of a campaign or a set of loosely coordinated efforts:

1. Encourage mayors and other elected officials to take on parking reform and help them succeed.

2. Help leading cities figure out next steps.

3. Help cities that aren't so far ahead.

4. Strengthen the community of parking reformers.

5. Recruit more allies.

6. Develop a benchmarking scorecard to motivate cities toward action.

7. Build an inventory and clearinghouse of information.

8. Scale good tools.

9. Change the narrative.

10. Galvanize the real estate development sector.

People are emotional about parking. Most reforms in the space come about as a by-product of other city goals—better downtowns, more and less expensive housing, safer bike lanes, improved access, faster transit, economic revitalization. Most parking reformers are incidental and accidental—they get involved because parking stands in the way of their goals.



Part 1: Making the Case for Reform Parking

David Bragdon,
Transit Center

Parking is significant competition to transit. It's part of the hidden subsidy of the automobile that is undermining transit use. From an urban design standpoint, transit stops are often across big parking lots from destinations. Parking degrades the walking environment. More curb cuts and less stuff to see makes a space intrinsically less interesting. In terms of station area planning, Park'n Rides serve people who drive. In low-density areas, they're seen as a way to attract more riders, but the space could be used to increase density. Parking makes it harder to get right of way for transit. The biggest barrier to high-frequency transit is pushback on repurposing parking for transit-only lanes. It's a public benefit question—will 30,000 people using the bus benefit, or the 300 to 400 people using the parking?

Cooper Martin, National
League of Cities

Paving is creating flash-flooding hazards where none previously existed. We're creating impervious lands that channel water and increase its velocity. Houston has flooded annually for the past couple of years now. Cities require all this parking, they subsidize all this parking, which create thousands of gallons of runoff that isn't meeting standards. The Clean Water Act requires that they address water quality, so they then have to build expensive water treatment plants. They are spending money on both ends of the deal.

Beth Osborne,
Transportation
for America

Parking rules are one of the biggest barriers to smart growth. It's hard to think of anything bigger than parking minimums. When we go into a community (to help them tackle smart growth issues), we say, "Here are the three big barriers to building the community you want: Euclidean zoning, building setbacks, and parking minimums." We have to spell it out for them, because there's a huge disconnect.

Matt Hoffman,
Enterprise Community
Partners

In general, parking adds an incredible amount of expense to affordable housing projects, especially in places where they still require one space per bed. There have been tremendous strides to go to zero parking in dense downtown core areas, which is great, but it is not necessarily conducive for already built multifamily projects.

Andrew Frey, Tecela

I wanted to develop small-scale urban infill sites and urban prototypes. I realized pretty quickly that if I wanted to build what I dreamed about, the biggest obstacle was parking requirements. I started thinking about how to change that so I could make the building that I wanted to build legal.

Jason Duckworth,
Developer, Arcadia Land
Company

Generally, the standards embedded in zoning ordinances seldom bear any relationship to what people need or demand. The ordinances have coded for ultimate parking convenience at the expense of other values. You end up doing absurd things like paving a third space next to the driveway or building a parking lot in the neighborhood. A lot of the stuff, I'm convinced, is really not as much about parking per se, as various ways to reduce density and cut affordability. Not that people will talk openly about keeping out the riffraff, it very seldom emerges as directly racist or classist, but they'll hire a planner every five or ten years to revise the ordinances, and people will say 'We need more large lots and I don't like the garden apartments and mobile home parks,' then the good-natured planner writes up minimum lot size, roads of certain geometry, and supersized parking, which excludes all sorts of housing types and land uses.

Parking has equity issues.

The systemic and historic inequities in the transportation system extend to parking. The tensions around whose voices are heard and who makes decisions extend to parking. “Equity is not a box to check,” explains Alex Baca, Housing Program Coordinator for Greater Greater Washington, DC, illuminating some of the complications around questions of equity.

Alex Baca, Housing
Program Coordinator
for Greater Greater
Washington, DC

What are we talking about when we talk about equity? Is it spatial and geographic? Is it racial or income? I generally ask people that question, it is important to talk about that. To pull way back on a macro level, if you are putting parking first, or not putting other stuff first, it makes it hard to build places that are more accessible. Prioritizing parking prioritizes a car as the price of admission for economic growth. The more that you build parking, the more you reinforce that, and make it harder to shift and change going forward.

I am waiting to testify for a board of zoning adjustment, a project on Mt Pleasant Street in Washington, DC. The historic preservation people, my neighbors, are pushing to require a parking minimum. If it passes, the two inclusionary zoning units will be lost. It is very clear. You need to be really firm at your core values, so when you have to zoom in, it's clear what you need to do on a project. Parking is always going to be contentious and we need a level of acceptance about that.

We cannot provide better transit access without altering the ability to park or drop off. I do understand that being able to park and idle is part of the practice and character of longtime residents. I get that. I also don't know how representative that is, when you account for the fact that transit will move people more effectively, more efficiently. To some degree, there has to be some level of discomfort.

When the opportunity to grow the pie is not there, the personnel leading the discussion need to make it very clear, you cannot have X if you are selecting Y. They need to make that case. The wealthier people are used to having their needs accommodated. Planners who run these sessions need to be polite but firm and say we cannot accommodate everything.

Ron Thompson, Transportation Equity Organizer at Greater Greater Washington, talked about the complexity of equity concerns in managing street parking.

Ron Thompson,
Transportation Equity
Organizer at Greater
Greater Washington

Some Black-owned businesses cite curbside management or on-street parking reform as problems. They believe it contributes to whatever problems they have. That is an equity concern, how you take into account Black-owned businesses. But for me, the more important part is asking, 'When we do curbside management, who are we doing it for? Are we doing it with seniors, elderly folks, and people with disabilities? Are we keeping them in mind when we carve out curb space?' The business community can be a wrench in the wheel around better managing curbside use. If you want to do curbside management with equity in mind you need to be clear on what group are you trying to insure has access to this location. Curbside management is complicated.

Bus lane pilots are proposed throughout the city, were supposed to go on some street through downtown DC, and businesses in that area, including some black-owned businesses, complained that it would inhibit DoorDash and people picking up food. If the priorities are 'How do we ensure that businesses continue to have access to customers via the ways people are getting food?' the outcome there would be, 'We're not going to build this bus lane.' If the people making the decision weigh the bus riders higher, they will ask, 'How do you ensure that bus riders, who through this pandemic have risked life and limb, how do we make their commute safer?' the bus lane would be built. When you think about equity, you have to be honest about whom you are trying to serve.

Charles Brown, an adjunct professor at Rutgers University, recently introduced the idea of Arrested Mobility, the many ways in which the systemic inequities and institutional racism has affected the mobility of Black and Brown people.

He cautions that rather than jumping immediately to solutions, allies for addressing racial inequities in mobility and transportation should slow down, listen carefully and seek to understand data on Black lives and experiences, which are often not well represented in standard data collection and interpretation.

Staying focused.

Parking guru Donald Shoup provides the basic blueprint for parking policy changes in *The High Cost of Free Parking in 2005*: “Remove requirements for off-street parking; charge the right prices for on-street parking; and spend parking revenue to improve public services on metered streets.” A recent addition to the mix is managing the curb, the hot new property of the mobility world.

People would use parking less if the price were higher.

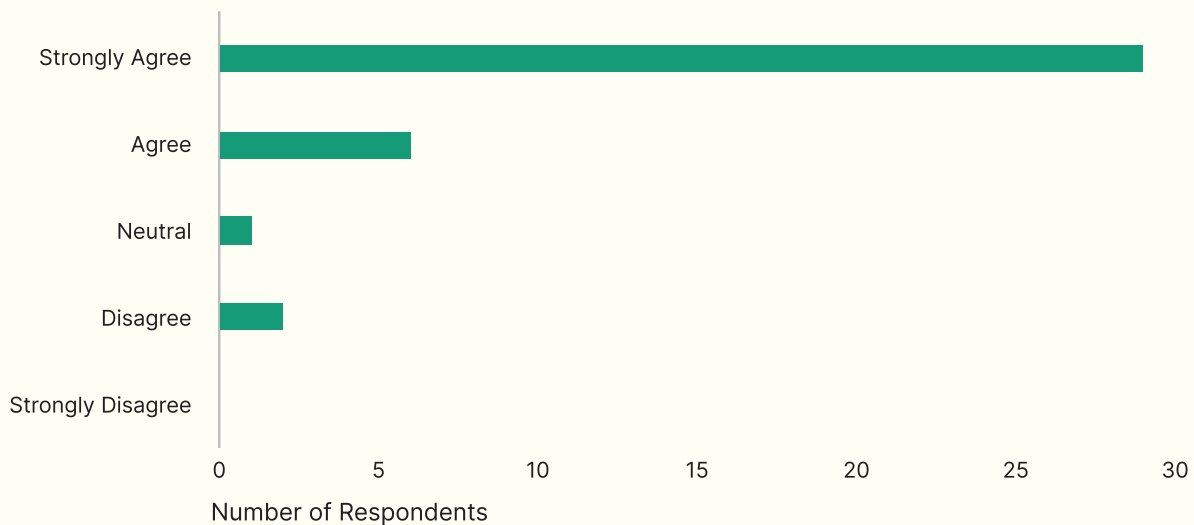


Table 5 - Most experts agreed that higher prices would lead to less use of parking.

