



Memorandum

To: Planning Commission
From: Thomas Dansie, Director of Community Development
Date: March 27, 2026
Re: Parking Standards Revisions

Executive Summary

A standard component of most land use codes across the country, Springdale's included, is a requirement for a developer to construct a minimum number of parking spaces when a property is developed. The minimum number of spaces required varies depending on the use of the property. The ubiquitous proliferation of these parking requirements coincided with the automobile boom of the late 1940's and early 1950's.

More recent research and analysis, beginning in the early 2000's and intensifying in recent years, has highlighted several problematic issues associated with standard minimum parking requirements. These issues include inefficiencies in transportation, land use, and economics. Researchers now recommend revising or even eliminating minimum parking requirements as means to improve transportation efficiency, allow more effective use of property, and ensure the cost of parking is distributed appropriately.

This memo summarizes recent research regarding the issues surrounding minimum parking requirements. It also presents options for the Commission to consider to address these issues.

History of Minimum Parking Standards

In the late 1940's and early 1950's several factors combined to shift the primary means of travel in most American cities to the private automobile (these factors included rapid suburbanization, development of the interstate highway system, and increased availability and affordability of automobiles). As the number of automobiles increased so did the need to provide places to park them. As a means to ensure supply of adequate parking spaces and to reduce the strain on limited on-street parking, most municipalities across America adopted land use requirements for off-street parking spaces to be included in all new development.

As off-street parking requirements became more common, transportation planners began to standardize the number of spaces required based on the use of the property. In 1980 the Institute of Transportation Engineers (ITE) published *Parking Generation*. This guidebook, updated many times since 1980, estimates the amount of parking spaces required for almost every conceivable type of land use, from single-family residences to large commercial developments. The ITE parking generation estimates are based on studies and empirical observations of actual parking demand in a variety of settings.

Planners use the ITE parking generation estimates to develop parking requirements for different land uses. These requirements mandate a minimum amount of parking spaces based on some quantifiable metric associated with the use. For example, the minimum parking requirement for a theater might be based on the number of seats in the theater. The minimum parking requirement for a retail shop might be based on the square footage of the retail space. Over time these minimum parking requirements were copied and pasted from one land use code to another until they became fairly consistent across the country.

By design, parking minimums anticipate peak parking demand and require the minimum number of parking spaces to meet that anticipated peak demand. The underlying assumption is that there should always be a parking space available for the driver of a vehicle traveling to the property, even during peak demand. For example, parking minimums for retail establishments are designed to accommodate parking during peak holiday shopping season (“Black Friday”).

Critiques of Minimum Parking Standards

Recent research (beginning in the early 2000’s and recently gaining momentum) has identified several potential issues associated with minimum parking requirements. Attached to this report are several journal publications summarizing the critiques of minimum parking standards. Many of the problems identified in this research impact large urban areas and are not particularly applicable to Springdale.

However, the research points to other issues associated with minimum parking standards that do impact Springdale. These are summarized below:

- *Minimum parking standards encourage travel by automobile and discourage walking, biking, and transit.* The underlying theory behind minimum parking standards is that parking should be convenient, plentiful, and free of charge. Thus, parking regulations have the effect of making automobile travel convenient and easy. Some critics argue the government mandated supply of parking at all destinations encourages automobile travel to the detriment of walking, cycling, and transit. The Town of Springdale has made repeated policy statements regarding the goal to promote alternative forms of travel and to make the Town a walkable and bikeable community. One way to encourage this would be to remove mandates that provide abundant automobile parking at every destination.
- *Minimum parking standards are based on national averages and may not be representative of the actual parking demand in a particular municipality, or even at different establishments of the same land use in any given municipality.* Because minimum parking standards have been copied from land use code to land use code across the country, their actual relation to the parking demand in a particular location is not guaranteed. For example, the parking demand for any given land use in St. George may be much different than the parking demand for the same use in Springdale. But standardized parking minimums don’t reflect that difference. Taking this issue a step further, the parking demand at different establishments of the same land use in the same municipality may be quite different. Two restaurants of the same size in the same municipality

might have distinctly different parking needs based on factors such as popularity, nature of the restaurant, etc. Again, standard parking minimums don't reflect those nuances. The result is that parking standards often require too much parking at some establishments, and not enough parking at others.

- *Minimum parking standards are designed for "peak" parking periods, leaving the majority of parking vacant most of the time.* By design, parking minimums anticipate peak parking demand. This leaves parking vacant most of the time. Land required to meet the peak parking demand is not available for other productive uses and sits unoccupied. The ratio of building area to parking area at many locations is 1 to 1, or even 1 to 1.5. This means there is often as much or more area of a property devoted to parking as there is to building space. In Springdale, large, unoccupied parking lots detract from the Town's village character, increase stormwater runoff, and contribute to "heat island" effects.

Based on these critiques, many planning practitioners and researchers recommend revising or eliminating parking minimums—some have even instituted parking maximums. Doing so leaves the decision regarding how much parking to develop on a property to the property owner or developer. The developer makes a business decision on how much parking to provide based on site specific considerations, economics, and business models.

Municipalities all across the country have instituted some type of parking reform. These include large metropolitan areas, as well as smaller rural areas.

Bandera, Texas (population 671 and the "Cowboy Capital of the World") removed parking minimums and replaced them with parking maximums in 2021. The city did this, in part, to protect its distinctive small town character. Similarly, Calumet, Michigan (population 621) replaced its parking minimums with parking maximums in 2022 to protect the aesthetics of the town and to minimize stormwater runoff. Closer to home, Sandpoint, Idaho (a recreation and natural amenity community similar to Springdale) removed parking minimums in its downtown area and drastically reduced the minimums in other areas of the city. One creative feature of Sandpoint's parking management is the option of an "in-lieu" parking fee which allows a developer to pay a fee to the City's parking improvement fund rather than develop required parking spaces.

Potential Obstacles to Parking Reform in Springdale

One of the key critiques of parking minimums is that they are a standard solution where a tailored approach is necessary. Using this same logic, it would not be advisable to copy and paste the parking reform plans of other communities in Springdale and expect success. Springdale has unique parking issues that need to be addressed with tailored solutions.

The following are some of the potential obstacles to a parking reform plan in Springdale which would need creative and tailored solutions.

- *Visitation to Zion National Park will always generate more parking demand than can easily be accommodated.* It is important to note that the parking reform strategies discussed above are most applicable to parking at individual properties serving the patrons of that property. General visitor parking to Zion National Park presents an entirely different parking situation. The Town has already taken a number of steps to manage the parking demand associated with visitation to Zion. The Town has implemented a parking management program and charges for on-street parking. This has helped mitigate many of the negative impacts of Zion visitation parking that existed prior to 2018. However, peak holiday parking is still a problem.

- *Potential “freeloader dilemma” if properties decide to develop no parking.* If the Town leaves the decision on how much parking up to individual property owners and developers, there could be a situation where one property owner develops no parking, and the adjacent property develops parking suitable for the demand on that property. It is possible (probable) that patrons of the property with no parking will end up parking on the property which has supplied suitable parking. This leads to increased burden of enforcement on the part of the property owner with suitable parking.

- *Impacts of on-street parking on Town character.* As part of its parking management program, the Town has strategically limited the amount of on-street parking throughout the community. Elimination of parking minimums could displace more patron parking to on-street spaces. These displaced patrons would compete with Zion visitors for on-street parking. This could generate demand for additional on-street parking, which could have impacts on the Town’s character.

