# MEMORANDUM

**TO:** MEMBERS OF THE PLANNING COMMISSION

**FROM:** KIRSTEN MELLEM, PLANNER

**THROUGH:** BARBARA MCBETH, *AICP*, CITY PLANNER

**SUBJECT:** PUBLIC HEARING FOR TEXT AMENDMENT 18.285

**DATE:** AUGUST 3, 2017

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Section 5.2 of the City of Novi's Zoning Ordinance provides for the required off-street parking minimums for all developments in the City of Novi. Attached you will find a proposed ordinance amendment that addresses changes to the minimum requirements based on extensive research of neighboring communities, comparison cities, and industry standards from the Institute of Transportation Engineers (ITE). Staff has proposed this amendment in response to development trends and new planning standards that have emerged in recent years that promote a reduction in required parking to promote pedestrian-oriented communities.

**Proposed Parking Minimums**

Staff reviewed all the uses that dealt with floor area to change from gross leasable area to gross floor area in order to be consistent between site plans, as applicants tend to use different reduction factors for leasable area.

Places of Worship

- Accommodating for square footages that are not used for worship space, but are general assembly areas to accommodate the needed parking spaces.

Private Tennis Clubs

- Reduction in the number of spaces per court from 6 to 3, but also accommodating required employees on the largest shift.

Golf Courses

- Reduction in the number of spaces per hole from 6 to 4.

Health clubs and facilities

- Changing the requirements to the gross floor area instead of based on memberships

Dance Halls, billiards, roller rink, assembly hall without fixed seats

- Decreased from 1 for each 2 to 1 for each 3 persons allowed within the maximum occupancy

Furniture and appliance show rooms

- Adding that planning staff may approve a land-banked parking area if certain conditions are met

Miniature golf courses

- Decreased from 3 spaces for each 1 hole to 2 spaces for each 1 hole

Mortuary establishments

- Changing to gross floor area (easier to calculate)
- Only including the assembly rooms, excluding any employee-only rooms

Banks

- Decreased required spaces from 1 per 150 gross leasable area to 1 per 250 usable floor area

Warehouse and wholesale establishments

- Decreased from 1 per 700 usable floor area to 1 per 1,000 usable floor area
- Eliminated the minimum of 5 spaces for the Planning Commission waiver

*Land Uses Consolidated.* Some land uses have changed over the years and how we interact with them has resulted in a recommendation to consolidate the uses together.

a. Conference facilities, now includes banquet hall
b. Lumber and building material stores, now includes hardware store

*Land Uses Eliminated.* Some land uses have never been established in the City of Novi and it is anticipated that these items will not be needed in the future.

a. Fraternities and sororities

**Proposed Definition**

In order to clarify the difference in how usable area is measured. The proposed amendment updates the definition for **Floor area, usable** to identify what areas are and are not being counted in retail, business office, and professional office uses.

**Proposed Parking Maximums**

Based on the discussion of the proposed amendment at the June 28, 2017 Planning Commission Meeting, staff has included language to address parking maximums in order to preserve green space in proposed developments and further support a reduction in landscape waivers. Staff has researched ordinances in other communities (sample ordinances attached) and industry literature discussing the trends and rationale (several articles attached).

The proposed amendment has three parts. The first is <u>limiting the maximum to 25% over the required minimum.</u> In the research the range in maximums was 10-25% over the required minimum. Staff felt that 25% was reasonable and on par with neighboring communities.

The second part is to allow for Planning Commission discretion and flexibility for proposed developments in order to promote appropriate off-street parking areas. The proposed amendment states that <u>exceeding the required minimum by more than 25%</u>

shall require a special land use permit and shall be based on documented evidence during a typical peak parking period. This allows the Planning Commission to apply the Special Land Use standards in Section 6.1.2.C, impose additional requirements to off-set the excess off-street parking spaces, and to review documentation in order to be well informed and transparent regarding the standards of review.

The final part limits the maximum requirement to sites requiring fewer than 50 spaces because it would be a burden to small businesses to produce documentation as to why a few additional spaces are warranted. For example, to provide documentation when the off-street parking minimum is 10 spaces and the applicant is proposing just over 25%, or 14 spaces, would be excessive to provide a typical peak parking period study for 4 spaces.

**Public Hearing and Recommendation to City Council**

**At this time, the Planning Commission is asked to hold a public hearing and make a recommendation to the City Council, who will ultimately approve or deny the amendment, and may propose alterations as well**. The attached staff version of the proposed amendment is subject to review and changes by City staff and/or the City Attorney's Office. Any questions please contact Kirsten Mellem at 248-347-0484 or kmellem@cityofnovi.org.

Attached:
Sample Ordinances from Other Communities
Putting a Cap on Parking Requirements by Donald Shoup, *Planning Magazine May 2015* Parking Standards by Michael Davidson and Fay Dolnick, *APA PAS Report #5107511*
Parking Maximums: Managing Stormwater Through Sustainable Parking Lots, Drake University
Metropolitan Area Planning Council – Maximum Parking Allowances

**SAMPLE ORDINANCES FROM OTHER COMMUNITIES**

## SAMPLE ORDINANCES FROM OTHER COMMUNITIES

### Bloomfield Hills, MI

*Maximum allowed parking.* In order to improve aesthetics and minimize excessive areas of pavement that increases the amount of stormwater runoff, exceeding the minimum parking space requirements by more than twenty (20) percent shall require a special use permit by the planning commission. In granting such additional parking, the planning commission shall determine that such parking will be required, based on documented evidence, to accommodate the parking demands for the use during a typical peak parking period. The planning commission may require that additional spaces be constructed with alternative paving materials, such as permeable/grass pavers or pervious concrete. A required or requested use of alternative paving materials shall include a maintenance plan and agreement from the property owner deemed satisfactory to the planning commission.

### Rochester Hills, MI

*Maximum Parking Permitted.* In order to minimize excessive areas of pavement which negatively impact aesthetic standards and contribute to high volumes of stormwater runoff, the maximum amount of off-street parking permitted for any use shall not exceed one hundred twenty-five percent (125%) of the minimum parking requirements of *Section 138-11.204*. This requirement shall not apply to single-family or two-family dwellings. The Planning Commission may permit additional parking over and above the maximum parking limit based on evidence indicating that the maximum parking permitted will not be sufficient to accommodate the use on a typical day.

### Fort Worth, TX

*Maximum parking requirements.* The maximum number of parking spaces shall not exceed 125% of the minimum parking requirement for all uses listed in the table set out below. Parking in excess of the maximum shall be allowed by meeting the requirement of one tree above the minimum required under Chapter 6, Article 3, for every additional ten parking spaces beginning with the first additional parking space and for each ten spaces thereafter.

**PUTTING A CAP ON PARKING REQUIREMENTS**
**DONALD SHOUP**
**PLANNING MAGAZINE, MAY 2015**

# Putting a Cap on Parking Requirements

A way to make cities function better. By **DONALD SHOUP, FAICP**

Suppose the automobile and oil industries have asked you to devise planning policies that will increase the demand for cars and fuel. Consider three policies that will make cars essential for most trips. First, segregating land uses (housing here, jobs there, shopping somewhere else) will increase travel demand. Second, limiting density will spread the city and increase travel demand. Third, minimum parking requirements will ensure ample free parking almost everywhere, making cars the default way to travel.

American cities have unwisely embraced each of these car-friendly policies, luring people into cars for 87 percent of all their daily trips. Zoning ordinances that segregate land uses, limit density, and require lots of parking create drivable cities but prohibit walkable neighborhoods. Urban historians often say that cars have changed the city, but public policies have also changed the city to favor cars.

Minimum parking requirements are particularly ill-advised. In my book *The High Cost of Free Parking*, I argued that parking requirements subsidize cars, increase traffic congestion and carbon emissions, pollute the air and water, encourage sprawl, raise housing costs, degrade urban design, reduce walkability, exclude poor people, and damage the economy. To my knowledge, no one has argued that parking requirements do not have these harmful effects. Instead, a flood of recent research has shown that parking requirements do have these effects.

### The high cost

Planners are put in a difficult position when asked to set parking requirements in zoning ordinances, largely because they do not know the parking demand at every site, or how much the parking spaces cost, or how the requirements increase the cost of development. Nevertheless, cities have managed to set parking requirements for hundreds of land uses in thousands of cities—the Ten Thousand Commandments for off-street parking.

Not knowing how much required parking spaces cost, planners cannot know how much the parking requirements increase the cost of housing. Small, spartan apartments cost much less to build than large, luxury apartments, but their parking spaces cost the same. Because many cities require the same number of spaces for all housing, the cost of required parking can consume the entire subsidy intended for affordable housing.

Minimum parking requirements resemble an Affordable Parking Act. They make parking more affordable by raising the cost of housing and everything else. Using data on the cost of constructing parking spaces and shopping centers, I estimated that the parking requirement of four spaces per 1,000 square feet for a shopping center in Los Angeles increases the cost of building a shopping center by 93 percent if the parking is underground and by 67 percent if the parking is in an aboveground structure.

This cost increase is passed on to all shoppers. Parking requirements raise the price of food for people who are too poor to own a car to ensure that richer people can park free when they drive to a grocery store.

### The median is the message

A single parking space can cost far more than the entire net worth of many American families. In recent research, I estimated that the average cost per space for parking structures in the U.S. is about $24,000 for aboveground parking and $34,000 for underground parking. We can compare the cost of a parking space with the net worth of U.S. households (the value of all assets minus all debts). In 2011, this median net worth was $68,828 for all U.S. households, $7,683 for Hispanic households and $6,314 for black households.

Thus one underground parking space can cost five times more than the median net worth for all black households in the country. Nevertheless, cities require several parking spaces (at home, work, shopping, recreation, churches, schools, and many other places) for every household.

Many families have a negative net worth because their debts exceed their assets. Eighteen percent of all households, 29 percent of Hispanic households, and 33 percent of black households had zero or negative net worth in 2011. The only way these families can take advantage of all the parking cities require is to go further into debt to buy a car, which they must then support, often by financing it at a high subprime interest rate on a car loan.

In other words, cities require parking for every building without noticing the high cost of the required spaces or the burden placed on families who have little or no wealth.

### Time for reform

Perhaps because of the growing doubts about minimum parking requirements, a few cities have begun to backpedal, at least in their downtowns. They recognize that parking requirements prevent infill redevelopment on small lots, where it is difficult and costly to fit both a new building and the required parking. And they see that parking requirements prevent new uses when older buildings lack the parking spaces required for those new uses.

'A city can be friendly to people or it can be friendly to cars, but it can't be both.'

—ENRIQUE PEÑALOSA, FORMER MAYOR OF BOGOTA, COLOMBIA

According to recent newspaper articles, many cities have reduced or removed their parking requirements. Some of the reasons: "to promote the creation of downtown apartments" (Greenfield, Massachusetts), "to see more affordable housing" (Miami), "to meet the needs of smaller businesses" (Muskegon, Michigan), "to give business owners more flexibility while creating a vibrant downtown" (Sandpoint, Idaho), and "to prevent ugly, auto-oriented townhouses" (Seattle).

Given this policy momentum, I thought the time to reform parking requirements in California had arrived when the legislature considered Assembly Bill 904 (the Sustainable Minimum Parking Requirements Act of 2012). AB 904 would have set an upper limit on how much parking cities can require in transit-rich districts: no more than one space per dwelling unit or two spaces per 1,000 square feet of commercial space. The bill defined these districts as areas within a quarter-mile of transit lines that run every 15 minutes or better.

AB 904 would limit how much parking cities can require, but it would not limit the parking supply. Developers could provide more than the required parking if they thought the demand justified the cost.

Why would a state want to adopt this policy? Federal and state governments give cities billions of dollars every year to build and operate mass transit systems, yet most cities require ample parking on the assumption that almost everyone will drive almost everywhere, even where public transit is available.

Twenty public transit lines serve the UCLA campus in Westwood, with 119 buses per hour arriving during the morning peak (7 to 9 a.m.). Nevertheless, across the street from campus, Los Angeles requires 3.5 parking spaces for every apartment that contains more than four rooms.