Many in the professional class of city staff and consultants understand the negative impacts of parking, and some embrace Shoup’s prescription, but they are not empowered to act on the ideas. Policy is far ahead of politics. In a 2018 survey, Bloomberg Philanthropies asked 156 mayors to name three local problems they hear from residents. The top response was traffic and parking.

Parking reform is more politically palatable if the focus is on what’s being gained not what’s being lost. A strong and engaging vision is essential to overcome the opposition. In his pitch for neighborhood parking districts where revenue is spent on local priorities, Shoup counsels, “If everybody sees their meter money at work, the new public services can make demand-based prices for on-street parking politically popular.” The more parking reform can be embedded in broader efforts for sustainable and equitable cities, the better.

Residents always oppose attempts to manage parking if it increases cost and/or decreases supply.

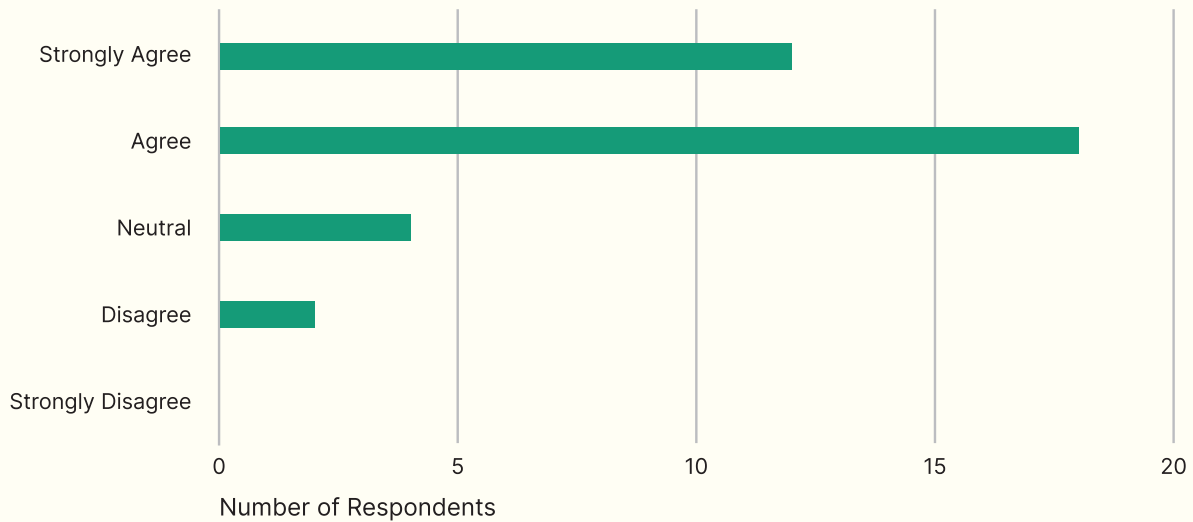


Table 6 - Experts agreed that gaining support of residents is an important challenge for parking reform.

Even if the alternatives to driving work well—robust transit, connected bike networks, good walking environments, denser land uses that put people closer to their destinations—people will continue to drive as long as it is cheap and easy. Practice, policy, and investment in the United States has long been focused on making driving (and parking) as easy as possible with predictable results. Free and easily available parking is a powerful incentive to drive. Charging for parking both provides a pricing signal to individuals and providing revenue for public agencies.

Matt Hoffman, Enterprise
Community Partners

I think that this notion of tying parking to congestion pricing and better understanding the implication of what causes congestion and the cost that this generates are key. Parking is just the end point or intermediary point of a bigger system. I don't think that any of us truly understand the true cost of owning or operating a car, nor do we understand the throughput capacities of any of the streets in a given jurisdiction.



Parking is big money.

The quest to charge more for parking in more places while repurposing some existing parking to better serve the community is made more difficult by the money involved. Even though 99% of parking nationwide is free, the parking industry was projected to generate \$28 billion in 2018. While most parking structures are private, cities and other public agencies earn revenue from on-street parking, structures, taxes, and tickets. In 2016, parking generated \$2.8 billion for city coffers in the 25 largest cities.

Publicly-owned parking is priced too low for the market.

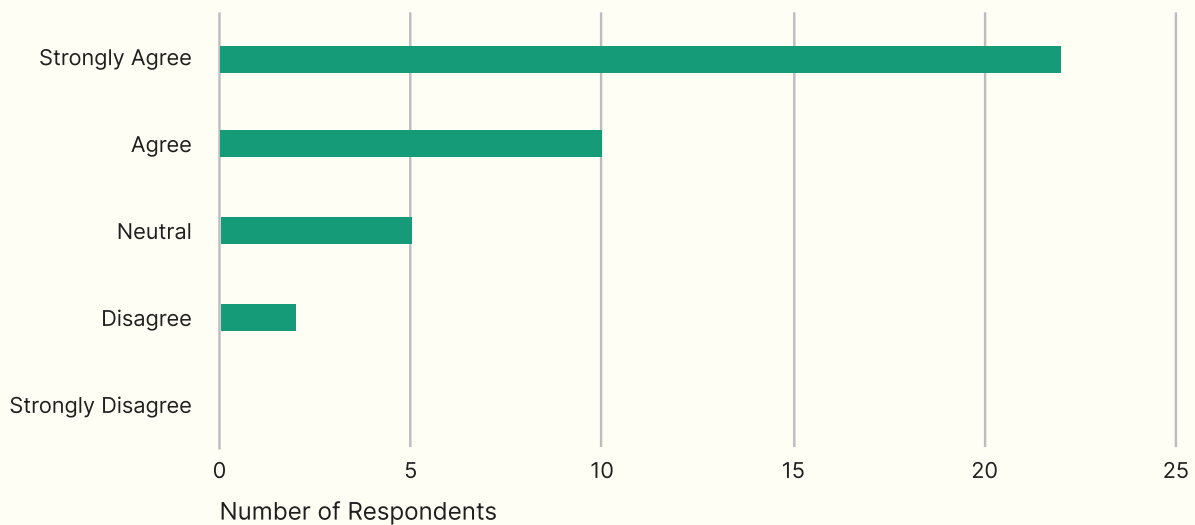


Table 7 - Most experts surveyed agreed that prices for public parking could be higher.

The monies funnel into city general funds, transportation departments, downtowns, or districts. Denver's \$52 million in parking revenues translates to 2.5% of the city's annual budget. Revenues from paid parking and fines accounted for more than 20% of Portland Bureau of Transportation's budget in 2016. Many cities suspended collecting parking fees at the beginning of the pandemic, adding another hit to budgets already severely impacted by drops in sales taxes and other revenues.

Success in reducing parking demand, while beneficial for cities on many levels, undermines an important revenue source. The rise of ride-hailing services, deliveries, and autonomous vehicles, which require more space for loading and less for parking, is spurring cities to focus on curb management, including exploring charging for access to loading zones.

Data and tech are changing the game.

Michael Kimmelman,
New York Times

There are said to be at least 105 million and maybe as many as 2 billion parking spaces in the United States.

Dennis Burns,
Kimley-Horn

We never used to plan for parking because we didn't have the information.

Research Institute
for Housing America,
foreword to Quantifying
Parking

Comprehensive parking inventories have never existed for US cities. Because of this, many parking-related questions have never been answered. By presenting the first complete parking inventories for five US cities, this research reveals an investment in parking that is out of balance with the current demand for parking in almost all cases, and even less in tune with what appears to be declining future demand.

Data is the new superpower in the parking universe. Knowing how much parking exists, how it is used, and its value moves conversations out of the political realm into fact-based decision-making. A caveat: While a reliance on data-driven decision-making is essential to a more reasoned conversation around parking, Charles Brown of Rutgers University cautions that the people who design and interpret data collection methods may not be fully capturing the

input and lived experience. “This is one way we clearly continue to perpetuate structural racism. We must demystify data collection and advocate for more racial and ethnic diversity in the data we collect.”

A deluge of data from the private sector is augmenting traditional data collection by public agencies and researchers. According to Gabe Klein of Cityfi, a key question for cities is “What does all this data mean and how valuable is it?” Cities are struggling to determine what data they need, how to interpret the equity elements, whether they will pay to get it or can require it in the permitting process, and how to combine the right bits to provide useful information to decision makers.

