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Parking

| president's message

Rethinking Parking Minimums

The inception of parking started in the 1920s and 1930s in the United States as cars were the new status symbol of wealth. There were rows of cars lining the curbs of streets, with no rules governing parking. The first parking meter was installed in the United States in 1935 in Oklahoma City, OK. Privately run off-street lots became popular to meet the demand, and parking structures sprung up to provide parking in proximity to surrounding destinations. Over time, parking management has become more complex and rules were needed to add order.

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City zoning ordinances were introduced which identified minimum parking requirements, which are typically calculated on a base unit, such as required stalls per 1,000 square feet of office space, or stalls per bed at a hospital. Developers were required to conform to the minimum parking requirements before they could develop their land. The minimums, however, result in an over-supply of parking. For example, a small restaurant could require a parking area that is 10 times larger than the footprint of the building. The overbuilding of parking increases the distance between buildings and impacts the dense, walkable commercial areas that we enjoy. Further, it is estimated that 25 to 30 percent of congestion in a downtown is caused by motorists searching block after block for available parking.

There is no such thing as free parking. It all comes at some cost. When you go to the grocery store, the cost of parking is included in your purchase. As a first-time homeowner, you may pay an extra $8,000 on the price of a new condo because the cost of the required parking space is buried in the purchase price. Parking minimums make some broad assumptions, including the idea that all homeowners can afford a car, want to pay for a parking stall, and that the car is their preferred mode of transportation. This works against many other policies a city creates to encourage sustainable development, promote active transportation, and serve low income families.

This discussion reminds me of the 1970s Joni Mitchell song *Big Yellow Taxi* in which she famously sings, "They paved paradise and put up a parking lot." Here are some easy ways to regain a piece of paradise:

1. **Eliminate mandatory minimum parking requirements** – This elimination will not only give people more say over how they live their lives and use their property, but it's also an important step in developing affordable housing. Buffalo, NY, USA and Hartford, CT, USA have recently scrapped their minimum parking requirements.

2. **Use data, technology, and pricing to manage parking** – The District Department of Transportation in Washington, DC, USA uses sensors embedded at metered stalls to measure parking availability, and then pricing is changed based on demand.

3. **Help developers and city staff better understand parking demand** – ITE *Parking Generation Manual*, 5th Edition is set for release and will allow better estimation of parking demand based on a newer, expanded data set and now for different locations including rural, urban/suburban, multi-use sites, and downtown.

4. **Promote alternate modes to curb parking demand** – Good parking planning goes hand-in-hand with good city policies on transit, as well as cycling and walking.

The good news is excess parking can be repurposed at any time, and the land returned to more meaningful community use. All of this will help build connectivity and vibrancy into our cities.

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Are Parking Minimums a Thing of the Past?

By Chrissy Mancini Nichols

The first minimum parking requirement was established in 1923 in Columbus, Ohio. By the 1950s, parking minimums had grown to become a staple of American urban planning—a catalyst for how the automobile was to define America and the shape of its cities. As suburban America took shape and grew, the concept of parking minimums became deeply rooted in planning regulations and city codes. The main idea of parking minimums was to ensure that parking on public streets for neighborhood businesses would not be overwhelmed by the private vehicles.

In recent years, however, parking minimums have come under increased scrutiny. Developers often find them inflexible, frustrating, and costly; minimums tie their hands and limit their choices for developing projects by forcing them to devote substantial land and money to providing parking. The planning community is increasingly opposed to parking minimums, concerned that they perpetuate an auto-centric nature of American cities that dedicates more land to cars than people, housing, and quality design. Transportation planners point out that parking minimums increase the distance between destinations, making cities and towns less walkable, thereby perpetuating a cycle of less viable transit and mobility options, the need for more driving, and—subsequently—even more parking.

Beginning in the late 1990s, planners and researchers, most notably UCLA Professor Donald Shoup, began identifying that municipal parking minimums required far more parking spaces than are typically needed, having a negative impact on city policy goals. And now, the transportation landscape is further shifting under planners' feet. Consumer preferences are changing and they have more options than simply driving and parking. Data shows teenagers are waiting longer to get their driver's licenses. Use of Transportation Network Companies (TNCs), such as Uber and Lyft, grows annually. Even dockless scooters have made a big impact in just one year.

As a result, urban planners are increasingly realizing that parking minimums do not necessarily promote their communities' planning values, economic development goals, and need to build more housing. In fact, they often work at cross purposes. Given that Americans are chaining how they get around, the idea of parking minimums seems to be an inflexible anachronism that has outlived its usefulness.

