

PARKING MATTERS

EXECUTIVE SUMMARY

PARKING MASTERPLAN AND IMPLEMENTATION STRATEGY

City of Mississauga Final Report (May 2019)









EXECUTIVE SUMMARY

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INTRODUCTION

As Mississauga continues to grow, the way we move is expected to change.

The goal of Parking Matters is twofold:

To improve the efficiency and effectiveness of current and future resources dedicated to parking

and to use parking as a tool to realize the city building objectives set out in the City's planning documents.

Approximately 15%

of total land use is estimated to be dedicated to off street parking facilities and access driveways.

In 2011, approximately 85% of trips into, out of or around Mississauga were taken in a car.

As of 2016, households in Mississauga owned an average of 1.6 cars per household. The number of cars per household varies significantly from neighbourhood to neighbourhood with some having less than 1 car per household and others having more than 3. Sizes of homes and driveways vary from

neighbourhood to neighbourhood as well, resulting in very different types and levels of parking pressures in different parts of the city.

As Mississauga is mostly "built out," city builders need to look for innovative ways to use land more effectively to get the most out of each property and new development site and maintain affordability. It is important for the City to look at how existing resources dedicated to parking and transportation can be used more efficiently and effectively. Parking policy can no longer be a one-size fits all approach.

The cost of providing "free" parking in the City needs to be recognized and reconsidered.





Parking Vision

The Parking Vision Statement was developed through extensive consultation with the public and relevant City divisions.



The Vision for Parking in the City is that parking policies and practices should consider parking as a valuable resource that influences city building, transportation choices and economic development, and provides an important service for residents and businesses. The City should strive to ensure a balance between park ing provision and management to maximize support for Mississauga as a multi-modal city. Finally, the City should strive to ensure a fair distribution of parking costs.

It is recommended that: the City require all future parking policy and practices to be strategically consistent with the vision statement.





Developing the Parking Masterplan

The Parking Master Plan was undertaken in three phases:

 Phase 1 involved significant public consultation and an exploration of parking best practices.

Phase 1
Discovery

Phase 2
Develop & Test Policies

 Phase 2 centered on presenting draft recommendations. Phase developed and refined the draft recommendations into the final Parking Master Plan.

Phase 3
Define & Approve
Policies

Consultation and Engagement

The Parking Master Plan was completed through a comprehensive process that gathered input and feedback from across the City. The stakeholders consisted of three groups, they were:

Decision-Makers

 Mayor and Members of Council, the City's Leadership Team, and the project Steering Committee.

Parking Providers

•Representatives responsible for and or who are interested in the provision and or management of public or private parking facilities in Mississauga. This group included anyone in the business of parking

Parking Users

•Homeowners, tenants, business-owners or business representatives, community groups, visitors, and engaged collaborators. This group included anyone who uses, relies on, or has an interest in parking in Mississauga.

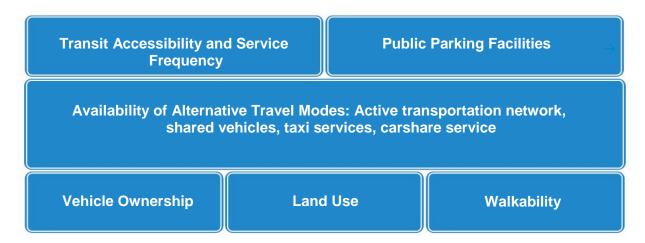






PARKING PRECINCTS IN MISSISSAUGA

A precinct approach to parking management in the City of Mississauga was considered by examining the following six criteria:



The review shows a wide range of conditions that impact parking demand, supply, and management. A precinct approach for Mississauga was further considered through a review of local precedents in Toronto, Vaughan, Kitchener, Hamilton, Richmond Hill, Oakville, and Newmarket.