General Plan Direction

The Town has adopted several policy statements directly or indirectly related to the idea of parking reform. There are reproduced below:

General Plan Transportation General Goal

It will be convenient, safe, and enjoyable to get from place to place in Springdale through a variety of different transportation modes (including walking, biking, transit, and private automobile). Traffic and parking congestion from vehicles of all types will be minimized and managed. The Town will plan for and accommodate emerging transportation technology such as electric vehicles, autonomous vehicles, charging infrastructure, and plan for future transportation innovations. The Town will participate in regional transit planning efforts.

General Plan Transportation Goal A

Develop the infrastructure, policies, and culture to support active transportation (walking, bicycling) as the primary mode of in-town travel.

General Plan Transportation Sub-Goal E

Use Town parking strategically to encourage more use of alternative forms of travel within Springdale, and discourage using private vehicles as the main mode of transportation.

General Plan Transportation Sub-Goal E(4)

The Planning Commission will evaluate the Town's land use requirements for off-street parking required for new development to make sure they promote the Town's land use and transportation goals.

Summary

This memo highlights some of the current research and best practices regarding parking management. Parking reform (elimination of parking minimums, establishment of parking maximums, and other similar strategies) is accelerating in communities across the country. Even small, rural communities are adopting parking reform strategies to preserve community character and accomplish other land use goals.

Springdale could consider parking reform, but in doing so should be cognizant of the Town's unique parking issues. Simply copying what other communities have done, even communities similar to Springdale, is not likely to yield beneficial results.

Planning Commission Action

The Commission should discuss the topic of parking reform in general. The Commission should also consider parking reform in the context of Springdale's unique parking situation. The Commission should then determine next steps. Options for next steps include:

1. Do nothing and keep Springdale's parking minimums as they are now. If the Commission determines parking reform is not appropriate in Springdale this is the most appropriate action.
2. Appoint a small task force to examine parking reform to see if it is feasible in Springdale. This task force could include one or two Commissioners, staff, business owners, and residents.
3. Direct staff to conduct additional research and bring potential strategies to a future work meeting for discussion.
4. Other action as determined appropriate by the Commission.

A high-angle, vertical photograph of a brick courtyard. The courtyard is flanked by multi-story brick buildings with windows and air conditioning units. In the center, there are trees with vibrant autumn foliage in shades of red, orange, and yellow. A silver SUV is parked in the upper part of the courtyard, a dark blue sedan is parked in the lower part, and a dark-colored car is partially visible at the bottom. The overall scene is brightly lit, suggesting a sunny day.

SHIFTING GEARS

**Why Communities Are Eliminating
Off-Street Parking Requirements—
and What Comes Next**

By *Catie Gould*

COLUMBUS, OHIO, INVENTED THE FIRST KNOWN off-street parking requirement for an apartment building in 1923. After nearly a hundred years, the results are in, and they're not good.

Last year, an assessment of the local zoning code—commissioned by the city as part of a comprehensive code revision process—concluded that off-street parking requirements were “not effective” and “often poorly matched to true parking demand.”

That mismatch has gotten worse over time. Today's parking requirements in Columbus are far higher than their cousins from the city's midcentury zoning code. In 1954, an apartment building with 100 one-bedroom units was required to have 100 parking spaces; today it has to have 150. For a 2,500-square-foot restaurant, nine required parking spaces became 34, in the 90 percent of the city not covered by special overlay districts. These ratios are out of step with the local market, leading builders to request parking reductions more than any other type of zoning variance. City and regional plans have recommended reducing parking requirements and making them more consistent (LWC 2021).

Columbus is not alone. Across the United States, decades of similar parking requirements have led to a glut: researchers estimate that for every car in the country, there are at least three parking spaces—and some have suggested the number is closer to eight spaces.

This oversupply has created a host of problems: parking requirements can inflate housing costs, block buildings from being adapted to new uses, and contribute to sprawl, making additional driving (and parking) necessary. They create an administrative burden. And the impervious surfaces of parking lots increase the risk of flooding and contribute to the urban heat island effect.

But there is good news: of all the harms traditional zoning has inflicted on communities, parking requirements are the easiest to fix, said Sara Bronin, former chair of the Hartford, Connecticut, Planning and Zoning Commission. Bronin was at the helm in 2017, when Hartford became one of the first cities in the United States to eliminate residential and commercial parking mandates. The year before, city leaders had tested the waters by eliminating requirements in the downtown area, a move that yielded new development projects and new proposals for reuse. “Every community should be eliminating their parking requirements,” Bronin said.

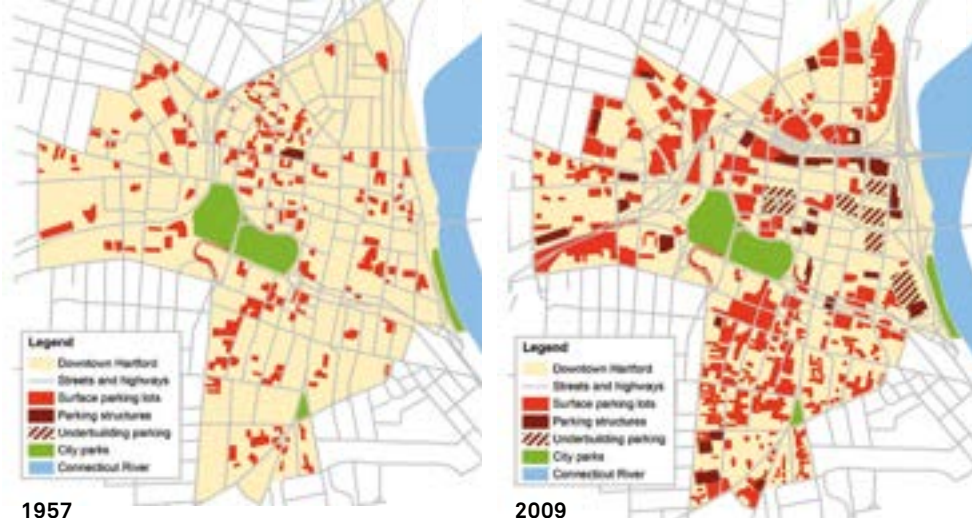
Each year, more cities are eliminating or reducing such mandates. In 2021, cities from Minneapolis to Jackson, Tennessee, eliminated minimum parking requirements from their zoning codes. In the week that this article was drafted alone, cities from Spokane to Chicago to Burlington, Vermont, rolled back parking mandates.

Communities might reduce their parking requirements because they are trying to reinvent themselves by attracting new businesses and development, accommodate population growth with space-efficient infill, or focus more on transit and walkability. Regardless of the reason, parking reform advocates say this land use regulation could finally be on its way out.

“We're going to look back at this as just this weird, late-20th century aberration,” predicts Patrick Siegman, an economist and planner who has been studying parking since 1992, including as a partner at the national transportation planning firm Nelson Nygaard. “We created something wildly inefficient.”

Across the United States, decades of off-street parking requirements have led to a glut: researchers estimate that for every car in the country, there are at least three parking spaces.

Researchers have determined that the land dedicated to surface parking lots in downtown Hartford, Connecticut, tripled between 1960 and 2000. Credit: Christopher McCahill and Norman Garrick.