Andrew Glass Hastings,
City of Seattle

What if cities invested in data analysis like we did in infrastructure? The data is being generated by activities that are happening on the space that we operate and manage. Cities both need to collect more data and get more data. Cities are not particularly good at articulating the use case. What do you want to use it for? If a city can't articulate a really clear and compelling use case, then they don't need the data.

A shared standard that allows public and private data from different sources to be merged and analyzed was developed by NACTO (National Association of City Transportation Officials) and Open Transportation Partnership. The SharedStreets data standards include curb information as well as bike-share data and crash stats. Coord, backed by Alphabet's Sidewalk Labs, is creating detailed digital maps of curbs for use by cities and app developers.

Dennis Burns,
Kimley-Horn

What if wireless sensors in the pavement of every on-street space in front of every store were ubiquitous? If we knew the turnover in front a Starbucks was 1.5 minutes or 5.8 minutes, how would that change the way we think about zoning codes. How do we take that data and turn it into meaningful policies?

In 2011, the innovative SFpark program installed in-pavement sensors in every parking space in central San Francisco to understand usage so it could price parking appropriately based on demand. With a smaller budget, Seattle hires contractors to do manual counts annually.

Andrew Glass Hastings,
City of Seattle

I am shocked at how archaic so many big cities are at pricing parking. Seattle continues to be one of the exceptions, using data to take politics out of paid parking. Our rudimentary performance-based parking system allows us to make changes annually, raising rates, lowering rates, keeping rates the same, without political influence. The data speaks for itself. That has been huge.

While many cities struggle to collect basic data, the private sector is moving fast with new technology:

Gabe Klein, Cityfi

Today, developers are building inexpensive cameras and LIDAR systems (a laser, a scanner and a GPS server) that can be mounted on vehicles to collect data not just on parking, but also potholes and construction zones. Companies are rolling out core nodes and sensors and signals to collect data on all sorts of things. Prices are coming down by the month and week.

The rise of apps that connect people with parking spaces is disrupting the parking world, with the new tech upstarts facing off against the traditional parking companies. The big tension is money, particularly the finder's fee that app companies charge as they connect a driver to a parking space. A parking company exec explains:

Perry Griffith,
Denison Parking

There's a proliferation of apps, most are losing money, who are out there trying to figure out how to enter and control and monetize this from a data standpoint. All of these entities need to know what kind of availability there is. The app company tell us "You need to use our app because we drive customers to you." I say, "I am providing this data to you free of charge, why don't I get paid for it in some way." The apps companies tell us "We're going to charge the customer \$10, give you \$8." Operators as a whole may be able to push back, saying, "You guys have to figure out a different way to monetize it. We're taking a 20% discount." For us, the app use is in the single digits, but it's growing.

Albie Brown is the CEO and Founder of Spotter, an app that he describes as Airbnb for private parking spaces, matching them with drivers for services like Lyft and Uber.

Albie Brown, Spotter

The apps are cutting into the profit margin, and it's really hard for the traditional companies. They have a lot of fixed costs. They are really like dinosaurs, huge and slow-moving that will not survive unless they radically change their model. They are really locked into their locations. It's prime real estate in the heart of the city and they are paying for that land.



Parking minimums are passé.

Donald Shoup,
Professor Emeritus, UCLA

Minimum parking requirements in the planning profession are closely analogous to bloodletting in the medical profession.

Cities facing a housing crisis are doing basic geometry: they can either provide beds for people or space for cars. A single parking space can add 20% to the cost of a housing unit. “We understand that parking policy is housing policy,” said Christopher Goett of the California Community Foundation, as they focus on addressing the homelessness emergency in Los Angeles. Seattle recently passed a sweeping measure to eliminate parking requirements for multi-family developments near frequent transit.

Andrew Glass Hastings,
City of Seattle

We had a couple of big champions on the council. They were pushing it strongly. One is a follower of Donald Shoup. The nexus in a big way was affordability. It was hard for the opponents to argue against it. They said everyone still drives, everyone is still parking in our neighborhoods. The response was, “Are we going to prioritize parking personal vehicles on the street in the public right of way, or provide housing? Government should not be requiring linkage of the sunk costs of housing with parking.

Distressed cities are also rethinking parking requirements. Buffalo, NY, in 2017 became the first city to eliminate parking requirements across the entire city in order to spur redevelopment. Hartford, CT, followed shortly after. Hartford had lifted parking requirements downtown in 2015 before taking it citywide in 2017. In a Streetsblog column, Angie Schmitt interviewed Hartford Planning & Zoning Commission Chair Sara Bronin.

Without the burden of parking mandates, it was easier for developers to rehab downtown buildings, said Bronin. “There have been some buildings that have been renovated downtown in a much faster and more efficient way by not having to provide as much parking,” she told Streetsblog. “Because of that we felt that it was time to bring that same benefit to developments citywide.”

Like other Connecticut cities, Hartford is plagued by fiscal problems, and the loss of productive land to parking spaces exacerbates those issues, constraining the city’s tax base. In Hartford, the capital of Connecticut, downtown is pocked with blocks of free parking for state employees. Support for citywide elimination of parking minimums was nearly universal, said Bronin.

Too much land is going to parking rather than more productive uses in my city.

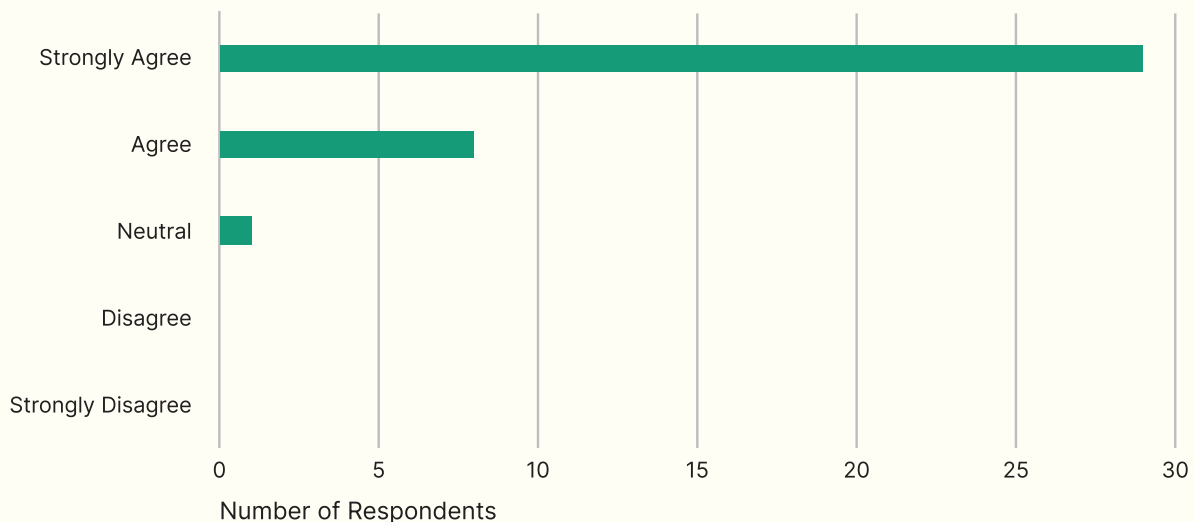


Table 8 – Surveyed experts feel that better uses of land could improve cities.

Matt Hoffman, Enterprise
Community Partners

For a lot of cities that are hotter markets that have housing shortages or affordability problems, there is tremendous opportunity to find new land by building on parking lots because it doesn't lead to displacement like redevelopment. That's the opportunity. Parking lots themselves don't return any revenue to city government. As a city you are functionally managing land. Turning unproductive use into any other use—light industrial, commercial, whatever—improves the property tax base.

Data-driven tools can tell good stories as well as support better outcomes. GreenTRIP Certification is a LEED-type certification for new development specifically focused on transportation and parking, developed by Bay Area NGO TransForm. A companion program, GreenTRIP Connect, is a free online tool that calculates how right-sized parking, smart location, affordable homes, and traffic reduction strategies can save money and reduce greenhouse gas emissions. The Right Size Parking Calculator, a tool developed by King County, WA, estimates parking demand at multi-family residential developments.

The development community is not monolithic in their approach to parking. Many rely on traditional formulas and funding mechanisms so are not interested in providing less parking. Lisa Bender, city council president in Minneapolis, MN, championed an ordinance that removed parking requirements from small (50 units or less) transit-oriented developments in 2015. While it passed, she complained, “I couldn’t even get the developers to support it.”

Despite Bender’s experience, a vanguard of progressive developers are building with less or no parking. Generally, they find financing from local or regional banks rather than from large institutions working “from comps and pro formas from 30 years ago,” as one said.

“We, infamously, were the first modern developers to build units without parking in Portland, in 2007,” says developer Eric Cress of Urban Development + Partners. “We had to fly the credit officer up from Wells Fargo to see the number of transit riders and bike riders” in order to convince him the development would be successful.

