



Document 9 – A Review of Minimum Parking Ratios

Introduction

To implement Ottawa's new Official Plan approved in 2022, work is underway on a new Zoning By-law. As part of that work, the policies in the Official Plan and the parking provisions in the current Zoning By-law 2008-250 have been reviewed. Informed by these reviews and completion of research on minimum space ratios in other municipalities, it is proposed to eliminate minimum parking space ratios city-wide and move to a choice-based approach. The research conducted by staff, policies in the Official Plan, approaches in other municipalities are discussed below.

In cities throughout Canada and North America, parking has been an important part of the discourse on city-building. Most of the parking spaces that are available in cities are off-street parking spaces created because of provisions in municipal zoning by-laws. This parking appears to be “free” to users, at least in monetary terms, but in reality, it is not free. Parking has direct and indirect impacts on the form and function of neighbourhoods and cities, and the cost of providing parking impacts the cost of development and everyday goods and services (Shoup, 1999a; Litman, 2023).

Parking regulations impact key city-building priorities including adapting to the impacts of climate change, creating liveable and healthy communities, housing affordability, sustainable public transit with high ridership levels, a diversity of small businesses, and the creation of resilient cities.

Initially introduced in 1923, minimum parking space ratios have become commonplace in zoning by-laws in North America (Nichols, 2019). Minimum space ratios dictate the minimum number of parking spaces a particular land use must provide. These ratios were initially designed to satisfy the assumed peak demand for parking spaces for various land uses at different times of the day and year and were intended to avoid potential spillover parking onto adjacent properties (Shoup, 1999b). The ratios vary based on the type of land use and where it is located.

Minimum parking space ratios have come under increased scrutiny (Nichols, 2019). Studies have shown that easily available parking (plenty of supply and ideal location) results in people owning cars and ultimately driving more often, a concept known as induced demand (Millard-Ball et al., 2021). Entrenching minimum parking ratios in zoning by-laws has come at the expense of cities and their inhabitants through inefficiencies such as the proliferation of surface parking lots that could be used for other land uses that include housing, neighbourhood supportive uses, trees and landscaped areas, and the underfunding and de-prioritization of transit, walking and cycling infrastructure (Hess & Rehler, 2021).

These inefficiencies have been recognized by cities world-wide and by the Institute of Transportation Engineers (ITE), the organization that originally developed standards for minimum parking ratios. In a 2019 letter from the Institute's president, the ITE encouraged cities to consider moving away from minimum parking space ratios towards



a choice-based approach where parking space ratios are no longer included in zoning by-laws (Belmore, 2019).

As more cities acknowledge the climate emergency many are reviewing their minimum parking space ratios and either eliminating or considerably reducing them for certain uses or in specific locations. The Official Plan contains numerous policies which aim to make the city more resilient to the impacts of climate change, and more sustainable over the period of the plan.

Concern #1: The removal of minimum parking ratios is intended to target drivers and those who rely on private vehicles daily.

Response:

A choice-based approach to parking encourages property owners to provide only the parking they require, aligning parking supply and demand. In moving towards a choice-based approach, the draft Zoning By-law achieves the intent of policies in the Official Plan regarding housing supply, housing affordability, and support for the urban forest tree canopy.

Removing minimum parking space ratios will not lead to no parking spaces being built. It may lead to reductions in overall parking supply in the mid to long-term across the city, however, in the short-term, it is expected that parking will continue to be supplied at the same or a slightly lower space rate. There is the potential in the short-term that parking supply may increase slightly in some areas of the city, depending on whether there are maximum space ratios in effect and market demand. Ultimately, moving away from minimum space ratios and towards a choice-based approach provides businesses and property owners flexibility in providing the parking they need.

Policy Overview

Official Plan

In November of 2022, Ontario's *Ministry of Municipal Affairs and Housing* approved the new Official Plan, which outlines how the city is anticipated to evolve and grow between now and 2046. As directed by Council, a new zoning by-law is being prepared to implement the new Official Plan. Staff are working to ensure the new Zoning By-law aligns with Official Plan policies and current best practices in zoning in Canadian municipalities.

The new Official Plan contains policies in [Section 4.1.4](#) that state the supply of parking in the city will be managed to gradually reduce the area of land used for surface parking lots, and that minimum parking provisions in the Zoning By-law may be reduced or eliminated.



Zoning By-law 2008-250

The first comprehensive Zoning By-law for Ottawa was created in 1964. At that time, minimum parking ratios were introduced however, it remains unclear how these ratios were established, or the methodology used to determine these ratios (Moerman, 2015a). It appears that Ottawa followed the same course as many other North American municipalities. The ratios were either taken directly from the standards set by the Institute of Transportation Engineers (ITE) or taken from other municipalities who had implemented minimum parking ratios, likely based on the ITE parking manual (Moerman, 2015b). Ottawa has maintained parking minimums in zoning since then. In the current Zoning By-law 2008-250 parking minimums are found in Section 101. The current minimum parking ratios found in Section 101 vary based on location and use.