Los Angeles is building its Subway to the Sea under Wilshire Boulevard, which already boasts the city's most frequent bus service. Nevertheless, along parts of Wilshire the city requires at least 2.5 parking spaces for each dwelling unit, regardless of the number of rooms.

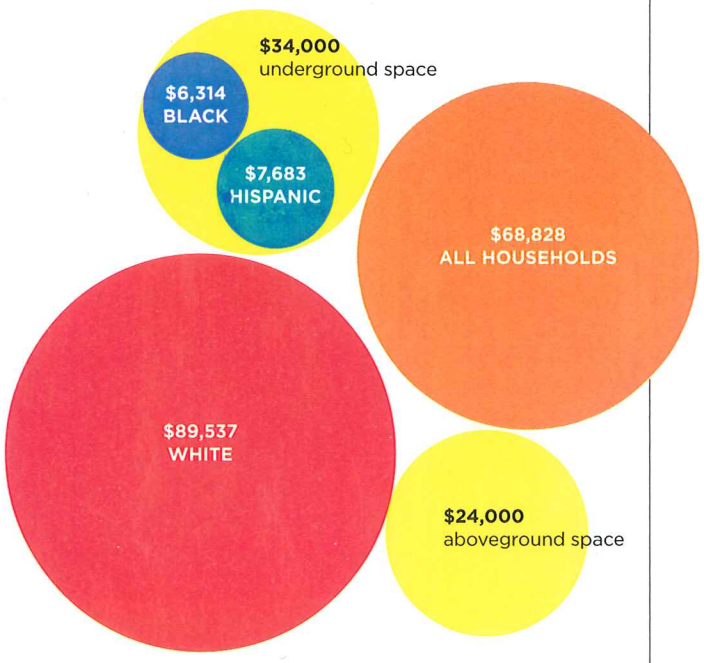
Also on Wilshire Boulevard, Beverly Hills requires 22 parking spaces per 1,000 square feet for restaurants, which means the parking lot is seven times larger than the restaurant. Public transit in this parking environment resembles a rowboat in the desert.

## Why limit parking requirements?

The rationale for a limit on parking requirements in transit-rich districts is the same as the rationale for most city planning: The uncoordinated actions of many individuals can add up to a collective result that most people dislike. In this case, minimum parking requirements create an asphalt wasteland that blights the environment and compels people to drive. Limits on the parking requirements in transit-rich neighborhoods can reduce this blight by making redevelopment more feasible near transit stations.

**Parking inequity**

The cost of one structured parking space far exceeds the median net worth of minority households.




SOURCES: U.S. CENSUS BUREAU, NET WORTH AND ASSET OWNERSHIP, 2011; DONALD SHOUP, IN *PARKING: ISSUES AND POLICIES*, 2014; GRAPHIC BY JOAN CAIRNEY

How will reducing off-street parking requirements affect development? Zhan Guo and Shuai Ren at New York University studied the results when in 2004 London shifted from minimum parking requirements with no maximum to maximum parking limits with no minimum. Comparing developments completed before and after the reform, they found that the parking supplied after the reform was only 68 percent of the maximum allowed and only 52 percent of the previous minimum required.

This result implies that the previous parking minimum was almost *double* the number of parking spaces that developers would have voluntarily provided. The researchers concluded that removing the parking minimum caused 98 percent of the reduction in parking spaces, while imposing the maximum caused only two percent of the reduction. Removing the minimum was far more important than imposing a maximum.

Cities usually require or restrict parking without considering the middle ground of neither a minimum nor a maximum. This

behavior recalls a Soviet maxim: "What is not required must be prohibited." AB 904, however, was something new. It did not restrict parking but simply imposed a cap on minimum parking requirements, a far milder reform.

Aided by lobbying from the California Chapter of APA, opponents succeeded in defeating AB 904 in the legislature, but it has since been resurrected and revised, and will be reintroduced as a new bill in the next session.

There have been precedents for statewide limits on parking requirements. Oregon's *Transportation Systems Plan* requires local governments to amend their land-use and subdivision regulations to achieve a 10 percent reduction in the number of parking spaces per capita. The United Kingdom's transport policy guidelines for local planning specify that "plans should state maximum levels of parking for broad classes of development. . . . There should be no minimum standards for development, other than parking for disabled people."

These attempts to take state and national concerns into account suggest that, when left to their own devices, local governments require too much parking.

## An arranged marriage

Many people believe that America freely chose its love affair with the car, but I think there was an arranged marriage. By recommending minimum parking requirements in zoning ordinances, the planning profession was both a matchmaker and a leading member of the wedding party.

Unfortunately, no one provided a good prenuptial agreement. Planners can now become marriage counselors or divorce lawyers where the relationship between people and cars no longer works well. Putting a cap on parking requirements is a good place to start. ■

Donald Shoup is a distinguished professor of urban planning at the University of California, Los Angeles, and the author of *The High Cost of Free Parking*, published in paperback by APA's Planners Press in 2011. He will retire later this year, and UCLA is launching a scholarship in his name. Details are at shoupista.com.

RESOURCES

**FROM APA**

*The High Cost of Free Parking,* by Donald Shoup, APA Planners Press, 2011 (paperback).

**MORE**

California Assembly Bill 904. The Sustainable Minimum Parking Requirements Act of 2012: shoup.bol.ucla.edu/AssemblyBill904.pdf.

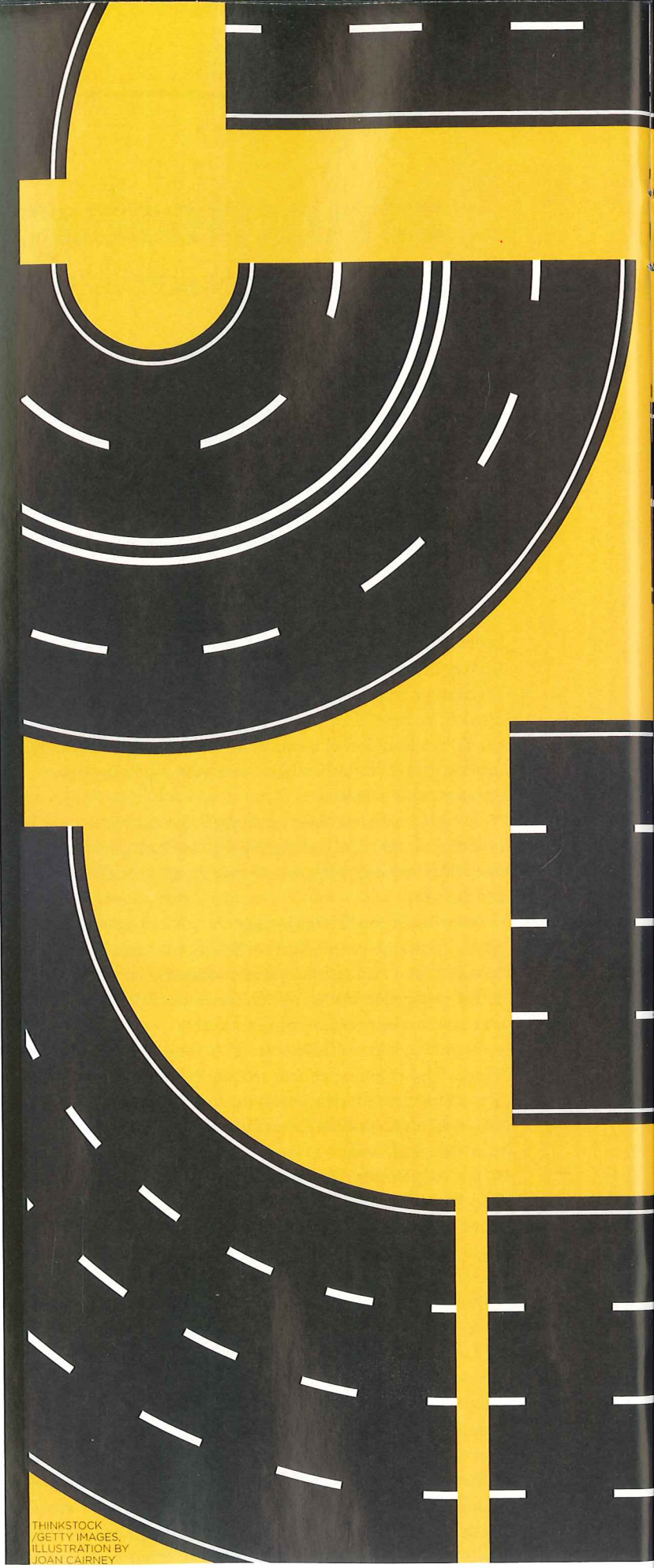
Zhan Guo and Shuai Ren. 2013. "From Minimum to Maximum: Impact of the London Parking Reform on Residential Parking Supply from 2004 to 2010." *Urban Studies* 50(6): 1183–1200.

Letters about AB 904 from mayors, planning academics, planning practitioners, and the California Chapter of APA are available here: shoup.bol.ucla.edu/LettersAboutAssemblyBill904.pdf.

Donald Shoup. "The High Cost of Minimum Parking Requirements," pp. 87–113 in *Parking: Issues and Policies,* Stephen Ison and Corinne Mulley (eds.). Emerald Group Publishing. 2014. shoup.bol.ucla.edu/HighCost.pdf.

Jessica Silver-Greenberg and Michael Corkery. "Rise in Loans Linked to Cars Is Hurting Poor," *New York Times,* December 25, 2014: idealbook.nytimes.com/2014/12/25/dipping-into-auto-equity-devastates-many-borrowers.

U.S. Department of Transportation, Bureau of Highway Statistics. 2015. National Household Travel Survey Daily Travel Quick Facts: rita.dot.gov/bts/sites/rita.dot.gov.bts/files/subject_areas/national_household_travel_survey/daily_travel.html.



THINKSTOCK /GETTY IMAGES, ILLUSTRATION BY JOAN CAIRNEY

# PARKING STANDARDS

MICHAEL DAVIDSON AND FAY DOLNICK

AMERICAN PLANNING ASSOCIATION
PLANNING ADVISORY SERVICES
REPORT NUMBER 5107511

though this space provides a safety valve to prevent an eventual shortage of parking, such an approach may diminish the benefits associated with the shared parking arrangement by effectively limiting the development potential of the site.

If the uses that share parking are not located on the same parcel, the zoning ordinance should contain provisions governing off-site parking (e.g., limitations on the distance between a use and its off-site parking). The distance that off-site parking may be from the use or uses served may vary depending on the type of use or destination in question, pedestrian infrastructure, and the regional climate.

### Maximum Parking Standards

Some communities, in addition to requiring a minimum amount of off-street parking, limit the amount of parking that may be provided for individual uses. Although this practice has become more widespread during the past decade, maximum standards are not currently found in most zoning codes. Communities that incorporate maximum standards range in size and character. They include San Antonio, Texas; Jefferson County (Louisville), Kentucky; Gresham, Oregon; Seattle, Washington; and San Francisco, California. And some cities, like those mentioned in the following paragraphs, do not establish set standards. Rather, they create formulas for determining maximums.

Parking maximums have been particularly prevalent in the Northwest due in part to state and regional goals or mandates. If the number of communities using such codes is any indication, however, more planners and policy makers nationwide believe that maximum standards are as important as minimum standards—if not more so. Shoup (1999b), although not espousing maximum parking standards, suspects that planners will some day look back and see minimum parking requirements as a terrible mistake. He believes minimum requirements are "observe, ambiguous, and cumbersome," and impede progress toward important social, economic, and environmental goals. Parking maximums have been used most extensively in downtown areas, but they also can be an effective tool for communities interested in managing stormwater, increasing densities, and meeting transportation demand management objectives throughout the community.

Combined with parking minimums, maximum standards create a parking range. Maximum standards generally come in three forms. Some communities, as with typical minimum requirements, set a ratio per number of square feet of building area. Pittsburgh, for example, sets a maximum off-street parking ratio of one space per 175 square feet of retail sales and services, while the city's minimum requirement for such uses is one space per 500 square feet beyond the first 2,400 square feet. (No parking is required for the first 2,400 square feet.) Thus, for a new 5,000-square-foot retail building in Pittsburgh, five off-street parking spaces are required and no more than 29 could be provided—a fairly wide range.