Hartford Leads the Way

Like many industrial cities in the United States, Hartford saw dramatic population decline during the second half of the 20th century. In 1960, half of the people working in Hartford lived there, many walking or taking transit to jobs downtown; by 1980, less than a quarter of its workforce called the city home. Many white residents had fled for the suburbs and the overall population was declining. The repercussions of this demographic and economic shift are visible in the city's bounty of parking lots: to accommodate the increase in car commuters, the city essentially paved over swaths of its downtown.

As historian Daniel Sterner put it, "Hartford is famous for having so much torn down" (Gosselin 2013). Not even the city's first skyscraper, built in 1912, survived the demolition boom. It was razed to make way for a taller office tower, but those plans were abandoned in 1990 as the country entered a recession. The prominent corner lot became, and remains, surface parking.

University of Connecticut Professor Norman Garrick and his team found that from 1960 to 2000, the amount of land dedicated to parking lots in the downtown business district tripled, nearly equaling the amount of land underneath all the adjacent buildings. "The increase in parking was part of the collapse of the city," Garrick said. "It's typical of a lot of American cities."

Even without the research, there was little debate that Hartford had an oversupply of parking. "I don't think every city needs a full-on parking history, or parking analysis," said Bronin. "Most people should be able to just look around and say, 'there's a lot of parking in this city.'"

The overabundance of parking came at a great cost, Garrick's team found. In a 2014 report, they estimated that the city was missing out on property tax revenue to the tune of \$1,200 per downtown parking space, or about \$50 million a year. That was a significant amount for a city whose downtown buildings were generating \$75 million in annual tax revenue (Blanc et al. 2014).

Attracting investment is critically important for Connecticut's capital city—and particularly challenging. More than half of the city's real estate is nontaxable, because the land is owned by the government or nonprofit institutions. The rest is subject to the highest property tax rate in the state. Eliminating parking requirements citywide is one way to create a more flexible, inviting environment for development.

"It's easy to say we have no parking minimums, as opposed to 'what zone?'," said Aaron Gill, current vice chair of Hartford's Planning and Zoning Commission. The biggest hurdle now is convincing developers they have new options, Gill said. He encourages developers to revisit parcels they might have discounted in the past, and to review how much parking is actually being used in previous developments.

The strategy seems to be working. The quasi-public Capital Region Development Authority (CRDA) has funded more than 2,800 new homes downtown since 2012, aiming to build a critical mass of residents to support retail and other services. Mike Freimuth, executive director of the CRDA, said the new zoning code has helped reduce costs and increased the use of existing parking garages.

One of the CRDA projects, Teachers Village, involved converting an office building that had been vacant for 20 years into housing for area educators. Thirty percent of the apartments were designated as affordable. Prior to the code change, more than one parking space would have been required for each unit, but the renovated building has only 18 underground parking spaces for 60 households. The spaces are leased separately from the apartments, saving money for those who don't need a parking spot. According to estimates based on U.S. Census data, more than 30 percent of Hartford households don't even own a car (Maciag 2014).

Other redevelopment projects have cut deals with adjacent parking garages, which are also adapting to the new world of remote work, to provide an off-street parking option for residents for an additional fee. Two derelict commercial buildings on Pearl Street, which Freimuth used to joke were the largest pigeon

coops in the state, went that route when the buildings were renovated into 258 new homes. A few blocks away, a former Steiger's department store is being converted into 97 new apartments with commercial space below.

Eliminating parking requirements citywide is one way to create a more flexible, inviting environment for development: "It's easy to say we have no parking minimums, as opposed to 'what zone?'"

The CRDA is also involved in an ambitious project known as Bushnell South, which aims to convert a 20-acre area dominated by surface parking into a vibrant, walkable, mixed-use neighborhood with up to 1,200 apartments and townhouses, restaurants and retail, green space, and cultural attractions. The city was reviewing proposals from developers this summer with the goal of moving forward this fall. Although some developers have expressed concern that the city is building more residential space than the market can support, Freimuth is eager to proceed. "This land has been laying fallow for 50 years," he told the *Hartford Courant* (Gosselin 2022). "Why do we have to keep on waiting?"

Planners hope to convert an area of downtown Hartford currently dominated by surface parking (left) into a mixed-use neighborhood known as Bushnell South (right). Credits (left to right): Mark Mirko/*Hartford Courant*, Goody Clancy/Bushnell South Planning Consortium.



The Benefits of a Citywide Shift

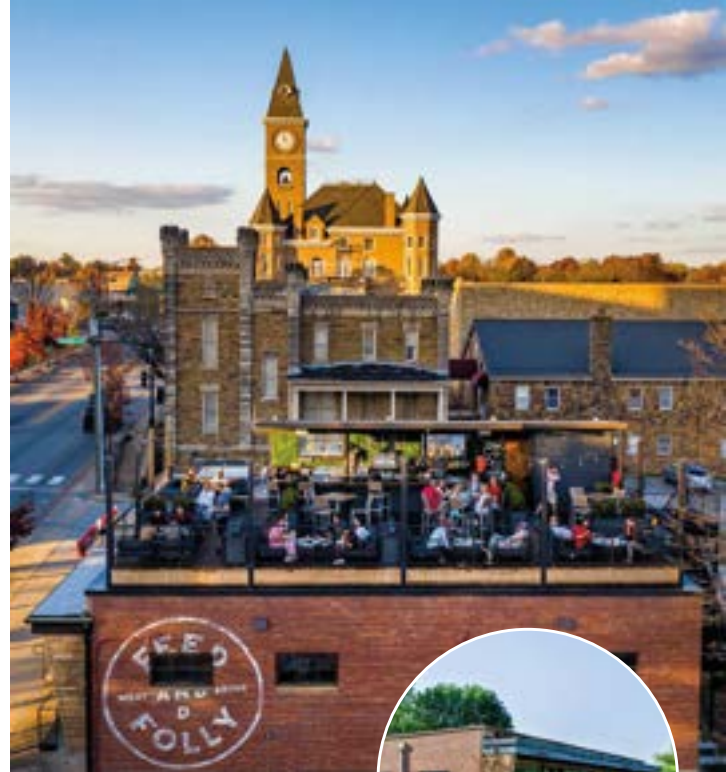
On the edge of downtown Fayetteville, Arkansas, a building that had stood vacant for nearly 40 years now houses a local restaurant with a rooftop patio. Down the road, a formerly abandoned gas station is back in use as retail space. The reuse of these once-forgotten properties was made possible several years ago, when Fayetteville's city council voted to remove commercial parking requirements citywide.

While most cities start with reducing parking mandates in a central business district, like Hartford did, planners in Fayetteville were fielding requests about properties throughout the city, and opted against defining a smaller boundary. At 44 square miles, Fayetteville is nearly 2.5 times larger than Hartford, with 70 percent of the population.

"As a city planner, you receive phone calls about what's possible with this property," Fayetteville planner Quin Thompson explained. "What I began to see was the same properties over and over again. Some of those properties were downtown, but a lot weren't." None of the parcels had enough space to meet the parking requirements in place at the time.

The planning staff approached the city council with the idea of eliminating commercial parking requirements citywide. Some of these properties were so constrained, they explained, it was impossible to imagine how they could be redeveloped under the current rules. They also said investors taking on the financial risk of a project were best suited to determine their own parking needs, and would act as a backstop even when the city was no longer regulating off-street parking spaces. In October 2015, Fayetteville's city council agreed.

What happened next? "The buildings that I had identified as being perpetually and perhaps permanently unusable were very quickly purchased and redeveloped, and are in use right now," said Thompson. "I can't think of any that are still out there that I had used as case studies that haven't been redeveloped."