The minimum dimension requirements for a parking space in the draft Zoning By-law are not proposed to change from what is required in the current Zoning By-law 2008-250. A parking space is required to be a minimum of 5.2 metres (12 feet) long by 2.6 metres (8.53 feet) wide. The average parking space is approximately 13.56 square metres (or 146 square feet in size). Add minimum aisle and driveway requirements and the area required increases, resulting in parking areas, especially surface parking lots, taking up considerable amounts of land which could otherwise be used for residential or non-residential uses and soft landscaping.

In 2016, City Council approved amendments to the parking provisions in Zoning By-law 2008-250, with the review focusing largely on minimum parking ratios. It is important to note that changes made to minimum space ratios impacted the urban area only. As a result, minimum space ratios were eliminated for properties around major transit stations and the space ratios were significantly reduced for mainstreets and neighbourhoods in the Downtown and Inner urban areas.

The 2016 minimum parking ratio review was a great start, and one that resulted in the approval of some small-scale developments, particularly residential uses within parts of the Downtown and Inner Urban areas, with no or reduced parking provided. From 2016-2022, the City received numerous site plan control applications for various development proposals. Where no minimum space ratios were applicable there were still developments choosing to provide parking despite not being required to. In the central part of the city, where the 2016 review impacted the minimum space ratios, the following is noted about the amount of parking provided for low-rise residential development subject to Site Plan Control:

- 27 proposals provided parking even though none was required,
- 70 proposals were not required to provide parking and did not provide any,
- 23 proposals were required to provide parking but did not, as a result of submitting a minor variance or zoning by-law amendment application.

The numbers above do not include the proposals that did not submit a *Planning Act* application and obtained only a building permit. The data also does not take into consideration applications submitted in 2023 and early 2024. Accordingly, these



numbers may be higher if other application years and building permit data were included. This data also looked exclusively at low-rise residential development. However, this data offers a small but important glimpse of development shifts within the Central Area of Ottawa and, illustrates the fact that removing minimums does not equate to no parking being provided.

Staff also analyzed minor variance and zoning by-law amendment applications that proposed a reduction in the minimum space ratio associated with a proposed development. The number of minor variance and zoning by-law amendment applications submitted between the years 2014 and 2022 that sought to reduce the number of provided parking spaces were:

- 97 minor variance applications
- 63 zoning by-law amendment applications.

The application numbers above do not account for applications where the owner/applicant proposed parking space rate reductions during the review process of a zoning by-law amendment application, as a result of changes made to the proposal. To-date, staff have not undergone a systematic review of the instances of zoning relief being sought for parking reductions – it is likely that there has been a significantly higher number of occurrences.

The central area of the city has different built form characteristics than other areas and, generally has access to transit stations or bus stops, in addition to being generally more walkable and bikeable. These facts must be considered when noting that some of these developments chose not to provide parking. In other areas of the city, outside of the downtown and inner urban area, property owners will still likely provide parking despite an absence of minimum space ratios, to serve their customers, tenants, or potential home purchasers.

Minimum visitor parking space ratios, minimum queuing space provisions for drive-through operations and minimum loading space provisions, are not being removed and will be carried forward in the new Zoning By-law. Additionally, minimum barrier-free parking spaces are required through the City of Ottawa Traffic and Parking By-law and will still apply where developments provide parking.

Concern #2: Removal of minimum parking ratios and adopting a choice-based approach means there will be no parking or no new parking constructed.

Response: Removing minimum parking space ratios from the Zoning By-law does not mean that parking will not be built. Nor does it necessarily mean that less parking will be built. It means that property owners have more flexibility and can determine the parking supply that they think is most appropriate for their use.



Economic Costs

The creation of parking facilities has various costs which include land value, construction costs, operating costs (i.e., maintenance, repairs), and environmental costs. Parking takes up a large portion of the land, sometimes equal to or exceeding the land dedicated to the actual building. Whether it takes the form of surface or below-grade parking structures, the costs associated with the land include land acquisition and preparation fees and construction financing which can be more expensive than the construction of the structure itself (Litman, 2022).

Once the land is acquired, the costs of the construction and maintenance of the parking structure can include the paving of the land, excavation, construction of parking spaces, stormwater management, and seasonal maintenance, increasing the overall cost of development (Litman, 2022). The cost to provide parking is spread out and can be realized through other expenses. Residents who do not drive or own a vehicle, are subsidizing parking spaces and the creation of them through the cost of dwelling units or the cost of products and services (Shoup 1999a; Litman, 2023a).

Studies of parking costs in Canada have estimated that a new freestanding parking structure costs approximately \$6.50 per square metre (above grade) to \$16.50 or more per square metre below grade; approximately \$25,000 to \$65,000 (or more) per stall (Construction Canada, 2021). These parking costs vary based on lot location, geotechnical conditions, labour costs, and construction costs.