“I’ve never had a funder pay any attention to parking numbers,” says Jason Duckworth of Arcadia Land Company in Philadelphia. “We have very urban places and people are so accustomed to garden apartments. We have plenty of people in center Philly and plenty of projects that have no parking. It’s not that unusual.”

When developer Andrew Frey wanted to build small-scale residential units in Miami, he realized that parking codes would not allow it, so he embarked on a four-year journey to convince city council to change it. The new code, passed in 2015, removes any parking requirement for small developments near frequent transit but away from single family homes.

Andrew Frey, Tecela

I had no issues with the bank financing. The interesting thing about the bank, based in Little Havana, is a lot of their collateral is buildings which were largely built in the 1920s and 30s with no parking. Being based in the neighborhood and knowing it so well got them comfortable with the buildings with no parking. It’s a great scenario for a community bank. While generally they aren’t on a level playing field with larger banks, they actually

have an advantage with financing progressive development because it's their context, it's what they know.

Frey also notes that until the ordinance was passed, there were no small-scale developers working in Miami. "Required parking was basically requiring small lot owners to sell out. The only people who could accommodate that would be larger developers."

Jason Duckworth,
Arcadia Land Company

In Philadelphia, in the last zoning ordinance, we did away with a lot of parking minimums. The developer provides the parking that they need. One of our big suburban developers built too much parking. Now they're trying to actively retrofit the garages. They miscalculated, and it's their problem. There's not really a role for government to protect developers from themselves. That's not an externality that government needs to address. Let the private market figure it out and you'll unleash a lot of innovation.

We have too much private parking in my city.

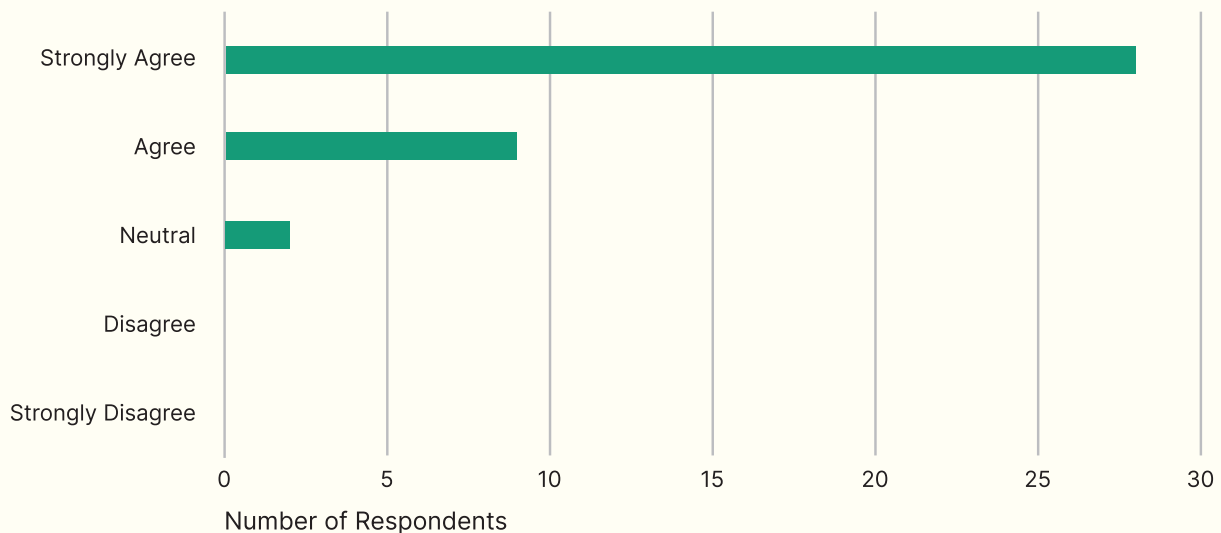


Table 9 – Expert opinions bolster the argument to remove parking minimums.

While small-scale developers are leading on building less parking, the big players in the retail world are also evolving. Ed McMahon from Urban Land Institute (ULI) tells the story of Target coming to Washington, DC, at a time when there were no mass retailers in town.

Ed McMahon, ULI

In 2008, Target expressed an interest in coming to DC to build their first inner-city store. They wouldn't come unless the city built them a two-level, 1,000-car parking garage. It cost \$40 million. In the nine years the parking garage was open, the largest number of cars ever was 421 cars. They really

didn't understand the urban space. They've closed one level and are trying to turn it into retail. Ten years later, Target just opened another urban store in Roslyn with zero parking.

John Clarke, head of real estate for Walmart, provided interesting insight:

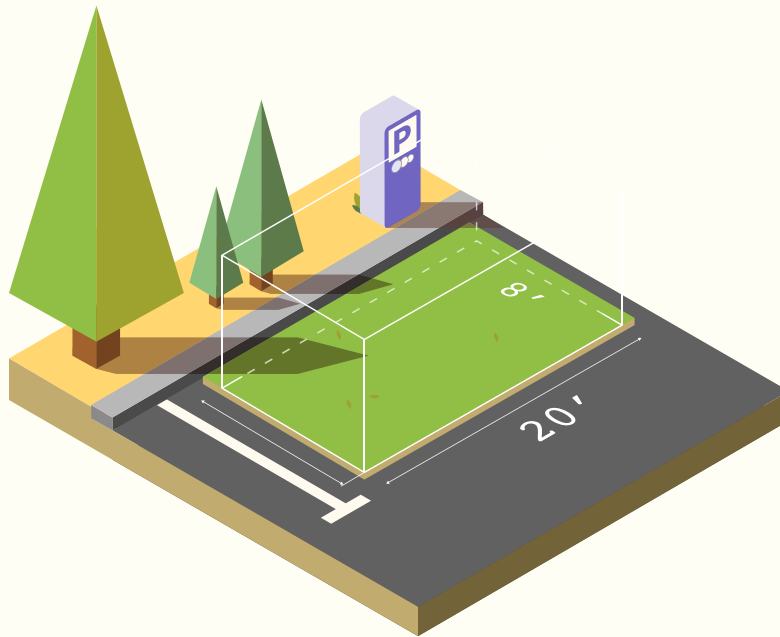
John Clarke, Walmart

We are actually reducing our minimum ratios, parking spaces per square foot per building. We have been for ten years. Every time we reevaluate, we pull it down a little bit, now we're willing to have as low as 4 spaces per thousand, at our peak we built 6 spaces per thousand feet per store. That means that on a big store, we went from 1200 to 800 spaces. It has a big impact: on the size of land needed for store, the cost of striping and cleaning the parking lots, just to light it at night. It's a significant cost factor for the facility to have one less stall. Every retailer wants the exact size of what they need. We believe that it is not due to more people walking or biking or taking Lyft and Uber, it's a shift from sales in the box to sales on e-commerce.

While big-box retailers are often blamed for the sprawling expanses of parking surrounding their stores, Walmart's Clarke shared a different take:

John Clarke, Walmart

We are driving the reduction in parking, rather than the cities. Over my 30 years of developing stores for Walmart, I only encountered five stores that had parking maximums and all of those were in the far west—Oregon, Washington, or California. The minimum ratios were pretty prevailing ten years ago. We would ask for variances below their minimum requirements, and they were always approved. Most places are still using codes from 15 years ago.



Cities are getting better at managing parking.

An engaging vision of why there is a need for parking management is essential to building support. On a broader level, processes that embed planning for parking in goals for sustainable and equitable cities gain broader support. Leaders in Austin, TX, recently took a comprehensive look at parking's role in downtown.

Downtown Austin
Parking Strategy

The Downtown Austin Alliance initiated this study to tackle the issue of parking head-on, as the status quo is no longer working. Austin needs a new parking approach if downtown is going to achieve its larger goals. The Downtown Austin Alliance led this study to help reframe parking not as the end itself, but as a means to an end. A new and comprehensive approach to parking is crucial to helping downtown:

- Continue to grow.
- Ensure economic vitality.
- Reduce congestion.
- Attract new employers. Address housing affordability.
- Reduce transportation inequities.
- Prepare for emerging mobility trends.

The business group A Better City in Boston with funding from the Barr Foundation completed a report on “The Future of Parking in Boston: Addressing the need to promote economic opportunity, enhance community access, and reduce parking demand.” The plans embrace the full toolkit of how to better manage parking and keep the focus on the outcomes. The processes of developing the plans build a shared vision that can help sustain momentum when implementation of the strategies run into rocky ground.

Businesses would be better off if we managed parking in a way that increased turnover.