The elimination of commercial parking requirements in Fayetteville, Arkansas, made new projects possible, including the conversion of a long-vacant building (inset) into the busy Feed and Folly restaurant. Credits: Courtesy of Feed and Folly; Katie Mihalevich, Realtor® (inset).

Thompson and his colleagues were right that the distinction between parking needs in a central city versus outlying neighborhoods can be arbitrary. In the lead-up to the removal of parking requirements in Edmonton, Alberta, in 2020, a citywide study of 277 sites found no clear geographic trend that related to how full parking lots were, even after factoring in variables like population density, walkability as measured by Walk Score, or drive-alone rate. Of all the sites surveyed, only 7 percent neared capacity at the busiest times of day. It was far more common for parking lots to remain half empty, as was the case for 47 percent of observed sites (Nelson Nygaard 2019).

In Fayetteville and other cities, eliminating parking minimums citywide has had another benefit: reducing administrative work and freeing up city staff to work on other things. "One of the

things you find in American cities is that they've got all of these college-educated planners, many of whom actually have graduate degrees, and what they're doing is spending hour after hour processing parking variances," explained Siegman.

Kevin Robinson was one of those planners, until he was hired as director of Planning and Development Services for Albemarle, North Carolina. To his surprise, the city had almost no parking requirements, having eliminated virtually all of them two decades prior. "However you came about it," he recalls telling city officials, "I think you're on the right track."

Towns where he had worked previously had only reduced parking requirements in central business districts, not citywide. "From an administrative standpoint, it's a heck of a lot easier to deal with," said Robinson.

"Quite honestly, a lot of times [parking minimums] are very arbitrary numbers," Robinson said. Now that he no longer has to enforce them, he has more time to spend on other aspects of development—including a downtown parking plan. He has plenty of data to rebut complaints that there isn't enough parking. Even at peak hours, public parking never gets more than half full, his heatmaps indicate.

Robinson acknowledges that eliminating parking minimums wasn't a cure-all: "We are still seeing far more parking being built than is absolutely necessary." (See sidebar to learn how the shift has played out in other cities.)

Construction in Albemarle is picking up as people get priced out of nearby cities like Charlotte. In the last two years, this small city of 16,000 has approved permits for 3,000 new

housing units, with another 1,000 in the works, including middle housing like duplexes and townhouses.

Robinson is nervous that the parking requirements, which were discarded at a time when the city wasn't growing, might return as development accelerates. "I'm trying to keep them from going in that direction," he said. His concerns aren't unfounded, as the experience of another city shows.

Left to the Market, How Much Parking Gets Built?

In Buffalo, New York, which struck down parking requirements in April 2017, a review of 36 major developments showed that 53 percent of projects still opted to include at least as many parking spaces as the previous code had required. The developers who did propose building less parking averaged 60 fewer parking spaces than the old minimum required, avoiding over eight acres of unnecessary asphalt and saving up to \$30 million in construction costs.

Seattle saw similar results after eliminating parking requirements near transit in 2012. A study of 868 residential developments permitted in the following five years found that 70 percent of new buildings in areas not subject to parking requirements still chose to have on-site parking. Collectively, the new buildings included 40 percent fewer parking spaces than would have previously been required, saving an estimated \$537 million in construction costs and freeing up 144 acres of land.

Sources: "What Happened When Buffalo Changed Its Parking Rules," Streetsblog (June 2021); "Seattle's Reduced Parking Minimums Cut 18,000 Stalls and Saved Over \$500 Million," State Smart Transportation Initiative (February 2021).

"The buildings that I had identified as being perpetually and perhaps permanently unusable were very quickly purchased and redeveloped, and are in use right now."

When Mandates Make a U-Turn

It took almost a decade for a new apartment building with no parking to arrive in Portland after the city waived requirements near transit in 2002. The political backlash came more swiftly. As Portland's rental market tightened, the city found itself with the second-lowest vacancy rate in the country in 2012. Apartment construction was booming, and buildings without off-street parking were becoming increasingly common.

Then controversy erupted. The epicenter was a 13-block section of Division Street, a car-oriented commercial corridor experiencing a building boom. By the time the issue made it to the front pages of *Willamette Week*, the local

weekly paper, 11 new multifamily buildings were under development, seven with no parking at all.

A city-commissioned survey of 115 residents of new apartment buildings would show that 72 percent of the respondents owned cars, with the majority parking on neighborhood streets (Mesh 2012a). Even though the same survey showed that the areas around the buildings had plenty of available parking, neighbors didn't perceive it that way. Mayor Charlie Hales, who had championed the removal of parking mandates as a council member in 2002, even floated the idea of instituting a building moratorium until the zoning code could be sorted out. Hales told *Willamette Week* that he had anticipated developers might build one parking spot instead

It took almost a decade for a new apartment building with no parking to arrive in Portland after the city waived requirements near transit in 2002. The political backlash came more swiftly.

Communities across the United States and Canada have modified or eliminated their off-street parking requirements. Credit: Parking Reform Network.

Scope of Reform

- Regional
- Citywide
- City Center/District
- Transit Oriented
- Main Street/Special



of two, but hadn't imagined banks would finance housing with no parking at all (Mesh 2012b).

In response to the outcry, Portland's city council reinstated a parking requirement for multifamily developments with more than 30 units. Those larger buildings would need to provide one parking space for every three or four units, depending on the building size. "That was the strategic retreat," Hales explained. "We decided to adjust our ideal slightly to a watered-down version in order to reduce the controversy."

Hales, who is no longer mayor, still believes strongly in eliminating parking requirements. "There's some things we really don't need to regulate," he said recently. "Minimum number of parking spaces is one of them." Given the political pressure of the time, he has a hard time imagining how things could have worked out differently.

While supporters of parking mandates prevailed in that case, the matter was far from settled. Several years after the brouhaha, regulated affordable housing near transit regained its exemption from parking requirements, after rising rents and economic displacement prompted Portland to declare a housing state of emergency and elect a tenant advocate to city council. Portland adopted an inclusionary zoning policy that same year, requiring multifamily buildings to set aside units for affordable housing—and waiving residential parking requirements for those buildings.

Looking back, Portland activist Tony Jordan, who went on to launch the national Parking Reform Network, thinks the city was foolish to derail the housing construction wave. "Why would you do anything" to make developers think twice about investing in larger buildings, he asked. The way the code was written, adding one more unit to a 30-unit building came with a penalty of six parking spaces, incentivizing builders to stay under the limit. "Even if we only lost 60 apartments," Jordan said, "that's a housing subsidy that we just threw away—and for what?"



Raleigh, North Carolina. Credit: Rose-Marie Murray via Alamy Stock Photo.

Communities with No Parking Minimums

According to the Parking Reform Network, the following communities do not have citywide minimum parking requirements (dates of implementation indicated when known). Learn more about these and other changes to U.S. parking mandates at www.parkingreform.org.