Four parking precinct areas are recommended for Mississauga. Exhibit E-1 shows the locations of the four parking precinct policy areas. It should be noted that the Precincts and their boundaries are preliminary, and subject to zoning by-law review. The delineations of Major Transit Station Areas (MTSAs) are subject to the MTSAs Study.







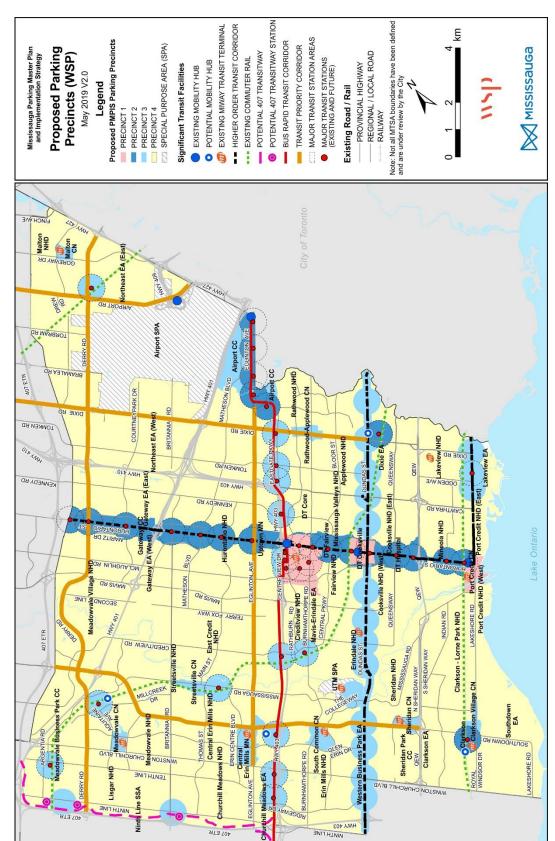


Exhibit E-1 Locations of Proposed Precinct Policy Aras for Parking







For parking management in the City, it is recommended that the City:

- Adopt a precinct based approach to parking provision and management, each precinct with its own approach.
- Adopt the following goals and parking management principles for each precinct:

Precinct One

- Goal: Lowest parking requirements, highest level of parking management strategies, and consideration of parking maximums for most land uses.
- Parking Management Principle: A Price Responsive approach that makes maximum use of pricing to build, own, operate, and supply municipal parking.

Precinct Two

- Goal: Second lowest parking requirements, high level of parking management strategies and consideration of parking maximums for certain land uses.
- Parking Management Principle: An Area Management approach that makes maximum use of area-based solutions such as pricing and shared parking.

Precinct Three

- Goal: Appropriate minimum parking requirements that are higher than those for Precinct One and Precinct Two.
- A phased approach for reducing parking requirements in proposed transit corridors based on committed funding
- Parking Management Principle: A Site-Focused approach that optimizes parking at appropriate sites and within the City's parking goals.

Precinct Four

- Goal: Appropriate minimum parking requirements (among the highest in the City.)
- Parking Management Principle: A Site-Focused approach that optimizes parking at appropriate sites and within the City's parking goals.
- Review the City's current Zoning By-law to determine appropriate parking requirements for each precinct and ensure that the parking requirements align with this study's criteria for defining and establishing the precinct areas.
- Conduct regular reviews (not more than five years apart) to assess whether precinct boundaries are still appropriate or need to be changed.







PARKING REGULATIONS

The Zoning By-law

Motor Vehicle Parking Standards

The current Mississauga Zoning By-Law (225-2007) specifies parking supply requirements for 14 residential land use categories and 51 non-residential land and mixed-use developments.

To realize the City's strategic goal of a transit-oriented city, the City's existing minimum parking requirements should be reduced and replaced with a policy designed to manage parking demand more deliberately. Emerging transportation patterns and trends (electric and autonomous vehicles, carsharing, etc.) also needs careful consideration.

