

Onsite Parking Requirements Update for the City of Kingston

SURP 826 Project Course
Queen's University

December 2020



ONSITE PARKING REQUIREMENTS UPDATE FOR THE CITY OF KINGSTON

PREPARED BY:

Bipin Dhillon | Jasmine Goodman | Jaeten Gosal | Stephan Kukkonen |
Lee-Ann Martin | Yvonne Mitchell | Griffin Tinevez

SUPERVISED BY:

Dr. Ajay Agarwal | Queen's University
City of Kingston | Planning Division and Transportation Services

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School of Urban and Regional Planning
Department of Geography and Planning
Queen's University



EXECUTIVE SUMMARY

PROJECT CONTEXT

Parking is the link between land use and transportation planning. It influences how we use land and move around in cities. However, parking's impacts on environmental, economic, and social issues are far-reaching and often overlooked. Specifically, mandatory parking requirements in the form of parking minimums result in costly parking facilities that require substantial amounts of land, prevent other valuable uses from being established, and reduce housing affordability. Cities around the world are recognizing the underlying influences of parking on other urban issues. This has prompted cities to reform their minimum parking requirements to reduce auto dependency, encourage sustainable mobility, and promote smart growth development.

Kingston is one example of such a city. They are in the process of updating the parking standards component of their new comprehensive, city-wide Zoning Bylaw and their Density by Design project. The new Zoning Bylaw will replace the existing set of outdated zoning bylaws to create a single vision consistent with the City's current planning and development goals. As part of the new Zoning Bylaw, the City is proposing five distinct parking management areas, each of which will have different location-based parking ratios.

The five parking areas are as follows:

Parking Area 1: Downtown

Parking Area 2: Williamsville Main Street Corridor

Parking Area 3: "Inner Transit" lands within 400 metres of a Kingston Transit Express Route

Parking Area 4: "Outer Transit" lands within 400 metres of a Kingston Transit Express Route

Parking Area 5: Remainder of the City

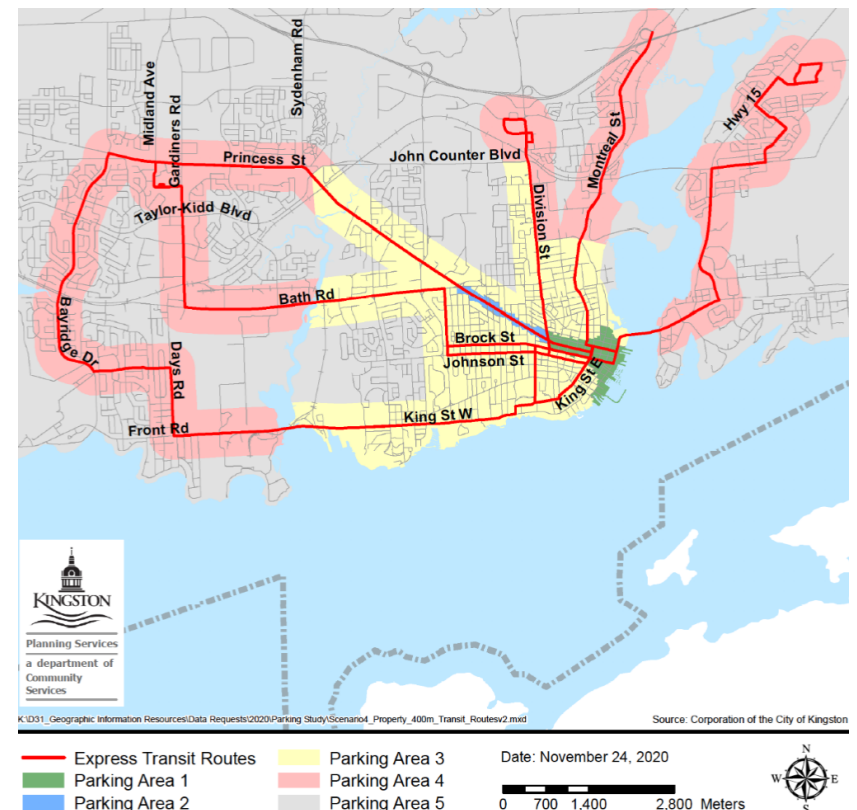


Figure E-1: Map of the five parking areas

PROJECT OBJECTIVES

The SURP 826 project course team was directed to undertake research on planning strategies and policy tools that will lay the groundwork for the City of Kingston's new onsite parking requirements.

The goals of this report are as follows:

1) To develop appropriate on-site parking ratios for Kingston that:

1. Contribute towards Kingston's sustainability goals.
2. Do not negatively impact Kingston's economic competitiveness.
3. Do not shift the parking burden (particularly personal automobiles) into the public realm at the expense of other needs.

2) To determine ways that Kingston can successfully shift towards a practice of parking maximums instead of minimum parking requirements.