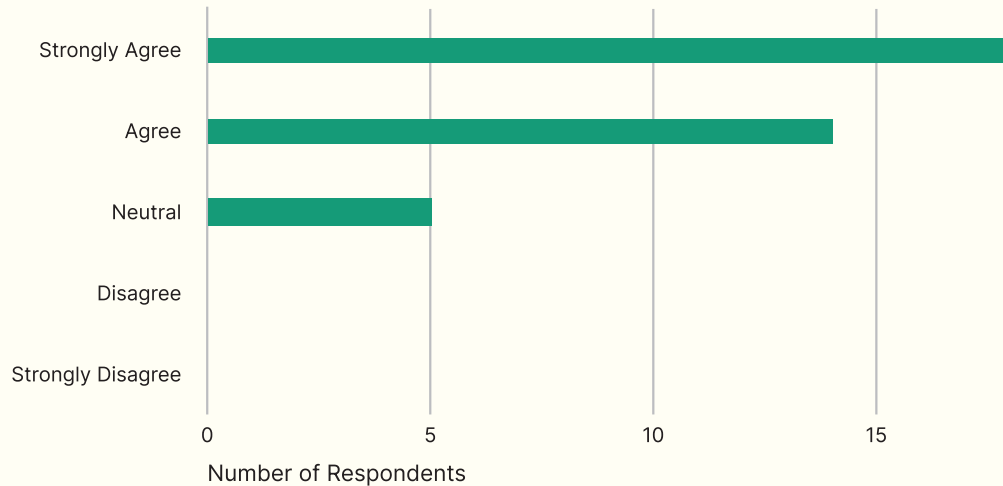


Table 10 - Most experts thought that businesses would benefit from parking management.

By basing their performance-based pricing program in data, with authority from city council to adjust rates annually, Seattle developed a program that is widely accepted.

Mike Estey,
City of Seattle

Our performance-based parking pricing program goes back to 2010. The parking team went to city council and said, “In our professional judgement, it’s time for a parking rate increase.” Council said, “Where’s the data?” We didn’t have any. That was the birth of the program. In late 2010, city council wrote into code that we would collect data on an annual basis and adjust rates based on the data with goal of 1–2 open spaces on each block. It was codifying the Donald Shoup goal of 70–85% occupancy. We have about 30 different paid parking areas where we set rates by time of day, morning, midday, afternoon. We contract with a data collector in every paid parking area each spring, crunch through analysis, then adjust rates accordingly in the fall. Going from 2010 to 2012, we’d get a lot of questions, but today, it’s sort of crickets with the public and with the elected officials.

Even with a single city, the management of parking is often spread among many departments. Keith Benjamin joined the City of Charlotte, SC, as the director of transportation in 2017. He describes the internal landscape and his work to navigate it:

Keith Benjamin,
City of Charlotte

The Mayor has given me the goal of looking under the hood, seeing what problems exist. We're doing the first Transportation Master Plan in 30 years, and the first parking study since 1998. From a parking perspective, we have a function of practice that has been in place for a long time, so it's been a real interesting few months. Parking overall is not in one department so there are basic things around parking that I don't have access to. I have enforcement, but not the garages, they're controlled by the real estate department.

We have privatized the maintenance and the collections. We recently invested \$3 million to change over parking meters to accept credit and debit cards as well as coins. I hustled on that; we've now replaced all 709 of our meters. We don't have collections under our department. They're on our floor, but under budget. This parking study is opening Pandora's Box, as we're churning the pot around. The planning department is looking at parking minimums, as that's something that needs to be revamped.

Everyone wants to use the curb.

Aarian Marshall,
Wired Magazine

To see the future of cities,
watch the curb. Yes, the curb.

In early 2018, San Diego parking giant Ace Parking reported that hotel parking was down 5%, restaurant valet parking was down 25%, and nightclub valet parking down 50% at venues served by Ace. Parking revenues at Dallas Fort Worth Airport came in \$4 million below projections in 2017.

The rise of ride-hailing services like Lyft and Uber had a significant impact on parking at major destinations. Trips that once ended in parking a car are now ending in unloading passengers at the curb. Or in the bike lane. Or in the travel lane. Wherever a driver can find a place to stop.

Brian Wiedenmeier,
San Francisco
Bicycle Coalition

We are increasingly talking about the future of curb in our conversations. Every single emerging mobility technology and disruptive transportation is eyeing the curb. Cities like San Francisco are waking up to the fact that they have an incredibly valuable resource that they have been giving away for a

long time. A lot of private companies are looking to make a lot of money by changing it from private auto storage. We are sometimes allied with them, sometimes not. San Francisco Bicycle Coalition has the longest track record in the city of navigating this difficult concept of using our streets to focus on people first, rather than cars. It's a political fight.

While the impacts of autonomous vehicles are still mostly theoretical, the rise of ride-hailing services and the increase in deliveries due to the pandemic has cities scrambling to more strategically manage the valuable asset of curbs space, including exploring ways to incentivize the use of electric vehicles to reduce greenhouse gas emissions.

Brian Wiedenmeier,
San Francisco
Bicycle Coalition

At the end of the day, whether it's autonomous vehicles, ride-hailing, whatever, make sure it brings us closer to a vision of a city that is affordable and livable.

A loading space that can be used by 30 vehicles an hour for two minutes at a time is more valuable than a single car parked in the space for an hour. But it may be even more valuable in speeding buses that carry 3,000 or 30,000 people a day or providing safe space for 1,500 cyclists during rush hour. Boston recently made a pilot program permanent that repurposed travel lanes and on-street parking to bus-only lanes. When Boston showed that most people using the parking weren't from the neighborhoods, local opposition faded. Chicago has chipped away at parking as they've expanded their network of protected bike lanes. Both cities did careful analysis on parking usage.

Seattle is referring to some curbs as "flex spaces" that may have one use during rush hour and another in the evening. San Francisco now has a curbside management department rather than a parking department. While the naming switches may seem minor, they are indicators of significant shifts underway.

The prospect of Autonomous Vehicles (AVs) got people interested.

Carolyn Helmke,
Stanford University

We've always been the ones to defend every parking space. But now, the parking is worth so much that we're getting better at managing change. It's a nuance of how it's looked at, it's now accepted as a real estate use, which is very different than ten years ago.

The shift from thinking of parking as real estate rather than as a fixed asset opens up the conversation about the best use of the land. On the Stanford campus, a strong embrace of tech (many Silicon Valley leaders are alumni), growth on campus, and an intergovernmental agreement with San Mateo County not to increase vehicle trips is driving the discussions.

Mark Lee Levine,
University of Denver
Burns School of Real
Estate and Construction
Management

Not often is real estate, residential and commercial, impacted to the level that a change creates trillions of dollars of implications.

Some starry-eyed prognosticators estimated that up to 90% of parking in downtowns will no longer be needed once autonomous vehicles come online. While AVs look unlikely to be that widespread anytime soon, the conversations alone are important. Five years ago, few people were talking about a future with significantly less parking.

The AV conversations open up opportunities for parking reformers. Engaging the community in the potential uses of excess parking can help build buy-in for better things. Local governments have an opportunity to develop plans and frameworks, perhaps with built-in triggers (if demand drops by X amount, then Y happens) for converting parking to other uses. They should also be cautious about usage and revenue projections in proposals for new parking structures.

Combining the prospects of AVs, ride-hailing services, the rise in deliveries, and demographic shifts to less driving, San Francisco has been exploring whether to convert an existing parking structure into affordable housing. Architects are starting to design parking structures with level floors, higher ceilings and ramps that can be removed so they can be retrofitted for other uses.



Storytelling is key.

Shin-pei Tsay,
Gehl Institute

The hardest thing is convincing the business owners that they don't need the spot in front of their store. A townhouse doesn't need the spot in front of their door. For a city, the economic case has been made over and over again. Donald Shoup has the research, maybe it needs to be made more plain. Parking is so wonky.

The parking reform movement has some good storytellers. Chuck Marohn and the team at Strong Towns write regularly about the downsides of parking. They host an annual Black Friday Parking social media event that encourages people to share pictures of the wastelands of unused asphalt on shopping's biggest day. They also host a crowd-sourced map showing cities that have reduced parking minimums.

Streetsblog reports regularly on parking issues. Their Parking Madness tournament highlights the top 16 “surface parking lots turned into dynamic urban places around the country,” lightheartedly pointing out the absurd amount of space devoted to parking. Parking reform is a highlight in TransitCenter’s policy guide for mayors and city leaders, All Transportation is Local. ITDP shares a simple mantra of add transit, build density, and decrease parking in their Parking Basics report.

Donald Shoup’s book *Parking and the City* continues his prolific and profound work in the space. Richard W. Willson’s book *Parking Reform Made Easy* is a good explainer of the hows and whys of policy change. Every organization, publication, and website that works for better cities seems to have published something on parking. Academics and researchers like Michael Manville and Todd Littman strengthen the case with every new study.