Litman (2022) illustrated the development cost for each additional parking space based on the construction of a two-storey, two-bedroom, 1,200 square foot multi-family home, please see Table 1 below.

Table 1: Parking Spaces and Cost per Unit

Parking Spaces Per Unit	0	1	2	3
Units / Acre	20	16	12	8
Land Cost / Unit	\$25,000	\$31,250	\$41,667	\$62,500
Paving Costs	\$0	\$1,600	\$3,200	\$4,800
Housing Construction Costs / Unit	\$100,000	\$100,000	\$100,000	\$100,000
Land, Parking & Construction Costs	\$125,000	\$132,850	\$144,867	\$167,300
Construction Financing (12%)	\$15,000	\$15,942	\$17,384	\$20,076
Total Construction Costs	\$140,000	\$148,792	\$162,251	\$187,376
Developer's Profit	\$14,000	\$14,879	\$16,225	\$18,738
Retail Price per Unit	\$154,000	\$163,671	\$178,476	\$206,114
Parking as Percentage of Retail Price	0%	6.3%	15.9%	33.8%
Developers' Profit per Acre	\$280,000	\$238,067	\$194,701	\$149,901

Based on the Table 1, the provision of one, two and three parking spaces can increase the retail price for housing per unit by 6%, 16%, and 34% of the retail price of housing



respectively. Where these parking spaces are required by a municipal zoning by-law, this is an indication that minimum parking ratios impose increased housing costs, contribute to housing affordability issues, and can disproportionately affect lower income households (Shoup, 2005).

Housing Affordability and Equity

Housing is essential for individual and community wellbeing. However, many Canadian cities are currently facing a housing affordability crisis. Over the last 10 years, average housing prices in Ontario have climbed 180% while average incomes have grown by 38% (Ministry of Municipal Affairs and Housing, 2022). The housing crisis is widespread, however high housing costs pose greater challenges for lower income Ontarians as these costs cause increased personal and financial stress and can push them further away from job markets (Ministry of Municipal Affairs and Housing, 2022).

In January 2020, City Council declared a housing and homelessness emergency. According to Statistics Canada (2021a), 20.9 percent of Canadian households spend 30 per cent or more of their income on shelter costs and 1.5 million Canadian households lived in core housing need which is defined as living in an unsuitable, inadequate, or unaffordable dwelling and being unable to afford alternative housing in their community. The costs of minimum parking ratios are negatively impacting housing affordability as they raise housing prices, widen social inequity in communities and inhibit the development of affordable housing.

In 2022, the Province of Ontario released the [Ontario Housing Affordability Task Force Report](#), as part of the government's plan to increase the supply of housing. The report contained numerous recommendations, including Recommendation 12, which notes that the reduction or elimination of minimum parking ratios can create more permissive land use, planning and approval systems that allow for more housing and greater density (Ministry of Municipal Affairs and Housing, 2022).

The current Zoning By-law 2008-250 requires a generous amount of parking for residential buildings which comes at a cost to residents, as discussed above. Lower-income households bear the burden as they spend a greater share of their income on housing in comparison to wealthier households, where the cost for parking is typically hidden in a percentage of the housing cost, regardless of need to accommodate a vehicle (Litman, 2023b). The construction of parking, whether the spaces are surface or below-grade, has a direct impact on the cost of the unit where developers require more land and incur more construction costs, increasing the overall cost of the building and making the unit less affordable (Moerman, 2015a; Litman, 2023b). Developers also cannot afford to build lower-priced housing when the land costs and cost of construction materials increase, leading to higher retail prices for units and a decrease in the supply of affordable housing (Litman, 2022).

In part due to urban sprawl and exclusionary zoning, current housing markets force low-income households to choose between undesirable neighbourhoods, high public transportation costs with respect to time, or high housing costs (Litman, 2023b).



Coupled with the lack of accessible public transportation in some cities, accepting job offers in city centres and participating in other social and economic activities can be negatively impacted. (Curl, et al., 2018). While vehicle ownership can offer greater accessibility, convenience, flexibility, comfort, and perception of safety, it also has the potential to pose additional financial hardship and can impact lifestyle choices as they relate to health and well-being (Curl, et al., 2018). This can include purchasing food and clothes, paying for education, access to health services as well as other services and amenities.

Additionally, minimum parking ratios create physical gaps in the urban fabric as off-street parking requires additional land which can contribute to reduced overall density, as the land that could be used to build additional housing is instead used for car storage (Shoup, 1999a; Gabbe & Pierce, 2016).

Increasing the amount of parking reduces the potential to increase the number and the size of residential units, further decreasing the supply of housing (Litman, 2022). To better illustrate this, Moerman (2015) examined a potential twenty metre by thirty metre lot in Ottawa (figure 1)). The example considers other requirements in the current Zoning By-law 2008-250 such as minimum required drive aisle width, parking stall dimensions, and landscaping requirements. A lot of this size is large enough to store twenty cars. Alternatively, the space could be utilized to construct an apartment building providing housing for twenty people. The example assumes a three-storey building with dwelling units also located in the basement.