In Redmond, Washington, the Neighborhood, Retail and General commercial zones are allowed a maximum of five spaces per 1,000 square feet of floor area for most uses and a minimum of four per 1,000 square feet. In a 5,000-square-foot building, 20 spaces would be required and the cap would be 25. Redmond is an example of a suburban community that has used maximum requirements effectively.

A second method for regulating the maximum number of spaces is to base the maximum on the minimum. For example, the Draft Unified Development Ordinance in Helena, Montana, requires the following:

**Maximum Number of Parking Spaces Required.**

The maximum number of off-street parking spaces for any building or use shall not exceed the amount determined as follows:

1. Parking lots of more than twenty and less than fifty-one spaces. Parking lots may not have more than one hundred twenty percent (120%) of the number of spaces identified in Table 15-C, not including accessible spaces, unless a minimum of twenty percent (20%) of the parking area is landscaped in accordance with the standards of this chapter.
2. Parking lots of fifty one spaces or more. No more than one hundred ten percent (110%) of the number of spaces required as identified in Table 15-C of this chapter, not including accessible spaces, are permitted.

Based on Helena's minimum parking requirement for retail uses of 4.1 spaces per 1,000 square feet of gross floor area, a 5,000-square-foot retail store would be required to provide 21 spaces and could provide no more than 25 spaces (unless 20 percent of the parking lot is landscaped)—a very narrow range. (Note that maximum standards of 125 or 150 percent of the minimum are more prevalent and provide a somewhat wider range.) Generally, communities with minimum parking requirements that are set particularly low (i.e., below typical demand) might consider higher maximum standards (e.g., 150 or 200 percent of the minimum) when using this method.

A third method is a limit on the overall number of parking spaces in a particular geographic area. Cambridge, Massachusetts, uses parking maximums as part of comprehensive set of strategies to reduce automobile dependence (Millard-Ball 2002). The Cambridge zoning ordinance, for example, states that "the total number of parking spaces serving non-residential uses in the North Point Residence District shall not exceed 2,500 spaces, allocated to each lot in the district at a rate of 1.2 spaces per 1,000 square feet of lot area." Cambridge also uses the more popular approach of setting parking maximums for many individual land uses.

Some communities offer automatic exceptions to maximum parking standards if certain objectives are met. For example, San Antonio, Texas, which incorporates maximum standards for an extensive number of uses in its zoning code, exempts structured parking and parking located on pervious pavement. The pervious pavement exemption is subject to standards that describe the underlying soil permeability, level of the water table, the slope of the lot, and maintenance of the lot (e.g., sweeping and washing).

A note of caution: maximum standards that are set particularly low may result in spillover parking that could erode support for such standards. On-street parking restrictions accompanying maximum standards are one way of dealing with this issue, though such restrictions are also controversial in many places. Resident-only parking restrictions are often both a response to and a source of friction between the wishes of area residents, who like having on-street parking available for themselves and their guests, and businesses and institutions that rely on the ability of their patrons to find places to park. Time will tell whether maximum standards completely replace minimum requirements as concern continues to rise about traffic congestion, low-density development, and the environmental consequences of automobile dependence.

### Downtown Parking Standards

In recent years, a number of communities without a traditional downtown have attempted to create such a place. Parking in downtown areas is complex and subject to a variety of competing interests. For example, the needs of businesses that rely on the availability of short-term parking are sometimes af-

**SUSTAINABLE INITIATIVE: 01-01**
**PARKING MAXIMUMS: MANAGING STORMWATER THROUGH SUSTAINABLE PARKING LOTS**
**DRAKE UNIVERSITY LAW SCHOOL & GREATER DES MOINES PARTNERSHIP**

# SUSTAINABILITY INITIATIVE: 01-01

STORMWATER MANAGEMENT

## PARKING MAXIMUMS: MANAGING STORMWATER THROUGH SUSTAINABLE PARKING LOTS

Drake UNIVERSITY

THE greater DES MOINES partnership

# SUSTAINABILITY INITIATIVE: 01-01
## PARKING MAXIMUMS: MANAGING STORMWATER THROUGH SUSTAINABLE PARKING LOTS

Oversized parking lots create numerous problems for municipalities, businesses, citizens, and the environment. Large lots can render vast areas impervious, forcing stormwater into a city's sewer system and eventually into waterways, leading to flooding, pollution, and increased water treatment costs. Oversized parking lots also exacerbate sprawl, making driving – rather than walking, biking and even public transit - virtually mandatory. They also contribute to traffic congestion, air pollution and poorer public health.[1] Traffic congestion in turn may result in calls for wider streets, bigger intersections, and even higher parking requirements, increasing local costs and further damaging local ecosystems.[2] Finally, the cost of building parking lots - from $4,800 per spot for suburban surface lots to more than $43,400 per spot for central business district surface lots -[3] inevitably get passed onto consumers. When those spots are under-utilized, consumers, developers, and cities are paying unnecessary charges.[4]

### WHY PARKING LOTS?

City codes often require developers to provide a minimum amount of off-street parking, but there are rarely accompanying maximum lot sizes.[5] This means developers can or must build larger-than-needed parking lots,

[1] Michael Lewyn, *Sprawl in Canada and the United States*, The Urban Lawyer, Vol. 44, No. 1 (Winter 2012).
[2] Donald C. Shoup, *The Trouble with Minimum Parking Requirements*, Transportation Research Part A, Vol. 33 (1999).
[3] Todd Litman, *Parking Cost, Pricing and Revenue Calculator*, Victoria Transport Policy Institute, *available at* www.vtpi.org/parking.xls.
[4] Shoup, *supra* note 2, at 1.
[5] *See, e.g.* Des Moines, Iowa Code § 134-1377 https://library.municode.com/HTML/13242/level3/MUCO_CH134ZO_ARTVOREPALO.html#MUCO_CH134ZO_ARTVOREPALO_S134-1377OREPAARRE.

often to meet a perceived parking need or to attract a certain business. Land that is used for parking is then unavailable for other uses, such other development that may boost the local economy and bring in more tax revenue, or green space that makes the city more livable.

**A maximum parking standard more accurately accounts for the true costs of parking lots and helps reflect their real impact.**

### WHAT IS THE PROPOSAL?

To address the stormwater, traffic congestion, and livability issues related to oversized parking lots, we have drafted and attached a model parking maximums ordinance. The ordinance places a cap on parking lot sizes, thereby curbing the practice of building large parking lots with unneeded spaces. Understanding that some businesses may need or want more parking than the ordinance allows, the proposal incorporates a flexible system to accommodate larger lots. The system allows developers to choose from a menu of sustainable parking solutions to counteract the environmental, economic, and aesthetic detriments of large parking lots. As set forth in the ordinance, such options include: permeable pavement, shared parking agreements, landscaping requirements, bike parking, and the inclusion of carpool spaces. The ordinance, attached to this abstract, is designed to work on a sliding scale: the larger the variation from the maximum, the more menu options the developer must incorporate. In addition, we have attached a summary of the costs and benefits associated with maximum parking lots.

**MODEL ORDINANCE NO. _____ (Parking Maximums)**

AN ORDINANCE to amend the Municipal Code of the City of _____, Section XXX-XXX [applicable parking code section], relating to certain shared parking spaces subject to a shared parking agreement.

Be It Ordained by the City Council of the City of _____:

Section 1. That the Municipal Code of the City of _____, Section XXX-XXX, is hereby amended by repealing and replacing Section YYY-YYY [applicable local code section pertaining to the schedule of parking spaces] [the following is typical existing code language that varies by jurisdiction]:

Schedule of spaces. In all zoning districts, except [districts that have special or more stringent parking requirements], in connection with every industrial, commercial, business, trade, institutional, recreational, or dwelling use and similar uses, space for parking and storage of vehicles shall be provided in accordance with the schedule in this subsection. Required off-street parking facilities shall be primarily for the parking of private passenger automobiles of occupants, patrons, or employees of the principal use served. No parking space provided for the purpose of complying with the provisions of this chapter shall be included as a parking space required under this chapter for another building, structure or use. *The maximum schedule of spaces for parking and storage of vehicles shall be as follows*:

[*insert revised schedule which reduces the schedule of parking spaces by fifty percent*]

Section 2. That the Municipal Code of the City of _____, Section XXX-XXX, is hereby amended by repealing Section ZZZ-ZZZ and enacting a new Section ZZZ-ZZZ with language set forth as follows:

*Section XXX-XXX.*

*a. A developer may exceed the maximum schedule of spaces for parking and storage vehicles by up to 50 percent, provided the lot includes one or more of the following features:*

*(1) Permeable pavement, as defined in Section AAA-AAA, on at least 20 percent of the surface. Regular maintenance of those permeable areas is required as set forth in Section AAA-AAA.*

*(2) A Shared Parking Agreement as provided in Section BBB-BBB.*

*(3) Climate-appropriate Vegetation on at least 10 percent of the surface.*

*(4) A Climate-appropriate Tree per 10 or fewer parking spaces of a size set forth in the tree replacement ordinance, Section CCC-CCC.*

*(5) Parking spaces designated for compact or electric cars comprising at least 20 percent of the parking spaces.*

*(6) Any other sustainable feature approved by the [appropriate city official].*

*b. A developer may exceed the maximum schedule of spaces for parking and storage vehicles by up to 75 percent, provided the lot includes two or more of the features in subsections (a)(1) through (a)(6) of this Section.*

*c. A developer may exceed the maximum schedule of spaces for parking and storage vehicles by up to 100 percent, provided the lot includes three or more of the features in subsections (a)(1) through (a)(6) of this Section.*

*d. No parking lot may exceed the parking maximum by more than 100 percent.*

Section 4. This Ordinance shall be in full force and effect from and after the later of its passage and publication as provided by law.

Section 5. That the City Clerk is hereby authorized and directed to cause certified copies of this ordinance and proof of publication of this ordinance to be properly filed in the office of the [County Recorder]:

FORM APPROVED:

**Analysis of Off-street Parking Requirements**

***Summary***

Cities began to require new developments to provide off-street parking in the 1930's, when on-street parking started disappearing due to the rapid growth of car ownership, and problems such as "cruising" for parking and "spillover" parking into residential neighborhoods emerged.[6] Now most cities require developers to provide enough off-street parking to meet peak demand for that use, resulting in off-street parking lots that are nearly empty much of the time.[7] These minimum parking requirements are rarely accompanied by a cap on parking lot sizes,[8] meaning developers can build far more parking than even peak demand would warrant. These oversized parking lots exacerbate numerous problems faced by businesses, citizens, and municipalities, including flooding, pollution, traffic congestion, urban heat, increased infrastructure needs, decreased walkability, and higher costs for developers, building tenants, and consumers.[9]

***Analysis***

While minimum parking requirements have produced no single disaster, "…evidence of their harm confronts us everywhere–traffic congestion, air pollution, energy imports, the orientation of the built environment around the automobile, perhaps even global climate change. Although not their sole cause, minimum parking requirements magnify all these

[6] Donald C. Shoup, *The High Cost of Free Parking*, Updated edition (June 21, 2011).
[7] *Id*.
[8] *See, e.g.* Des Moines, Iowa, Code § 134-1377, *available at* https://library.municode.com/HTML/13242/level3/MUCO_CH134ZO_ARTVOREPALO.html#MUCO_CH134ZO_ARTVOREPALO_S134-1377OREPAARRE.
[9] Todd Litman, *Parking Management: Strategies, Evaluation and Planning,* November 2013, *available at* http://www.vtpi.org/park_man.pdf.

problems."[10] For example, minimum parking requirements - and a lack of maximum parking regulations - exacerbate stormwater management issues. Parking lots are impermeable surfaces that prevent stormwater from seeping into the ground, forcing it into the city's storm sewers and eventually into streams, rivers and lakes. An inch of rain on a one-acre parking lot creates 3,450 cubic feet of runoff, compared to 218 cubic feet of runoff on a one-acre meadow.[11] This leads to flooding, pollution, urban heat, and increased water treatment costs for cities.[12]

Minimum parking requirements are not without benefit; they ensure every individual land use can accommodate peak parking demand. But that local benefit hurts the city as a whole. Along with exacerbating stormwater management issues, oversized parking lots also cause sprawl, which makes driving – rather than walking, biking, or even taking public transit - virtually mandatory. Shops that are surrounded by a sea of parking are not only difficult to get to by foot or bike due to sheer distances, but are also uninviting and dangerous for pedestrians.[13] The increased driving this engenders then leads to traffic congestion, air pollution, and poorer public health,[14] and traffic congestion in turn results in calls for wider streets, bigger intersections, and, ironically, even higher parking requirements.[15] Importantly, land that is used for parking lots then cannot be used for housing, commerce, or recreation.