- The City should consider establishing maximum parking requirements in all Precincts as part of a future, detailed Zoning By-law review.
- The City should require any development proponent who wishes to exceed the maximum parking requirement to provide a justification report that considers at least the following questions:
 - Is the proposed development consistent with the City's overall parking and transportation planning objectives?
 - Has the applicant demonstrated a need for additional on-site parking beyond short-term or event driven levels?
 - Has the applicant considered and discussed with City staff the viability of providing the additional parking in a shared format such as a public parking lot?
 - Has the applicant considered a phasing plan to remove surplus parking in the future, for example, as part of a later development phase or because of regular monitoring?
 - Is the applicant able to implement a design (higher ceilings, wider separation joints, or pre-fab structure that can be dismantled) that would allow for the conversion or retrofit of the parking spaces in future, if necessary?







- When precincts are introduced:
 - Precinct One should have the lowest parking requirements and parking maximums should be considered for most Precinct One land uses.
 - Precinct Two could have the same or slightly higher parking requirements than Precinct One and parking maximums should be considered for some Precinct Two land uses.
 - Precinct Three's minimum parking requirements should be higher than those of Precinct One and Two, but should not be the highest in the City.
 - Precinct Four includes areas where parking demand could be particularly high due to limited transit service and inadequate Active Transportation infrastructure. This situation may continue for some time. Precinct Four's minimum parking requirements should be appropriate and may be the highest in the City.

Shared Parking

The Zoning By-law provides a shared use parking formula that considers parking occupancy for each activity at different times of the day and week.

- The City's future Zoning By-law review should examine current shared parking categories to determine whether additional land uses and land use categories should be added.
- The City should review current parking occupancy percentages to determine whether the percentages are appropriate.







Payment-In-Lieu of Parking Program

Mississauga's payment-in-lieu of parking program (PIL) is applicable where municipal parking is provided. The City evaluates PIL applications based on the appropriateness of the proposed development and the adequacy of municipal parking to offset the proposed parking deficiency. Where municipal parking is unavailable, the City evaluates its interest in providing municipal parking in the future and the viability of interim parking solutions.

The recommendations for the City's PIL program are as follows:

- The City should conduct a review of the PIL program, led by the Planning and Building Department and in partnership with the Municipal Parking Group, and Corporate Services.
- The City should continue considering applications not meeting the Zoning Bylaw requirements to be candidates for a contribution to the PIL program.
- The City should review the PIL program to address the following:
 - Find an appropriate methodology to address land value in consultation with Corporate Services.
 - Incorporate current benchmark costs for surface, structure, and below ground parking facilities including concrete and pre-fab construction options and applied City wide.
- The City should conduct a review to determine the impact of expanding the PIL program to include residential uses, in coordination with other aspects of the parking system.
- The City's should conduct regular updates of parking fees to incorporate current construction costs and land costs.
- The City's PIL program should be is administered and managed by the Municipal Parking group in consultation with the Planning & Building Department.





PARKING FACILITIES

On-Street Parking

On-Street Parking Time Restrictions

Parking is allowed on City roads for a maximum of 5 hours unless otherwise posted. Parking on-street is not permitted overnight between 2 am and 6 am. Vehicles with accessible parking permits can park on-street for a maximum of 24 hours. In certain locations, 15-hour on-street parking is permitted including overnight hours. On Statutory Holidays, parking is allowed between 8:00am and midnight without time restriction.

The recommendations for on-street parking time restrictions are as follows:

 The City should continue to allow on-street parking between 8 am and midnight beyond the 5-hour limit on all Statutory Holidays.

Resident Petition Program

Residents can request changes to parking restrictions through a petition program. The program requires a petition showing support from at least 66 percent of affected homeowners, a technical review by the City, and approval by the Ward Councillor. Typical requests are to extend the 5-hour parking limit, to allow lower driveway boulevard parking, and to reduce local parking prohibitions.