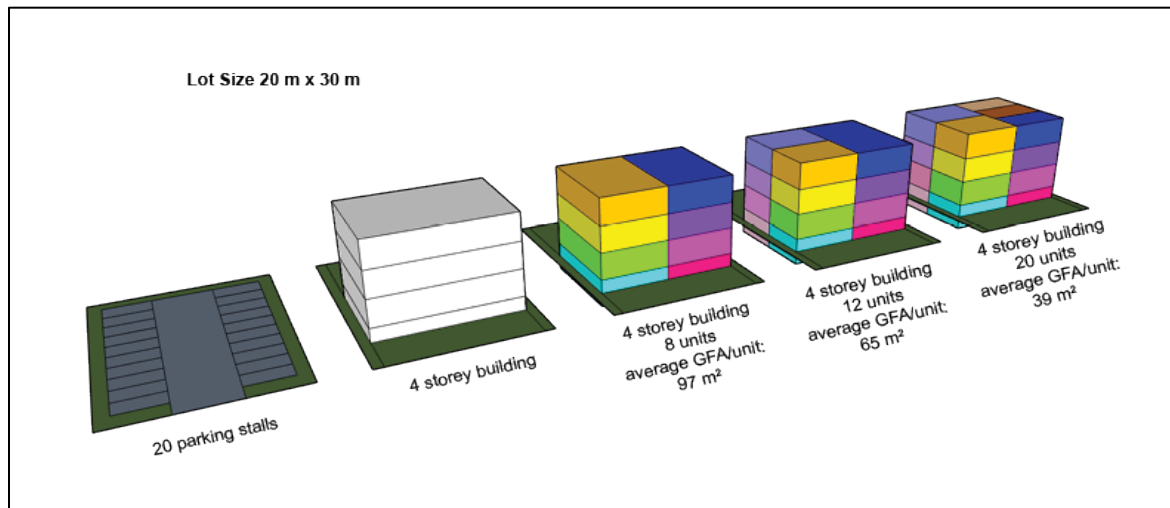


Figure 1. Illustration of a 20 X 30 metre lot in Ottawa



Table 2. Parking spaces and dwelling units on a 20 X 30 metre lot

PARKING LOT (20m x 30m)			BUILDING LOT (20m x 30m)		
	Metres	Feet		Metres	Feet
Lot Width	20.0	65.6	Lot Width	20.0	65.6
Lot Depth	30.0	98.4	Lot Depth	30.0	98.4
Parking Stall Width	2.6	8.5	Front Yard	6.0	19.7
Parking Stall Depth	5.2	17.1	Rear Yard	11.0	36.1
Aisle Width	6.7	22.0	Side Yard 1	1.2	3.9
Net Width	17.1	56.1	Side Yard 2	1.2	3.9
Net Depth	26.0	85.3	Net Buildable Width	17.6	57.7
Front Buffer (grass)	2.5	8.2	Net Buildable Depth	13.0	42.6
Rear Buffer (grass)	1.5	4.9	Net Buildable Area	229	2462
Side Yard Buffers (grass)	1.5	4.8	Levels (including basement)	4	4
Net Width	17.1	56.1	GFA	915	9848
Net Depth	26.0	85.3	Less 15 per cent (corridors etc.)	137	1477
2x10 = 20 Parking Stalls			Net Floor Area (85 per cent of GFA)	778	8370
			Average unit @ 8 units	97	1046
			Average unit @ 12 units	65	698
			Average unit @ 20 units	39	419

Broken down by unit count, twenty people equate to: eight three-bedroom units at 1,000 square feet and 2.5 people each (or half of them have two people and half have three); twelve two-bedroom or one-bedroom-one-den units at 700 square feet and 1.67 people



each (or one third of them have one person and two-thirds have two, either couples or pairs of roommates); or twenty one-bedroom or bachelor units at 420 square feet and one person each.

Based on Table 2 and the example in Figure 1, the hypothetical 20 metre by 30 metre lot has the potential of creating housing units instead of a parking lot with 20 spaces. Additional housing can be provided to support the ongoing housing crisis in Ottawa while utilizing land more efficiently. There is also more opportunity for increased landscaping on the lot in the front and rear yards which has significant benefits to public health as discussed below.

Stormwater Management, Tree Canopy, and the Urban Heat Island Effect

As additional paved areas or lot coverage for parking structures are required as part of providing on-site parking, the added impervious surface can have multiple impacts in terms of available tree canopy, stormwater management, and contributions to urban heat islands.