Considering the short time frame of the project course, the team limited their recommendations to Parking Area 1.

RESEARCH APPROACH

The approach to this report was qualitative in nature, and consisted of a policy review, a literature review, case study analyses, and site studies for developing policy recommendations.



Figure E-2: View of Parking Area 1 (Shown in green)

POLICY REVIEW

Kingston aims to be Canada's most sustainable city, and they've developed a high-level planning policy framework for supporting this goal. Among the relevant policies reviewed for this project include:

- Ontario's Provincial Policy Statement (2020)
- Kingston's Official Plan (2019)
- Kingston's Zoning Bylaws
- Kingston's Transportation Master Plan (2015)
- Kingston Transit's 5-Year Business Plan (2017-2021)
- Kingston's Active Transportation Master Plan (2018)
- Kingston's Active Transportation 5-Year Implementation Plan (2019-2023)
- Kingston's Strategic Plan (2019-2022)

Reviewing Kingston's transportation and parking policies reveals that the City has a strong foundation in parking management. Many of the City's existing strategies align with best practices from other cities. This implies that implementing parking maximums and other supporting strategies will be a smoother process than if these strategies were not already in place.

PARKING MANAGEMENT BEST PRACTICES

The team explored recent trends in progressive parking policies through a literature review of parking management best practices from both academic and non-academic sources. Best practices were organized according to transportation researcher Todd Litman's categorization of parking management strategies, which are as follows:

1) Increasing Parking Efficiency

- Shared Parking
- Parking Maximums
- Parking Benefit Districts

2) Reducing Parking Demand

- Transportation Demand Management (TDM)
- Parking Pricing
- Car-Share Parking

3) Supporting Strategies

- User Information
- Overflow Parking
- Parking Enforcement

4) Miscellaneous Strategies

- Location-Based Parking Ratios
- Smart Growth and Compact Development

CASE STUDIES

Case study analyses were conducted on four North American cities that have implemented maximum parking requirements. These cities include:

1. Pasadena, California, USA
2. Hartford, Connecticut, USA
3. Edmonton, Alberta, Canada
4. Ottawa, Ontario, Canada

Case studies were selected not only for their progressive parking policies but also for possessing characteristics similar to Kingston such as population size, concerns for downtown parking, Canadian policy contexts, and historical downtown's. Specific lessons were learned from each case study, which included the following key takeaways:

- A range of parking management strategies create a more balanced transportation system
- Alignment, phasing, and comprehensive re-zoning eases the implementation process of parking maximums
- Parking ratios should be location-based
- Promoting the positive outcomes of a more compact built form can help alleviate the controversial nature of parking changes

SITES SELECTED FROM AREA 1

The maximum parking requirements from each city, as well as parking generation data from the Institute of Transportation Engineers (ITE), were applied to four sites in Parking Area 1 representing different land uses including a supermarket (i.e. commercial), a high-rise multi-unit apartment building, a mid-rise multi unit apartment building, and general office. The specific sites were as follows:

1. Metro Supermarket (310 Barrie Street)
2. Carruthers Wharf (135 Ontario Street)
3. Anna Lane Condominium(121 Queen Street)
4. Smith Robinson (S&R) Building (27 Princess Street)

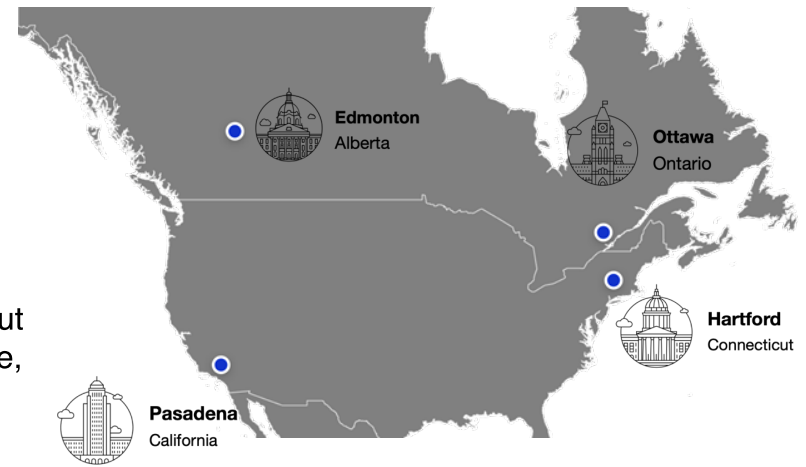


Figure E-3: Map of our four case study cities. (Gosal, 2020)

Icons: Bepfoolish (n.d.)