- **California:** Alameda (2021), San Francisco (2018), Emeryville (2019)
- **Connecticut:** Bridgeport (2022), Hartford (2017)
- **Georgia:** Dunwoody (2019)
- **Indiana:** South Bend (2021)
- **Michigan:** Ann Arbor (2022), Mancelona, Ecorse (2020), River Rouge (2021)
- **Minnesota:** Minneapolis (2021), St. Paul (2021)
- **Missouri:** Branson
- **New Hampshire:** Seabrook (2019), Dover (2015)
- **New York:** Buffalo (2017), Canandaigua, Hudson (2019), Saranac Lake (2016)
- **North Carolina:** Raleigh (2022)
- **Tennessee:** Jackson (2021)
- **Texas:** Bandera, Bastrop (2019)
- **Alberta:** Edmonton (2020), High River (2021)

Stopping Parking Spillover

When parking complaints bubbled up in Portland's Northwest neighborhood in 2016, the city was ready to try a different strategy: directly managing on-street parking. A local parking advisory committee had petitioned Portland's city council to apply the citywide parking requirements to the growing district, which had historically been exempted. But when a study showed that those regulations would have made 23 percent of newly constructed homes in the neighborhood illegal, the council opted to improve the district's fledgling parking permit program instead.

"When city staff manage on-street parking properly, they can prevent that on-street parking from getting overcrowded with a 99 percent success rate," said Siegman, who has spent much of his career studying spillover parking concerns. The problem, he said, is that almost no one has training in how to manage street parking in a way that is both effective and politically popular. On-street parking management is not part of the core curriculum for planners or transportation engineers.

"What you're essentially doing with on-street parking spaces is taking a valuable resource that belongs to the public and setting up rights to determine who gets to use it," said Siegman. Any hotel manager knows that once the keys are gone, there is no vacancy. Yet cities often hand out multiple residential permits for every street space, and wait until the problem is so bad that neighbors have to petition for curbside management.

When a neighborhood has more drivers seeking permits than there are on-street spaces, there are a number of ways to ensure balance. Boundaries for a parking district could exclude new buildings or households with driveways, or restrict the number of permits to the street frontage of the lot—forcing developers and incoming residents to make a plan for storing cars off-site.



Officials in Vancouver addressed curb congestion by raising the price of on-street parking permits. Credit: Elena_Alex_Ferns via Alamy Stock Photo.

Siegman estimates the costs of setting up an effective parking permit program could be somewhere in the neighborhood of \$100,000—a bargain compared to the cost of building parking, which can run as much as \$50,000 per space. "There are all kinds of different feelings about what's fair," Siegman said, "but you can often come to a solution that has durable majority political support."

That's what officials in Vancouver, British Columbia, did in 2017 to resolve crowded curbs in the West End. Despite 94 percent of residents having access to an off-street parking space, many still preferred to park on the street. Over 6,000 drivers had opted for the \$6 a month permit for the chance to park in one of the 2,747 on-street spaces. When the city raised permit prices to \$30 per month—more in line with what private garages charged—and installed more parking meters, curb congestion cleared up. Before that change, only one out of five blocks met the city's standards of being less than 85 percent full at the busiest times of day. Within two years of the pricing adjustments, all of the blocks measured below that threshold, making it far easier to find a parking space.

The Next Wave of Parking Reform

More and more, champions of eliminating parking mandates are getting elected to offices and planning commissions, according to Jordan, of the Parking Reform Network. “One person can really get the idea and push it through,” he said. The growing number of cities that have taken this deregulatory action (see map and sidebar on pages 28–29) provides political cover for policy makers who have been hesitant to go first.

But parking reform advocates say change should and will happen beyond the local level. Since “the perceived benefits of instituting parking regulations [have been] almost entirely local,” Siegman said, he thinks almost all of the productive reform to get rid of minimum parking laws is going to come from the regional, state, or national level.

A wave of legislation against parking mandates has been gathering momentum on the West Coast. In 2020, Washington State quietly capped excessive parking requirements near transit for market-rate and affordable housing. California’s third attempt to limit local parking requirements near public transit succeeded in September with the signing of AB 2097. That came on the heels of another statewide rollback in Oregon, where a state land use commission struck down parking mandates for projects near transit, affordable housing, and small homes across the state’s eight largest metro regions, which house 60 percent of Oregon’s population.

By July 2023, nearly 50 cities in Oregon will need to choose between wholly eliminating minimum parking requirements or implementing a suite of other tools to manage parking and comply with the new administrative rule. They are sure to have lots of company, as municipalities

and states across the nation weigh the harm these regulations have caused against the 20th century dream of free and easy parking.

Aaron Gill, of the Hartford Planning and Zoning Commission, has some simple advice for jurisdictions considering removing parking minimums: “I would say just do it. Don’t waste time having a discussion as to if it’s going to work or not. The reality is we have way too much parking in this country.” □

Catie Gould is a transportation researcher with the Seattle-based nonprofit think tank Sightline Institute.

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Municipalities and states across the nation are weighing the harm these regulations have caused against the 20th century dream of free and easy parking.

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PRACTICE PARKING REFORM



The Pseudoscience of Parking Requirements

Donald Shoup, FAICP

At the dawn of the automobile age, suppose Henry Ford and John D. Rockefeller had asked how city planners could increase the demand for cars and gasoline. Consider three options. First, divide the city into separate zones (housing here, jobs there, shopping somewhere else) to create travel between the zones. Second, limit density to spread everything apart and further increase travel. Third, require ample off-street parking everywhere so cars will be the easiest and cheapest way to travel.

American cities have unwisely adopted these three car-friendly policies. Separated land uses, low density, and ample free parking create drivable cities but prevent walkable neighborhoods. Although city planners did not intend to enrich the automobile and oil industries, their plans have shaped our cities to suit our cars.

Parking requirements are particularly ill-advised because they directly subsidize cars. We drive to one place to do one thing and then to another place to do another thing and then drive a long way back home, parking free everywhere. In *The High Cost of Free Parking*, published by the American Planning Association in 2005, I argued that parking requirements increase traffic congestion, pollute the air, encourage sprawl, raise housing costs, degrade urban design, prevent walkability, damage the economy, and penalize everyone who cannot afford a car. Since then, to my knowledge, no member of the planning profession has argued that parking requirements do not cause these harmful effects. Instead, a flood of recent research has shown that parking requirements are poisoning our cities with too much parking.

Despite all the harm off-street parking requirements cause, they are almost an established religion in zoning practice. One should not criticize anyone else's religion, but I'm a protestant when it comes to parking requirements. And I believe zoning needs a reformation.

THREE PARKING REFORMS

Reform is difficult because parking requirements do not exist without a reason. If

on-street parking is free, removing off-street parking requirements will overcrowd the on-street parking and everyone will complain. Therefore, to distill 800 pages of *The High Cost of Free Parking* into three bullet points, I recommended three parking reforms that can improve cities, the economy, and the environment:

- **Remove off-street parking requirements.** Developers and businesses can then decide how many parking spaces to provide for their customers.
- **Charge the right prices for on-street parking.** The right prices are the lowest prices that will leave one or two open spaces on each block, so there will be no parking shortages. Prices will balance the demand and supply for on-street space.
- **Spend the parking revenue to improve public services on the metered streets.** If everybody sees their meter money at work, the new public services can make demand-based prices for on-street parking politically popular.

Each of these three policies supports the other two. Spending the meter revenue to improve neighborhood public services can create political support to charge the right prices for curb parking. If cities charge the right prices to produce one or two open spaces on every block, no one can say there is a shortage of curb parking. If there is no shortage of curb parking, cities can then remove their off-street parking requirements. Finally, removing off-street parking requirements will increase the demand for curb parking, which will increase the revenue to pay for public services.