Creating surface parking lots results in a loss of potential green space, thereby contributing to reductions in soft landscaped areas, room for trees and the urban tree canopy. Even where trees are not directly cut down to provide space for a surface parking lot, paved surfaces can negatively impact the root zones of trees, limiting their growth and creating challenges with respect to tree retention. Underground parking garages impact the urban tree canopy as well, by limiting the volume of soil that can be placed on the roof of the garage. Soil volume is important to sustaining a tree over its lifespan and insufficient soil volumes can lead to shorter lifespans or under-growth of trees.

Surface parking lots contribute to extreme heat due to the urban heat island effect, which occurs due to the high concentration of buildings and paved surfaces that absorb greater amounts of heat than greenspaces shaded by trees and soft landscaped areas. Heat captured by urban areas during the day contributes to high daytime and nighttime temperature, which adversely affect human health ([Climate Atlas of Canada, 2019](#)). Extreme heat impacts human health in many ways including being linked to higher rates of death and hospitalizations due to heart and lung diseases (Gosselin, et al., 2022). In eliminating parking minimums, there is the potential for reduced land area dedicated to off-street surface parking thus providing the potential for increased landscaping and building area for residential and non-residential uses ([Climate Atlas of Canada, 2019](#)).

On-site parking can adversely impact the natural environment by interfering with stormwater quantity and quality. Impervious parking surfaces can increase stormwater runoff where contaminant loads can increase in freshwater systems, resulting in increased flooding and polluted water resources (Davis, et al., 2010; Gibbons, 1999). Increased stormwater runoff across impervious parking surfaces can also lead to increased water flow resulting in increased sedimentation and erosion polluting water resources (Davis, et al., 2010; Gibbons, 1999).



To mitigate the urban heat island effect, provide visual screens and noise buffers, and decrease potential stormwater runoff, many Canadian cities, including Ottawa, have landscaping requirements for parking lots in their zoning by-laws. In Ottawa, these are found in the current Zoning By-law 2008-250 in Section 110. These provisions are being reviewed as part of work on the new Zoning By-law.

Public Health and the Built Environment

The health risks associated with auto-centric built environments and the proliferation of private vehicle use was examined in 2009 by the Region of Peel located within southwestern Ontario and comprising the municipalities of Brampton, Caledon, and Mississauga. The Peel Healthy Development Index (HDI) from the Centre for Research on Inner City Health at St. Michael's Hospital, noted:

Parking requirements and characteristics have a direct impact on proximity, density, and aesthetics in the built environment as well as on social and economic factors that indirectly affect healthy development. For example, large parking lots – particularly those in the front setbacks of buildings – directly create unappealing, uninviting, unsafe pedestrian environments. However, this ample (often free) parking also encourages driving, which in turn indirectly degrades the active transport network by placing more cars on the road and so reducing comfort and safety for pedestrians and cyclists, slowing public transit and making it less viable, requiring an increase in motorized vehicular infrastructure and its related public costs, and further contributing to the various environmental degradations brought on by the automobile. (Dunn et al, 2009).

A healthy built environment enables active transportation, social cohesion, and protection from health hazards (City of Ottawa, 2019). Built environments can influence people's diets, and their physical activity commuting to work, home, and during leisure time (Cecchini et al., 2010). These issues connect to three important features of neighbourhood design highlighted by Ige-Elgebede (2022): completeness, compactness, and connectivity. For these reasons, the design of our communities affects chronic diseases and overall well-being. Growing evidence confirms that the way physical environments are built has an impact on physical, mental, and social health (Public Health Agency of Canada, 2017).

The design of physical infrastructure and a city's transportation system can result in exposure to harmful traffic-related air pollution, impact levels of physical activity, and impact the ability for someone to access services, amenities, employment, education, and their social networks (City of Ottawa, 2019). Auto-centric built environments encourage increased sedentary lifestyle behaviours, resulting in increased risk to human health via chronic diseases (Mowat et al., 2014). A health-supportive built environment can help decrease risk for chronic diseases, such as diabetes, cancer, cardiovascular disease, which are the leading causes of death in Canada. For example,



a neighbourhood with connected streets, accessible greenspaces, full-service food stores, and attractive places to gather can help increase physical activity rates, increase access to nutritious foods, and create a sense of social belonging and improved mental health (Public Health Agency of Canada, 2017). Shifting away from parking regulations that are based on the assumed peak demand for parking spaces to a choice-based system will help to avoid over-provision of parking and its negative impacts on the built environment and human health.

Concern # 3: Removal of parking minimums means more people will start parking on my street as no parking will be built.

Response: Eliminating minimum parking space ratios does not mean that developments will be constructed with no parking spaces. There will be some developments constructed with no on-site parking and others that will choose to provide on-site parking. In terms of housing developments, people will choose housing that suits their needs, factoring in the availability of parking.

Certain areas of Ottawa have residential parking permit areas. If a development within a permit area does not provide on-site parking, the residents and tenants of those areas may apply to the City to obtain an on-street parking permit for a fee.