[10] Shoup, *supra* note 6.
[11] Lewyn Coase, *Towards a Sustainable Urbanism: Lessons from Federal Regulation of Urban Stormwater Runoff*, 48 Wash. J. Urban & Contemp. L. 1, 12 (1995).
[12] Amy Rowe, *Green Infrastructure Practices: An Introduction to Permeable Pavement,* Rutgers, The State University of New Jersey (February 2012), *available at* http://njaes.rutgers.edu/pubs/publication.asp?pid=FS1177.
[13] Michael Lewyn, *What Would Coase Do? (About Parking Regulation),* 22 Fordham Envt'l L. Rev. 89 (2010), *available at* http://works.bepress.com/lewyn/70.
[14] Michael Lewyn, *Sprawl in Canada and the United States*, The Urban Lawyer, Vol. 44, No. 1 (Winter 2012).
[15] Shoup, *supra* note 6.

It's no secret that there are many more parking spaces than cars or drivers in the United States. A study from professors at Arizona State University and the University of California, Berkeley estimated the number of off-street parking spaces in the United States at anywhere from 630 million to 910 million – far greater than the estimated 240 million passenger vehicles in the country or 210 million licensed drivers.[16] [17] When on-street parking is included, estimates range from 722 million parking spaces to more than 2 billion parking spaces – nearly 1 percent of the entire land mass of the United States.[18] Another study focusing on the upper Midwest estimated Illinois, Indiana, Michigan, and Wisconsin allocate 5 percent of their urban land use to over 43 million off-street parking spaces, or nearly three off-street parking spaces per vehicle.[19] That study does not include on-street parking, which would raise those figures significantly.[20]

These parking spaces carry not only immense societal and environmental costs, but also huge fiscal costs for developers, tenants, and consumers. According to the Victoria Transport Policy Institute, an independent research organization dedicated to developing innovative and practical solutions to transportation problems, each parking space in a suburban surface lot carries a price tag of $4,818 in land and construction costs in 2002 dollars (along with $300 annually in operation and maintenance costs)(See Table 1).[21] An urban surface lot is nearly three times as much, at $13,333 per space and $500 in annual operation and maintenance

[16] Mikhail Chester, Arpad Horvath & Samer Madanat, *Parking Infrastructure and the Environment*, ACCESS #39 (Fall 2011).
[17] Federal Highway Administration, Our Nation's Highways: 2011, *available at* https://www.fhwa.dot.gov/policyinformation/pubs/hf/pl11028/chapter4.cfm.
[18] *Id*.
[19] Amélie Y. Davis, Bryan C. Pijanowski, Kimberly D. Robinson, & Paul B. Kidwell, *Estimating parking lot footprints in the Upper Great Lakes Region of the USA*, Landscape and Urban Planning, May 30, 2010.
[20] *Id*.
[21] Litman, *supra* note 3.

costs.[22] And central business district (CBD) surface lots are an astounding $43,462 per space, with $600 in annual operation and maintenance costs.[23] The immense cost of building and maintaining off-street parking lots inevitably gets passed onto building tenants and consumers, who effectively subsidize cheap and ample parking through higher rents and retail costs.[24]

**Table 1**

| Type of Facility | Land Costs, Per Acre | Land Costs, Per Space | Construction Costs Per Space | Total Costs | Annual O & M Costs |
|---|---|---|---|---|---|
| Suburban, On-Street | $200,000 | $800 | $3,000 | $3,800 | $200 |
| Suburban, Surface | $200,000 | $1,818 | $3,000 | $4,818 | $300 |
| Suburban, 2-Level Structure | $200,000 | $909 | $15,000 | $15,909 | $500 |
| Urban, On-Street | $1,000,000 | $4,000 | $5,000 | $9,000 | $300 |
| Urban, Surface | $1,000,000 | $8,333 | $5,000 | $13,333 | $500 |
| Urban, 3-Level Structure | $1,000,000 | $2,778 | $18,000 | $20,778 | $600 |
| Urban, Underground | $1,000,000 | $0 | $25,000 | $25,000 | $700 |
| CBD, On-Street | $5,000,000 | $20,000 | $5,000 | $25,000 | $400 |
| CBD, Surface | $5,000,000 | $38,462 | $5,000 | $43,462 | $600 |
| CBD, 4-Level Structure | $5,000,000 | $9,615 | $20,000 | $29,615 | $700 |
| CBD, Underground | $5,000,000 | $0 | $35,000 | $35,000 | $800 |

[22] *Id*.
[23] *Id*.
[24] Shoup, *supra* note 6, at 1.

Minimum off-street parking requirements - and the lack of a maximum parking regulation - put in place by cities are a major source of the excessive supply of parking and the problems that come with it. For example, the Clive City Code requires restaurants to provide 15 parking spaces per 1,000 square feet of gross floor area.[25] That would mean a 4,000 square foot McDonald's, for instance, would have to provide a minimum of 60 off-street parking spaces.[26] A lot that size could easily take up 16,000 square feet – four times the size of the restaurant. That means a developer must allocate 80 percent of the land area for parking, amounting to nearly $300,000 in land and lot construction costs (based on Table 1). Again, these costs are passed on to building tenants and consumers. Image 1, below, is an example of the immense amount of parking required by these regulations. This McDonald's and KFC are located near 114th Street NW and University Avenue in Clive.

**Image 1**[27]


[25] Clive City Code, Ch. 13 Sect. 11-3-8, *available at* http://sterlingcodifiers.com/codebook/index.php?book_id=595&section_id=350231.
[26] *Id*.
[27] Google maps.

Unreasonable minimum parking requirements are just part of the problem. Developers will often build parking lots well over the minimum, to respond to a perceived need or to attract certain tenants. One example of this can be found at The Shoppes at Three Fountains, located in the 4500 block of University Avenue in West Des Moines. While the West Des Moines city code required a minimum of 448 parking spaces for the development, 691 parking spaces were built - over 50 percent more than required (See Image 2, below).

**Image 2**[28]


So where do these minimum off-street parking requirements come from? The two most common ways to determine appropriate minimum parking requirements - surveying nearby cities and consulting Institution of Transportation Engineers handbooks - are both seen as problematic by scholars.[29] Surveying nearby cities "may simply result in a repetition of someone

[28] Google Maps.
[29] Donald C. Shoup, *The Trouble with Minimum Parking Requirements*, Transportation Research Part A, Vol. 33 (1999).

else's mistakes,"[30] while generic parking rates "cannot take into account the mix of context-sensitive, community-specific variables—density, demographics, availability of transportation choices, or the surrounding land-use mix—all of which influence demand for parking and *should* be reflected in parking requirements:[31]

> Instead, requirements are based on maximum demand for parking, when parking is provided at no charge to users, and walking, biking, and transit are not available choices. This formula yields a surplus of parking area that is costly for developers to provide, and it subsidizes personal automobile use and encourages auto use even in areas where convenient transportation choices exist. Because of the way in which they are typically established, parking requirements are remarkably consistent across different cities, despite varying levels of economic vitality, population size, and development density.[32]

An examination of local city codes suggests many minimum parking requirements need an update. The Des Moines city code contains incredibly specific minimum parking requirements for uses as varied as bowling alleys (five parking spaces for each lane); churches (one parking space for every eighty square feet of principal auditorium, including balcony, if any); funeral homes and mortuaries (one parking space for each five seats in the principal auditorium); fraternity or sorority houses (one parking space for each two persons residing on the premises); and theatres and assembly halls with fixed seats (one space for each six seats).[33] The minimum parking requirements for all these uses are the same as when they were set nearly 50 years ago.[34]

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[30] *Id*. (citing Planning Advisory Service, 1971. An Approach to Determining Parking Demand, Planning Service Report Number 270. American Planning Association, Chicago).
[31] Christopher V. Forinash, Adam Millard-Ball, Charlotte Dougherty & Jeffrey Tumlin, *Smart Growth Alternatives to Minimum Parking Requirements*, 2nd Urban Street Symposium, July 28-30, 2003.
[32] *Id*.
[33] *See e.g.* Des Moines City Code, *supra* note 8.
[34] *See e.g.* City of Des Moines Ordinance 7226, adopted July 12, 1965.

***Conclusion***

Minimum parking requirements imposed by cities – and the lack of maximum parking regulations – create huge costs for all sectors of society, from cities and developers to consumers and the environment. Many of these requirements are outdated or lack a strong factual basis. Reducing minimum parking requirements significantly and then capping the maximum size of parking lots would address many of these issues, while allowing developers to exceed the maximum by incorporating sustainable features into lot design provides for flexibility.

This document is the product of a collaboration between the Greater Des Moines Partnership and Drake University Law School. The document was drafted by the Partnership's Senior Vice President Meg Fitz, Professor Jonathan Rosenbloom and Drake Law students Andrew Duffelmeyer, Kelsey Knight ('14) and Derek Moran ('12). If you have any questions, please contact us at: jonathan.rosenbloom@drake.edu or mfitz@desmoinesmetro.com

**METROPOLITAN AREA PLANNING COUNCIL**
**MAXIMUM PARKING ALLOWANCES**
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# Maximum Parking Allowances

parking-allowances

## Limiting Parking Supply

Parking Maximums establish an upper limit on parking supply, either at the site level or across an area. Limits imposed by district or neighborhood are called "Parking Caps". Either type of maximum can be imposed in addition to or instead of minimum parking requirements. Establishing a maximum allowable amount of parking can prevent developers from building excessively large lots, or limit the parking supply in an area based on roadway capacity or community priorities. Communities looking to increase tax revenue through redevelopment of parking lots, improve pedestrian safety and comfort downtown, or reduce stormwater runoff and heat island impacts of parking may want to consider parking maximums as a way to achieve those goals.

Either type of parking maximum can pose implementation issues, however. Setting a maximum leaves little room for error in projecting parking demand. Area-wide parking caps also leave little room for error and require substantial effort in planning and administration to determine the appropriate number of spaces and to allocate them to specific development projects. Furthermore, a restricted parking supply can present problems with spillover effects if not implemented carefully. Resident permit parking or other solutions to mitigate spillover effects and availability of other transportation options can improve the chances of success. Developers may also worry about the long-term marketability of the site if parking is restricted. If parking is restricted throughout an area, then the site will not be less competitive than surrounding sites. Restricting the parking supply may seem to put a community at a competitive disadvantage, and only makes sense in places where the benefits, such as rapid transit service, attractive pedestrian environments, or concentrations of businesses and services, outweigh any inconvenience from reduced parking.