Lower Driveway Boulevard Parking

Traffic By-law 555-00 prohibits parking on the city boulevard (area between the property line or sidewalk and the road), and any obstruction of the sidewalk from pedestrian traffic. While lower driveway boulevard parking (LDBP) is permitted in some locations, there are many residents who park in the boulevard illegally.

It is recommended that based on a review of best practices and safety requirements:

- The City should continue to offer LDBP but without the need for a resident's petition. LDBP can help to alleviate the shortages of residential parking in some areas.
- The City should develop a communications campaign to explain LDBP and the expectations on residents to park properly.

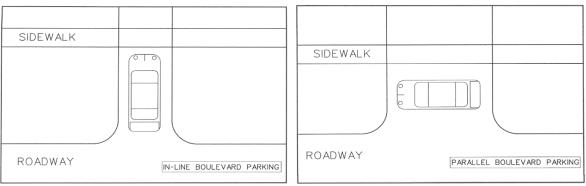






Exhibit E-2 shows correct and safe in-line and parallel vehicle positions in a lower driveway boulevard.

Exhibit E-2 - Correct In-line and Parallel Parking in a Lower Boulevard



Source: Resident Parking Petition, City of Mississauga

On-Street Parking Permits

There are currently five types of on-street parking permits offered by the City, including residential short-term temporary, residential long-term, commercial blanket, residential blanket, and carshare permits.

- The City should develop a digital on-street parking permit program (for processing, operating and enforcing the program).
- The City should replace the various parking permits currently available by implementing a comprehensive digital parking permit system for residents and businesses.
- The City should undertake further study and review to specify the most appropriate types of permit to adopt.
- The City should implement an on-street overnight parking program in residential areas to work in alignment with the review of the Zoning By-law requirements and the potential reductions in certain precincts (e.g. parking requirement for Secondary Units could be waived in areas within the overnight permit parking program, or where boulevard parking is feasible).





Paid On-Street Parking

There are certain locations within the City where paid on-street parking is in force. The existing paid parking program is administered through pay-and-display machines installed along the curb.

It is recommended that:

- The City should continue to monitor on-street parking occupancy in Precincts One, Two and Three (specifically Port Credit, the Downtown, Streetsville, Clarkson, and Cooksville).
- To improve the management of parking demand and to encourage turnover in areas that charge for parking, the City should increase parking fees when parking occupancy exceeds 85% during peak hours in these areas. See Best Practices review for this study.
- To improve the management of parking demand and to encourage turnover in areas that do not charge for parking, the City should consider introducing a parking fees when parking occupancy exceeds 50% during peak hours.

Curbside Management

Competing for curb space with on-street parking are vehicles that are loading and unloading goods and deliveries as well as an increase in passenger pick-ups and drop-offs attributable to the popularity of ride-sharing in the City.

- The City should consider a Curbside Management Study to:
 - Frame the discussion regarding on-street parking.
 - Determine appropriate locations.
 - Determine curbside priorities for each proposed Precinct area.
- Where appropriate, and subject to coordination with other City
 Departments, the Municipal Parking Section should identify and or approve locations where on-street pick-up and drop-off areas are permitted.
- Loading regulation should be reviewed in conjunction with parking regulations as part of the zoning by-law review.







Off-Street Parking Lots

Municipal Parking Lots

Mississauga currently operates 3 below grade off-street paid garages and 4 paid off-street surface lots. The City also provides public parking at municipally owned recreational, institutional, and transit facilities. As the need for additional public parking increases the City will need to find options for providing additional parking capacity.

Some free City public parking facilities are located close to paid City public parking facilities. As the City begins the process of right-sizing, it will be increasingly important for the City to manage its parking supply consistently and logically.