Changes to the built environment are usually incremental. Eliminating minimum parking ratios does not mean there will be an over-night reduction in the amount of parking provided for new developments. Many developments will likely continue to provide parking for their residents, tenants, customers, and employees.

Many cities have eliminated minimum parking space ratios, including London, Sao Paulo, Mexico City, Buffalo, Toronto, and Edmonton. Eliminating parking minimums has not resulted in chaos in these cities, particularly with regard to on-street parking (Barter, 2019). The presence of minimum parking ratios in a zoning by-law does not prevent parking issues, as parking issues result largely from parking management problems, not the total amount of off-street parking provided (Barter, 2019).

The Parking Context Elsewhere

As more cities start critically examining the costs of minimum space ratios, many are reducing their ratios or moving to a choice-based approach that allows property owners to decide how much parking they need. Many cities are also opting to implement maximum parking ratios, particularly in downtowns, business districts, and locations near higher-order transit.



London, England

In 2000 and 2001, the United Kingdom adopted a series of national policies aimed at promoting alternative transportation options (Li & Guo, 2014). This led to the approval of the London Plan in 2004, the city's strategic plan where parking minimums were removed, and new maximum parking standards were established for employment, residential and retail uses (Guo & Ren, 2013). This wasn't the first time that maximum parking standards were implemented in the city. In 1976, maximum parking standards for offices, shops, and housing were set through the Greater London Development Plan with varying standards for the Central Area, the Inner Ring, suburban centres, and outer London. Provisions were further reviewed, leading to the most recent publication of the London Plan, approved, and adopted on March 1, 2021, which sets maximum parking standards and encourages car-free development city-wide (Greater London Authority, 2021). In addition to the elimination of parking minimums and the introduction of maximum ratios applicable city-wide, London also has car-free areas with no parking, with the exception of accessible parking spaces (Greater London Authority, 2021).

Sao Paulo, Brazil

São Paulo approved a new Strategic Master Plan in 2014 where minimum parking ratios were removed city-wide for all uses (Institute for Transportation and Development Policy, 2014). New parking maximums were implemented along transit corridors, with fees for parking spaces above the limit. In addition to the elimination of parking minimums and the introduction of a maximum parking space ratio, the plan also bans front yard parking (parking between the front lot line and the building façade) to create active streetscapes (Prefeitura de São Paulo, 2014; Parking Reform Atlas, 2022).

New Zealand

In 2020, New Zealand's Ministry for the Environment issued National Policy Statement on Urban Development (NPS-UD), requiring local councils to remove minimum parking ratios, except for accessible parking spaces, for new developments from district plans (New Zealand Government, 2020). As such, developers and landowners are able to determine the amount of parking they require based on demand and the nature of their operations (New Zealand Government, 2022; OurAuckland, 2022). NPS-UD came into force starting in August 2020 where local councils such as Auckland, Wellington and Hamilton have removed parking ratio provisions.

Across North America

Over the past decade, cities across North America have begun to either partially or fully eliminate parking minimums, as shown in the map below: orange represents an elimination in certain areas of the city and red represents a city-wide elimination of minimums. As time has gone on, this map has become populated by more and more dots representing cities that have started critically examining and changing how they regulate parking. This map, from the *Parking Reform Network*, is constantly being updated.