Map: Vemaps (2020)

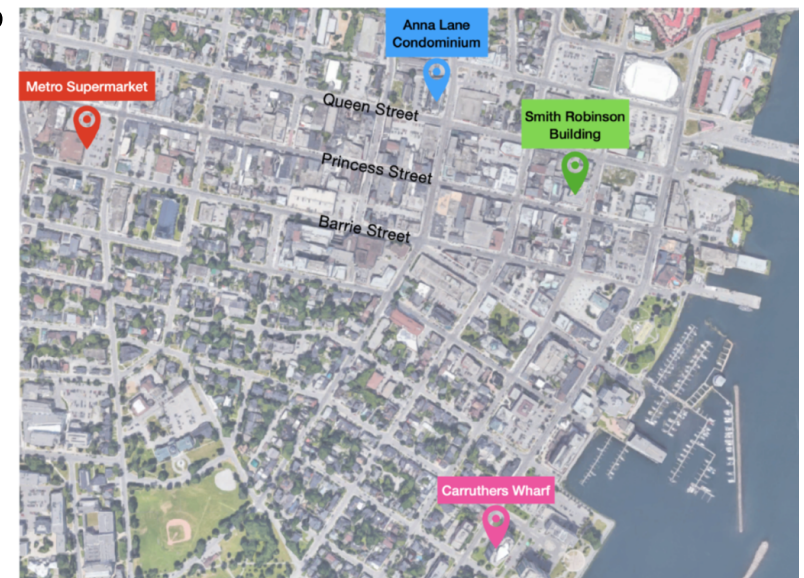


Figure E-4: Map of the four study sites in Parking Area 1

POLICY RECOMMENDATIONS

A series of policy recommendations were developed by the team, which include proposed maximum parking ratios for selected sites in Parking Area 1 as well as other parking management strategies to support the implementation of these ratios. The recommendations are as follows:

Recommendation #1: Phased Implementation of Parking Maximums

The City should undertake a phased approach when shifting from minimum to maximum parking requirements, starting with Parking Area 1 where there is existing infrastructure to support alternative transportation modes.

Considering the parking requirements from each case study, assessed demand from previous consultant reports and ITE data, as well as each site's existing conditions, maximum parking ratios are recommended and justified for each site. These ratios illustrate how onsite parking supplies would retroactively impact each site.

Metro Supermarket: Recommended Maximum

Option A

3/1000ft² (~3.23/100m²) GFA = 77 spaces

Option B

Less than 77 spaces

Carruthers Wharf: Recommended Maximum

Option A

0.85/unit = 111 spaces

Option B

0.5 spaces per bachelor/1-bedroom unit (22 spaces)

1 space per 2+ bedroom units (86 spaces)

=108 spaces

Anna Lane Condominium: Recommended Maximum

Option A

0.85/unit = 98 spaces

Option B

0.5 spaces per bachelor/1-bedroom unit (27 spaces)

1 space per 2+ bedroom units (62 spaces)

=89 spaces

Smith Robinson Building: Recommended Maximum

1/200m² = 40 spaces

Recommendation #2: Adopt Performance-Based Pricing in Area 1 and Regularly Review

Prices for parking should be performance-based and set to achieve an occupancy rate where one or two spaces per block remain available during a 1-hour time period. This can be accomplished by setting prices for mornings, afternoons and evenings to capture differences in demand. Areas with the highest demand should be priced higher than locations that are less convenient.

Recommendation #3: Establish Parking Benefit Districts in Central Neighbourhoods

Residential permit areas near downtown should be converted into parking benefit districts as a pilot project. All generated revenue should be reinvested into the neighbourhood through sidewalk repairs, street trees, or cycling infrastructure. This aligns with Kingston's strategic objectives of prioritizing active transportation and building quality streets.

Recommendation #4: Integrate TDM Measures within City Policies and Processes

Developers should prepare TDM reports as part of the development application process. The City should also aim to implement new legislative and zoning requirements that require new developments to implement building-based TDM plans. This aligns with Council's priorities of demonstrating leadership on climate action and improving walkability, roads, and transportation.

Recommendation #5: Develop a Parking Enforcement Plan

Kingston should determine an attainable "capture" rate within Parking Area 1 that is based upon current parking enforcement policies and practices. Capture rates can vary based upon the size of the enforcement area, the method of patrol, and number of enforcement officers.

Recommendation #6: Prepare a Comprehensive Citywide Parking Management Strategy

This document will contain all relevant information pertaining to parking within Kingston. The preparation of a Parking Management Strategy is an efficient way for the City to combine all current and future parking-related documents into one report.

Conclusion

Maximum ratios and a combination of parking management strategies are recommended to help address different components of Kingston's parking system to increase efficiency, reduce demand, and provide support. This approach allows the City to improve the management of its existing parking supply while also reducing automobile dependency and promoting sustainable transportation. Alignment with Kingston's other goals helps set a clear vision, which can make regulations more easily understood by the public and more acceptable to City Council. It is believed that the recommendations outlined in this report align with the City's strategic objectives and will contribute to Kingston's goal of becoming Canada's most sustainable city.