Sightline Institute, a think tank in the Northwest, wrote a 13-article series on parking that examines every major aspect of the topic. PeopleForBikes published a series of blogs on tips for success in removing parking to build better bike lanes.

Doug Gordon,
NYC advocate

Language matters. NYC DOT used to use words like “requires the loss of ten parking spaces.” Advocates would push back, saying, “Let’s not use the word loss. Use repurpose or replace.” Is ten a lot? Nobody knows, unless you do an accounting of parking spaces in an area. DOT does not have great data on the actual number of parking spaces. If you know how many in the total neighborhood, you can use percentages versus big numbers, and say, “Requires the repurposing of 1% of the parking in the neighborhood.” Use your data to make the case.

In launching the dynamic pricing program SFpark, “Everything was done with an eye toward making it easy so lots of cities would be doing much better parking management within a few years,” says Jay Primus. “We shared everything—all the draft language, all the RFP documents and policies, all the data. We created some tools, like the 3-minute animation for SFpark, very explicitly so any consulting company or city could say “this is how we can do this.”

Which stakeholder groups are most important to developing parking reform?

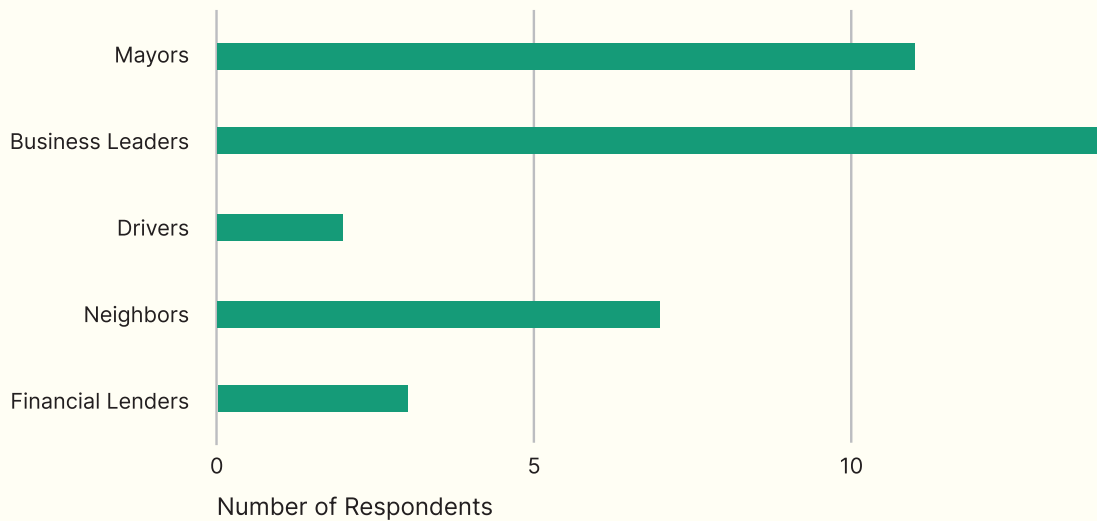


Table 11 - Experts thought that business leaders, mayors, and neighbors were the most important groups to target for parking reform.

Ottawa produced a helpful video. As did ITDP as part of its work helping Mexico City replace parking minimums to maximums.

Tactical urbanism projects like Park(ing) Day shows what can be done in a single parking space to improve the city. Programs that convert parking spaces into sidewalk cafes or community gathering places are increasingly popular. Pilot projects that temporarily retrofit parking for bike lanes, transit lanes, or public plazas allow people to see the potential and understand proposed changes by being shown, rather than told, the concepts. The need to accommodate outdoor dining during the COVID crisis removed significant parking with little pushback, serving as widescale pilot projects.

The conversations are moving beyond the simplistic theme of “parking makes people crazy” into a deeper understanding of why.

Doug Gordon,
NYC advocate

A lot of [the attitude toward parking] is generational and arrival to the city. A lot of people who bought their apartments in the 80s and 90s see all the changes surrounding streets. New arrivals see it as part of the deal and they don't get caught up in that drama. It's odd, car owners are typically wealthier, yet, there's a feeling here that car ownership represents the real New Yorkers. Nationally, politicians on the stump go to a diner in Iowa to represent the Real America. Politicians want to pose with coal miners because they think it gives them authenticity. Here in New York City, a lot of politicians take on the plight of the beleaguered drivers. It's “We, the real people who have lived here forever, need our cars. Not some hipsters.” A lot

of elected officials have more sympathy for drivers, maybe because they drive and have free parking.

Danish design firm IS IT A BIRD dove deep into people's emotional attachments to driving in a project for the City of Copenhagen. They learned that people see their cars as extensions of their houses, a private space that makes them feel safe and insulated from the world. Cars also serve as secure storage places. "My car is like a big purse. Everything I need is in it," said one woman. Understanding these cultural and personal attachments is a first step towards unraveling some of the connections.

Shin-pei Tsay,
Gehl Institute

We've started a research project that looks at the psychology, a feeling of entitlement around driving, a right to own a car. The culture. The right to take up space. We are going to do a research project that gets at it from a mindset change, what is driving this. What constructs this idea that this is something that you're allowed to have. We will create profiles of individual people who drive, map out what do they take in, what are they relying on the driving to do. We're building it from the individual outward, so we can disaggregate it.

The field is wide open.

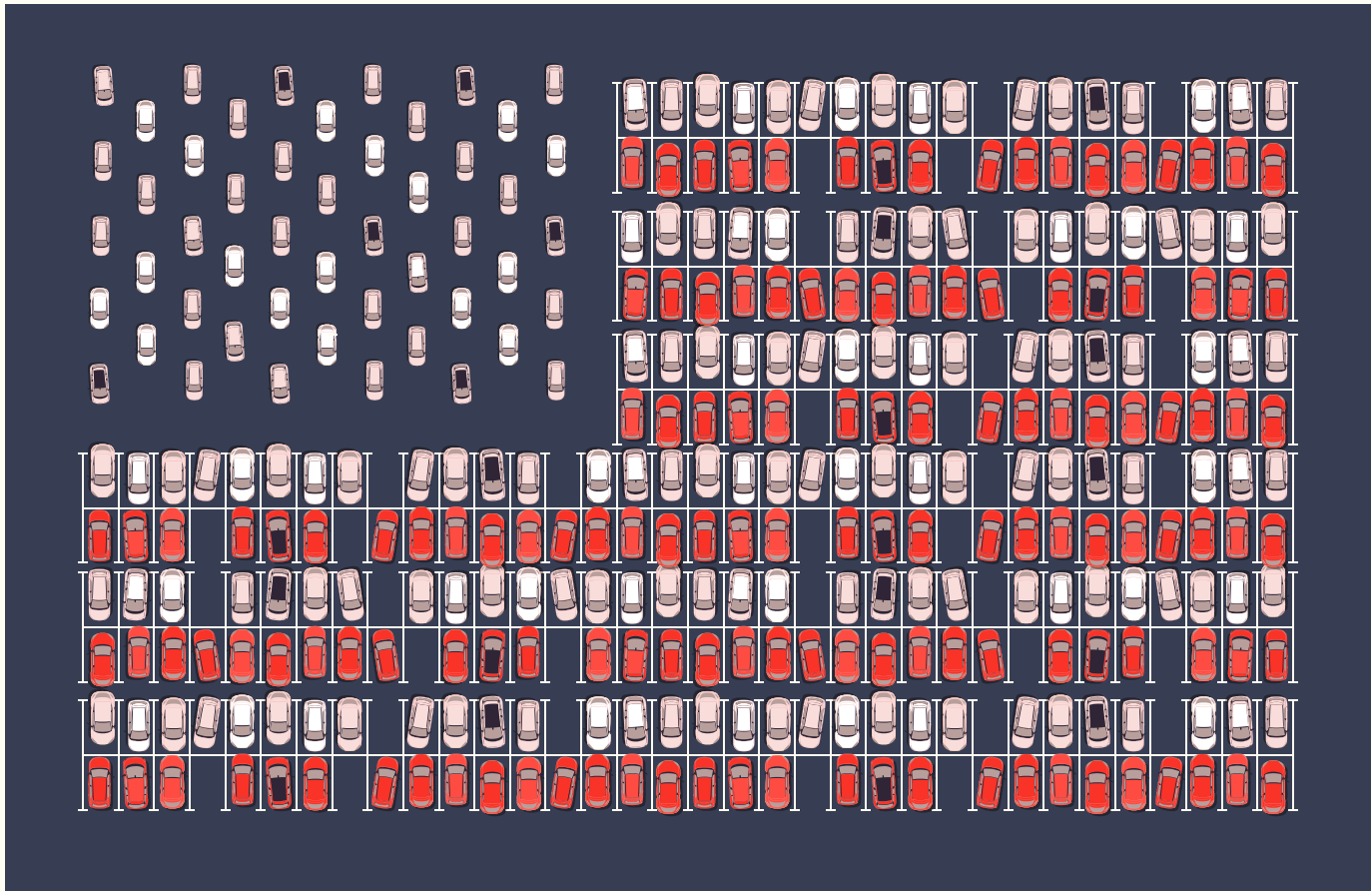
Beth Osborne,
Transportation for
America

We haven't tried very hard yet. We can't touch it. The folks who protect local land uses have scared us out of the debate all together.