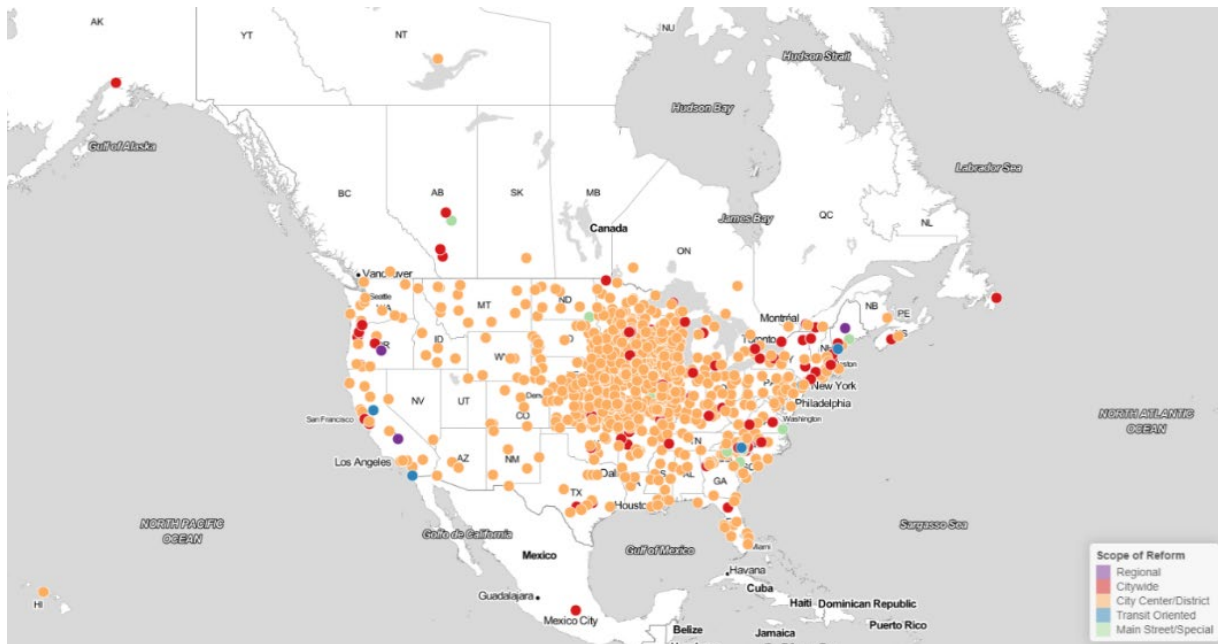


Figure 2. Elimination of parking minimums in North American cities (Herriges, 2021)

In 2017, Mexico City became the first capital city in North America to eliminate minimum parking ratios (Barter, 2018). Maximum parking ratios were enacted, mostly at the same ratios of the old minimums, where developers would be required to pay a fee if they were to build more than 50 percent of the maximum parking ratios within the central city (Schmitt, 2017; Reyes, 2021).

That same year, Buffalo, New York eliminated minimum parking ratios, becoming the first major U.S. city to do so (Ferrin, 2023; Bipartisan Policy Center, 2023; City of Buffalo, 2016). While some cities have eliminated parking minimums to help boost housing supply, Buffalo did so with the aim of attracting business and office development, revitalizing the downtown and reducing the city’s environmental impact (Bipartisan Policy Center, 2023). Since the introduction of this reform, Buffalo has seen new mixed-use developments with reduced parking provided; however, low-rise residential and commercial developments have seen increased parking, over and above what the previous minimum parking ratio was (Bipartisan Policy Center, 2023). Overall, there has been a reduction in the total number of off-street parking spaces provided in Buffalo, which has contributed to the city slowly becoming more walkable and less car-dependent (Bipartisan Policy Center, 2023).

Since 2017, more U.S. cities have joined Buffalo in eliminating minimum parking ratios. In 2022 the following 15 cities eliminated parking minimums: Culver City, Nashville, Anchorage, San Francisco, San Jose, Salem, Portland, Boston, Lexington, Cambridge, Burlington, Richmond, Raleigh, Jackson, and Minneapolis (Herriges, 2021). In 2023, more U.S. cities joined that list, including Austin, Burlington, Bend, Willmar, and Spokane (Mieleszko, 2023). In May of 2023, the “People over Parking Act” was introduced in the U.S. House of Representatives (Gilbo, 2023). If passed, the Act



would override state and municipal parking ratios and remove parking requirements within 0.8km (0.5 miles) of public transit stops nation-wide.

Within Canada

Several Canadian cities have eliminated minimum parking ratios for all uses, city-wide. Even more cities have decided to start by reducing the minimum ratios for various uses in specific locations, as the evidence pointing to the direct and indirect negative impacts associated with minimum parking ratios increases. Further details on the cities that have eliminated ratios entirely or partially is found in Tables 3 and 4, below.

In 2020, the City of Edmonton approved an Open Option Parking approach across the city which removed minimum parking ratios from the Zoning By-law. The Open Option Approach allows developers, landowners, and businesses to determine how much on-site parking they provide based on their particular operations, activities, or lifestyle (City of Edmonton, 2020). This approach meant treating parking spaces as marketed goods, rather than a regulated amenity, where parking spaces can be shared among users and be regulated by those who provide them (Canadian Institute of Planners, 2021).

Maximum parking ratios for residential and non-residential uses were also established for sites or zones in the Capital City Downtown Area Redevelopment Plan, within the defined radius of a Transit Centre or LRT station, or within the boundary of the Main Streets Overlay as specified in *Section 54.2 On-Site Vehicle Parking Quantities* of the Edmonton Zoning By-law 12800.

In 2020, the City of Calgary approved amendments to the Land Use By-law to eliminate minimum parking ratios for non-residential uses (City of Calgary, 2020). The amendment also provides opportunities for shared parking – parking spaces that are shared by more than one use or business – for uses where minimum parking ratios do not apply. This allows for parking facilities to be used more efficiently while optimizing space within the city. Barrier-free parking and visitor parking spaces are still required where applicable as specified in *By-law 48P2020* of the City of Calgary Land Use By-law.

Within Ontario

In 2021, the City of Toronto adopted amendments to Zoning By-law 569-2013, modifying the then-existing standards for vehicle and bike parking. The amendments included city-wide removal of minimum parking ratios for all uses, excepting minimum visitor parking and loading regulations. It also introduced new electric vehicle standards and established new maximum parking standards for new developments. This amendment aligned with the City of Toronto's climate action strategy, TransformTO, approved in 2017, and reflects matters of provincial interests as reflected in the Provincial Policy Statement and the Growth Plan, adopted in 2019, including the mitigation of greenhouse gas emissions, environmental sustainability and creating healthier communities (City of Toronto, 2021).