To improve flexibility, planners can set up the parking maximums as transferable parking entitlements, so that the allowed number of parking spaces can be transferred or sold to another development if they are not needed. This allows for area-wide control of parking supply without restricting developments that need more parking. Developments requiring less parking can benefit by selling the rights to their additional spaces. [1]

Local examples:

- The Town of Burlington lists both maximum and minimum parking requirements for most uses throughout the town (see regulation [1]).
- The City of Somerville provides parking maximums (in addition to minimums) for the Assembly Square Mixed Use District and the Planned Unit Development-A Overlay District that will go into effect when a new MBTA station is operational there (see regulation [2]).
- The City of Cambridge has caps on the number of off-street parking spaces that may be provided within certain Special Districts and maximums for certain uses throughout the city.
- The Town of Belmont has maximum numbers of parking spaces allowed for each subdistrict of the McLean Hospital property and in the Belmont Uplands District (without parking minimums) (see regulation [3]).
- The Town of Bedford has maximum parking allowances for certain uses throughout the town (see regulation [4]).
- "In 1977, the City of Boston adopted a freeze on commercial parking open to the public, but not parking reserved for individuals or a company use within office buildings. While the number of commercial spaces have not increased, there was a 26% increase in exempt spaces between 1984 and 1987 alone and motor vehicle traffic increased dramatically along major corridors to the city." [4]

**National examples:**

- "In 1975, the City of Portland set an overall cap of approximately 40,000 parking spaces downtown, including existing and new parking facilities. The cap was increased to about 44,000 spaces by the 1980's and increased again in the 1990's. The City is generally satisfied with its parking policies and believes it has helped increase transit use from 20-25% in the early 1970's to 48% in the mid-1990's." [4] In addition, Portland sets maximum parking limits based on type of use and availability and frequency of transit service, and allows transfer of unused parking entitlements. [1]

- San Francisco limits parking downtown to 7% of the building's floor area. [2]
- Seattle allows a maximum of one parking space per 1,000 square feet of office space downtown, and is considering extending this limit to areas outside of downtown as well. [2]
- Redmond, Washington, a suburban community, allows a minimum of 4 and a maximum of 5 spaces per 1,000 square feet of floor area for most uses in the Neighborhood, Retail, and General commercial zones. [3]
- Helena, Montana establishes maximum parking ratios as a percent above the minimum parking ratio (e.g. no more than 110% of the minimum for parking lots of more than 51 spaces). [3]

**Additional resources:**


1. U.S. Environmental Protection Agency, *Parking Spaces / Community Places: Finding the Balance Through Smart Growth Solutions*, January 2006; p. 16-18. Available as a free download at http://www.epa.gov/smartgrowth/parking.htm [5], or click here for the PDF.
2. Maryland Governor's Office of Smart Growth, *Driving Urban Environments: Smart Growth Parking Best Practices*, March 2006; p. 5-6. Available as a download [6].
3. Jason Wittenberg, "*Parking Standards in the Zoning Code*", Zoning News, January 2003, p.3.
4. Victoria Transport Policy Institute, "Parking Maximums", Online TDM Encyclopedia: http://www.vtpi.org/tdm/tdm28.htm#_Toc128220478 [7].
5. Todd Litman, *Parking Management: Strategies, Evaluation, and Planning*, Victoria Transport Policy Institute, April 2006; p. 15. Available as a free download from http://www.vtpi.org/park_man.pdf [8] or by clicking here.
6. Fitzgerald & Halliday, Inc., *Northwest Connecticut Parking Study - Phase II: Model Zoning Regulations for Parking for Northwestern Connecticut*, Northwestern Connecticut Council of Governments and Litchfield Hills Council of Elected Officials, September 2003. Available as a free download from http://www.fhiplan.com/PDF/NW%20Parking%20Study/NW%20Connecticut%20Parki... [9] or by clicking here.
7. Christopher V. Forinash, et al., "*Smart Growth Alternatives to Minimum Parking Requirements*", Proceedings from the 2nd Urban Street Symposium, July 28-30, 2003. Available as a free download from http://www.urbanstreet.info/ [10] or click here for the PDF.


| Attachment | Size |
|---|---|
| Burlington Zoning Parking Regs.pdf [1] | 108.64 KB |
| Somerville Zoning Parking Regs.pdf [2] | 401.63 KB |
| Maryland_SmartGrowthParking.pdf [6] | 854.28 KB |

# Local Examples: Parking Maximums

example parking maximums

## Local Example - Belmont, MA: Parking Maximums for Uses in Some Districts

**Town of Belmont Zoning By-Law, SECTION 6 SPECIAL REGULATIONS**

**SECTION 6A McLEAN DISTRICT**

[Amended 3/9/99; approved 11/8/99]

6A.3 Parking and Access Requirements

6A.3.1 Maximum Number of Spaces

Accessory parking for the uses allowed in the Residential Subdistricts, the Senior Living Subdistrict, the Research and Development Subdistrict, the McLean Institutional Subdistrict, and the Cemetery Subdistrict shall be allowed provided that such parking may not exceed the limits set out in the following table.

Residential Subdistricts: Two inside parking spaces and two outside parking spaces per dwelling and 122 parking spaces for guests.

Senior Living Subdistrict: One parking space per unit and 50 parking spaces for staff and guests.

Research and Development: Three and one-half parking spaces per Subdistrict 1,000 square feet of gross floor area.

McLean Institutional: For existing uses and structures 853 Subdistrict parking spaces.

For new construction, as follows: 3 per 1,000 square feet of gross floor area; provided, however, that the total of parking spaces added for all new construction may not exceed 150 spaces.

Open Space District: Five parking spaces adjacent to the (privately-owned lands) Mill Street Lodge; five parking spaces adjacent to the Pleasant Street Lodge.

Cemetery Subdistrict: Seven parking spaces.

# Local Example - Bedford, MA: Maximum Parking Limits for Some Uses

**Town of Bedford Zoning By-Laws, 7. SPECIAL PROVISIONS**

**7.4 Parking Regulation**

7.4.1 Required Spaces

The purpose of these parking regulations is as follows:

To prevent the creation of unnecessary or surplus amounts of parking spaces which contribute to additional Single-Occupancy Vehicle (SOV) trips being generated, thereby exacerbating traffic congestion and traffic service level deterioration on impacted roadways within the Town;

To encourage the use of bicycles to reduce traffic congestion and to release motor vehicle parking places by providing secure bicycle parking facilities.

To encourage and ensure use of Transportation Management strategies; and to encourage the development of a regional Transportation Management Association (TMA) to help reduce new SOV trips from being generated within the Town;

To encourage and ensure use of Public Transportation opportunities and use of High Occupancy Vehicles (HOV) such as buses, carpools and vanpools, associated with new development within the Town; and

To reduce unnecessary amounts of impervious surface areas from being created within the Town, and particularly within the well-head and aquifer recharge areas around public water supplies.

Permanent offstreet parking facilities and adequate loading areas shall be provided on the same lot for each of the following uses and structures described in the following subsections 7.4.1.1 through 7.4.1.11 in accordance with the requirements of the applicable subsection. Whenever a change in the type or extent of use of any premises would require an increase of more than 20% in the number of required parking spaces by application of the following subsections, off street parking spaces shall be provided in accordance with said subsections. Where a use is not specifically included in the schedule below, it is intended that the regulations for the most nearly comparable use specified shall apply.

The Planning Board may grant a Special Permit to increase the maximum parking spaces and ratios specified below provided that all of the following findings and conditions are met:

(a) The applicant, site operator or owner agrees to reduce 20% of the estimated Institute of Transportation Engineers (ITE) trip generation rates related to the subject development or use in both the AM and PM peak hours, based upon the latest edition of "ITE Trip Generation" manual. The method or methods by which such a reduction or reductions are accomplished shall be satisfactory to the Planning Board. The Planning Board may elect to determine compliance with this condition by monitoring traffic movements at the site after project completion and occupancy. The applicant, site operator or owner shall fund this monitoring program.

(b) The applicant has developed and submitted data and evidence, including but not limited to parking accumulation and utilization data, that demonstrate the need for additional parking spaces to be created, in the opinion of the Planning Board.

7.4.1.1 Dwelling including multi-unit structured

Two parking spaces for each dwelling unit.

7.4.1.2 Housing for elderly

One parking space for each dwelling unit.

7.4.1.3 Hotel, motel or lodging house

One parking space for each bedroom plus such additional spaces as shall be required for the number of employees' vehicles which can be reasonably expected at any one time on the premises.

7.4.1.4 Educational

One parking space for each classroom plus one space for each two staff positions and one space for each five persons of rated capacity of the largest place of assembly plus such additional spaces as shall be required for the number of students' vehicles which can be reasonably expected at any one time on the premises.

7.4.1.5 Nursing home

One parking space for each sleeping room for single or double occupancy or, where not divided into such rooms, one parking space for each two beds plus such additional spaces as shall be required for the number of employees' vehicles which can be reasonably expected at any one time on the premises.

7.4.1.6 Retail, service or business use as defined in Sections 4.5.1, 4.5.3, 4.5.4, 4.5.5 and 4.5.13

One parking space for each 250 square feet of gross floor area, excluding permanent storage areas, staircases, corridors and restrooms.

7.4.1.7 Professional, general office, or research facility

A minimum of one parking space for each 300 square feet of gross floor area if the building or the property under common ownership has less than 10,000 square feet of gross floor area. **A minimum and a maximum of one parking space for each 350 square feet of gross floor area if the building or the property under common ownership has 10,000 square feet or more of gross floor area.** Gross floor area does not include permanent storage areas, staircases, corridors and restrooms. **Preferential carpool and vanpool parking shall be provided to encourage the use of carpooling and vanpooling.**

7.4.1.8 Industrial use

A minimum of one parking space for each 350 square feet of gross floor area if the building or the property under common ownership has less than 10,000 square feet of gross floor area. **A minimum and a maximum of one parking space for each 400 square feet of gross floor area if the building or the property under common ownership has 10,000 square feet or more of gross floor area.** Gross floor area does not include permanent storage areas, staircases' corridors and restrooms. **Preferential carpool and vanpool parking shall be provided to encourage the use of carpooling and vanpooling.**

7.4.1.9 Restaurant, lodge, club, recreation use or other place of assembly

One parking space for each four seats of rated capacity or one space for each four persons normally expected on the premises at the time of maximum use plus such additional spaces as shall be required for the number of employees' vehicles which can be reasonably expected at any one time on the premises.

7.4.1.10 Bank or indoor amusement use and uses defined in Section 4.5.2.

One parking space for each 150 square feet of gross floor area, excluding permanent storage areas, staircases, corridors and restrooms.

7.4.1.11 Auto service station or auto body shop

Three parking spaces for each lubrication or repair bay, excluding such bays, plus such additional spaces as shall be required for the number of employees' vehicles which can be reasonably expected on the premises at any one time.

7.4.1.12 Mixed uses

In the case of mixed uses, the requirements shall be calculated based upon each area of use to the end that, in the opinion of the Inspector of Buildings, adequate space shall be provided to accommodate the cars of all persons likely to be gathered at the premises at any one time. Parking spaces for one use shall not be considered as providing the required spaces for any other use, except when it can be clearly demonstrated that the need for parking occurs at different times.

7.4.1.13 Child Care Facility (Added ATM 3/27/00, approved 6/20/00)

One parking space per ten children of rated capacity of the child care facility plus one space for each staff person on the largest shift.