Cities are beginning to respond to the need for less parking in a meaningful way. For instance, San Francisco, CA, USA and Minneapolis, MN, USA have both recently announced the total elimination of parking minimums, joining Buffalo, NY, USA and Hartford, CT, USA. Chicago, IL, USA gravitated in that direction, reducing parking requirements within a half-mile of transit stations and has proposed reductions along major bus corridors, a huge swath of the city and a step toward eliminating minimums city-wide. The trend is even happening in smaller cities, with Fargo, ND, USA; New Orleans, LA, USA; Pittsburgh, PA, USA; and other cities eliminating parking minimums in downtown districts.

Urban Planning Factors

When cities remove parking minimums, it is typically to promote urban planning goals. For instance, over the past decade, many cities have worked hard to encourage residents and visitors to ride transit, bike, or walk in lieu of their private vehicles. Much of the impetus for promoting transit revolved around sustainability goals. City planners and other leaders wanted to make their communities greener by reducing the number of cars and trucks on their streets. When there are fewer cars on city streets, less fuel is burned, and less exhaust is created and dispersed into the air.

In addition, at a time when cities are increasingly facing housing shortages, removing or reducing parking minimums provides more land for people and housing. And because parking is expensive, reducing unnecessary parking requirements has the added benefit of reducing the overall cost of housing, particularly when more housing can be built.

Impending technological advancements will also reduce the need for parking minimums. Autonomous vehicle scenarios show an expected reduction in parking demand, particularly in urban communities, of between 10 percent on the low end to as much as 40 percent over the next few decades. Even a low-end scenario means millions of vehicles will not park in spaces they do today. Commuters and visitors who today visit cities in their personal

vehicle will instead be dropped off by self-driving TNCs, while owners of self-driving vehicles will have their vehicles return home for the day or send them to less expensive parking facilities outside busy urban areas. Others will take a shared autonomous vehicle to their nearest transit station.

The way America gets around is changing. For parking planners this is a potentially earth-shattering proposition. Not only will urban parking demand drop significantly, but new areas—including the curb—will have to be designed and managed to handle the dramatic increase in pick-ups and drop-offs. It is easy to see why these trends and the impending arrival of the self-driving age are causing city planners to rethink the need for parking minimums.

And because cities must always be looking to the future, now is the time to make a change. Because planning and investment decisions made today will impact the infrastructure used 50 years from now, it is crucial for cities to reexamine the concept and requirement of parking minimums.

Making It Work

While there's clearly a trend of reducing parking requirements under way, there is no general pattern. This is because every community is unique, with no one-size-fits-all approach that can provide universal answers. What works in San Francisco may not work in Chattanooga, TN, USA. It's a matter of "right sizing" parking to meet the distinctive needs of a particular community. If you are going to eliminate parking requirements, strategies must be in place to assure that the parking supply will satisfy demand.

And just because a city reduces or eliminates parking minimums, it does not mean that less parking will be built. Parking minimums were originally adopted because the planning community did not trust developers to provide an adequate amount of parking. But the landscape has changed. Most developers want to right-size parking because it's a requirement for a successful development. No developer wants a failed project because they built too many or too few parking spaces.

And while developers devote a significant portion of their capital costs to satisfy parking requirements, they are increasing the amenities that reduce the need to own a vehicle. Redirecting parking funds to providing non-parking access to sites via car sharing, transit passes, and bike parking is seen as more efficient, less costly, and aligned with today's diverse transportation demands.

Where it is needed, there will be parking—and other forms of access. The question is how much and how it will be provided.

The good news is that there are reliable tools and parking planning strategies that can help assure that communities (and developers within those communities) are building the right amount of parking so commerce can thrive, while, at the same time, manage the existing parking supply efficiently and effectively. Not

only is this approach more cost-effective, but it also assures that valuable land can be used for more appropriate uses; parking is often not the desired "highest and best use," particularly in a dense urban or even suburban location.

There are a number of strategies that cities can pursue to accommodate a reduction in parking requirements. First, any policy of reducing or eliminating parking minimums should be combined with targeted on-street parking policies to eliminate street spill-over. Typically, it is not ideal for residential parkers, employees, or other long-term parkers migrating to on-street spaces that are needed for local business customers. Policies such as parking pricing, time restrictions, and active enforcement improve and are often crucial to the overall operation of the parking system, ensuring that valuable on-street parking spaces are available for visitors and other customers.