THE MOST EMOTIONAL TOPIC IN TRANSPORTATION

Everyone wants to park free, and most people consider parking a personal issue, not a policy problem. Rational people quickly become emotional about parking, and staunch conservatives turn into ardent communists. Thinking about parking seems to take place in the reptilian cortex, the most

primitive part of the brain responsible for snap judgments about urgent fight-or-flight issues, such as how to avoid being eaten. The reptilian cortex is said to govern instinctive behavior like aggression, territoriality, and ritual display, which all play a role in parking.

Parking clouds people's minds, shifting analytic faculties to a lower level. Some strongly support market prices—except for parking. Some strongly oppose subsidies—except for parking. Some abhor planning regulations—except for parking. Some insist on rigorous data collection and statistical tests—except for parking. This parking exceptionalism has impoverished thinking about parking policies, and ample free parking is seen as a goal that planning should produce. If drivers paid the full cost of their parking, it would seem too expensive, so we expect someone else to pay for it. But a city where everyone happily pays for everyone else's free parking is a fool's paradise.

Few people are interested in parking itself, but parking strongly affects issues people do care strongly about, such as affordable housing, climate change, economic development, public transportation, traffic congestion, and urban design. For example, parking requirements reduce the supply and increase the price of housing. Parking subsidies lure people into cars from public transportation, bicycles, or their own two feet. Cruising for free curb parking congests roads, pollutes the air, and adds greenhouse gases. Do people really want a drive-in dystopia more than they want affordable housing, clean air, walkable neighborhoods, good urban design, and a sustainable planet?

Reforms in planning for parking may be the cheapest, quickest, and most politically feasible way to achieve many social, economic, and environmental goals.

THE EFFECTS OF PARKING REQUIREMENTS

Cities have parking requirements for every art gallery, bowling alley, dance hall, fitness club, hardware store, movie theater, night club, pet store, tavern, and zoo without knowing the demand for parking at any of

them. Despite a lack of theory and data, planners set parking requirements for hundreds of land uses in hundreds of cities—the 10,000 commandments of planning for parking. Planners have adopted a veneer of professional language to justify the practice, but planning for parking is learned only on the job and it is more a political activity than a professional skill.

Consider what planners do not know when they set parking requirements:

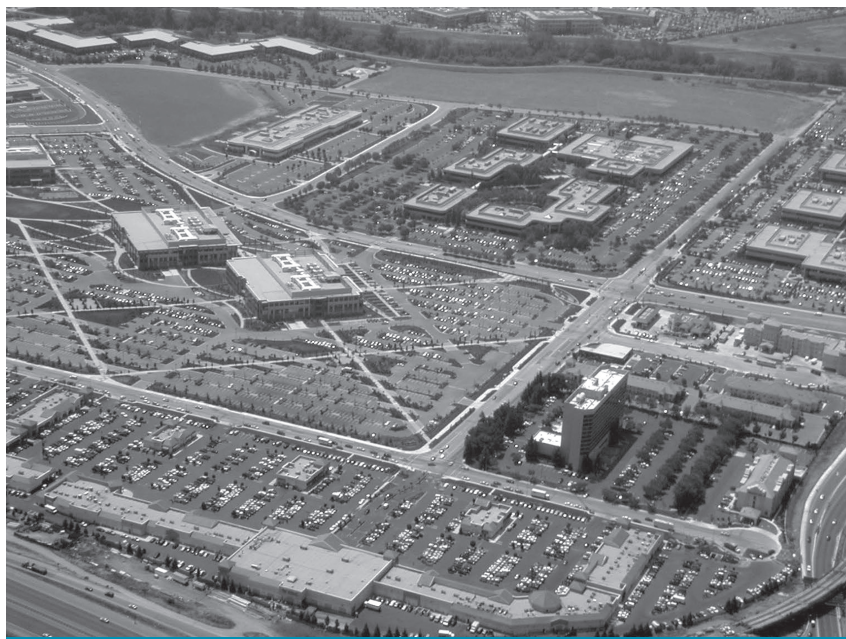
- How much the required parking spaces cost
- How much drivers are willing to pay for parking
- How parking requirements increase the price of everything except parking
- How parking requirements affect architecture and urban design
- How parking requirements affect travel choices and traffic congestion
- How parking requirements affect air pollution, fuel consumption, and CO₂ emissions

The High Cost of Parking Requirements

Cost is an especially important unknown. A recent study found that the parking spaces required for shopping centers in Los Angeles increase the cost of building a shopping center by 67 percent if the parking is in an aboveground structure and by 93 percent if the parking is underground (Shoup 2014). Retailers pass this high cost on to all shoppers, regardless of how they travel. People who cannot afford a car pay more for their groceries so richer people can park free when they drive to the store.

Without knowing how much the required parking spaces cost to build, planners cannot know how parking requirements increase the cost of housing. Small, spartan apartments cost less to build than large, luxury apartments, but their parking spaces cost the same. Because many cities require the same number of spaces for every apartment regardless of its size or quality, the required parking disproportionately increases the cost of low-income housing. One study found that minimum parking requirements raise housing costs by 13 percent for families without cars (Gabbe and Pierce 2017).

Drivers pay for their cars, fuel, tires, maintenance, repairs, insurance, and



Stuart Cohen, Transform

Figure 1. An office park on the border of Milpitas and San Jose, California.

registration fees, but they usually don't pay for parking. Who does pay for the parking? Everyone, including people who cannot afford a car. All of life's necessities cost more in order to provide free parking.

America is a free country, and many people seem to think that means parking should be free. Parking requirements enable everyone to park free at everyone else's expense, and no one knows that anyone is paying anything. Parking is free, however, only because everything else is more expensive. Parking requirements are well-intentioned, but good intentions do not guarantee good results or mitigate unintended harm.

The required parking takes up a lot of space. Parking lots typically have about 330 square feet per space. Because there are at least three off-street parking spaces per car in the United States, there are at least 990 square feet of off-street parking space per car. In comparison, there are about 800 square feet of housing space per person in the United States. The area of off-street parking per car is thus larger than the area of housing per human.

In astronomy, dark energy is a force that permeates space and causes the universe to expand. Similarly, in urban planning, parking requirements are a force

that causes cities to expand. The higher the parking requirements, the stronger the dark energy that spreads cities out and rips them apart. Typically, the process of setting the parking requirements is closer to astrology than astronomy.

Parking Requirements in Practice

When I am invited to speak in a city, I start with an aerial view of a site in the city with too much parking, such as this photo of an office park in San Jose, California (Figure 1). It looks like a giant parking lot with a few buildings.

I then show a page from the city's parking requirements, which are so precise and so specific for so many land uses that most people probably assume planners carefully study parking (Table 1). Instead, planners are winging it. Planners are not oracles who can divine the demand for parking. I have never met a city planner who could explain why any parking requirement should not be higher or lower. To set parking requirements, planners usually take instructions from elected officials, copy other cities' parking requirements, or rely on unreliable surveys. Parking requirements are closer to sorcery than to science.