**Links:**
[1] http://www.mapc.org/sites/default/files/Burlington_zoning_parking_regs.pdf
[2] http://www.mapc.org/sites/default/files/Somerville_zoning_parking_regs_0.pdf
[3] http://www.mapc.org/resources/transportation-parking-toolkit/local-examples-parking-maximums#belmont-parkingmaximums
[4] http://www.mapc.org/resources/transportation-parking-toolkit/local-examples-parking-maximums#bedford-parkingmaximums
[5] http://www.epa.gov/smartgrowth/parking.htm
[6] http://www.mapc.org/sites/default/files/Maryland_SmartGrowthParking_0.pdf
[7] http://www.vtpi.org/tdm/tdm28.htm#_Toc128220478
[8] http://www.vtpi.org/park_man.pdf
[9] http://www.fhiplan.com/PDF/NW%20Parking%20Study/NW%20Connecticut%20Parking%20Study%20Phase%202.pdf
[10] http://www.urbanstreet.info/

# TEXT AMENDMENT 18.285
# PARKING MINIMUMS UPDATE
# MARKED-UP VERSION

**DRAFT 8-3-2017**

**STATE OF MICHIGAN**

**COUNTY OF OAKLAND**

**CITY OF NOVI**

**ORDINANCE NO. 17-18.285**

**AN ORDINANCE TO AMEND THE CITY OF NOVI ZONING ORDINANCE, AMENDING ARTICLE 5, SITE STANDARDS, SECTION 5.2, OFF-STREET PARKING SPACES AND ARTICLE 2, DEFINITIONS TO MODIFY THE MINIMUM AND MAXIMUM OFF-STREET PARKING REQUIREMENTS AND ASSOCIATED DEFINITIONS TO BETTER MEET THE NEEDS OF THE CITY'S CURRENT AND FUTURE LAND USES.**

**THE CITY OF NOVI ORDAINS:**

**Part I. That The City of Novi Zoning Ordinance is amended, by amending Section 5.2.12, in Article 5 – Off-Street Parking Requirements, to read as follows:**

The minimum number of off-street parking spaces by type of use shall be determined in accordance with the following schedule:

| 5.2.12 Off-Street Parking Spaces | | |
|---|---|---|
| Land Use | | Minimum Number of Parking Spaces per Unit of Measure |
| A. Residential | | |
| Residential, one-family and two-family | | Two (2) for each dwelling unit |
| Residential, multiple-family | | Two (2) for each dwelling unit having two (2) or less bedrooms and two and one-half (2 ½) for each dwelling unit having three (3) or more bedrooms |
| ~~Fraternities or sororities~~ | | ~~One (1) for each five (5) permitted active members, or one (1) for each two (2) beds, whichever is greater~~ |
| Housing for elderly: | | |
| 1. | Shared elderly housing | Two (2) for each dwelling unit |
| 2. | Independent elderly | One (1) for each dwelling unit and one (1) for each employee |
| 3. | Congregate elderly | Three (3) for each four (4) units and one (1) for each employee |
| Mobile home park | | Two (2) for each mobile home site |
| B. Institutional | | |
| Places of worship | | One (1) for each three (3) seats or persons permitted to capacity as regulated by ~~local, county or state fire or~~ building code~~s~~ or six (6) feet or pews in the main unit of worship, whichever is the greater, and one (1) for each thirty (30) square feet of assembly floor area without fixed seats, including all areas used for worship service at any one time, plus parking for accessory uses, if determined necessary by the City |
| Hospitals | | Two and seven-tenths (2.7) for each one (1) bed plus parking for related uses |
| Assisted living convalescent care, homes for the aged, and nursing | | One (1) for each four (4) beds and one (1) for each employee |

| 5.2.12 Off-Street Parking Spaces | |
|---|---|
| Land Use | Minimum Number of Parking Spaces per Unit of Measure |
| homes | |
| Elementary and junior high schools | One (1) for each one (1) teacher, administrator and other day employee or the requirements of the auditorium, whichever is the greater |
| Senior high schools | One (1) for each one (1) teacher, administrator, and other day employee, and one (1) for each four (4) students over the driving age, or the requirements of the auditorium, whichever is the greater |
| Private clubs or lodge halls | One (1) for each three (3) persons allowed within the maximum occupancy load as established by local, county, or state fire, building, or health codes |
| Private golf clubs, swimming pool clubs or other similar uses | One (1) for each two (2) member families or individuals plus spaces required for each accessory use such as a restaurant or bar |
| Private tennis clubs or other similar uses | ~~Six (6)~~Three (3) for each one (1) tennis court plus one (1) parking space per employee based on the greatest number of employees in any one shift, plus spaces required for each accessory use |
| Golf courses open to the general public, except miniature or "par-3" courses | ~~Six (6)~~ Four (4) for each one (1) golf hole and one (1) for each one (1) employee, plus spaces required for each accessory use, such as a restaurant or bar |
| Stadiums, sports arenas, or similar place of outdoor assembly | One (1) for each three (3) seats or five (5) feet of benches |
| Theaters and auditoriums | One (1) for each three and four-tenths (3.4) seats plus one (1) for each two (2) employees |
| Nursery schools, day nurseries or child care centers | One (1) for each three hundred fifty (350) square feet of usable floor area plus one (1) space for each employee |
| Libraries, museums, post offices | One (1) for each three hundred fifty (350) square feet of gross floor area |
| Health clubs and facilities: | |
| a. 30,000 square feet or less | One (1) for every two hundred (200) square feet of gross floor area ~~each 5.5 memberships (family or individual)~~ |
| b. Greater than 30,000 square feet | One (1) for every two hundred (200) square feet of gross floor area ~~each 9 memberships (family or individual)~~ |
| Swimming clubs (private) | One (1) for each four (4) member families (under max membership) |
| Swimming pools (public) | One (1) for each four (4) persons permitted under maximum capacity of the facility |
| C. Business and Commercial | |
| Auto washes (automatic) | Two (2) spaces plus one (1) for each employee plus one (1) for each vacuum station or similar area |
| Auto washes (self-service or coin-operated) | Two (2) spaces plus one (1) for each employee plus one (1) for each vacuum station or similar area |
| Beauty parlors or barbershops | Three (3) spaces for each of the first two (2) beauty or barber chairs, and one and one-half (1 ½) spaces for additional chair |
| Bowling alleys | Five (5) spaces for each one (1) bowling lane plus parking for accessory uses |

| 5.2.12 Off-Street Parking Spaces | | |
|---|---|---|
| Land Use | | Minimum Number of Parking Spaces per Unit of Measure |
| Planned commercial or shopping centers | | One (1) for each 250 square feet gross leasable area (GLA) for developments under 400,000 square feet (4.0 spaces per 1,000 square feet GLA)<br><br>For developments between 400,000 and 600,000 square feet, a sliding scale where the parking ratio increases/ decreases proportionally with the centers' square footage, from one (1) for each 250 square feet of GLA (4 spaces per 1,000 square feet GLA) at 400,000 square feet to (1) for each 222 square feet of GLA (4.5 spaces per 1,000 square feet GLA) at 600,000 square feet.<br><br>For developments 600,000 square feet GLA and larger, one (1) for each 222 square feet (4.5 per 1,000 square feet GLA). If the combined GLA of restaurant, cinema, and entertainment uses exceeds 20% of the total GLA for the shopping center, a shared parking study shall be undertaken to determine the appropriate parking ratio for the shopping center.<br><br>Any single use over 30,000 square feet and within a shopping center shall have its portion of the parking requirement calculated from the appropriate standards for the use, if one exists. |
| Dance halls, pool or billiard parlors, roller skating rinks, exhibition halls, and assembly halls without fixed seats | | One (1) for each three~~wo~~ (3~~2~~) persons allowed within the maximum occupancy load as established by ~~local, county or state fire,~~ building ~~or health~~ code~~s~~. |
| Restaurants and other establishments for sale and consumption on the premises of beverages, food or refreshments: | | |
| a. | Sit-down | One (1) for each seventy (70) square feet gross floor area (14.3 spaces per one-thousand (1,000) square feet), or one (1) for each two (2) employees, plus one (1) for each two (2) customers allowed under maximum capacity (including waiting areas), whichever is greater |
| b. | Fast food | One (1) for every two (2) employees, plus (1) for every two (2) customers allowed under maximum capacity (including waiting areas) plus compliance with the requirements for stacking spaces outlined in Section 5.3.11 |
| Drive-in restaurants | | One (1) for each thirty (30) square feet of usable floor area |
| Furniture and appliance, household equipment, repair shops, showroom of a plumber, decorator, electrician, or similar trade, shoe repair and other repair uses | | 1. One (1) space for each two hundred (200) square feet of gross leasable floor area |
| | | 2. Upon approval by the Planning Commission or Staff, granted pursuant to Section 5.2.14, the paved area for off-street parking may be reduced to an area comprising one (1) space for each eight hundred (800) square feet of usable floor area, and one (1) additional space for each two (2) employees working in processing areas, provided |

| 5.2.12 Off-Street Parking Spaces | |
|---|---|
| Land Use | Minimum Number of Parking Spaces per Unit of Measure |
| | that a surplus area is provided on the site to accommodate the construction of additional off-street parking to fulfill the requirements of preceding paragraph if needed. |
| Fueling stations (with accessory service garage) | Two (2) for each service bay; and one (1) for each fuel dispensing stand; and one (1) for each vehicle used as part of the equipment of the service station; and spaces for accessory uses |
| Fueling stations (without accessory service garage) | One (1) fueling space for each fuel dispensing stand. In addition, one (1) space per 200 square feet usable floor area (not to include vehicle fueling spaces located at the pump) plus parking for accessory uses. In no instance shall such facility provide less than three (3) parking spaces. In no instance shall a required parking space or its maneuvering area conflict with vehicles being fueled or awaiting fuel |
| Laundromats and coin-operated dry cleaners | One (1) for each two (2) machines (washing and dry cleaning) |
| Miniature or "par-3" golf courses | Twohree (23) for each one (1) hole plus one (1) for each one (1) employee |
| Mortuary establishments | One (1) for each fifty (50) square feet of grossusable floor area in each assembly room |
| Motels, hotels, or other commercial lodging establishments | One (1) for each one (1) occupancy unit plus one (1) for each one employee, plus parking for accessory uses |
| Motor vehicle sales and service establishments | One (1) for each two hundred (200) square feet of usable floor area of sales room and one (1) for each one (1) auto service stall in the service room |
| Retail stores except as otherwise specified herein | One (1) for each two hundred (200) square feet of gross leasable floor area |
| Conference and banquet hall facilities | One (1) for every three (3) persons allowed within the maximum occupancy load as established by local, county or state fire, building or health codes. Requirements for hotel, motel, restaurants, lounges, offices and other uses associated with a conference facility shall also be met as established for such uses in Section 5.2 |
| Exposition facilities | 1. One (1) for every one hundred twenty (120) square feet of gross floor area in exhibition hall space and ancillary conference room space available for use, plus parking for general office space, restaurants, museum area, warehousing and other permitted uses per requirements at Section 5.2.12. In addition, a minimum of ten (10) tractor-trailer truck parking spaces shall be provided for an exhibition facility. Truck spaces shall be a minimum of fourteen (14) feet wide and fifty-five (55) feet long, with adequate maneuvering area located adjacent to said truck spaces. |
| | 2. The parking requirements for an exposition facility may be satisfied by construction of seventy-five (75) percent of the minimum required spaces, provided that an area sufficient to construct the remaining twenty-five (25) |

| 5.2.12 Off-Street Parking Spaces | |
|---|---|
| Land Use | Minimum Number of Parking Spaces per Unit of Measure |
| | percent of required spaces is reserved on the site, or on a site owned by the applicant which is within three hundred (300) feet of the site pursuant to Section 5.2.3. Thereafter, the applicant shall on an annual basis submit a report to the Building Division listing each event held at the facility, the number of attendees, the total number of vehicles parked on site each for the event, and the peak number of vehicles parked on site at a given time during the event. The Building Division shall also have provided to it by City consultants and departments, any additional information pertinent to the reasonable adequacy of the usable parking at the facility. The Building Division shall make a determination on an annual basis as to whether additional parking shall be constructed on the land reserved or a portion of the land reserved. |
| Oil change facilities, mini-lubes | Two and one-half (2.5) for each service bay |
| ~~Hardware/building supply stores (free-standing)~~ | ~~One (1) per two hundred forty (240) square feet of gross floor area (interior and exterior)~~ |
| ~~Banquet halls~~ | ~~One (1) for each three (3) persons permitted under maximum capacity~~ |
| Microbreweries; brewpubs | One (1) for each seventy (70) square feet of gross floor area (14.3 spaces per one-thousand (1,000) square feet), or one (1) for each two (2) customers allowed under maximum capacity (including waiting areas) in the taproom/restaurant, whichever is greater, plus one (1) for each one and one-half (1 ½) employees in largest working shift in the taproom/restaurant and in the microbrewery or brewpub. Above requirements apply for either a freestanding facility or for a facility attached to other retail uses in a planned commercial center |
| Pet boarding facilities | One (1) for each seven hundred (700) square feet of usable floor area |
| Warehouse stores, characterized by the collocation of sales and storage functions, where aisles are designed to frequently accommodate both customers and powered material handling equipment simultaneously | One (1) for each seven hundred (700) square feet of gross leasable floor area |
| Lumber, hardware, and building material stores ~~over 75,000 sq ft~~ | Under seventy-five thousand (75,000) square feet gross floor area: one (1) space for every two hundred forty (240) square feet of gross floor area (interior and exterior)<br><br>Seventy-five thousand (75,000) square feet gross floor area and over: One (1) for each seven hundred (700) square feet of gross ~~leasable~~ floor area (interior and exterior) |
| D. Offices | |
| Banks | One (1) for each two~~one~~ hundred fifty (2~~1~~50) square feet of gross floor area (four (4~~6.7~~) spaces per one thousand |