Along with on-street parking regulations, cities must also manage the growing demand for the curb to efficiently allocate time between the increasingly diverse users competing for space. Between TNCs, bicycles, scooters, delivery vehicles, buses, and private cars, there is a lot more going on at the curb compared to even a couple of years ago. The private sector may be reshaping how people get around, but the use of public resources and assets play a crucial role in their success. Cities have the opportunity and the obligation to use the tools at their disposal, including curb access fees and regulations, to leverage curb management strategies that help meet city wide land use and mobility goals. Improvements in technology are arriving just in time to allow cities to engage in curb management. These tools can facilitate the use of curb access fees that fund investments in bike lanes, pedestrian improvements, and transit. Cities like Santa Monica, CA are leading the way on this strategy with dockless scooters. Similar policies should be applied to TNCs and eventually autonomous vehicles, which have a greater impact on traffic congestion and the environment.

Shared parking can also play a vital role in providing more parking more flexibly, and less of it. Shared parking relies on parking owners with varying needs sharing parking resources. The mechanism leverages complementary land uses' variations in the times of peak demand in parking usage, allowing different users to share parking spaces.

For instance, an office building, which primarily requires parking spaces during business hours, can share parking facilities with residential buildings, which typically need to provide most of its parking on evenings and weekends. A shared parking strategy allows parking owners to provide the necessary accommodations without building more parking spaces for customers, workers, residents, and even delivery drivers. When cities permit shared parking they provide a cost-effective way to address parking shortfalls using existing spaces, while increasing the capacity of

each parking space in the system. This opens more land for uses other than parking and reduces overall development costs, which can have the parallel effect of lowering rents.

For obvious reasons, a successful transit system can be an important factor in a city's ability to remove parking requirements. The benefits move in both directions, though, because parking management can generate revenue to fund mobility options, such as transit, bicycle and pedestrian infrastructure, thus further reducing the need for parking minimums. For example, parking revenues in San Francisco and Portland, OR, USA fund transit service. Good pedestrian infrastructure can also effectively increase the parking supply by making it easier to walk to more destinations from existing parking facilities. In the long run, using parking funds for other modes of transportation is likely to help reduce the amount of parking a community needs.

Data-Driven Decisions

While eliminating parking minimums provides cities and developers much more flexibility, these decisions must be made in an informed manner. Understanding how much parking is needed by a development, neighborhood, or entire city requires up-to-date market data and analysis. Parking has become extremely technology-centric in recent years, and parking planning has been leading the way.

There are a number of ways to get these data. While traditional parking studies that manually count utilization during key days and times are the most tried and true, data must be applied with city-wide goals and the future of travel in mind.

Modern technology also can help with this process. Several popular technologies, including parking guidance systems (PGS) and frictionless parking suites combining access and revenue control (PARCS), license plate recognition (LPR), and automatic vehicle identification (AVI) can be set up to keep a running count of parking facility occupancy rates. These data can be combined with data produced by the parking study to help determine a reasonable number of spaces for a particular site. Cities as different as Davis, CA and Houston, TX, USA are using these technologies to better manage and gain efficiencies in their existing parking before making costly or unnecessary new investments.

These same technologies, working independently or in conjunction with mobile apps, provide real time availability information that can be used to improve performance to maximize existing land uses dedicated to parking.

Effective parking management is also essential. Any policy of reducing or eliminating parking minimums must be combined with data-backed pricing and regulation of the on and off-street public supply, two of the most powerful strategies for influencing parking behavior. By charging a premium for high-demand spaces in central business districts and other high traffic areas—while at the same time charging less for more remote parking options—planners can encourage long-term parkers to use remote parking spaces. Time limits increase parking capacity by encouraging parking turnover. Higher turnover occurs with short term spaces, and long-term parkers utilizing previously empty spaces at the periphery increase the total number of vehicles accommodated in the system. These strategies further reduce the need for minimums on mandated parking in select locales within a city.

Finally, public perception must be considered in the parking minimum conversation. People generally feel that parking resources are inadequate, so when they see that minimums are being eliminated, they become concerned, assuming it will be harder to find parking or that they'll need to walk farther from their vehicles to their destinations. When implementing new policies, it's critical to clearly communicate what the new policy is, what it means for the community, and how it will not impact people's lives. This transparency can assuage concerns before public perception creates a negative effect.

A Growing Trend

The moves by leaders and planners in San Francisco, Buffalo, and Minneapolis to eliminate parking minimums are precursors to what should be standard policies in many cities over the next few years. In today's world, with alternative modes of transportation and transit ridership as key policy goals, and where shared parking is becoming necessary to accommodate new destinations, parking minimums appear to be inflexible relics from a bygone era. Ultimately, removing minimums will have widespread benefits for urban planning, development, and the quality of life in our communities. However, decisions around this effort must be data-driven, and the parking must be managed more efficiently and effectively for this new minimum-free approach to work. **itej**

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