- The City should develop a parking demand forecasting model that can be used on an ongoing basis for all of Precinct One and Precinct Two. The model should incorporate the following data:
 - Existing parking utilization
 - Development applications
 - Area Master Plans
 - Long-term population and employment forecasts
- The City should review the feasibility of removing overnight parking prohibitions at all its off-street parking facilities, and should determine the capital and or operational changes required to implement the change.
- The City's Municipal Parking unit should work with other City business units, such as Parks and Forestry and Mississauga Transitway, to align long-term plans for parking expansion and to find opportunities for shared public parking.
- The City should consider opportunities to partner with the private sector where appropriate and beneficial for providing parking or developing shared parking arrangements.
- The City's Zoning By-law review should consider the role and policies of the City's Downtown CIP and how the CIP will work with the City's PIL policy.
- The Zoning By-law Review should recommend any CIP or PIL modifications required to ensure that the CIP and PIL complement the Precinct approach.
- Where parking is needed in some areas the City should consider partnerships with the private sector to deliver a portion or all the parking spaces.







- The City should implement parking controls, including paid parking if necessary, at free City parking facilities when one or a combination of the following is true:
 - There is an existing market for paid parking in the area
 - Transit is available
 - Utilization during peak periods exceeds 85 percent

Parking Lot Design

In line with the City's commitment to Vision Zero, safety is always a top priority. Slips, trips and falls in parking facilities have proven to be significant causes of injury. In addition, people often perceive parking garages as unsafe environments due to their lack of visibility and layouts.

It is recommended that:

 The City should develop safety standards and best practices for pedestrian andbicycle safety in parking facilities.





GOVERNANCE

Governance refers to how the City makes decisions related to parking. Decisions about parking and service delivery are currently made within a horizontally integrated organizational structure.

A well-designed governance structure will result in the alignment of policies, operations and financial objectives to meet the needs of the citizens the City serves. The current organizational structure served the City well in the past, but is no longer appropriate. Based on an evaluation of five parking organization models used in North America, benchmarking against comparable Canadian cities, consideration of parking governance principles.

It is recommended that:

 The City adopt a vertically integrated organizational model that includes a parking division.

Mississauga's Parking Division

It is recommended that:

- The City approve and support the new governance model of establishing a new Parking Division over time within the Transportation & Works Department.
- The City creates a "Parking Service Area" which would have its own business plan.

The new parking division should have four groups: Parking Operations, Parking Planning, Parking Enforcement, and Business Development.









The Parking Operations Section would:

- Coordinate off-street municipal parking lots, on-street paid parking, winter maintenance for City provided parking, digital products, and policies for other City provided parking.
- Manage parking considerations, both short-term and long-term.
- Administer the Traffic By-law and on-street overnight permits.
- Maintain Electric Vehicle (EV) charging infrastructure

The Parking Planning Section would:

- Provide input into the Mississauga Official Plan (MOP) parking policies.
- Develop parking design guidelines.
- Provide parking comments for Zoning By-law Amendments and Committee of Adjustment applications. Review driveway widening applications.
- Provide input to Zoning By-law parking policies.
- Review parking studies and lead area specific parking strategies.
- Coordinate Payment-in-Lieu (PIL), Development Charges (DCs) and parking elements of Community Improvement Plans (CIPs).
- Assist with accessibility policies and standards.







Parking Enforcement would:

- Enforce parking and traffic by-laws.
- Administer the APS (Administrative Penalty System).
- Coordinate enforcement technology upgrades.

The Business Development Section would:

- Undertake business analysis.
- Handle data management and visualization.
- Be responsible for business planning.
- Support 311 municipal phone-in service with parking customer service.
- Be responsible for parking communications, marketing and outreach.
- Be responsible for finance in cooperation with the City's Finance division.

Private Sector Partnerships

It is recommended that:

 The City continue to support joint ventures and partnerships with private sector companies to optimize the use of land and infrastructure and meet public needs for parking spaces in the most appropriate way.

Decision-Making

City Council will continue to be the final decision-making body on policy issues such as strategic goals, capital and operating budgets for existing and future expanded parking services and facilities, and parking fees. Important aspects of the reporting and decision-making process include Standing Committee of Council, Citizens-Business Advisory Committee and the Committee of Adjustment.