In April 2022, the City of Kingston enacted a new Zoning By-law (2022-62). Kingston opted not to remove minimum parking ratios city-wide for all uses, instead removing them city-wide for non-residential uses while reducing minimum parking ratios for residential uses.

Table 3. Complete Elimination of Parking Minimums in Canadian Cities (Herriges, 2021)

City	Use
Edmonton, Alberta	All uses
High River, Alberta	All uses
Toronto, Ontario	All uses; visitor, loading and barrier free still subject to minimums
Bromont, Quebec	All uses
Lunenburg, Nova Scotia	All uses
St. John's, Newfoundland & Labrador	All uses

Table 4. Elimination of Parking Minimums in Canadian Cities in Specific Areas (Herriges, 2021)

City	Use	Location
Yellowknife, NWT	Commercial and residential	Downtown and Old Town areas
Penticton, British Columbia	Commercial	C5 and C6 zones
Calgary, Alberta	Commercial and Institutional	City-wide
Regina, Saskatchewan	All uses	Downtown Direct Control District
Dryden, Ontario	Commercial	Downtown Commercial (CD) Zone
Thunder Bay, Ontario	All uses	Rural Areas, Rural Settlements, Institutional and Community Areas, Natural Heritage Areas, and Future Development Areas Pedestrian Commercial Areas Urban Neighbourhoods and Commuter Commercial Areas
Elliot Lake, Ontario	Commercial and industrial	C1 Central Commercial Zone
Timmins, Ontario	All uses	EA -CG Zone in a downtown area



City	Use	Location
London, Ontario	All uses	Downtown district, Transit Village, Rapid Transit Corridors, and around the Main Street area Urban Corridor, Shopping Area, Neighbourhoods, Future Community Growth, Heavy Industrial, Light Industrial, Commercial Industrial, Future Industrial Growth, Commercial Industrial, Institutional, Green Space, Environmental Review, Farmland, Rural Neighbourhood, Waste Management Resource Recovery Area
Kitchener, Ontario	All uses	Urban Growth Center zones
Penetanguishene, Ontario	Commercial	Mixed Use Commercial Zone, Downtown and Waterfront Zone
Oakville, Ontario	Commercial	Downtown Oakville [Mixed Use Zone on Map 19(8a)]
Oshawa, Ontario	Residential	Specific areas - see 39.10 Exception
Ottawa, Ontario	All uses	Near Major LRT Stations (Area Z), Inner Urban Area (Area X)
Kingston, Ontario	Commercial; residential uses – reduced	City-wide
Laval, Quebec	Commercial and industrial	City-wide
Montreal, Quebec	Residential	Ville Marie
	All uses	Le Sud-Ouest
Sherbrooke, Quebec	All uses	Downtown
Moncton, New Brunswick	All uses	Area 1 according to Schedule C - Parking Area Map



City	Use	Location
Halifax, Nova Scotia	All uses	Downtown Dartmouth (DD), Downtown Halifax (DH), Centre 2 (CEN-2), Centre 1 (CEN-1), Comprehensive Development District 2 (CDD-2), Comprehensive Development District 1 (CDD-1)

Conclusion

The preceding discussion provides an overview of Official Plan policies, the evolution of best practices of parking provisions in Ottawa and other municipal zoning by-laws, and the implications of minimum parking ratios on the cost of development and public health.

It is proposed to replace minimum parking ratios with a choice-based approach that gives property owners and developers the flexibility to provide the amount of parking they require, aligning parking supply and demand. In moving towards a choice-based approach, the draft Zoning By-law achieves the intent of policies in the Official Plan regarding housing supply, housing affordability, and support for the urban forest tree canopy.

Removing minimum parking ratios does not mean new developments built in Ottawa will not have on-site parking. Nor does it mean that the number of parking spaces provided will necessarily be lower in the short-term. In the medium to long-term though, and over the lifespan of the Official Plan, it is expected that moving to a choice-based approach will result in less parking provided, especially for sites near transit where maximum parking provisions apply. By shifting away from minimum parking ratios towards a choice-based approach, in the long-term this will assist with the creation and enhancement of more-transit supportive, walkable neighbourhoods in the city. Moving to a choice-based system for the provision of parking has other benefits, including reducing the cost of housing where parking is not provided, and allowing more space to be allocated to housing, commercial uses, landscaping, and trees, all of which support complete neighbourhoods.

It is proposed to include minimum visitor parking space ratios, minimum queueing space rates for drive-through facilities and minimum loading space rates in the new Zoning By-law. Barrier-free regulations under the City of Ottawa's Traffic and Parking By-law will still be applicable to development that provides parking.



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