Jay Primus, SFpark

Parking is an emotional and political subject, takes the sun, moon, and stars to align. It's a public policy, it just needs to be done.

For such a big topic with so many people involved, so much change underway, so much awareness of the impacts, and so many resources at hand, there has been little organized advocacy around parking reform. No national campaigns have focused directly on parking reform, no formal network of parking reformers exists and a google search on the term leads not to any central point of information but the broad array of books, academic research, blogs, articles, and news on city efforts. It is time to pull together the allies and launch a focused effort.



Part 2: Ten Recommendations to Accelerate Parking Reform

Alan Durning,
Sightline Institute

It seems to me that there ought to be a nationwide campaign with one or a handful of organizations driving it, to implement a package of parking reforms at a state and city level all over the place. It would develop best practices on how do you run a campaign and win. We actually have a tremendous amount of research, but a surprisingly small amount of campaigning knowledge. Find places where a community has let go of parking, understand what were the steps, what was the process, how did different framing change the political dynamic. Create a center of gravity to

coordinate with Mike Manville and the various people who are researching things, stitch it all together and learn from each other.

Below are ten recommendations. Some could be combined into a national campaign, others might live with organizations with specific expertise. While creating fundamental shifts is a long-term job, even a three-to-five year effort could achieve measurable results and build a better roadmap and a strong network of partners.

A next step is convening the smartest people in the field to develop a plan that leverages on the good work underway and builds it into a movement. The to-do list includes mapping the landscape of who's doing what and identifying goals, measurable objectives, and the highest impact actions. When place-based and national foundations see a coherent plan that makes the connection between parking reform and their priorities, more may invest in a body of work.

1. Encourage mayors and other elected officials take it on and help them succeed

In the parking reform world, most policy changes are local, so mayors and other elected officials are the front line. They take the heat from angry constituents. They might grasp the benefits of parking reform but worry that the results won't be obvious before election day.

David Bragdon,
TransitCenter

We need a motivational piece: Why parking should be on the agenda.

Parking reform should be on the minds of mayors. At a gathering of mayors in 2015, bike share was a hot topic. Mayors would show pictures of their system or talk about their launch date. While parking reform isn't as sexy, coalescing conversations among mayors on the topic would validate their efforts and serve as therapy for the battle scars.

Parking reformers can provide talking points, graphics, and case studies to back their efforts. Ideas include a more robust "mayors guide to parking reform" materials and a graphic novel of the Parking Super Mayor who braves the howling mob to save her city (spoiler: she's a hero in the end). Mayors care a lot

about publicity for their cities, so strategic PR efforts could laud their efforts. A scorecard that benchmarks how cities are doing could help to engage mayors.

2. Help leading cities figure out next steps

Cities like Seattle and San Francisco are at the leading edge of changing demands for curbside use. They are models for other cities, but they also need help in figuring out what's next. This is work for futurists, think tankers, and roll-up-the-sleeves practitioners who can help wrangle data, sort through the new tech and create more nimble policy approaches.

Andrew Glass Hastings,
City of Seattle

Having a clear roadmap for where to go next would be helpful. We have had huge success building performance-pricing programs. What is the next leap? It's probably more of a technology-based solution, haven't figured out the right technologies. We need a better ability to more dynamically manage the right of way, make deliveries more accessible, make Lyft and Uber more accessible. What's the best use of our curb space at different times?

Brian Wiedermeier,
San Francisco
Bicycle Coalition

I see two areas that need investment: research and dissemination, and to what degree can we predict where we can go. We need initial solutions and management strategies, where do we need to be piloting, and where can we invest in advocacy and innovation. In five years when a city is having a problem, here's a solution that Seattle or Chicago pilots, as they move outside of their comfort zone. All of their colleagues will be there sooner when they think. It's been a surprisingly successful pitch: How do we humanize the technology and make sure the hell scenario doesn't happen? We say, "Here's our problem, let's better understand it, and see what's happening out there." We need some capital to do that.

A focused effort could support a cohort of leading cities in exploring these evolving spaces through technical assistance and leadership development. Support for community groups that build political will for city action is key and should include resources specifically dedicated to raising up the voices and experiences of people of color. A strong messaging component would celebrate success and share best practices to catalyze progress elsewhere. Barr Foundation in Boston, Heinz Endowments in Pittsburgh, and Bullitt Foundation in Seattle have been supporting research and reports into emerging trends such as curbside management, AV policy, and congestion pricing. These efforts could be expanded and networked together.

Which key stakeholder is best positioned to lead parking reform?

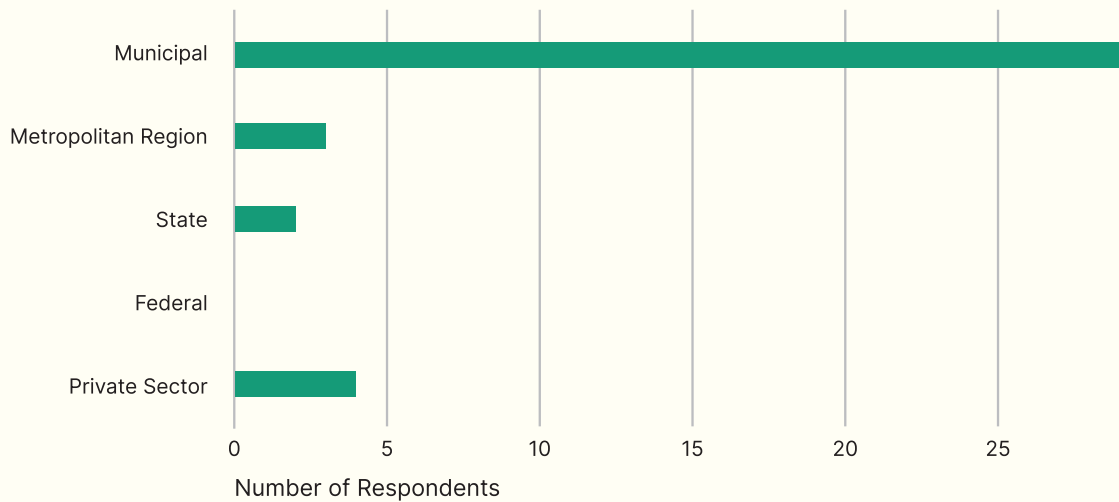


Table 12 - Experts feel that city governments are in a privileged position to champion parking reform.

3. Help cities that aren't so far ahead

Although it is exciting to work with cities on the leading edge, it is also important to think about how to move the rest of the cities. Many smaller cities do not even charge for parking in their downtowns. Assisting them would be valuable as well. Again, assembling a cohort of cities with similar dynamics, such as whether they are booming or distressed, and that are tackling some of the same issues, could be an effective way to help them move forward.

Jay Primus, former SFpark

It's hard work to do this. City by city, people who care about it continuing to push it forward. It's easy to envision a lot of technical support. "How you can do something like SFpark on a small budget? How you get the contracts right, how you cut through the fog of dealing with a lot of opportunities."

Alan Durning,
Sightline Institute

In the Pacific Northwest, there are a few parking advocates in Portland, a few in Seattle, in Vancouver, nothing in smaller cities. I wonder if there's some package of reforms that could win in cities four through 40 in our region, rather than the top three. Is there some national version that could get them from horrible to not terrible? In distressed cities, is there any kind of a green/red alliance, some kind of property rights libertarian strand of American conservatism?

4. Strengthen the community of parking reformers

Tony Jordan,
Portlanders for
Parking Reform

Part of the problem is that there are no grassroots organizations focusing on how this is a thing to do. Government moves slowly, but there's also hesitance to take it on. I call it "Fear of Parking." I think there are a lot of easy pickings to be had by sending some letters. The thing to change is the awareness that it's possible to change parking. Every local political hears about parking. Who is asking them to do the right thing? The people who know the right thing are staff or consultants who can't speak up. I can say stuff, I can ask for stuff, I am just a citizen saying do the right thing.

On a local level, advocates of more transportation choices have been the most active voices for parking reform. "I joke that my job is removing street parking," says San Francisco Bicycle Coalition's Brian Wiedenmeier. The New York City based non-profit Transportation Alternatives hired a staffer specifically to focus on parking requirements.