It is recommended that:

The City Council and applicable standing committees of Council continue to be the decision-making body associated with parking policies including, for example, fee setting, expansion of parking facilities, joint ventures with the private sector, new technologies, and integrating TDM with parking and other policy issues.







FINANCE

Finance refers to how current and future municipal parking operations are currently funded and financed. The City's main revenue streams for parking are on-street and off-street paid parking, parking fines, PIL, and development charges. The cost of providing "free" parking in the City should also be considered.

Future Funding Options

- As the City's paid parking market matures, the City undertake an analysis of the benefits and costs of reducing the daily and monthly parking discount and that the City aligns its parking passes with surrounding commercial monthly parking fees.
- The City increase its parking fees at regular intervals to keep pace with inflation.
- Over the long-term, the City's fee-setting strategy evolve to meet specific parking utilization objectives. The strategy could include setting parking fees that vary by location, time of day, and special event type.
- The City support its April 2018 TDM Strategy pricing parking measure by setting monthly parking fees higher than the MiWay adult monthly transit pass fee.
- The City formalize the approach to financing and funding Municipal Parking operations. The policy should adhere to the following principles:
 - Revenue-generating parking activities should be funded through parking revenues (separate cost centre) as much as possible.
 - Non-revenue parking activities should be funded by the property tax base (separate cost centre).
- Municipal Parking fees should reflect market conditions (supply and demand).
- The City use annual parking ticket revenue to cover all costs of enforcement including parking ticket processing. Any surplus revenue should placed into the reserve account to pay for new capital projects (For example, surface lots, parking garage structures and necessary equipment).







- The City undertake an analysis to determine the benefits and costs of implementing dynamic or escalating on-street pricing in each of the Precincts.
- The City undertake an analysis of the benefits and costs of reducing the daily and monthly parking discount to align the City's parking passes with surrounding commercial monthly parking fees.
- The existing six geographically-delineated parking reserve accounts are merged into one capital reserve account.

New Parking Structures

It is recommended that:

 A formalized process for determining the business case associated with any parking capital project be adopted.

GO Parking

It is recommended that:

 The City work with Metrolinx to develop a strategy to reduce all-day free parking at GO Transit rail and bus stations.

Special Considerations

There are instances where exceptions to paid parking can lead to a loss of revenue. For example, the CarShare vehicle permits at \$65.00 per month and patio spaces in high traffic areas limit the potential parking revenues that can be generated from the same space.

It is recommended that:

 The City develop a strategy to accurately account for lost revenue where special considerations are given in paid parking locations







TECHNOLOGY AND INNOVATION

Payment Methods

As technology continues to evolve related to parking, cities should monitor these new tools for parking management and apply them where they can be most effective. As new technologies have become available the City has updated its network to improve the user experience but also to be able to track parking usage more accurately. Currently, the City uses pay and display machines, multi-visit payment cards, and annual and monthly permits. New payment methods were considered, including pay-by-license-plate (PBLP), gated pay-on-foot (POF), pay-by-phone, and pay-by-online permit.

- The City should undertake a business case analysis to determine the feasibility and benefits of upgrading its Pay and Display machines and enforcement technology to a PBLP system.
- The City should consider a Pay-On-Foot (POF) system possibly combined with LPR technology at locations that require additional parking controls.
 Depending on circumstances, POF may offer a better solution than Pay and Display and or PBLP.
- The City should consider POF for any new parking structures planned for the Downtown Core.
- The City should consider converting the City Hall parking garage from Pay and Display machines to a POF system.
- When installing POF systems, the City should consider systems with the latest technologies available including access control for monthly parking permit holders and property management staff proximity cards, wireless transponders, and mobility phones.
- The City should consider the business case for advanced technology such as LPR for future installations.
- The City should offer the convenience of Pay-By-Phone at all the City's on-street and off-street parking facilities.
- The City should use a phased approach to introduce Pay-By-Phone.