Next, I show the size of the parking lots resulting from the city's parking

TABLE 1. SELECT PARKING REQUIREMENTS FOR “ENTERTAINMENT AND RECREATION” USES IN SAN JOSE, CALIFORNIA

Use	Vehicle Parking Required
Arcade, amusement game	1 per 200 sq. ft. of floor area
Batting cages	1 per station, plus 1 per employee
Bowling establishment	7 per lane
Driving range	1 per tee, plus 1 per employee
Golf course	8 per golf hole, plus 1 per employee
Health club, gymnasium	1 per 80 sq. ft. recreational space
Miniature golf	1.25 per tee, plus 1 per employee
Performing arts rehearsal space	1 per 250 sq. ft. of floor area
Poolroom/billiards establishment	1 per 200 sq. ft. of floor area
Private club or lodge	1 per 4 fixed seats on the premises, or 1 per 6 linear feet of seating, plus 1 per 200 square feet of area without seating but designed for meeting or assembly by guests, plus 1 per 500 sq. ft. of outdoor area developed for recreational purposes
Recreation, commercial (indoor)	1 per 80 sq. ft. of recreational area
Recreation, commercial (outdoor)	20 per acre of site
Skating rink	1 per 50 sq. ft. of floor area
Swim and tennis club	1 per 500 sq. ft. of recreation area

requirements. For many land uses, the parking lots are bigger than the buildings they serve (Figure 2). There is more space for parking than for people. For example, San Jose, California, requires a restaurant to provide a parking lot that is more than eight times the size of the restaurant itself. The requirements provide parking everywhere anyone wants to go, but they also create places where few people want to be.

Most people think parking behaves like a liquid. If the parking supply is squeezed in one place, cars will park somewhere else. But parking behaves more like a gas. The number of cars expands to fill the available space, and more parking leads to more cars. Nevertheless, planners usually assume that cars and people come in fixed proportions, and they often require parking in proportion to people: per beautician, dentist, mechanic, nun, student, teacher, or tennis player. If parking were priced to cover its cost, people would own fewer cars and drive less.

Parking requirements are not only ridiculous but also dangerous. They make cities friendly to cars but not to people—drivable but not walkable. As Jane Jacobs wrote, “The more downtown is broken up and interspersed with parking lots and garages, the

duller and deader it becomes, and there is nothing more repellent than a dead downtown.” We want more out of our streets than traffic and free parking. We also want safety, health, walkability, prosperity, and pleasure.

The Unequal Burden of Parking Requirements

Cities require parking for every building without considering how the required spaces place a heavy burden on poor people. A single parking space, however, can cost more than the net worth of many U.S. households. One study found that in 2015 the average construction cost (excluding land cost) for parking structures was about \$24,000 per space for aboveground parking and \$34,000 per space for underground parking.

By comparison, the U.S. Census of Wealth and Asset Ownership in 2015 found that the median net worth (the value of assets minus debts) was \$110,500 for white households, \$19,990 for Hispanic households and \$12,780 for black households. One space in a parking structure, therefore, costs more than the entire net worth of more than half of all Hispanic and black households in the country.

Free curb parking and off-street parking requirements have spread the city out so

that most people need a car to get a job, go to school, and shop. In a misguided attempt to provide free parking for everyone, cities encourage poor people to buy cars they can ill afford, often financing them by subprime loans at high interest rates. Free parking has the veneer of equality, but it increases inequality. It is enormously wasteful and grossly unfair.

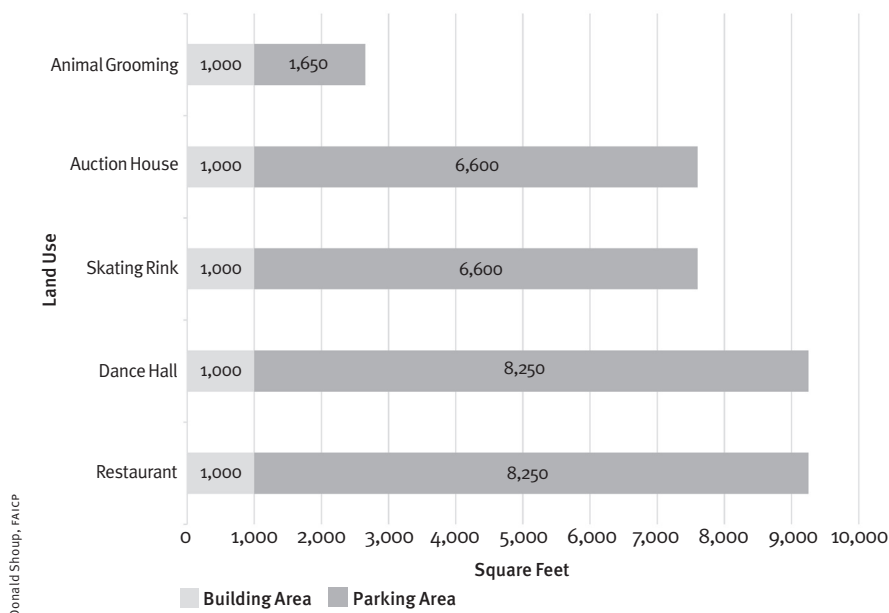
Assumptions and Parking Requirements

Parking requirements resemble what engineers call a “kludge”—an awkward but temporarily effective solution to a problem, with many moving parts that are clumsy, inefficient, hard to understand, and expensive to maintain. Off-street parking requirements are a kludge designed to prevent a shortage of free on-street parking. Parking requirements are superficially plausible but fundamentally wrong.

Parking requirements are like barnacles on a ship, accumulating one at a time and slowing the ship’s progress. They have severed the link between the cost of providing parking and the price that drivers pay for it. They increase the demand for cars, and when citizens object to the resulting traffic congestion, cities respond by restricting development to reduce traffic. That is, cities require parking and then limit the density of people to limit the density of cars. Free parking has become the arbiter of urban form, and cars have replaced people as zoning’s real density concern.

Parking requirements create many disputes about how many parking spaces a building “needs,” with each side making solemn claims backed by dubious evidence. Consider the opposite approaches in the Los Angeles and San Francisco central business districts. For a concert hall downtown, Los Angeles requires, as a minimum, 50 times more parking spaces than San Francisco allows as its maximum. This difference helps to explain why downtown San Francisco is much more exciting than downtown Los Angeles.

If physicians in one city prescribed bloodletting and physicians in another city prescribed blood transfusion to treat the same disease, everybody would demand to know what is going on. Nobody notices when Los Angeles requires parking and San Francisco restricts it. Ultimately, minimum parking requirements increase traffic



Donald Shoup, FAICP

Figure 2. Required ratios of building-to-parking area for select uses in San Jose, California.

because all the cars drawn to the required parking spaces clog the roads. Los Angeles has more parking spaces per square mile and worse traffic congestion than any other city in the United States. Minimum parking requirements began as a solution but have become the problem, a disease masquerading as a cure.

If planners assume that every new resident will come with a car, they require developers to provide enough off-street parking to house all the cars. Ample free parking then ensures that most residents do want a car. Parking requirements thus result from a self-fulfilling prophecy. Parking requirements increase the number of cars, and planners then use the large number of cars to justify the need for higher parking requirements.

Planners often use “motivated reasoning” to justify the parking requirements required by elected officials who want enough parking to ensure that citizens won’t yell about a shortage of free parking. Planners must then fashion arguments for conclusions already reached. Assumptions are the starting point of most parking requirements, and the person who makes the assumptions determines the outcome. Instead of reasoning about parking

requirements, planners rationalize them and feign expertise they do not have.

When it comes to parking requirements, planners have used Pandora’s box as their toolkit. These requirements result from complex political and economic forces, and planners are not in full control. But they do enable the pseudoscience, and the public bears the cost.