Chuck Marohn,
Strong Towns

I'm coming to the notion that the best way to get people to look at parking is to get more people walking or biking, so they can envision themselves by some other means than driving. Some are sympathetic, but most of them drive to every place they go. It's hard to make the case that we don't need parking unless people experience it otherwise. Once you get people out walking and biking, things change. I'm not talking about the guy who lives in a cul-de-sac ten miles away, but if 10% of the population does it, that's a huge culture shift.

Support for community organizing should be expanded to include groups working for social and environmental justice and addressing long-standing inequities in the transportation system. Strategies and solutions based on community priorities and lived experiences are the foundation for successful campaigns.

Tony Jordan,
Portlanders for
Parking Reform

Fund some people who want to work on this problem for a while. Focus on getting people in cities where they can move the needle to dig in and make campaigns to push for parking minimums. The concepts are there in Shoup's ideas. The organizing has to be done on a local level. Choose some places where the organizing is likely to be promising, places with affordability problems, cities with passable public transit that are ripe for reform. There are certainly a bunch of cities where there are staff who want to act, they just need someone to say, "Now is the time."

To reduce parking requirements in Miami, developer Andrew Frey became an organizer.

Andrew Frey, Tecela

I took about a year to form this coalition of community development and business organizations, understanding their unique interests in job creation, community revitalization, etc. I went to all these different NGOs in Miami, they all wrote letters of support. I took that package to one of the city commissioners and he agreed to be the sponsor of the ordinance.

Here's my advice: Start small, start with something politically digestible. Don't try to radically change the entire system. Try to find any precedent in your neighborhood or a nearby city. Try to be as citywide as possible. If you're going to go to bat for something, don't have this fight ten times. In terms of an equity standpoint, you're not picking winners and losers if it's citywide. Start small, find precedent, build a coalition, go citywide.

5. Recruit more allies

A small cohort of focused people with a broad bench of incidental and incremental supporters will power parking reform. If many people do a little bit, the issue will move. Every organization that works for better cities should be articulate about parking reform. It might not be at the core of their work, but it could be on their agenda. They could be ready to speak up when parking comes up and look for opportunities to advance the conversations.

Information for organizations on “Why our people should care about parking reform and here are actions to take,” with convenient stats and talking points would be helpful. A speakers bureau can give presentations at their conferences. Articles in newsletters help people connect the dots. A joint pledge could help organizations, both national and local, solidify their position. Allies can be recruited from the shared-use mobility world and real estate developers.

6. Develop a benchmarking scorecard to motivate cities toward action

Beth Osborne,
Transportation for
America

We need to praise and shame. When you rank people, when you show them poorly, they want to get off your naughty list. Rate communities on who is the most overparked.

Mayors pay attention to how their city compares to others. The simple act of identifying where a city is at in terms of managing parking can be a powerful way to convene the conversation and bring attention to the topic. A report card

or scorecard could be an extension of existing city rating systems or a new tool. It could be geared to work for cities large and small, whether they are just starting out or ready for advanced moves. It would provide a mechanism for measuring, rewarding, and catalyzing progress, a useful tool for cities looking for peer comparisons and a set of data for reports and reporters.

7. Build an inventory and clearinghouse of information

Expand on the inventory of who has done what in terms of parking. Information from a scorecard could contribute to building a database and central clearinghouse of information. Strong Towns has an online user-generated map of parking policy reform—a good start. Knowing which cities have eliminated parking minimums, where new developments with zero parking are, and what cities have successfully removed on-street parking would be helpful. Ideally, it would be comprehensive and regularly updated. A central place that linked to best practices, reports, videos, updates, talking points, and tools would be helpful to those new to parking reform as well as veterans.

8. Scale good tools

Beth Osborne,
Transportation for
America

Who is wasting the most space on empty parking spaces? How much it goes unutilized even on Black Friday? We need some way to quantify this. If you could say that the City of Hartford has 4,000 empty parking spots a day, it costs taxpayers X amount of dollars, or those parking lots if redeveloped could bring in X amount of sales tax, then you could say, “Your elected officials let empty parking space take your money.”

The new availability of data makes quantifications like this possible. Weaving together data from several sources, in a standard format across cities, could tell these stories with more accuracy. Ensuring that data collection efforts do a better job of capturing racial and ethnic information to better understand who is impacted can help design strategies that address specific equity concerns. The comprehensive inventory in the Quantified Parking could be expanded. Programs like TransForm’s GreenTRIP Certification and GreenTRIP Connects, and King County’s Right Size Parking Calculator could be scaled for use in other cities. They are data-intensive and powerful ways to help incentivize developments with less parking and help build public awareness and support.



9. Change the narrative

A small, savvy, and nimble PR team could do compelling messaging with a strong social media presence and be ready to help cities through rough spots with strategic communications.

Polling, focus groups, and other research would add deeper insight into the psychology behind parking and what moves people's opinions. A deeper dive into the language around parking would help to develop new typologies, memes, and graphics. A deeper understanding and better messaging about the racial and income makeup of those who park and those who do not would be helpful. Good storytellers should be supported.

Chuck Marohn,
Strong Towns

Our theory of change is to change the culture, change the narrative to explain what is going on. I use Urban 3's stuff a lot—tagline “We use urban analytics and data to visualize the fiscal impact of development types across communities.” It's so compelling that it gets beyond the petty squabbling stuff. That's where I put my energy.

Naomi Doerner,
City of Seattle

One of the things that I think we can do more of in terms of messaging and communicating: speaking directly to affordability. We could build more affordable housing if we didn't have as much parking. We could do better at making that more clear. We need great graphics, a way to visualize it:

For a family of four, based on percentage of AMI, you're living in the city, how much of your rent is actually parking costs? What would the potential savings be? De-wonk it, make it visual, do better communications.

Jeff Tumlin,
Nelson\Nygaard

It is easy to change one person's mind, but it takes 20 minutes. America has a 15-second attention span. It is slow work, but it is not hard to expose the lies of the technologists. Then you're inoculated. You will see the lies forever. Carrying that to scale is the critical issue. We have to do a video series. We need the reality TV show, where you go and fix a place. The dystopic model doesn't point the way out. I thought Spike Jonze didn't get enough credit for the movie HER. The city was fabulous. Sociable. It was so striking seeing this walkable, sociable future of LA.

Developer parking requirements make housing too expensive.

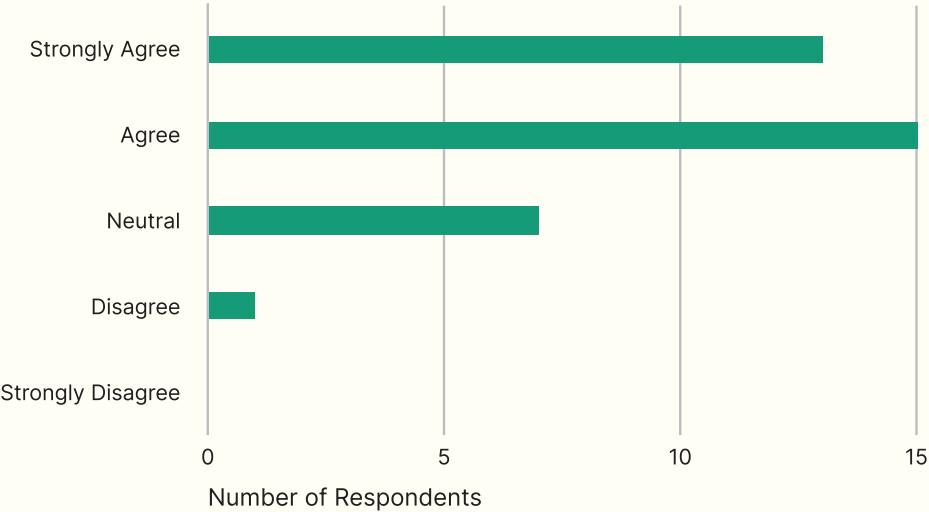


Table 13 - Most experts surveyed thought reducing parking minimums could help improve the affordability of housing.

10. Galvanize the real estate development sector

A more thorough inventory of real estate developments with less or no parking and how they have fared in the market would help make the case to the risk-averse financial world. Smart Growth America and Urban Land Institute have networks of progressive developers who could identify projects and allies within the banking world.

Jeff Tumlin,
Nelson\Nygaard

We need to infiltrate financial services. They use comps from the 1970s, they need more recent and more relevant comps, a pro forma approach to the right amount of parking supply. The lending industry remains a big obstacle, but nobody wants to go to the financial services conference and socialize with bankers.

Ed McMahon,
Urban Land Institute

We need more stories, case studies, a campaign strategy for approaching real estate financing. What would be the interventions to make it go mainstream? There are boutique funders who are willing to fund innovative things, but the mainstream funders are doing the same old same old. What would be the strategy to change their thinking? For the developers, the case study approach is very useful.

In summary, the world of parking reform is poised to make significant progress with strategic investments in organizing, research, and storytelling.