Parking Enforcement Technology

Recent advances in parking enforcement technology have made new approaches economic even for smaller municipalities to use License Plate Recognition (LPR) for parking enforcement.

A pilot project in underway in the City's Parking Enforcement group to test License Plate Recognition technology and Digital Chalking equipment. This will eliminate the need for manual chalking, offers immediate recognition of vehicles plates and a review of existing permit data. Digital Chalking will allow officers to enforce the City's parking bylaws more efficiently and allowing for reliable, digital tracking during inclement weather conditions. In addition to efficiencies of a single pilot vehicle for Chalking duties is an anticipated 25 per cent improvement to process productivity.







Parking Data Collection and Management

Fundamental to any discussion of policy change is an understanding of existing conditions such that strengths can be built upon and weaknesses remediated or removed. A review of Mississauga's Municipal Parking's existing data collection and storage methods identified several gaps and opportunities for improvement.

It is recommended that:

- The City's Municipal Parking organization should develop an annual parking data collection program and create a comprehensive database of City-provided parking supply and utilization. The data collected should be openly available online. This work will begin the process of creating the back-end infrastructure required to provide parking and utilization information to the end-user.
- The City should consolidate existing data files regarding privately-owned parking and add information at key locations of interest across the municipality (For example at Intensification Areas). The data collected could be used to develop a more comprehensive understanding of existing parking supply for development and long-range planning purposes.



 Future data collection and storage methods for parking enforcement should link infraction location data, and the data should be mapped.







Digital Signage and Wayfinding

Parking guidance systems are useful in large areas where alternative parking locations are available close to destinations. They typically include a website and mobile app that provide real-time, map-based information on parking availability and pricing.

- The City should consider implementing a parking guidance system in locations such as Precinct 1 where there are large municipal parking facilities and large private parking facilities. The system should combine digital variable message signs and wayfinding signs to direct drivers to available parking.
- The signs should be placed at Precinct entry points, key decision-making points within the Precinct, and access points to each parking facility.
- Wayfinding signs should be provided for parking locations where real-time information is unavailable.
- All City parking guidance technology in all parking facilities should be compatible to ease integration into the City's information system.

- The parking guidance system should include a website with an associated app that makes parking availability and pricing data available to customers.
- The City should promote the use of the online tools, particularly during peak demand periods such as special events. The webbased tools may be developed by the City or through a private partnership.
- The City should regularly:

 Review the geographical areas where a parking guidance system is implemented.
 - Assess the parking guidance technology available and consider advances in technology and best practices.





IMPLEMENTATION PLAN AND MONITORING STRATEGY

To ensure the vision of the Parking Masterplan is achieved, it is critical to develop a robust and comprehensive Implementation Plan and corresponding Monitoring Program to guide next steps — day to day work completed by staff, decision making by Council and input / support provided by stakeholders and partners.

To support implementation of the parking master plan a comprehensive implementation plan has been prepared. A summary of the implementation plan is provided in Exhibit E-3. The plan is documented in a summary table which is intended to be used by City staff to guide next steps.

Exhibit E-3 Implementation Plan Summary

Short-Term	Medium-Term	Long-Term
Adopt a Precinct Approach to Parking requirements	PIL Program Review	Update the Parking Master Plan
Zoning By-Law Update	Improve public communication on parking projects and policies	Review the impacts of Autonomous Vehicles on parking
Transformation of existing Parking Permits to Digital Platform	Curbside Management Study	Full build out of a vertically integrated Parking Division within the City structure
Implementation of Lower Driveway Boulevard Parking City-wide	Develop Share-Your-Parking program	
Develop new funding options and opportunities around parking provision and maintenance	Develop business case and implement pay-by-phone	
	Implement digital signage and wayfinding	