| 5.2.12 Off-Street Parking Spaces | |
|---|---|
| Land Use | Minimum Number of Parking Spaces per Unit of Measure |
| | (1,000) square~~.~~ feet~~.~~ gross floor area~~GFA~~) |
| Business offices or professional offices except as indicated below | One (1) for each two hundred twenty-two (222) square feet usable floor area~~GLA~~ (four and one- half (4.5) spaces per one thousand (1,000) square ~~.~~ feet~~. GLA~~ usable floor area) for buildings up to one hundred thousand (100,000) square feet.<br><br>For buildings greater than one hundred thousand (100,000) square feet, one (1) per two hundred eighty-six (286) square feet usable floor area~~GLA~~ (three and one-half (3.5) spaces per one thousand (1,000) square~~.~~ feet~~. GLA~~ usable floor area) |
| Professional offices of doctors, dentists, veterinarian or similar professions; outpatient clinics | One (1) for each one hundred sixty-seven (167) square feet usable floor area~~GLA~~ (six (6) spaces per thousand (1,000) square feet~~f GLA~~ usable floor area) for buildings up to five thousand (5,000) square feet.<br><br>For buildings greater than five thousand (5,000) square feet, one (1) per one hundred seventy-five (175) square feet usable floor area~~GLA~~ (five and seven-tenths (5.7) spaces per thousand (1,000) square~~.~~ feet~~. GLA~~ usable floor area) |
| E. Industrial | |
| Industrial or research establishments and related accessory offices | One (1) space for each seven hundred (700) square feet of usable floor area or five (5) plus one (1) for each one and one-half (1 ½) employees in the largest working shift, whichever is greater. Space on site shall also be provided for all construction workers during periods of plant construction. |
| Warehouses and wholesale establishments and related accessory offices | 1. One (1) space for each thousand~~seven hundred~~ (~~7~~1,000) square feet of usable floor area |
| | 2. Upon approval from the Planning Commission, granted pursuant to Section 5.2.14, the paved area for off-street parking may be reduced to ~~an area comprising five (5) spaces plus~~ one (1) for every one (1) employee in the largest working shift, or ~~five (5) spaces plus~~ one (1) for every seventeen hundred 1,700 square feet of usable floor area, whichever is greater, provided that a surplus area is provided on the site to accommodate the construction of additional off-street parking to fulfill the requirements of the preceding paragraph if needed. |
| Automobile service establishments, (major and minor services) | Two (2) spaces for each service bay, plus one (1) space for every employee. No wrecked or partially dismantled vehicles, or vehicles without current license plates shall be stored outside |
| Mini warehouses | Five (5) spaces at the office. Access to individual storage units shall provide for loading/unloading of vehicles adjacent to units without impeding thru traffic flow |

**Part II. That The City of Novi Zoning Ordinance is amended, by amending Section 5.2, in Article 5 – Off-Street Parking Requirements, to read as follows:**

13. Maximum Parking Requirements. In order to minimize excessive areas of pavement which negatively impact aesthetic standards and increase the amount of stormwater runoff, exceeding the minimum off-street parking requirement of Section 5.2.12 by more than twenty-five percent (25%) shall require a special land use permit by the Planning Commission. This requirement shall not apply to single-family dwellings, two-family dwellings, or minimum off-street parking requirements for sites requiring fewer than fifty (50) spaces. In granting such additional parking, the Planning Commission shall determine that such parking will be required, based on documented evidence, to accommodate the parking demands for the use during a typical peak parking period.

~~13.~~14. [unchanged]
~~14.~~15. [unchanged]
~~15.~~16. [unchanged]

**Part III. That The City of Novi Zoning Ordinance is amended, by amending Section 2.2, in Article 2 – Definitions, to read as follows:**

**Floor Area, Usable:** In retail uses, ~~T~~that area used for or intended to be used for the sale of merchandise or services, or for use to serve patrons, clients, or customers. In business or professional office uses, that area used for or intended to be used for conducting business, serving visitors, or treating patients. Such floor area which is used or intended to be used principally for the storage or processing of merchandise, hallways, or for utilities or sanitary facilities, shall be excluded from this computation of "Usable Floor Are." Measurements of useable floor area shall be the sum of the horizontal areas of the several floors of the building, measured from the interior faces of the exterior walls. Floor space to be used for servicing vehicles in automobile service establishments and public garages shall be considered as usable floor space.

**PART IV.**
**Severability**. Should any section, subdivision, clause, or phrase of this Ordinance be declared by the courts to be invalid, the validity of the Ordinance as a whole, or in part, shall not be affected other than the part invalidated.

**PART V.**
**Savings Clause**. The amendment of the Novi Code of Ordinances set forth in this Ordinance does not affect or impair any act done, offense committed, or right accruing, accrued, or acquired or liability, penalty, forfeiture or punishment, pending or incurred prior to the amendment of the Novi Code of Ordinances set forth in this Ordinance.

**PART VI.**
**Repealer.** All other Ordinance or parts of Ordinance in conflict herewith are hereby repealed only to the extent necessary to give this Ordinance full force and effect.

**PART VII.**
**Effective Date: Publication**. Public hearing having been held hereon pursuant to the provisions of Section 103 of Act 110 of the Public Acts of 2006, as amended, the provisions of this Ordinance shall be published within fifteen (15) days of its adoption by

publication of a brief notice in a newspaper circulated in the City of Novi stating the date of enactment and effective date, a brief statement as to its regulatory effect and that a complete copy of the Ordinance is available for public purchase, use and inspection at the office of the City Clerk during the hours of 8:00 A.M. to 5:00 P.M., Local Time. The provisions of this Ordinance shall become effective seven (7) days after its publication.

MADE, PASSED, AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF NOVI, OAKLAND COUNTY, MICHIGAN, ON THE ___ DAY OF _____, 2017.

_____
ROBERT J. GATT, MAYOR

_____
CORTNEY HANSON, CITY CLERK

Ayes:
Nays:
Abstentions:
Absent:

# TEXT AMENDMENT 18.285
# PARKING MINIMUMS UPDATE
# CLEAN VERSION

**DRAFT 8-3-2017**

**STATE OF MICHIGAN**

**COUNTY OF OAKLAND**

**CITY OF NOVI**

**ORDINANCE NO. 17-18.285**

**AN ORDINANCE TO AMEND THE CITY OF NOVI ZONING ORDINANCE, AMENDING ARTICLE 5, SITE STANDARDS, SECTION 5.2, OFF-STREET PARKING SPACES AND ARTICLE 2, DEFINITIONS TO MODIFY THE MINIMUM AND MAXIMUM OFF-STREET PARKING REQUIREMENTS AND ASSOCIATED DEFINITIONS TO BETTER MEET THE NEEDS OF THE CITY'S CURRENT AND FUTURE LAND USES.**

**THE CITY OF NOVI ORDAINS:**

**Part I. That The City of Novi Zoning Ordinance is amended, by amending Section 5.2.12, in Article 5 – Off-Street Parking Requirements, to read as follows:**

The minimum number of off-street parking spaces by type of use shall be determined in accordance with the following schedule:

| 5.2.12 Off-Street Parking Spaces | | |
|---|---|---|
| Land Use | | Minimum Number of Parking Spaces per Unit of Measure |
| A. Residential | | |
| Residential, one-family and two-family | | Two (2) for each dwelling unit |
| Residential, multiple-family | | Two (2) for each dwelling unit having two (2) or less bedrooms and two and one-half (2 ½) for each dwelling unit having three (3) or more bedrooms |
| Housing for elderly: | | |
| 1. | Shared elderly housing | Two (2) for each dwelling unit |
| 2. | Independent elderly | One (1) for each dwelling unit and one (1) for each employee |
| 3. | Congregate elderly | Three (3) for each four (4) units and one (1) for each employee |
| Mobile home park | | Two (2) for each mobile home site |
| B. Institutional | | |
| Places of worship | | One (1) for each three (3) seats or persons permitted to capacity as regulated by building code or six (6) feet or pews in the main unit of worship, whichever is the greater, and one (1) for each thirty (30) square feet of assembly floor area without fixed seats, including all areas used for worship service at any one time, plus parking for accessory uses, if determined necessary by the City |
| Hospitals | | Two and seven-tenths (2.7) for each one (1) bed plus parking for related uses |
| Assisted living convalescent care, homes for the aged, and nursing homes | | One (1) for each four (4) beds and one (1) for each employee |
| Elementary and junior high schools | | One (1) for each one (1) teacher, administrator and other day employee or the requirements of the auditorium, |

| 5.2.12 Off-Street Parking Spaces | | |
|---|---|---|
| Land Use | | Minimum Number of Parking Spaces per Unit of Measure |
| | | whichever is the greater |
| Senior high schools | | One (1) for each one (1) teacher, administrator, and other day employee, and one (1) for each four (4) students over the driving age, or the requirements of the auditorium, whichever is the greater |
| Private clubs or lodge halls | | One (1) for each three (3) persons allowed within the maximum occupancy load as established by local, county, or state fire, building, or health codes |
| Private golf clubs, swimming pool clubs or other similar uses | | One (1) for each two (2) member families or individuals plus spaces required for each accessory use such as a restaurant or bar |
| Private tennis clubs or other similar uses | | Three (3) for each one (1) tennis court plus one (1) parking space per employee based on the greatest number of employees in any one shift, plus spaces required for each accessory use |
| Golf courses open to the general public, except miniature or "par-3" courses | | Four (4) for each one (1) golf hole and one (1) for each one (1) employee, plus spaces required for each accessory use, such as a restaurant or bar |
| Stadiums, sports arenas, or similar place of outdoor assembly | | One (1) for each three (3) seats or five (5) feet of benches |
| Theaters and auditoriums | | One (1) for each three and four-tenths (3.4) seats plus one (1) for each two (2) employees |
| Nursery schools, day nurseries or child care centers | | One (1) for each three hundred fifty (350) square feet of usable floor area plus one (1) space for each employee |
| Libraries, museums, post offices | | One (1) for each three hundred fifty (350) square feet of gross floor area |
| Health clubs and facilities: | | |
| a. | 30,000 square feet or less | One (1) for every two hundred (200) square feet of gross floor area |
| b. | Greater than 30,000 square feet | One (1) for every two hundred (200) square feet of gross floor area |
| Swimming clubs (private) | | One (1) for each four (4) member families (under max membership) |
| Swimming pools (public) | | One (1) for each four (4) persons permitted under maximum capacity of the facility |
| C. Business and Commercial | | |
| Auto washes (automatic) | | Two (2) spaces plus one (1) for each employee plus one (1) for each vacuum station or similar area |
| Auto washes (self-service or coin-operated) | | Two (2) spaces plus one (1) for each employee plus one (1) for each vacuum station or similar area |
| Beauty parlors or barbershops | | Three (3) spaces for each of the first two (2) beauty or barber chairs, and one and one-half (1 ½) spaces for additional chair |
| Bowling alleys | | Five (5) spaces for each one (1) bowling lane plus parking for accessory uses |
| Planned commercial or shopping centers | | One (1) for each 250 square feet gross leasable area (GLA) for developments under 400,000 square feet (4.0 spaces per 1,000 square feet GLA) |