Every Sin Is Forgiven if It Is Done With Our Permission

When a city requires off-street parking, city officials have something to offer developers—a planning variance that reduces the parking requirement. The city can then allow a business to provide fewer than the required number of parking spaces because of special circumstances. Some planners may believe that minimum parking requirements are needed as a bargaining chip because they enable cities to reduce the parking requirements in exchange for community benefits, such as affordable housing. For example, California requires cities to reduce the parking requirements for residential developments that include a specific share of affordable housing units. Reducing parking requirements as an inducement to provide affordable housing shows how unnecessary

the parking requirements are in the first place. Cities would never reduce the code requirements for safe electrical wiring or fire escapes in exchange for affordable housing units, but they can easily bargain away parking because it is obviously not necessary.

Just as the medieval Catholic Church sold indulgences for the remission of sins, cities can sell planning variances for the remission of parking requirements. In Dostoyevsky’s *The Brothers Karamazov*, the Grand Inquisitor of Seville explained why the Church was popular even though it threatened Hell as the punishment for minor sins: “Every sin will be forgiven if it is done with our permission.” Removing minimum parking requirements will remove the temptation to sell variances that allow sinfully few parking spaces.

How can cities remove their minimum parking requirements and still have the bargaining power the requirements provide? They can establish maximum parking limits and allow developers to provide more spaces if they pay a fee for every space they provide above the limit. I do not recommend establishing parking maximums to use as a bargaining tool with developers. Nevertheless, if cities want to use parking as a bargaining tool, it is much better to bargain from the starting point of maximum limits than of minimum requirements.

THE UPSIDE OF MINIMUM PARKING REQUIREMENTS

The upside of parking requirements is that removing them can do so much good. Figure 1 showed the asphalt desert created by excessive parking in Silicon Valley. What would happen if San Jose removed off-street parking requirements, charged demand-based prices for on-street parking, and used the resulting revenue to improve neighborhood public services? Property owners might decide their land is more valuable for housing than for parking. If a city wants more housing and less traffic, removing off-street parking requirements will help.

Everyone in Silicon Valley complains about expensive housing, long commutes, congested traffic, and polluted air. Building housing on the periphery of parking lots would help to solve all these problems. Figure 3 suggests what could happen if San Jose removed parking requirements and allowed housing on the periphery of



➔ Figure 3. The same office park from Figure 1, digitally altered to illustrate how removing parking requirements could result in liner apartment buildings on previously developed sites.

parking lots. A parking lot can easily be redeveloped because it has a single owner, has no demolition costs, does not require new infrastructure, and is near both jobs and shopping. If apartment buildings fronted the sidewalks, anyone walking, biking, or driving by would see a real city. The smartest way to travel is to be near your destination already, and this job-adjacent housing would allow commuters to walk to work—a rare out-of-car experience.

The housing can be built without new parking because the existing spaces can be shared between office buildings and apartments. To avoid a parking shortage, the cost of parking will have to be separated from the rent for apartments and offices, so only drivers pay for parking. Residents who work in a nearby office building may find they can live with only one or even no car. They will have the option to rent an apartment without paying for two parking spaces, an option that parking requirements now forbid. The new housing cannot cause gentrification or displacement because no one lives on the parking lots now. Converting parking spaces into housing sites will also reduce traffic congestion because more people will walk, bike, carpool, or ride transit to their destinations. Oversized parking lots offer the possibility of something much better, but parking

requirements prevent anything else. The asphalt landscape in too much of America is not walkable, beautiful, or sustainable, but it can be reformed and transformed.

Removing parking requirements can produce a cascade of benefits: shorter commutes, less traffic, a healthier economy, a cleaner environment, and more affordable housing. If we reform our misguided planning, vast parking lots can evolve into real communities. Economic objectives often conflict with environmental objectives, but parking reforms can serve both.

The money we now spend on cars and fuel can be spent on other things. Cars and fuel are often imported, but we cannot import apartment buildings. Spending less for cars, fuel, and parking and spending more for housing will increase the demand for labor in a host of professions, such as architects, carpenters, electricians, plumbers, and roofers. Importing fewer cars and hiring more people to build infill development will boost the whole economy.

Some critics argue that removing an off-street parking requirement amounts to “social engineering” and a “war on cars.” Instead, off-street parking requirements are a war for cars. All the required parking spreads buildings apart so more people need cars to get around. Removing

a requirement that restaurants provide 10 parking spaces per 1,000 square feet of floor area is no more a war on cars than removing a requirement that everyone must eat in restaurants 10 times a month would be a war on restaurants.

When it comes to off-street parking, I’m pro-choice. Cities should not require developers to provide unwanted parking spaces. Parking requirements were a bad idea, poorly executed, and they prevent many good results. Figure 3 shows that an upside of the mess we have made is an accidental land reserve available for job-adjacent housing. If cities remove their unwise parking requirements, we can reclaim land on a scale that will rival the Netherlands.

Cities have three good reasons to remove minimum parking requirements: We can’t afford them, we don’t need them, and they do immense harm. Wishing that parking requirements did not exist, however, is not a strategy for removing them. Parking requirements respond to a real problem, but they are the wrong solution. And cities cannot remove their parking requirements without also better managing on-street parking. If cities manage on-street parking properly, they won’t need to require off-street parking. Information wants to be free, but parking wants to be paid for.

PROOF IT CAN BE DONE

When *The High Cost of Free Parking* was published, half the city planning profession thought I was crazy and the other half thought I was daydreaming. Since then, several cities—including Buffalo, New York; Hartford, Connecticut; Minneapolis, and San Francisco—have removed all parking requirements, and many others have removed their downtown requirements. Mexico City has converted its minimum parking requirements into maximum parking limits while leaving the numbers almost unchanged. What once seemed politically impossible may slowly become the new normal.

For example, in July 2019, Houston nearly doubled the size of its downtown off-street parking exemption area, redefining it as a “market-based parking area” (§26-471(b)(6) & §26-472). In this area, developers decide how much parking to provide, and at least one shopping center developer has already decided to provide a public plaza instead of more parking (DiMiceli 2019).

CONCLUSION

Assembling support for parking reform is like opening a combination lock: each small turn of the dial seems to achieve nothing, but when everything is in place the lock opens. Three reforms can open the parking combination lock: (1) remove off-street parking requirements, (2) charge market prices for on-street parking, and (3) spend the revenue for neighborhood public services.

Repealing off-street parking requirements and replacing them with market prices for on-street parking may at first glance seem a Herculean task, almost like Prohibition or the Reformation, too big an upheaval for society to accept. Nevertheless, this strategy should attract voters across a wide political spectrum. Conservatives will see that it reduces government regulations. Liberals will see that it increases public spending. Environmentalists will see that it reduces

energy consumption, air pollution, and carbon emissions. Urban designers will see that it enables people to live at higher density without being overrun by cars. Developers will see that it reduces building costs. Residents will see that it improves their neighborhood public services. Drivers of all political stripes will see that it guarantees convenient curb parking. Elected officials will see that it depoliticizes parking, reduces traffic congestion, allows infill development, and provides public services without raising taxes. Finally, planners can devote less time to parking and more time to improving cities.

Repealing off-street parking requirements, charging the right prices for on-street parking, and using revenue to provide public services will improve cities, the economy, and the planet, one parking space at a time. Cities will look and work much better when prices, not planners and politicians, govern

decisions about the number of parking spaces. Like the automobile itself, parking is a good servant but a bad master.

Note: This piece is adapted from the Introduction to *Parking and the City*, published by Routledge in 2018.

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2