| 5.2.12 Off-Street Parking Spaces | | |
|---|---|---|
| Land Use | | Minimum Number of Parking Spaces per Unit of Measure |
| | | For developments between 400,000 and 600,000 square feet, a sliding scale where the parking ratio increases/ decreases proportionally with the centers' square footage, from one (1) for each 250 square feet of GLA (4 spaces per 1,000 square feet GLA) at 400,000 square feet to (1) for each 222 square feet of GLA (4.5 spaces per 1,000 square feet GLA) at 600,000 square feet.<br><br>For developments 600,000 square feet GLA and larger, one (1) for each 222 square feet (4.5 per 1,000 square feet GLA). If the combined GLA of restaurant, cinema, and entertainment uses exceeds 20% of the total GLA for the shopping center, a shared parking study shall be undertaken to determine the appropriate parking ratio for the shopping center.<br><br>Any single use over 30,000 square feet and within a shopping center shall have its portion of the parking requirement calculated from the appropriate standards for the use, if one exists. |
| Dance halls, pool or billiard parlors, roller skating rinks, exhibition halls, and assembly halls without fixed seats | | One (1) for each three (3) persons allowed within the maximum occupancy load as established by building code. |
| Restaurants and other establishments for sale and consumption on the premises of beverages, food or refreshments: | | |
| a. | Sit-down | One (1) for each seventy (70) square feet gross floor area (14.3 spaces per one-thousand (1,000) square feet), or one (1) for each two (2) employees, plus one (1) for each two (2) customers allowed under maximum capacity (including waiting areas), whichever is greater |
| b. | Fast food | One (1) for every two (2) employees, plus (1) for every two (2) customers allowed under maximum capacity (including waiting areas) plus compliance with the requirements for stacking spaces outlined in Section 5.3.11 |
| Drive-in restaurants | | One (1) for each thirty (30) square feet of usable floor area |
| Furniture and appliance, household equipment, repair shops, showroom of a plumber, decorator, electrician, or similar trade, shoe repair and other repair uses | | 1. One (1) space for each two hundred (200) square feet of gross leasable floor area |
| | | 2. Upon approval by the Planning Commission or Staff, granted pursuant to Section 5.2.14, the paved area for off-street parking may be reduced to an area comprising one (1) space for each eight hundred (800) square feet of usable floor area, and one (1) additional space for each two (2) employees working in processing areas, provided that a surplus area is provided on the site to accommodate the construction of additional off-street parking to fulfill the requirements of preceding paragraph |

| 5.2.12 Off-Street Parking Spaces | |
|---|---|
| Land Use | Minimum Number of Parking Spaces per Unit of Measure |
| | if needed. |
| Fueling stations (with accessory service garage) | Two (2) for each service bay; and one (1) for each fuel dispensing stand; and one (1) for each vehicle used as part of the equipment of the service station; and spaces for accessory uses |
| Fueling stations (without accessory service garage) | One (1) fueling space for each fuel dispensing stand. In addition, one (1) space per 200 square feet usable floor area (not to include vehicle fueling spaces located at the pump) plus parking for accessory uses. In no instance shall such facility provide less than three (3) parking spaces. In no instance shall a required parking space or its maneuvering area conflict with vehicles being fueled or awaiting fuel |
| Laundromats and coin-operated dry cleaners | One (1) for each two (2) machines (washing and dry cleaning) |
| Miniature or "par-3" golf courses | Two (2) for each one (1) hole |
| Mortuary establishments | One (1) for each fifty (50) square feet of gross floor area in each assembly room |
| Motels, hotels, or other commercial lodging establishments | One (1) for each one (1) occupancy unit plus one (1) for each one employee, plus parking for accessory uses |
| Motor vehicle sales and service establishments | One (1) for each two hundred (200) square feet of usable floor area of sales room and one (1) for each one (1) auto service stall in the service room |
| Retail stores except as otherwise specified herein | One (1) for each two hundred (200) square feet of gross leasable floor area |
| Conference and banquet hall facilities | One (1) for every three (3) persons allowed within the maximum occupancy load as established by building code. Requirements for hotel, motel, restaurants, lounges, offices and other uses associated with a conference facility shall also be met as established for such uses in Section 5.2 |
| Exposition facilities | 1. One (1) for every one hundred twenty (120) square feet of gross floor area in exhibition hall space and ancillary conference room space available for use, plus parking for general office space, restaurants, museum area, warehousing and other permitted uses per requirements at Section 5.2.12. In addition, a minimum of ten (10) tractor-trailer truck parking spaces shall be provided for an exhibition facility. Truck spaces shall be a minimum of fourteen (14) feet wide and fifty-five (55) feet long, with adequate maneuvering area located adjacent to said truck spaces. |
| | 2. The parking requirements for an exposition facility may be satisfied by construction of seventy-five (75) percent of the minimum required spaces, provided that an area sufficient to construct the remaining twenty-five (25) percent of required spaces is reserved on the site, or on a site owned by the applicant which is within three hundred |

| 5.2.12 Off-Street Parking Spaces | |
|---|---|
| Land Use | Minimum Number of Parking Spaces per Unit of Measure |
| | (300) feet of the site pursuant to Section 5.2.3. Thereafter, the applicant shall on an annual basis submit a report to the Building Division listing each event held at the facility, the number of attendees, the total number of vehicles parked on site each for the event, and the peak number of vehicles parked on site at a given time during the event. The Building Division shall also have provided to it by City consultants and departments, any additional information pertinent to the reasonable adequacy of the usable parking at the facility. The Building Division shall make a determination on an annual basis as to whether additional parking shall be constructed on the land reserved or a portion of the land reserved. |
| Oil change facilities, mini-lubes | Two and one-half (2.5) for each service bay |
| Microbreweries; brewpubs | One (1) for each seventy (70) square feet of gross floor area (14.3 spaces per one-thousand (1,000) square feet), or one (1) for each two (2) customers allowed under maximum capacity (including waiting areas) in the taproom/restaurant, whichever is greater, plus one (1) for each one and one-half (1 ½) employees in largest working shift in the taproom/restaurant and in the microbrewery or brewpub. Above requirements apply for either a freestanding facility or for a facility attached to other retail uses in a planned commercial center |
| Pet boarding facilities | One (1) for each seven hundred (700) square feet of usable floor area |
| Warehouse stores, characterized by the collocation of sales and storage functions, where aisles are designed to frequently accommodate both customers and powered material handling equipment simultaneously | One (1) for each seven hundred (700) square feet of gross leasable floor area |
| Lumber, hardware, and building material stores | Under seventy-five thousand (75,000) square feet gross floor area: one (1) space for every two hundred forty (240) square feet of gross floor area (interior and exterior)<br><br>Seventy-five thousand (75,000) square feet gross floor area and over: One (1) for each seven hundred (700) square feet of gross floor area (interior and exterior) |
| D. Offices | |
| Banks | One (1) for each two hundred fifty (250) square feet of gross floor area (four (4) spaces per one thousand (1,000) square feet gross floor area) |
| Business offices or professional offices except as indicated below | One (1) for each two hundred twenty-two (222) square feet usable floor area (four and one- half (4.5) spaces per one thousand (1,000) square feet usable floor area) for buildings up to one hundred thousand (100,000) square feet. |

| 5.2.12 Off-Street Parking Spaces | |
|---|---|
| Land Use | Minimum Number of Parking Spaces per Unit of Measure |
| | For buildings greater than one hundred thousand (100,000) square feet, one (1) per two hundred eighty-six (286) square feet usable floor area (three and one-half (3.5) spaces per one thousand (1,000) square feet usable floor area) |
| Professional offices of doctors, dentists, veterinarian or similar professions; outpatient clinics | One (1) for each one hundred sixty-seven (167) square feet usable floor area (six (6) spaces per thousand (1,000) square feet usable floor area) for buildings up to five thousand (5,000) square feet.<br><br>For buildings greater than five thousand (5,000) square feet, one (1) per one hundred seventy-five (175) square feet usable floor area (five and seven-tenths (5.7) spaces per thousand (1,000) square feet usable floor area) |
| E. Industrial | |
| Industrial or research establishments and related accessory offices | One (1) space for each seven hundred (700) square feet of usable floor area or five (5) plus one (1) for each one and one-half (1 ½) employees in the largest working shift, whichever is greater. Space on site shall also be provided for all construction workers during periods of plant construction. |
| Warehouses and wholesale establishments and related accessory offices | 1. One (1) space for each thousand (1,000) square feet of usable floor area |
| | 2. Upon approval from the Planning Commission, granted pursuant to Section 5.2.14, the paved area for off-street parking may be reduced to one (1) for every one (1) employee in the largest working shift, or one (1) for every seventeen hundred 1,700 square feet of usable floor area, whichever is greater, provided that a surplus area is provided on the site to accommodate the construction of additional off-street parking to fulfill the requirements of the preceding paragraph if needed. |
| Automobile service establishments, (major and minor services) | Two (2) spaces for each service bay, plus one (1) space for every employee. No wrecked or partially dismantled vehicles, or vehicles without current license plates shall be stored outside |
| Mini warehouses | Five (5) spaces at the office. Access to individual storage units shall provide for loading/unloading of vehicles adjacent to units without impeding thru traffic flow |

**Part II. That The City of Novi Zoning Ordinance is amended, by amending Section 5.2, in Article 5 – Off-Street Parking Requirements, to read as follows:**

13. Maximum Parking Requirements. In order to minimize excessive areas of pavement which negatively impact aesthetic standards and increase the amount of stormwater runoff, exceeding the minimum off-street parking requirement of Section 5.2.12 by more than twenty-five percent (25%) shall require a special land use permit by the Planning Commission. This requirement shall not apply to single-family dwellings, two-family dwellings, or minimum off-

street parking requirements for sites requiring fewer than fifty (50) spaces. In granting such additional parking, the Planning Commission shall determine that such parking will be required, based on documented evidence, to accommodate the parking demands for the use during a typical peak parking period.

14. [unchanged]
15. [unchanged]
16. [unchanged]

**Part III. That The City of Novi Zoning Ordinance is amended, by amending Section 2.2, in Article 2 – Definitions, to read as follows:**

**Floor Area, Usable:** In retail uses, that area used for or intended to be used for the sale of merchandise or services, or for use to serve patrons, clients, or customers. In business or professional office uses, that area used for or intended to be used for conducting business, serving visitors, or treating patients. Such floor area which is used or intended to be used principally for the storage or processing of merchandise, hallways, or for utilities or sanitary facilities, shall be excluded from this computation of "Usable Floor Are." Measurements of useable floor area shall be the sum of the horizontal areas of the several floors of the building, measured from the interior faces of the exterior walls. Floor space to be used for servicing vehicles in automobile service establishments and public garages shall be considered as usable floor space.

**PART IV.**
**Severability**. Should any section, subdivision, clause, or phrase of this Ordinance be declared by the courts to be invalid, the validity of the Ordinance as a whole, or in part, shall not be affected other than the part invalidated.

**PART V.**
**Savings Clause**. The amendment of the Novi Code of Ordinances set forth in this Ordinance does not affect or impair any act done, offense committed, or right accruing, accrued, or acquired or liability, penalty, forfeiture or punishment, pending or incurred prior to the amendment of the Novi Code of Ordinances set forth in this Ordinance.

**PART VI.**
**Repealer.** All other Ordinance or parts of Ordinance in conflict herewith are hereby repealed only to the extent necessary to give this Ordinance full force and effect.

**PART VII.**
**Effective Date: Publication**. Public hearing having been held hereon pursuant to the provisions of Section 103 of Act 110 of the Public Acts of 2006, as amended, the provisions of this Ordinance shall be published within fifteen (15) days of its adoption by publication of a brief notice in a newspaper circulated in the City of Novi stating the date of enactment and effective date, a brief statement as to its regulatory effect and that a complete copy of the Ordinance is available for public purchase, use and inspection at the office of the City Clerk during the hours of 8:00 A.M. to 5:00 P.M., Local Time. The provisions of this Ordinance shall become effective seven (7) days after its publication.

MADE, PASSED, AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF NOVI, OAKLAND COUNTY, MICHIGAN, ON THE ___ DAY OF _____, 2017.

_____
ROBERT J. GATT, MAYOR

_____
CORTNEY HANSON, CITY CLERK

Ayes:
Nays:
Abstentions:
Absent: