Paid Parking Management Strategy

Table of Contents

Introduction

The City of St. John’s has the responsibility of managing parking for the benefit of residents, visitors, and businesses. An effectively managed system of public parking can contribute to a healthy, vibrant, and economically strong community. However, public parking represents a significant cost to the City. Initial capital costs for construction, maintenance of the spaces, snow clearing, and enforcement add up to a considerable ongoing investment of public funds. The City must therefore take care to properly manage public parking resources. Payment for parking is a key management tool for this public resource.

The City of St. John's uses a combination of parking meters and parking permits to manage parking resources in high demand areas. Short-term parking is used to create parking opportunities for business customers and short stay visitors. Long-term parking provides opportunities for area employees, residents, and longer stay visitors. Paid parking receipts contribute to the City’s general revenue and is reinvested into reserve funds earmarked for area and parking improvements.

Many different parking management initiatives are currently in progress. These include:

- updates to our meter hardware
- updates to permit management system
- exploration of solutions for meter theft and damage
- consideration of a cashless parking system
- transition to E-Ticketing based parking enforcement
- exploration of improved payment methods such as pay-by-phone applications
- exploration of more effective paid parking policies
- updates to City policies and By-Laws

Many of these are highly interrelated and generally as we take action on each, there will be opportunities that are opened for others – and doors that are closed.

In this Paid Parking Management Strategy the required updates to the City’s current paid parking management system are discussed. Coordination is considered in this strategy to improve system integration, effectiveness, efficiency, and security. This report details the current paid parking system and required upgrades and reviews the history and financial implications of ongoing parking meter theft. This report provides recommendations for taking the next steps to make the transition to a cashless paid parking system, upgrade existing paid parking hardware and enforcement, partner with a pay-by-phone application provider, implementing variable parking pricing, managing paid parking areas, communicating with the general public, and updating City Policies and By-Laws to support the proposed strategy.

Current System

1. Parking Meters

The City operates a total of 1,167 single-space parking meters[3] in areas of the Downtown, St. Clare's Mercy Hospital, Harvey Road, Rawlins Cross, Churchill Square, and Westerland Road as shown in Figure 1. All City parking meters are in effect between 8:00 AM and 6:00 PM, Monday to Friday excepting Shop Closing holidays[4] and other holidays as may be determined by the City. A standard rate of 25 cents for 10 minutes or $1.50 per hour is in place for all meters, regardless of meter location.

The physical hardware used to manage paid parking in the City must be maintained and updated as meters age and technology allows better service to the public. In January 2014 the City replaced all of its parking meters with digital meter devices. The manufacturer of these meters has announced that the model currently used by the City will be discontinued as of January 1, 2018 and that replacement meters will only be available until inventory stock runs out which is expected by the end of 2018. As a result of this product discontinuation the City is now in a position where it needs to plan for updated meter hardware moving forward.

Figure 1: Metered Parking Space Locations

[3] http://www.stjohns.ca/living-st-johns/streets-traffic-and-parking/parking-meters

[4] http://assembly.nl.ca/Legislation/sr/statutes/s15.htm

The City's current single-space meter hardware is mounted individually or in groups of two, three, or four meters. Each meter is locked onto the meter housing/post and a single meter unit is required to control each parking space.

Table 1 presents a summary of key features of the model of single-space hardware currently used by the City as well as a number of identified disadvantages.

In addition to the noted hardware features, Table 2 presents a summary of the inherent benefits and disadvantages associated with the current traditional single-space parking meter system.

MacKay Guardian SOLO meter model currently used by the City of St. John's

Table 1: Existing Single-Space Hardware Features and Disadvantages

Features	Disadvantages
Accepts cash (coin), credit card, and ParkCard payment options	Individual hardware is required to control each parking space
Powered by a solar rechargeable lithium-ion battery pack	Not Wi-Fi enabled or compatible with 3G/4G networks
Large backlit digital screen	Susceptible to theft/vandalism
Wireless cellular radio communication interface that supports remote monitoring and programming	
Compatible with existing meter housings	
Proven reliable operation in St. John's climate	

Table 2: Single-Space Parking Meter System Benefits and Disadvantages

Benefits	Disadvantages
Familiar to most users, publically accepted	Coin collection requires accessing each meter vault
Simple enforcement process	Snow clearing
In the event of equipment malfunction, control of only one space is lost	Susceptible to theft/vandalism
No specialized/additional numbering or signage of parking spaces is required	

2. Enforcement

In February 2016, City Council directed city staff to take the next steps and proceed with a Request for Proposals (RFP) to implement electronic ticketing for parking violations (E-Ticketing). In January of 2017 the E-Ticketing RFP was reviewed and updated.

Section 12 of the Provincial Offences Act[5] allows for the use of electronic tickets. However, the procurement process has been on hold as the City works with Traffic Court to understand how the E-Ticketing process will work should a ticket issued be contested to the court.

The recommendation in this Strategy to upgrade the City's back-end paid parking management system (REC - 25) will greatly reduce the burden of a stand alone commitment to digitize the parking enforcement system. As such, a transition to E-Ticketing is expected to follow the implementation of an upgraded back-end management system rather than through an individual procurement process.

3. Parking by Permit

Commercial Parking Permits

The City currently manages 101 off-street and 102 on-street parking spaces in the downtown area designated for commercial parking. Permits for these spaces are issued on a monthly basis and can be renewed on an ongoing basis. Permit parking has historically been in high demand and people have experienced long waits for available spaces. Unfortunately, our current permit system does not allow a waitlist to be maintained and in past periods of high demand there would be line ups at the Citizen Service Desk of citizens hoping to purchase a commercial permit that had not been renewed by the previous holder.

The six commercial permit parking areas that the City operates are shown in Figure 2.

Figure 2: Commercial Permit Parking Areas

[5] http://www.assembly.nl.ca/legislation/sr/statutes/p31-1.htm#12_

In October of 2015, Council approved a three-year parking permit fee increase as summarized in Table 3 to reflect comparable parking rates in the downtown. These rates represented fair market value at the time they were developed. Since that time the local economy and market demands have changed and demand in some areas has dropped considerably.

Monthly permit rates are currently set at the 2017 levels identified in Table 3, regardless of demand in each commercial parking location. In March of 2018 parking permit fees are scheduled to be increased. However, in early 2017 there was a noticeable drop in permit demand and at present there are vacancies in commercial parking areas that have previously been 100% occupied with additional demand.

Table 3: 2016 – 2018 Parking by Permit Fee Increase

Year	Monthly Permit Fees	
	On-Street	Off-Street
2015 (Original)	$60 plus HST	$120 plus HST
March 2016	$93 plus HST	$137 plus HST
March 2017	$127 plus HST	$153 plus HST
March 2018	$160 plus HST	$170 plus HST

Given the experienced drop in permit parking demand coupled with an anticipated increase in commercial vacancies in the downtown area, additional consideration to the uniform increase of permit parking fees is warranted. Recommendations on pricing are made in the section on Commercial Permit Parking below.

Currently, commercial permits are undersold which results in a budgetary shortfall on expected revenue. By cancelling the scheduled increase and making other adjustments it is expected that the demand for these permits will be raised and the overall effect will be a net increase in revenue relative to the existing undersold condition.

Staff would then be able to decrease or increase commercial permit prices in response to market demand. For example, demand is currently low for the Water Street East parking area and prices could be lowered. Conversely, demand is currently about on target with supply for the Central / Livingstone area and prices would not be adjusted for these permits. This would form a part of a broader variable pricing policy for paid parking inventory as discussed below.

In addition to approving the permit fee increase in October of 2015, Council also directed that an RFP incorporating software to manage parking permits be issued. The current permit processing and management system is labor intensive and no system exists for maintaining a waitlist. This improvement, including a proper waitlist system to track demand, will be included as part of upgrades to the Back-End Parking Management System.

Residential Permit Parking

The City manages 11 on-street residential permit parking (RPP) areas within the downtown where off-street parking is often not available. On-street parking in these areas is reserved for residents and visitors of the area and is controlled through a permitting system. Permit holders are not guaranteed a parking space or entitled to the exclusive use of an on-street parking space adjacent to their residence; rather, the intent of the program is to ensure that residents have access to a parking space within a reasonable walking distance from their home. Neither this intent nor what constitutes a "reasonable distance," are formally defined.

Residents of these areas are currently eligible for one non-transferrable residential parking permit for each vehicle registered to the address less the number of off street parking spaces available on their property. A vehicle not registered to an address in a permit area may occasionally be granted a residential permit under unique circumstances as reviewed and determined by City staff on a case-by-case basis. Those eligible for a residential permit can purchase one from the City at a cost of $15 per year. A total of 1,824 residential parking permits were issued to date in 2017.

Visitor Parking in Residential Permit Areas

The City may issue one visitor parking permit to each household in a residential permit parking area, regardless of the household's access to off-street parking. Visitor parking permits are not intended for use by residents and are only to be used for the purpose of visiting or providing a service to a household located in a residential permit area. This permit does not guarantee the availability of an on-street parking space but allows a visitor of a residence to park on-street within a one block radius of the address being visited. The visitor permit displays a full residential permit area and the only time the one block radius stipulation is enforced is in the case of citizen complaint. Residents of parking permit areas may purchase a visitor parking permit from the City at a cost of $15 per year. A total of 1,872 visitor parking permits were issued in 2017 to date.

The most common complaint the City receives regarding the RPP program is alleged misuse of visitor parking permits. There have been reports of visitor permits being used by non-visitors to park in these areas and reports of permits being resold for the use of commercial parking. The City deals with visitor permit infractions on a complaint basis but enforcement is limited as no time limit or frequency restrictions are currently placed on the use of visitor permits and the current visitor permit management system cannot track the use of these permits. Allegations of misuse are therefore very time consuming to confirm and/or enforce.

Specialized Permits

The following specialized permits are issued by the City for use in residential permit parking areas:

Service Provider Permits

The City may issue on-street parking permits to individuals/businesses that provide an in-home service – such as home care, nursing, or client visitation – to residents living in designated RPP areas. This permit allows the provider to park on-street in designated RPP areas 1 to 10 for a maximum of 3 hours. Service provider permits can be purchased by qualified providers for $250 per year or $6.00 per year if the provider is registered with a not for profit organization. Permits may be used by different vehicles associated with the same provider but are not transferrable between organizations. A total of 204 service provider permits have been issued by the City in 2017 to date.

Temporary and Contractor Permits

The City may issue a temporary on-street parking permit to residents who have recently moved into a residential parking area who have not yet had their address changed on their drivers licence and/or vehicle registration at the cost of $15 per permit. A temporary permit is generally only valid for a two-week period, at which time the resident must provide updated documentation to receive their permanent parking permit.

The City may issue up to two temporary on-street parking permits to a contractor who is doing work on a residence located in a RPP area for the duration of the construction/repair project at a cost of $25 per vehicle. The permit allows the contractor to park on-street in the designated RPP area within two blocks of the address where work is occurring for up to 30 days. Permits may be used by different vehicles associated with the same contractor company but are not transferrable between companies.

A total of approximately 420 temporary and temporary contractor permits have been issued by the City in 2017 to date.

Bed and Breakfast Parking Permits

The City may issue on-street parking permits to registered Bed and Breakfast properties located within RPP areas. The permit allows for on-street parking in the designated RPP area within one block of the Bed and Breakfast and is to be used only by guests of the Bed and Breakfast. A maximum of one permit per bedroom, up to a total of four, may be issued at a cost of $25 per permit per year. A total of 49 Bed and Breakfast permits were issued by the City for 2017 to date.

City Hall Staff Parking Permits

The City issues parking permits for the City Hall parkade to Councillors and City Staff. In 2017, a total of 437 staff parking permits have been issued to date – 228 of which were general permits and 209 of which were meter exempt permits (allow registered vehicle to park at City meters free of charge). Meter exempt permits are generally issued to staff who may be required to use and park their vehicle in metered areas as part of City business.

Skating Permits

The City may issue a skating permit to citizens participating in mid-day public skate events at Mile One Center. The permit allows participants to park on levels 3 and 4 of the City Hall parkade and is only valid from 12:00 PM to 2:00 PM, Monday to Friday on days when there is public skating at Mile One Center. This non-transferrable permit can be purchased for $10 per year and may not be used for any purpose other than that for which it is intended. The City has issued a total of 22 skating permits in 2017 to date.

Special Event Pricing

The City provides St. John's Sports and Entertainment (SJSE) with control over managing the City Hall Parkade for events held at Mile One Centre. SJSE charges a flat rate of $10 for parking on the evening of an event. No per hour rate is offered. At other times the City Hall Parkade is free for public use in the evening (except Level 2). Other commercial parking lots in downtown typically match this pricing scheme on the nights of special events. This system is a small example of Variable Parking Pricing discussed below.

Parking Meter Theft and Loss of Revenue

A persistent problem of parking meter burglary has plagued the City in recent years. Since March of 2015, over 1,000 meters have been damaged in more than 90 incidents of theft and vandalism. This criminal activity has led to loss of parking and citation revenue as well as meter hardware repair, replacement, and labour costs. By the end of 2017, these costs and losses were estimated to be in the order of $1,355,900.

Parking meter theft/vandalism results in a threefold cost to City revenue:

1. Loss of cash stolen from the meter
2. Meter hardware repair/replacement costs and associated labour cost
3. Loss of forecast parking and enforcement revenue while damaged meters are out of service

The amount of coins in a parking meter varies depending on use and collection timing. It is estimated that any given parking meter would have held approximately $20 of coins at the time of theft. Based on this, approximately $12,000 has been stolen from meters in the past two years.

Each incidence of meter theft or attempted theft results in damage to the meter hardware. In most incidents, only the locking mechanism and coin can components require replacement. However, many incidents have resulted in the intentional vandalism of the entire meter unit. Over the past two years the City has spent approximately $200,000 in hardware repair/replacement costs and another estimated $70,000 in labour costs to complete the repair work for a total cost of $270,000.

Based on Section 11 of the City's Parking Meter Regulation[6] when a meter is out of service for repair/replacement the space affected becomes a no parking area. However, common practice for enforcement of this rule is very lenient. As such, out of service meters are effectively free parking with

[6] http://www.stjohns.ca/bylaws.nsf/nwByLawNum/1541

no time restriction. Free parking when out of service is also the interpretation of Traffic Court[7]. In addition to losing paid parking revenue during this time, parking violation revenue generated through enforcement is lost. This is an example of the type of change that needs to be addressed as discussed in City Policy and By-Law Changes.

Based on parking meter revenue generated in 2016, the total projected parking meter revenue estimate for 2017 was $1,927,900. Based on this projection, the total number of metered parking spaces in the City, and the total number of days the meters are in effect, the average projected daily meter revenue is on the order of $7.00 per meter. The total possible revenue for 10 hours of occupancy is $15.

For budgeting purposes the number of parking meter violations issued for 2017 was projected to be on the order of 40,000 based on the average number of tickets issued in the past five years. Each ticket generates $21 of revenue ($30 fine less $9 of processing fees) the total projected ticketing revenue for 2017 was on the order of $840,000. Based on this projection, the total number of metered parking spaces in the City and the total number of days the meters are in effect, the average projected daily ticketing revenue is on the order of $3.00 per meter.

By late 2017, approximately 300 parking meters were out-of-service, each representing a total loss of approximately $10.00 in meter and ticketing revenue for every day they remained out-of-service. Although some of these meters were down for routine maintenance, the majority were in for repairs related to meter theft/vandalism. Prior to the theft and vandalism issue coming to the fore, the City was able to maintain a sufficient inventory of meters and parts to ensure that metered spaces did not go out of service for routine maintenance.

In order to estimate the total lost parking meter and ticketing revenue, 2017 revenue projections were compared to the actual revenue generated as summarized in Table 4.

Table 4: Projected vs Actual 2017 Parking Meter Revenue Generated

Revenue[8]	2017 Projected	2017 Actual Generated	Difference[9] (shortfall)
Parking Meter Revenue	$1,927,900	$1,137,100	($790,800)
Ticketing Revenue	$840,000	$556,900	($283,100)
Total	$2,767,900	$1,694,000	($1,073,900)

[7] City of St. John's v Gibbons

[8] all values rounded to the nearest hundred

[9] In 2015 and 2016 actual cash revenue exceed forecast cash revenue

The actual parking meter and ticketing revenue generated in 2017 was $1,073,900 or 39% less than projected. While a small portion of this revenue shortfall may be associated with decreased parking activity, the majority of the lost revenue can be directly attributed to out-of-service parking meters due to theft/vandalism.

Considering the estimated $1,073,900 in lost revenue in 2017, the $270,000 of hardware repair/replacement and labour costs, and the estimated $12,000 of stolen coins, it is estimated the City has lost over $1,355,900 in recent years as a result of meter theft/vandalism.

In addition to the significant direct cost to City revenue, parking meter theft/vandalism has serious impacts on parking turnover and adjacent development. While a meter is out of service, no time restriction can be enforced for the parking space. This results in long-term occupancy and low turnover of the unrestricted space. As metered parking spaces are concentrated in commercial areas, an out-of-service meter space means short-term parking for visitors and customers is lost.

Businesses rely on short-term metered parking to provide convenient parking for their customers. In areas of meter theft and vandalism businesses are experiencing a decline in business directly related to the lack of parking turnover. Business owners are routinely requesting the City replace the out-of-service meters as quickly as possible. The City has had to relocate operational meters from areas of lower demand to high demand commercial areas to respond to business owner's requests while damaged meters are repaired. This represents a further cost on our paid parking system that has not been quantified above.

The City has made significant effort to respond to the problem of meter theft and vandalism. Beginning in March of 2015, City staff coordinated a targeted prevention campaign that included the following attempted measures of prevention:

- Increasing meter collection from once per week to twice per week for six months;
- Retaining the services of the RNC to install alarms and conduct video surveillance at select meters in the Downtown;
- Ongoing varied scheduling of five different collection routes;
- Targeted surveillance by City staff and corporate security; and
- Development and deployment of lock reinforcement retrofits.

Over the past two years, the RNC have made six arrests for meter theft (five different individuals). This has resulted in only one conviction to date. Prosecution of the other four individuals is still pending.

The installation of the original lock protectors resulted in approximately three weeks of success followed by a significant incident of vandalism at which time some of the meters were cut off entirely from the post. After this, the people targeting meters adopted a revised break and entry method that could bypass the lock protectors rendering them ineffective.

From the beginning of October to the end of November the City tested the effectiveness of upgraded "Abloy" locks on 22 parking meters. These locks cost $40 each and, during two months of testing, 12 were targeted without a successful theft. This increased security of the meters is a promising step

towards deterring the problem and new locks for all of the City's meters have been ordered and are being installed.

Ultimately two key strategies are fundamental in curtailing issues with meter theft and vandalism:

1. Deterrence: by increasing the security of the meter, the probability of a successful theft will be reduced.
2. Reduced incentive: reducing the payout of a successful meter attack will also, over time, reduce the likelihood of additional attempts. Some efforts to do this have already been employed (such as varying collection schedules). Other such as: increasing the convenience of payment methods other than cash; and/or, reducing or eliminating the acceptance of cash as a payment method are recommended in this Strategy.

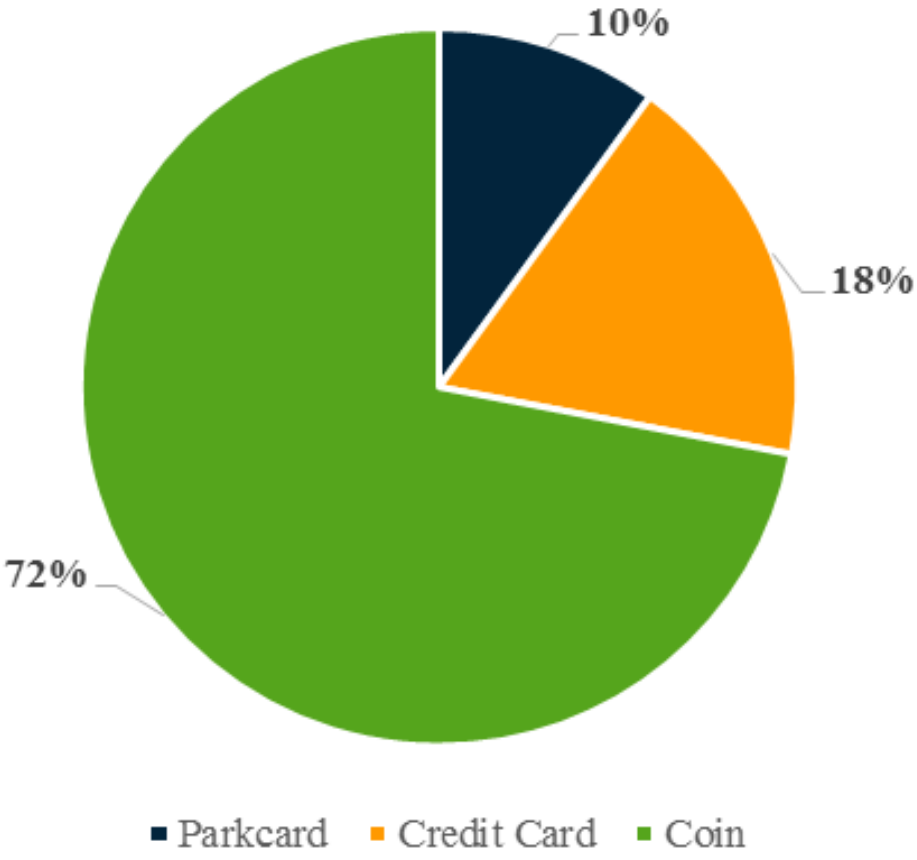
Comprehensive Paid Parking Management Strategy

1. Cashless Paid Parking System

As mentioned above it is estimated that a single space meter will have about $20 on average in it when broken into. Despite this low target value and meters being generally located in areas of good exposure, the problem of parking meter theft is persistent. As long as cash is accepted as a form of payment and stored in the meter, the parking meter will represent a target for theft.

Credit card and ParkCard cashless payment options are currently accepted at meters, however, the majority of meter payments are still made by coin. Figure 3 illustrates the percentage of the overall parking meter revenue paid through each of the three available payment methods in 2016. To date, payment data from 2017 indicates a similar segmentation by payment method for the current year.

Figure 3: 2016 Parking Meter Payment Summary



Current payment preferences can be interpreted as a proxy that reflects the relative convenience of each option, with coins being the most convenient option while credit card and ParkCard are significantly less so.

At present, City issued ParkCards must be purchased from the Access St. John's Service Center in City Hall during regular business operating hours. ParkCards can be purchased with cash,

debit, or credit for a one-time $2 service fee[10] with any balance between a $20 minimum and a $100 maximum. The current system requires users to reload card balances in person at City Hall during regular business operating hours, there is no service charge for reloading. Since 2014 the City has issued approximately 16,000 ParkCards. This represents the maximum number of ParkCards that are currently in circulation. Based on ParkCard revenues from 2014 through 2016 an average of approximately $58 in parking is paid for with each ParkCard issued.

It recognized that although the majority of people who currently use coin payment at meters likely do so out of convenience, a segment of the population that does not have access to a credit card do so out of necessity. Eliminating a coin payment option will present a barrier to this demographic and is an issue of social equity. The City should work towards minimizing this barrier and provide convenient payment options for all.

By removing coins as an accepted form of payment and providing only cashless payment options, the target of theft is eliminated. Transitioning to a cashless parking meter system would not only provide added security benefits, but an entirely digital system would also provide increased system auditing ability and eliminate cash handling costs.

REC - 01 Establish a cashless system as an end goal for paid parking in the City of St. John's and ensure the transition to a cashless system be planned and managed carefully in recognition of social equity issues raised above.

A phased approach that provides additional cashless payment options to users while improving the efficiency and convenience of the existing credit card and ParkCard payment methods is a strong starting position.

Recommendation

REC - 01 Establish a cashless system as an end goal for paid parking in the City of St. John's and ensure the transition to a cashless system be planned and managed carefully in recognition of social equity issues raised above.

2. Hardware Replacement Program and Enforcement Upgrades

The model of single-space meter hardware currently used by the City will be phased out/replaced by the manufacturer in the upcoming year. The transition to new parking meter hardware should be coordinated with the promotion of and transition to a cashless payment system.

[10] This fee was originally implemented (in combination with on card advertisements) to cover the $3.95 USD cost of each card. After a change in supplier the cards now cost $3.00 CAD each. We no longer sell advertising space on these cards and essentially subsidize their purchase by $1 per card. This is seen as a good value for the collection benefits that accrue to the City as a result of ParkCard payments.

Most parking meter hardware, including the meters currently used by the City, can be modified to include/remove the coin payment option. This gives the flexibility to trial cashless meters with the option to enable the coin payment feature of the hardware in future if required. The level of familiarity with the existing meter hardware and its acceptance of cash will ease the transition toward the recommended system.

REC - 02 Maintain status quo of allowing coin payment for existing meters in the system.

The appropriate time to make the change from cash accepting to cashless meters is as the current meters are phased out and new meter hardware is purchased.

REC - 03 Install new meters with the cash payment option disabled, in carefully targeted areas, as part of a phased trial of a cashless replacement program for new parking meter hardware.

This strategy will support the association between new meter hardware and the change to cashless payment and will help support a consistent user expectation.

REC - 04 Review the cashless rollout strategy once cashless meter hardware has been operating for a full calendar year.

Considering revenue, theft/vandalism, enforcement records, and stakeholder feedback, a recommendation will then be made to continue with the cashless hardware replacement or to change the payment options strategy.

Single-Space Meter Hardware

A traditional single-space meter, as described above, controls one parking space per meter. Some manufactures now offer updated "double-space" models of meters that can control two spaces with one meter as well as the following upgraded features:

- Accepts contactless credit card payment
- Compatible with 3G/4G networks
- Compatible with pay-by-phone platforms to display app payment information to aid enforcement

Double-Space Meter Example
MacKay mkBEACON

The City can reduce the amount of meter hardware required to manage meter spaces by transitioning where possible from the existing meter model to a double-space model.

This change would introduce another potentially confusing change to meter parking. As such making this change would need to be carefully considered. The decision on whether or not to make this transition will rest primarily on the hardware lifecycle costs of single-space vs. double-space options. Consideration must be given to the implications of cash acceptance at double-space meters. If a double-space meter is enabled to accept coins, a single coin vault must hold payment for two spaces. This requires an increased frequency of coin

collection and results in a higher value target for meter theft. Other key factors in selecting appropriate meter hardware will be usability and available features.

REC - 05 Coordinate the installation of new meter hardware with any roadway improvement projects that may arise from time to time.

Multi-Space Meter Hardware

Multi-space meter pay stations can offer increased hardware security and are a cost effective alternative to single-space meters in areas where meter parking spaces are concentrated and can operate on pay-by-space, pay-by-plate, or pay & display systems.

Pay stations offer lower per space capital costs, increased security (if accepting cash, which is not recommended), and a reduced maintenance burden.

REC - 06 Incorporate “pay stations” where determined to be most effective as part of the required hardware replacement program.

Multi-Space Meter Example
MacKay TANGO station

Multi-space meters can operate on pay-by-space, pay-by-plate, or pay & display systems:

Pay-by-Space System

In a pay-by-space system each parking space is assigned an identifying number displayed on a sign or meter that the user must enter. The enforcement officer checks to see if payment has been received and confirm duration information for each occupied space. This system does not provide the number of options to improve our parking management system as other and has implications for snow clearing and maintenance operations. It is therefore not recommended.

Pay & Display System

In a pay & display system, the user selects the duration of their parking session and pays for the time at the centralized kiosk. The user receives a printed receipt for the transaction then must return to their vehicle to display this proof of payment. The pay and display system is much more demanding from a user perspective than pay-by-plate or pay-by-space options and is therefore not recommended.

Pay-by-Plate System

In a pay-by-plate system the driver indicates the area or zone where they wish to park as well as the license plate of the vehicle to be parked when they initiate a parking session.

Enforcement officers enter/scan license plates of parked vehicles to see if payment has been received and confirm duration information for the parked vehicle. Pay-by-plate parking zones are established and parking duration and pricing information is assigned by zone. This information is provided to users through signs adjacent the parking zones.

A pay-by-plate system requires the least on street signage to communicate parking areas and it works particularly well with recommended Multi-Space Meter Pricing needs and the Pay-by-Phone Application platform.

REC - 07 Implement a pay-by-plate system for all upgraded metered areas.

REC - 08 Leverage the technology and back-end system requirements of a pay-by-plate system to improve the paid parking service the City provides.

Users wishing to park in areas controlled with multi-space meters on a pay-by-plate system enter their licence plate, select session duration, and provide payment at a centralized kiosk. In addition to offering the same payment options as single-space meters, a multi-space meter approach greatly reduces meter hardware and maintenance costs by managing any number of spaces through a small number of strategically placed multi-space kiosks.

It is noted that City issued ParkCards can continue to be used as a form of payment with the updated single-space and multi-space meters. New multi-space pay stations could also be enabled to check and reload balances onto ParkCards.

REC - 09 Use multi-space metered areas as a test bed for a Cashless Paid Parking System.

An approach that introduces cashless payment to areas that maintain some cash accepting meters will help ease the introduction of cashless parking. The following areas have been identified as excellent locations for this hybrid approach to hardware replacement:

Churchill Square

A total of 253 metered parking spaces are located in the Churchill Square area with 129 located in the portion of the central parking lot closest to Terrace on the Square and 124 located around the perimeter. In addition 124 free parking spaces are located in the remaining portion of the central parking lot. Council has recently[11] discussed the conversion of 32 of these free parking spaces to permit spaces; therefore, of the 377 total parking spaces in Churchill Square, 285 are currently – or approved to be – paid spaces while 92 spaces are free.

[11] http://www.stjohns.ca/sites/default/files/files/minutes/Police_Traffic_Minutes_March%2024%2C%202016.pdf#page=2

Churchill Square used to be the home of a Dominion grocery store. In late 2016 the City was approached by business interests enquiring after the redevelopment of the old Dominion site. They were interested in the possibility of a shared parking or permit parking arrangement with the City to support their onsite parking needs. This enquiry led to City staff reviewing the existing parking lot configuration at Churchill Square to explore reconfiguration options that would allow for a variety of alternate parking strategies such as: gated entry payment control; multi space metering; and changes to the allocation of paid/free spaces. These options were explored with an eye to reduce maintenance difficulty, reduce enforcement requirements, and offer increased paid parking options to the tenants, employees, visitors, and other users of Churchill Square.

Some of the reconfiguration options considered increased the total number of parking stalls available on the site. However, the work involved to reconfigure the site access and circulation would be costly and time consuming. As such, a major reconfiguration of the physical parking lot was taken off the table at this time. It was determined that by introducing multi-space pay-by-plate parking to Churchill Square, the City can avoid significant capital cost while still providing additional paid parking options.

REC - 10 Transition all parking spaces in Churchill Square to paid parking.

Many aspects of this change require careful consideration. This section discusses many of the details associated with this change.

This fully managed lot provides an excellent test bed to trial cashless payment and to provide the parking permit options that have been requested by some employers on the Square. To implement this change a combination of new multi-space meters and existing metered spaces are recommended.

REC - 11 Procure approximately eight multi-space pay stations to manage the central parking lot and a portion of the perimeter spaces in Churchill Square.

REC - 12 Maintain approximately 40 of the existing cash-accepting single-space meters at perimeter parking spaces adjacent to Terrace on the Square.

This combined approach will reduce the impact of a fully cashless system and maintain a familiar option to users. As the cashless system matures it may be possible to remove these remaining meters in favour of a single consistent payment system in Churchill Square.

This recommended strategy will result in the conversion of the remaining 92 free parking spaces to metered parking. This change will make paid parking in Churchill Square more equitable as all those parking will be required to pay for their space between 8am and 6pm. Once implemented there will no longer be the current situation where those arriving early are able to avail of free parking while visitors to the businesses in Churchill Square are required to pay.

As discussed in the section on Variable Parking Pricing there is a strong case to be made for adjusting the cost of parking to better respond to the demand in any given area. Currently in Churchill Square the typical parking demand sees the free spaces fill up very early in the morning and the paid spaces closest to the businesses along the perimeter see activity over the day. Many of the paid spaces that are least convenient to the businesses in Churchill Square see very little activity during the day. This indicates that there is a mismatch between demand and price in the area. Demand is very high for the free spaces while the use of the paid spaces is lower than optimal as the cost of these spaces is too high to generate demand.

From a parking management perspective the ideal price for parking in Churchill Square would be high enough to ensure that at any given time there are parking spaces available for employees and visitors. The ideal price would also be low enough to attract other users, such as those currently using the free parking. This would create a more efficient use of the lot while also minimizing parking displacement to the adjacent residential areas.

One approach to setting the price of parking in Churchill Square would be to target no change in revenue potential, effectively spreading the existing price of parking on metered spaces to all available spaces. This works out to $1.13 per hour for all spaces in the square[12] or, for cash accepting meters, this would be rounded to $1.25 per hour.

Another approach to setting the price of parking in Churchill Square would be to target no net change in revenue actually realised. To complete this calculation we must estimate the new occupancy rate for all parking in the square after changes are implemented. For the purposes of this strategy the occupancy is expected to change from the existing 3.4 hours per day to 5.4 hours per day[13]. This revenue neutral approach works out to $0.62 per hour for all spaces in the square[14] or, for cash accepting meters, this would be rounded to $0.75 per hour.

[12] Assuming the existing 285 spaces of meter parking approved for the site are occupied for one hour at the current hourly rate of $1.50, a total of $427.50 is collected in meter revenue per hour. In order to maintain this current level of meter revenue collected over all 377 spaces on site, the hourly rate must be reduced to $1.13 ($427.50 of revenue divided by 377 spaces).

[13] The existing 253 spaces returned approximately $300,000 in meter receipts over the course of 2015. At $1.50 per hour this works out to an average of 3.4 hours occupied for each meter during each of the 239 days per year that meter parking prices are in effect. If we assume the free parking is 95% occupied each day then this represents an additional 1,178 hours of parking each day (124 spaces * 95% occupied * 10 hours per “parking day”). Adding this to the existing 849 hours of parking each day (253 spaces * 3.4 hours occupied) gives us 2,027 parking hours per day over 377 spaces, or 5.4 hours occupied per day. Please note that this assumes that the number of vehicles currently parking for free will choose to park under the new paid model. While this is unlikely the exercise is useful in understanding an appropriate price.

[14] Spreading the $300,000 revenue over all 377 spaces, and assuming an occupancy of 5.4 hours per day, would reduce the required hourly charge from $1.50 to $0.62 to maintain the existing revenue levels.

There is considerable uncertainty in these estimates. In addition, it is expected to be quite delicate to manage the competing demands of parking for the broad area surrounding Churchill Square (including Churchill Park, nearby businesses, and MUN) and parking for Churchill Square business activity. As such it is very important that City staff are able to respond to parking demand by adjusting the price. This is discussed in much greater detail in the section on Magnitude and Frequency of Parking Rate Variation.

REC - 13 Set an initial base rate of $0.75 per hour for all parking in Churchill Square when transitioning to all paid parking.

Rather than setting a maximum parking duration for multi-space meters at Churchill Square a base price + long stay premium model would encourage turnover while providing a longer duration option for those who require it and are willing to pay.

REC - 14 Double the base hourly parking rate after the first four hours of parking as long stay premium pricing at multi-space meters in Churchill Square.

Effectively this creates an incentive where the first four hours parked are half the rate for the existing paid parking in Churchill Square. The maximum daily cost for parking from 8am to 6pm would be reduced from the current $15 to $12 per day under this system.

REC - 15 Maintain the current 2 hour maximum restriction on the 40 spaces in Churchill Square that will continue to operate with existing coin accepting hardware.

A number of outdoor vendors including a food truck, the Open Air Market, and a Christmas tree lot operate in the Churchill Square parking lot from time to time. No changes are proposed for these outdoor vendors.

REC - 16 Maintain existing parking arrangements with outdoor vendors regardless of changes to the paid parking system in Churchill Square.

An improved parking option for employees in Churchill Square may be necessary with the recommended change to pricing in Churchill Square. Some employees in the Square are full-time professionals who can afford a market rate parking permit. However, many employees in the Square are part time and or low wage employees who may not be able to bear the burden of a full market rate price for a parking permit. While this same mix of employees exists in other areas such as downtown, the change from relatively easy access to free parking in Churchill Square to paid parking dictates a more sensitive approach.

REC - 17 Engage with the employers in Churchill Square to determine the parking needs of employees and develop parking permit rates that are appropriate for these needs. This should include consideration for permits that vary in cost based on employment type.

REC - 18 Implement a monthly parking permit for Churchill Square, based on the engagement in REC - 17, that would be open only to those that can demonstrate proof of employment in the area defined through public engagement.

The exact nature of employee parking permits for Churchill Square would be finalized before the conversion to fully paid parking mentioned in REC - 10. It should be noted that unless individually designated spaces are provided these employee permits would operate similar to other permit areas in that no space would be guaranteed to a permit holder.

Ricketts Road

A total of 21 metered parking spaces are located along the south side of Rickett's Road in the area of the St. Clare's Mercy Hospital. It is estimated that two or three pay stations would adequately replace the existing meters.

REC - 19 Convert 21 metered parking spaces on Rickett's Road to multi-space meter hardware with the installation of multi-space pay stations.

Cathedral Street

A total of 31 metered parking spaces are located along the west side of Cathedral Street between Duckworth Street and Gower Street. It is estimated that two or three pay stations would adequately replace the existing meters.

REC - 20 Convert 31 metered parking spaces on Cathedral Street to multi-space meter hardware with the installation of multi-space pay stations.

Cavendish Square

A total of 20 metered parking spaces are located along the west side of Cavendish Square between Duckworth Street and King's Bridge Road. It is estimated that two pay stations would adequately replace the existing meters.

REC - 21 Convert 20 metered parking spaces on Cavendish Square to multi-space meter hardware with the installation of multi-space pay stations.

Multi-Space Meter Pricing

Both pricing and duration limits can be used to encourage turnover at multi-space meters. A base price + long stay premium model encourages this turnover while providing longer-duration options and eliminating the issue of Reparking.

REC - 22 Double the base hourly rate at multi-space meters to a premium long stay rate for parking beyond four hours at new multi-space meters on Rickett's Road, on Cathedral Street, and on Cavendish Square.

In areas where the standard base hourly rate of $1.50 is maintained, a premium rate of $3.00 per hour would apply after the set time limit. A person wanting to park all day (10 hours) at a multi-space meter in a four hour limit area would pay a total of $24 ($6 for the first four hours and $18 for the following six hours). This flexible approach replaces the need to set maximum parking durations by encouraging shorter parking stays through pricing.

Enforcement

The City continues to work towards updating parking enforcement operations to introduce to implement electronic ticketing for parking violations (E-Ticketing).

As the City pursues the implementation of E-Ticketing, additional updates to parking enforcement equipment must be coordinated with the recommended improvements to the current system. In conjunction with the installation of multi-space meters and the introduction of a pay-by-phone system, equipment that enables enforcement officers to verify parking payment by license plate is required. Coordinated enforcement tools for these systems will be a requirement in the tendering of the parking system upgrade.

There will be several benefits to an electronic enforcement system. However, as there is no way to electronically verify the presence of an individual vehicle the basic requirement for the Parking Enforcement Officers to complete a walked enforcement route will remain.

Cost Implications

Table 5 summarizes the approximate hardware cost to replace all of the existing single-space meter units with updated single-space, double-space and multi-space meter hardware based on estimated hardware unit costs and the estimated number of single-space and multi-space meters proposed as part of the recommended hybrid hardware replacement program.

Table 5: Estimated Parking Meter Hardware Costs

Revenue	Estimated Unit Cost	Total System Units	System Replacement Cost
Single-Space Meters	$580	76[15]	$44,080
Double-Space Meters	$750	343	$257,250
Multi-Space Meter Kiosk	$6,000	17	$102,000
		TOTAL	$403,330

Total hardware costs associated with upgrading the existing system meter hardware as per the recommended hardware replacement program are in the order of $403,330. This does not include civil work, installation, or other non-hardware costs.

Signs related to parking control will also need to be erected as new hardware and other changes are made. Costs associated with these signage changes are not included in the costs provided above.

In addition to the above hardware costs, the estimated cost of the proposed sidewalk construction along Rickett's Road is roughly $50,000.[16]

[15] Assuming single-space meters will represent 10% of meter stock not served by multi-space meters

Most providers of meter hardware that operates on a pay-by-plate system provide the required software to enable enforcement at no additional cost. Depending on system compatibility, enforcement officers may be able to run this pay-by-plate enforcement software on cell phones or tablets. Equipment such as this will need to be procured.

Recommendations

REC - 02 Maintain status quo of allowing coin payment for existing meters in the system.
REC - 03 Install new meters with the cash payment option disabled, in carefully targeted areas, as part of a phased trial of a cashless replacement program for new parking meter hardware.
REC - 04 Review the cashless rollout strategy once cashless meter hardware has been operating for a full calendar year.
REC - 05 Coordinate the installation of new meter hardware with any roadway improvement projects that may arise from time to time.
REC - 06 Incorporate "pay stations" where determined to be most effective as part of the required hardware replacement program.
REC - 07 Implement a pay-by-plate system for all upgraded metered areas.
REC - 08 Leverage the technology and back-end system requirements of a pay-by-plate system to improve the paid parking service the City provides.
REC - 09 Use multi-space metered areas as a test bed for a Cashless Paid Parking System.
REC - 10 Transition all parking spaces in Churchill Square to paid parking.
REC - 11 Procure approximately eight multi-space pay stations to manage the central parking lot and a portion of the perimeter spaces in Churchill Square.
REC - 12 Maintain approximately 40 of the existing cash-accepting single-space meters at perimeter parking spaces adjacent to Terrace on the Square.
REC - 13 Set an initial base rate of $0.75 per hour for all parking in Churchill Square when transitioning to all paid parking.
REC - 14 Double the base hourly parking rate after the first four hours of parking as long stay premium pricing at multi-space meters in Churchill Square.
REC - 15 Maintain the current 2 hour maximum restriction on the 40 spaces in Churchill Square that will continue to operate with existing coin accepting hardware.
REC - 16 Maintain existing parking arrangements with outdoor vendors regardless of changes to the paid parking system in Churchill Square.

[16] Unit cost $95/m^2 sidewalk only 100mm thick at 285m x 1.35m = $36,551.25 plus 20% contingency and 15% engineering costs. This cost does not include HST or property acquisition (if required).

REC - 17 Engage with the employers in Churchill Square to determine the parking needs of employees and develop parking permit rates that are appropriate for these needs. This should include consideration for permits that vary in cost based on employment type.

REC - 18 Implement a monthly parking permit for Churchill Square, based on the engagement in REC - 17, that would be open only to those that can demonstrate proof of employment in the area defined through public engagement.

REC - 19 Convert 21 metered parking spaces on Rickett's Road to multi-space meter hardware with the installation of multi-space pay stations.

REC - 20 Convert 31 metered parking spaces on Cathedral Street to multi-space meter hardware with the installation of multi-space pay stations.

REC - 21 Convert 20 metered parking spaces on Cavendish Square to multi-space meter hardware with the installation of multi-space pay stations.

REC - 22 Double the base hourly rate at multi-space meters to a premium long stay rate for parking beyond four hours at new multi-space meters on Rickett's Road, on Cathedral Street, and on Cavendish Square.

3. Pay-by-Phone Application

In addition to updated parking meter hardware, the City is exploring a number of initiatives to update the current paid parking system including the opportunity to introduce a "pay-by-phone" option for parking spaces. This service would be delivered by partnering with a technology/application vendor. The City would be able to offer an additional cashless payment option to citizens under this model.

REC - 23 Procure a pay-by-phone parking system that is capable of serving as the foundation for the other recommendations in this strategy.

It is noted that Memorial University (MUN) awarded a tender for a pay-by-phone mobile application in 2016 to the vendor Passport[17] and launched the payment application for parking on campus in May 2017.

System Setup

Many different providers offer smartphone applications and complimentary online platforms that allow the user to pay for parking on their smartphone. With most pay-by-phone providers, users register with an account providing basic profile information including their mobile phone number and their credit card, debit card or payment account (e.g., PayPal or Apple Pay) information. Under a pay-by-plate system as recommended above a pay-by-phone user can also record their vehicle information and prior parking locations within the smartphone application to

[17] https://passportinc.com/

allow them to prepopulate the information required for future parking sessions. This allows users to easily recall the details required to complete a pay-by-phone transaction greatly improving the convenience of this option as no visit to a meter or pay station is required.

There are two general models for pay-by-phone parking, “Start Stop” and “Start Duration”:

Start Stop

The general premise of a “Start Stop” system is that when a driver parks in an area where pay-by-phone is available, they start a parking session in their application (they “check-in”). Payment for this session continues until the driver indicates they are done parking by stopping the session on the application (they “check-out”) or until the maximum parking time permitted in the area is reached. The “Start Stop” system can allow a driver to pay only for the specific period of time during which they were parked. Unfortunately, the addition requirement of a “check-out” makes this approach a little less convenient and often times drivers will forget to end their parking session and end up being charged for the maximum parking duration regardless of actual time parked.

Start Duration

In a start duration system, when the driver initiates a parking session they also specify the duration of the session. Once this specified duration has ended, a notification is sent to the driver who has the ability to extend the session if the maximum parking time permitted in the area is not exceeded.

REC - 24 Implement a start duration model in the recommended pay-by-phone system.

It reflects the existing payment system in place at parking meters and is a familiar and accepted system. It is noted that some providers of start duration pay-by-phone systems offer a feature to municipalities that allows drivers to end a parking session before the specified duration is reached with the difference in duration refunded to the users account. The City should consider the merits and inclusion of this feature when selecting a system provider.

Back-End Parking Management System

Many of the initiatives that this Parking Management Strategy recommends require, or would greatly benefit from, an upgrade of the City’s back-end system. At present, the City tracks all commercial, residential, and visitor parking permits as well as ParkCards in house. These systems are out of date, labour intensive, and offer no integration or any online payment or management options. Collection and storage of detailed parking usage data, enforcement information, permit management, price management, and revenue details would allow City staff to more effectively and efficiently manage the City’s paid parking resource.

A significant advantage to partnering with a pay-by-phone provider is the opportunity to update the City’s back-end parking management services as part of the application back-end.

Many pay-by-phone providers offer management software with the capability of integrating the pay-by-phone platform with permit management. By partnering with a vendor that provides up to date, streamlined and integrated back-end parking payment and management software the City can coordinate critically important improvements to its current systems with the introduction of pay-by-phone technology.

REC - 25 Upgrade the City's back-end paid parking management system to serve the recommendations of this Strategy.

This approach aligns with Council's existing directive to update the existing parking permit management system while allowing for added system integration and efficiency.

Integrations and Incentives

Opportunities to integrate a pay-by-phone system with additional services may be available depending on the service provider selected. Coordination of payment for services such as Metrobus rides and parking permits may be integrated through the application in future. Depending on provider the pay-by-phone could be integrated with the MUN app for a seamlessly coordinated system. There may also be opportunities to provide incentives through the application such as transit passes to encourage alternate transportation, reduced parking rates to encourage the use of the cashless application payment option, or other initiatives to promote carpooling.

REC - 26 Explore integration and incentive opportunities available through a pay-by-phone platform.

Service Features

In addition to back-end system updates and features available to the City, pay-by-phone parking will provides users with another convenient cashless option that offers a number of features that may include:

- Alerts to user when time is about to expire;
- Remote top-up payments (as long as area maximum time is not exceeded);
- Current area parking demand/availability information;
- Notifications to users regarding snow removal parking bans; and
- Payment by text message.

Some providers also offer a payment by telephone option that allows users registered online to call a customer service agent to initiate and set up a parking session. The City should review this option with vendors and explore the opportunity to coordinate this service through 311 if it is unavailable directly through the vendor.

Pay-by-Phone Only Areas

Pay-by-phone parking can be incorporated as an additional payment option for traditional meter spaces or can be implemented as a singular payment option in a designated area to eliminate the

need for parking meter hardware altogether. This application not only streamlines payment management for the area but also eliminates the problem of parking meter theft/vandalism.

The City has an opportunity to trial the pay-by-phone payment platform in select areas as the sole payment method once the provider has been selected and the application/technology is ready to be launched. Pay-by-phone only parking areas should be tested in areas where the majority of users represent a demographic familiar with application technology or in areas that can be designated as distinct zones that accommodate longer duration parking and are in close proximity to alternative paid parking options.

REC - 27 Trial the replacement of parking meters with pay-by-phone only payment in two locations – Westerland Road and Harbour Drive – and explore coordination with MUN pay-by-phone system for Westerland Road.

Westerland Road Trial Area

Parking along Westerland Road is adjacent to the MUN main campus and services a demographic readily familiar with application technology. There are currently 12 metered parking spaces along Westerland Road between Elizabeth Avenue and Prince Philip Drive. As previously noted, pay-by-phone technology was introduced for MUN campus parking earlier this year and users parking in the area have already been exposed to the platform. For many years the lot used by MUN visitors at St. Augustine's Anglican Church has operated with a pay-by-phone option. This lot is immediately adjacent the proposed trial area on Westerland Road. Opportunities to coordinate parking on Westerland Road with the recently implemented MUN pay-by-phone system should also be explored.

Harbour Drive Trial Area

On-street parking along Harbour Drive is located in close proximity to alternative off-street commercial parking and on-street meter spaces while the majority of these on-street spaces are not directly adjacent to businesses. There are currently 136 metered parking spaces along Harbour Drive between Water Street and Job's Cove. Harbour Drive is also a distinct, relatively localized area that can be designated as a recognizable zone to implement a pay-by-phone only area. Given the high concentration of on-street parking in this area, the removal of meter control along Harbour Drive would result in significant hardware and maintenance cost savings for the City. In addition, paid parking spaces would remain active and generating revenue through the winter. In the past the meters may have become snow covered and unenforceable at times during the winter months.

An approach similar to that described for multi-space meter pricing above, would provide improved parking options.

REC - 28 Operate pay-by-phone only areas with a base price + premium long stay model rather than a set maximum parking duration.

REC - 29 Set the base price duration, for the purposes of the base price + premium long stay model, to four hours on Westerland Road and to three hours on Harbour Drive

The 4-hour base rate duration set for Westerland Road is consistent with the 4-hour maximum currently in place at those meters. The 3-hour base rate duration set for Harbour Drive represents an increase from the existing 2-hour maximum currently in place. This increase responds to feedback from area businesses that the current 2-hour restriction does not allow enough time for their customers to shop downtown. A 3-hour base rate will give additional time for these users to park at the current rate.

The City's current process of bagging parking meters to indicate temporary parking bans will have to be adapted for pay-by-phone only areas – as well as multi space metered areas – to a method of signage and application alerts to notify users of temporary bans.

Designating certain areas as pay-by-phone only may not prove to be successful. It limits the payment options of users and may be viewed as inequitable. Despite this it is a very important aspect of testing the viability of different payment options to trial systems such as this.

REC - 30 Review these pay-by-phone only areas after a one year trial period to determine if pay-by-phone only is a viable payment scheme.

At the end of the trial, the City will review revenue and enforcement records as well as stakeholder feedback to determine if meter hardware should be reintroduced or if the pay-by-phone only areas should be made permanent and existing meter posts/housings should be removed.

Cost Implications

Pay-by-phone providers typically operate with a zero-cost implication for the municipality. In general, the services chargers the user the standard parking price set by the City plus a service or convince fee that goes directly to the vendor operating the system. Depending on the provider, this fee may be charged to the user as an upfront or ongoing subscription fee or as a small premium for each transaction. This pricing model allows the City to offer an additional convenient payment option to the user with no direct cost to the municipality.

The revenues that a vendor receives from these convenience fees typically cover the cost of setting up the system for the City as well as providing and installing all on-street signage associated with the pay-by-phone areas. Most vendors will also allow trial periods at the outset of establishing a new system to help demonstrate the benefits of the system and identify any risks. While there may be no direct cost to the City to implement pay-by-phone application,

additional fees may be associated with the development/implementation of an updated back-end system to facilitate other recommendations such as an updated permit management system.

Recommendations

REC - 23 Procure a pay-by-phone parking system that is capable of serving as the foundation for the other recommendations in this strategy.
REC - 24 Implement a start duration model in the recommended pay-by-phone system.
REC - 25 Upgrade the City's back-end paid parking management system to serve the recommendations of this Strategy.
REC - 26 Explore integration and incentive opportunities available through a pay-by-phone platform.
REC - 27 Trial the replacement of parking meters with pay-by-phone only payment in two locations – Westerland Road and Harbour Drive – and explore coordination with MUN pay-by-phone system for Westerland Road.
REC - 28 Operate pay-by-phone only areas with a base price + premium long stay model rather than a set maximum parking duration.
REC - 29 Set the base price duration, for the purposes of the base price + premium long stay model, to four hours on Westerland Road and to three hours on Harbour Drive
REC - 30 Review these pay-by-phone only areas after a one year trial period to determine if pay-by-phone only is a viable payment scheme.

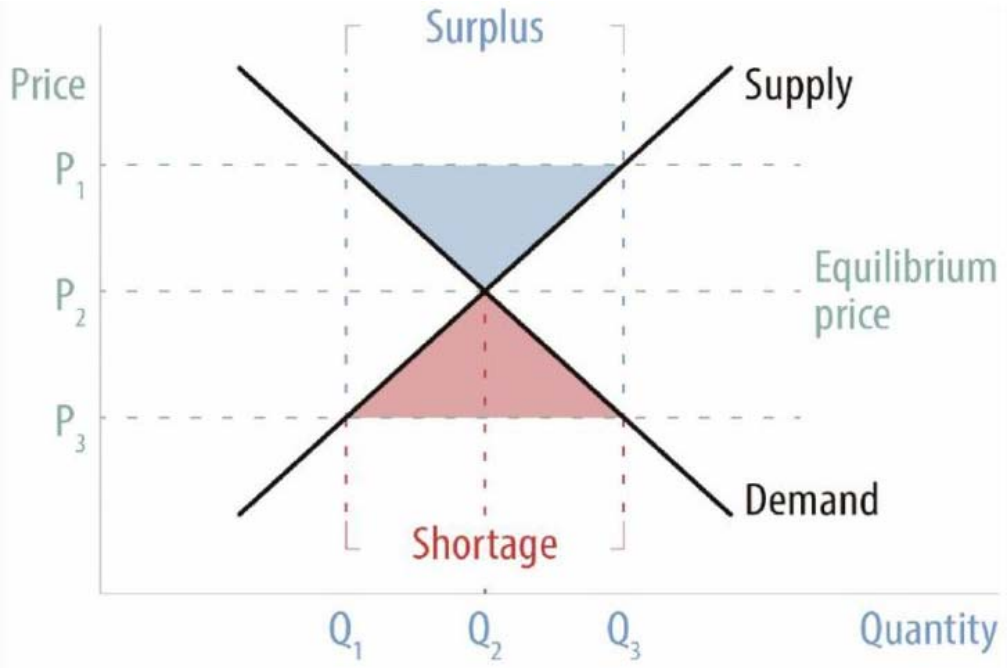
4. Variable Parking Pricing

Standard rates are currently set and fixed for all City parking meters as well as on-street and off-street commercial parking permits. This rate structure does not give any consideration to parking location or area demands.

Figure 4 shows the basic concept of supply and demand. As the price goes up (vertical axis) the demand goes down (horizontal axis). This is evident at Churchill Square where paid parking areas remain largely vacant while the vacant spaces in the same lot are completely full. When the price is too high we are left with a surplus (shaded in blue) of supply which, from the perspective of managing paid parking is a waste of municipal resources.

A similar situation occurs in the downtown. In the evenings the price is so low (free) that the demand for these spaces is very high and we see a shortage (shaded red area) reflected in the comments of downtown visitors. Other parking is available downtown in the evenings but the price of this parking typically exceeds the price the market is willing to bear.

Figure 4: Basic Supply and Demand Curve[18]



As paid parking is intended as a tool to manage parking demands, payment rates should be sensitive and reflect changes in parking demand. The goal in this context is to adjust the price of parking to near that of the equilibrium price shown in Figure 4. This means that in areas or time periods of lower demand a reduction in rates should be considered while in areas or time periods of greater demand an increase in rates should be considered in order to maintain efficient parking availability. Many municipalities at the forefront of parking management innovation are now aggressively adjusting prices on a block by block basis to create a balance between supply and demand that favours a slight surplus of parking availability. This slight surplus of available parking means that most people looking for a space can find one available quite close to their destination at any given time.

With the current fixed rate system, the City has not historically been in the practice of routinely reviewing metered parking rates and has not had the flexibility to adjust rates to respond to area specific parking demands. At the same time, the parking permit rate increases approved over two years ago may no longer be appropriate for the current area demands.

Parking rates can be a very hotly debated issue. Misunderstandings of the fundamental relationship between parking availability and parking price are common. This often leads to members of the public advocating directly against their own best interest. Developing a set policy with respect to rate setting can help insulate a good parking policy from the tides of public opinion.

[18] Adapted from - https://epthinktank.eu/2016/02/09/secular-stagnation-and-the-euro-area/supply-and-demand-curve/

REC - 31 Adopt a policy of setting time and location specific rates for parking meters and permits based on demand.

Future rate adjustments would be limited such that the impacts on the public are small at any given time and that changes are phased in over long periods of time allowing continuous review of the success of the pricing strategy employed. The parameters under which future recommended changes to the price of parking would be made are outlined below.

Magnitude and Frequency of Parking Rate Variation

Standard Metered Parking

Standard metered parking is the most basic type of paid parking currently being employed by the City. For this type of parking it is important to make changes slowly, evaluate the impact of changes before proceeding further, and minimize the impact of any individual change. Two months public notice is considered the minimum required for these changes.

REC - 32 Review standard metered parking pricing and recommend to Council adjustments of up to $0.25 per hour (increase or decrease) up to twice per calendar year. Cashless meter rates may be adjusted in multiples of $0.05.

Parking Trial Areas

As the City moves toward testing new paid parking technologies and different paid parking policies it is important that the City can respond nimbly to the experience on the ground. As such it is more important to be able to act, and react, more quickly in trial areas than in standard metered parking. Two weeks public notice is considered the minimum required for these changes.

REC - 33 Review parking trial area pricing and recommend to Council adjustments of up to $0.25 per hour (increase or decrease) up to six times per calendar year. Cashless meter rates may be adjusted in multiples of $0.05.

Commercial Permit Parking

Our commercial permit parking is typically used by employees in the areas where parking is available. There are usually a variety of parking options available to employees and therefore the market influence on commercial permits is much stronger than on other paid parking types. It is therefore important to maintain competitive permit pricing. If not, the City risks an inefficient use of parking resources which leads to unnecessary problems and complaints with respect to parking issues.

REC - 34 Review commercial permit parking pricing and recommend to Council adjustments of up to $30.00 per month (increase or decrease) a maximum of once per calendar year.

REC - 35 Complete an initial round of price adjustments for commercial permits based on the 2017 demand as shown in Table 6.

Table 6: Initial price adjustments for Commercial Parking Permits

Commercial Permit Area		Available Spaces	Permits Active	Recommended Adjustment	March 2018 Price
Central / Livingstone	On Street	35	35	Cancel Increase	$127 +HST
Queen's Road		9	3	Cancel Increase	$127 +HST
Water Street East		46	7	Reduce by $28	$99 +HST
Gower Street		8	8	Cancel Increase	$127 +HST
Plymouth Road		12	0	Reduce by $28	$99 +HST
City Hall Parkade - Level 5	Off Street	75	28[19]	Cancel Increase	$153 +HST
Prince Street Lot		20	11	Cancel Increase	$153 +HST

Notification of planned adjustments to commercial permit pricing will typically be given to current permit holders and the general public two months in advance (by November 1) of the planned adjustments coming into effect (on January 1). For the initial round of adjustments (REC - 35) the notifications would be completed immediately upon adoption of this strategy to be reflected in the scheduled March 1 increases. The intent of this recommendation the goal of price adjustments on commercial permits would be to fill all available commercial permit parking spaces while minimizing the wait list for permits in these areas.

Maximum Parking Duration Limits

The maximum parking duration at a metered space in St. John's currently varies from 20 minutes to 10 hours. Most spaces that are intended to provide short-term parking opportunities and reasonable levels of parking turnover are assigned a maximum parking duration of 2 hours.

REC - 36 Delegate the authority to City staff to make changes to maximum parking duration in paid parking areas.

This would allow our parking inventory to be optimized for the specific duration needs of any given area. Although the proposed paid parking strategy does not include any such recommendations at this time, changes to maximum parking durations may be considered where appropriate in future.

Price Variation by Parking Duration

One tool that the City does not currently employ is varying the price of parking through the day based on the length of time a vehicle remains in a space. This type of system allows the City to create spaces that serve a dual role in the parking inventory. Typically the first 1 to 4 hours of parking are charged a basic parking rate similar to other meters in the area. This allows the

[19] 2017 permits for Level 5 of the City Hall Parkade have not been issued in the regular quantities as renovation of the garage has impacted availability of spaces for City employees.

metered space to serve the short term, high turnover, function typical for on street parking. Most short term meters then require a driver to move their vehicle after the maximum stay has been reached (most commonly 2-hour limit in our inventory).

Following the initial “base” parking period, a meter with pricing that varies by duration of stay would then begin charging an increased rate for the longer duration stay. This allows flexibility for those who really need to stay for a longer period of time while discouraging abuse of the system through the higher price.

With our current meter hardware and back-end technology this type of arrangement can be difficult to implement and enforce. However, the recommended hardware and system updates will allow the City to begin using this tool.

REC - 37 Adopt a policy of implementing duration based pricing where found to be appropriate as a tool to manage turnover and demand while providing flexibility to users.

This approach would be trialed at the proposed multi-space meter parking areas (see Multi-Space Meter Pricing) and pay-by-phone only areas (see Pay-by-Phone Only Areas).

Short Term Parking Incentives

Another tool that the City does not currently employ is the use of price incentives as positive reinforcement to encourage the parking behaviour, or payment behaviour, that the City would like to see. For example, if the City wished to, an incentive could be offered for payment by one or more cashless methods. This is the “carrot” approach to reducing cash in our parking system in contrast to the “stick” approach of eliminating cash options on meters.

A viable cashless incentive could be offering “first 30min free parking with cashless payment”. A duration based incentive like this can also be used to promote high turnover for parking spaces as people take advantage of the short free parking period. Incentives could be offered periodically or during an introductory period to encourage transition to the pay-by-phone app.

The easiest way to implement this type of incentive system would be through a pay-by-phone application and the associated back-end systems. The City could consider offering other payment incentives on this platform, such as deducting the cost of the application convenience fee from your total meter charge, to encourage the use of this cashless tool.

REC - 38 Adopt a policy of allowing price, stay duration, and other incentives within the paid parking system to encourage desired parking behaviour (such as cashless payment or frequent turnover).

Reparking

The current St. John's Parking Meter Regulations[20] Section 4(2) dictates that "No person shall allow a motor vehicle to remain in a metered parking space beyond the maximum period of time indicated on the face plate or digital display of the parking meter." However this regulation does not restrict a person from moving their vehicle to another adjacent parking spot, or "reparking" their vehicle. Reparking circumvents the time restrictions put in place to ensure a fair opportunity for parking to those who wish to park in the metered area.

Currently the issue of reparking is not tracked and it may be that there currently is not an issue. However, in order to properly manage our paid parking inventory, particularly in high demand areas such as downtown, the City should establish a policy on reparking that limits the area within which a vehicle is permitted to park again. This would be impractical to complete at this time due to technological limitations. However, with the recommend upgrades to the parking management back-end system and the move to pay-by-plate technology this issues can be tracked and, if needed, addressed.

REC - 39 Do not limit reparking but track it through system upgrades and, should an issue be identified, introduce a policy to limit the area and/or times within which reparking would be prohibited. This new policy would take the form of an amendment to this section of the Paid Parking Management Strategy.

Cost Implications

The stay duration and price setting tools discussed in this section demonstrate a variety of approaches to ensuring that parking is reasonably available for those who need it, in a location that is reasonably convenient to them, at a price that is fair to everyone in the City. Given the wide variety of options and the way they are intended to be customized to fit the parking needs of individual areas the precise cost implications of a variable pricing policy have not been calculated.

Adjustments to parking rates may reduce or increase revenue. Changes to these rates don't have a clear outcome before implementation as the interplay between price and demand will affect the results. The phrasing of recommendations made in this Strategy reflect a balanced approach that promotes a revenue neutral approach where possible, minimal fee increases otherwise, and allows staff to review and make adjustments to set pricing in order to accomplish this goal.

[20] http://www.stjohns.ca/bylaws.nsf/nwByLawNum/1541

Recommendations

REC - 31 Adopt a policy of setting time and location specific rates for parking meters and permits based on demand.

REC - 32 Review standard metered parking pricing and recommend to Council adjustments of up to $0.25 per hour (increase or decrease) up to twice per calendar year. Cashless meter rates may be adjusted in multiples of $0.05.

REC - 33 Review parking trial area pricing and recommend to Council adjustments of up to $0.25 per hour (increase or decrease) up to six times per calendar year. Cashless meter rates may be adjusted in multiples of $0.05.

REC - 34 Review commercial permit parking pricing and recommend to Council adjustments of up to $30.00 per month (increase or decrease) a maximum of once per calendar year.

REC - 35 Complete an initial round of price adjustments for commercial permits based on the 2017 demand as shown in Table 6.

REC - 36 Delegate the authority to City staff to make changes to maximum parking duration in paid parking areas.

REC - 37 Adopt a policy of implementing duration based pricing where found to be appropriate as a tool to manage turnover and demand while providing flexibility to users.

REC - 38 Adopt a policy of allowing price, stay duration, and other incentives within the paid parking system to encourage desired parking behaviour (such as cashless payment or frequent turnover).

REC - 39 Do not limit reparking but track it through system upgrades and, should an issue be identified, introduce a policy to limit the area and/or times within which reparking would be prohibited. This new policy would take the form of an amendment to this section of the Paid Parking Management Strategy.

5. Managing Parking in Residential Permit Parking Areas

Currently the price of a residential parking permit is $15 per year for each vehicle. A visitor permit in the Residential Permit Parking (RPP) area is also $15 per year. These nominal permit fees are so low they have no management effect on parking in residential areas.

Parking permit availability, price, and duration limits are viable tools to manage parking in the Residential Permit Parking (RPP) Areas. Unlike other paid parking managed by City, the RPP program provides a vital service for residents in areas where there are no off street parking options available. Therefore, the use of these parking management tools in RPP areas must be sensitive to both the widely varying needs of residents and the impacts that parking behaviour can have on neighbours when considered to be unfair, inequitable, or otherwise abusive of the

RPP program. The use of these management tools should support the program intent of ensuring residents have access to a parking space within a reasonable walking distance from their home while still allowing visitors of residents to park in the area.

Availability of Residential and Visitor Parking Permits

Currently the number of permits issued within RPP area are not actively controlled. Any eligible resident can pull a visitor permit and there is no limit on the number of residential permits that may be pulled[21]. The concern has been raised that the number of permits issued in any given area exceeds the available spaces to park within that area.

The City's current policy is that a residential parking permit does not guarantee anyone a space. However, the unrestricted number of permits being issued, and the lack of active management of these permits could present a problem for residents of a RPP area.

In order to assess the possibility of this issue a desktop review of parking in a sample RPP area was conducted. The area selected for review was RPP Area 3. There are currently 101 residential permits and 89 visitor permits active for Area 3. There are approximately 100 parking spaces reserved by on street signage for Area 3. In addition there are a large number of unrestricted parking spaces in the immediate vicinity of Area 3. A rough estimate shows that there are approximately 100 eligible households within RPP Area 3.

Based on these values it is obvious that if all Area 3 permitted vehicles were parking within the designated Area 3 spaces there would be no room left for visitors. Similarly, if some visitor permits were in use it is possible that there would be no designated spaces available for a residential permit holder. However, the presence of unrestricted spaces within the Area 3 geography significantly muddies the waters of this simple comparison.

The most useful conclusion that can be drawn from this is that there may be an issue with permit availability but we do not have the data available to complete a proper evaluation or quantify the potential problem.

REC - 40 Complete a study of: parking supply in the RPP areas; effects of any visitor permit changes (REC - 42); and, eligibility criteria for residential permits.

REC - 41 Bring forward a recommendation to council on how to manage the total number of RPP permits issued based on the study in REC - 40. This recommendation would take the form of an amendment to this section of the Paid Parking Management Strategy.

A policy on restricting permit availability would then be brought to Council for consideration. Although this cursory review does not provide enough specific information to make an informed recommendation regarding permit availability, it does support the need for better tracking and management of residential and visitor parking permits.

[21] Provided eligibility based on the number of vehicles registered to that address and off-street parking available at the address.

Management of Visitor Permits

The alleged abuse of our visitor parking permits is a perennial complaint from residents of RPP areas. By issuing an unrestricted permit to any registered address within a RPP area the City is unable to track the use, or abuse, of visitor permits. The small amount of enforcement that the City is able to complete is very time consuming. By charging the same permit price for visitors as residents this unregulated system also gives equal consideration and access to visitors as residents. In order to ensure visitor permits are used for their intended purpose, improvements to visitor permit management is required.

Three key variables can be used to improve the management of visitor permits. The first variable is stay duration. Ostensibly a visitor permit is intended to provide RPP area residents the ability to provide their guests with a nearby parking option. The visitor could be parking for any number of reasons including: for a short visit (e.g., a few hours in the evening); for a long visit (e.g., several weeks); or, intermittent visits over a long period (e.g., twice a week, every week). The City does not currently comment on or restrict visitor duration in any way. In our permitting records there is nothing to distinguish between a visitors permit that was used a few times in a year from a visitors permit that was used every day of the year.

The second variable is price. With a low price renewed annually there is very little barrier to use of a visitors permit. Increases in price would be expected to have little effect on usage up until the point at which a person no longer chooses to purchase a visitors permit. This type of increase in permit prices could be considered an inequitable policy that discriminates against those with a low income and is therefore not recommend. That said, there is a market value for the ability to park in an RPP area and using the price as a tool for management of visitor parking is critical.

The third variable is tracking visitor parking activity through vehicle registration. By registering a licence plate against a visitor permit it would be possible to better track usage of the permits and determine if any abuse is occurring. With the current permit system it is not feasible for the City to enforce visitors permits based on a licence plate registration process.

By combining the three variables above it is possible to develop a visitor parking permit system that allows the City to track and enforce any abuse, is equitable, and remains convenient for legitimate visitors to a RPP area.

REC - 42 Conduct a public engagement process to gather feedback on changing the current annual visitor parking permits for RPP areas and incorporate feedback into permit program changes.

Permits and Fees

The low cost of a residential parking permit and the visitor permits need to be addressed in order to properly manage the RPP program. A total of approximately 3,600 resident and visitor parking permits are issued each year at a current cost of $15 each. Therefore, approximately $54,000 of is currently recovered through permit sales. Given that the average annual cost to operate and

enforce the City's RPP areas is on the order of $100,000, the program is currently operating with a $46,000 shortfall not covered by permit revenue. In order to provide this service as revenue neutral, the price of visitor and residential permits would need to be increased by approximately $12.50 to a total of $27.50 each.

While this may seem like a large proportional increase based on the current fee, our residential permit parking fees are incredibly far below the market rate for parking. A real estate premium of $20,000 to $50,000 is not uncommon for a residential property with off street parking in the downtown compared to a similar property with no off street parking. Averaged out over 50 years of residence a $20,000 premium costs $400 per year even before maintenance is considered. It is recognized that on street parking reserved through the RPP program is not as valuable as an off-street parking space on your own property. However, the City is providing these residents with an exclusive service and spaces reserved through the RPP program have a market value to residents of these areas. Therefore, asking residents to pay $27.50 per year to cover the cost of providing the RPP program is considered to be very reasonable.

Some permit prices are currently set within By-Law and those By-Laws would need to be amended to implement the recommendations above.

Some may argue that by increasing the fees for residential and visitor parking permits we are unfairly treating residents of those areas. In fact, the City is currently taking a public resource typically available to everyone– on-street parking – and assigning it for the exclusive use of a select user group – residents in the RPP area. The cost of this services provides residents in these areas with preferential access to on-street parking near their home. This understanding supports the application of a revenue neutral user fee.

REC - 43 Move toward a policy of setting the price of the annual residential parking permit based on a revenue neutral price target based on recouping the cost to the City of administering and enforcing the program.

REC - 44 As part of developing the 2019-2022 budget, conduct public engagement to inform the process described in REC - 43.

Visitor permits should also cover the cost of administering the spaces used for visitor parking. However, there is an additional argument for pricing to be used as a parking management tool for visitor parking. Ultimately the cost of visitor parking will depend in part on the type of visitor parking permit system recommended. Both the system and the price for it will be discussed through the engagement process in REC - 42.

Changes to the visitor permits provided may not be appropriate under all circumstances and a hang tag permit issued annually may still be needed. These circumstances are typically compassionate in nature or in response to a uniquely difficult or complicated situation that a resident faces. In addition, something as simple as not having a credit card could pose a barrier for an online registration system and this can easily be compounded by other factors. Allowing City staff some flexibility in accommodating resident needs will be an important part of any changes recommended for the current visitor parking permit system.

How exactly a special circumstances accommodation may be incorporated into the visitor parking permit will be discussed through the engagement process in REC - 42.

Over time parameters may be placed around what special circumstances are considered eligible if abuse of this accommodation becomes evident. Similarly, the pricing and details for the visitor parking permit system described may need to be adjusted over time to ensure the program is operating well and any abuse is curtailed.

At this time no changes are recommended to the pricing or operation of specialized parking permits currently issued by the City. While these permits would be managed through the updated back-end system, the current definitions of intended use and pricing will remain in effect.

REC - 45 Delegate the authority to staff to make minor changes to the parking permits available, such as: application process, definitions of intended permit use, and eligibility criteria to align with and support the intent of the RPP program.

Some permit details are currently set within By-Law and those By-Laws would need to be amended to implement the recommendation above.

Cost Implications

While there are no immediate cost implications associated with the proposed recommendations regarding Managing Parking in Residential Permit Parking Areas future adjustments to permit pricing are anticipated. This is important to ensuring that residential permit parking is reasonably available for those who need it, in a location that is reasonably convenient to them, at a price that is fair. The phrasing of recommendations made in this Strategy reflect a balanced approach that promotes a revenue neutral approach where possible, minimal fee increases otherwise, and allow staff to review and propose adjustments to set pricing in order to accomplish this goal.

Recommendations

REC - 40 Complete a study of: parking supply in the RPP areas; effects of any visitor permit changes (REC - 42); and, eligibility criteria for residential permits.

REC - 41 Bring forward a recommendation to council on how to manage the total number of RPP permits issued based on the study in REC - 40. This recommendation would take the form of an amendment to this section of the Paid Parking Management Strategy.

REC - 42 Conduct a public engagement process to gather feedback on changing the current annual visitor parking permits for RPP areas and incorporate feedback into permit program changes.

REC - 43 Move toward a policy of setting the price of the annual residential parking permit based on a revenue neutral price target based on recouping the cost to the City of administering and enforcing the program.

REC - 44 As part of developing the 2019-2022 budget, conduct public engagement to inform the process described in REC - 43.

REC - 45 Delegate the authority to staff to make minor changes to the parking permits available, such as: application process, definitions of intended permit use, and eligibility criteria to align with and support the intent of the RPP program.

6. Managing Paid Parking Areas

Much of the public parking that the City maintains is done so free of charge for the end user. In some cases this is appropriate, however, in areas of high parking demand it is more appropriate to manage the available parking to ensure that the end users who need to park in a particular area have an option available to them. This can be done through introducing paid parking to areas that currently are not covered.

The Residential Permit Parking (RPP) program is one way that new areas enter the paid parking inventory and the City follows a relatively simple process to designate new RPP areas. When the City receives a request for a new RPP area by an interested resident the intent and operations of the program are explained. If the resident is still interested, the existing RPP area that the new area would be added to is identified and a survey of the affected residences is completed. If the results of the surveyed residents indicate a majority (approximately 60%) in favour, addition of the new area to the RPP program is approved and implemented. However, there is not currently a process to identify and implement new commercial parking areas or new metered areas[22].

REC - 46 Expand the currently delegated authority to staff to introduce paid parking in areas of high parking demand that would benefit from managed parking.

Parklettes

As part of the Water Street Refresh project the City received feedback from stakeholders that Water Street should incorporate the flexibility to develop parklettes in on-street parking spaces adjacent to their businesses.[23] A parklette, or sidewalk patio / street patio, can include features important to the adjacent business such as seating, tables, bicycle parking, planters, or other attractive features that enhance the street.

[22] The St. John's Parking Meter Regulations delegate authority for meter locations to staff (see Section 3). However, permit areas are not covered.

[23] "What We Heard" document for Water Street Refresh https://www.engagestjohns.ca/707/documents/2279

Figure 5: Example of a Parklette

A program by which a local business, not just on Water Street, could lease on-street parking for parklettes would contribute to enhancing the public space and creating a more vibrant community. Some key questions that would need to be explored as part of developing a parklette program include: who will be eligible; what will the cost be; what physical requirements will parklettes need to meet; will the number of parklettes on a block be limited; and, what uses will be permitted within a parklette.

REC - 47 Conduct an engagement process to determine the appropriate parameters for a parklette program and develop the necessary policy and tools to implement such a program.

Downtown Off-Peak Parking Management

The downtown core currently experiences very high parking demands outside of regular business hours, specifically during daytime hours on Saturdays and Sundays as well as evening hours on Thursdays, Fridays and Saturdays. These evening hours are already recognized as being particularly busy in the area of George Street by the road closures in place there for the overnight period.

Introducing off-peak paid parking in the downtown would encourage the use of off-street parking for longer visits to the downtown, increase on-street parking turnover for businesses on busy weekends, and increase on-street parking availability for downtown visitors. This could be especially important to the businesses on Water Street during the upcoming Water Street Infrastructure Project[24]. During this time there will be a reduction in available on street parking and adjusting the price is an effective tool to promote on-street parking availability.

[24] https://www.engagestjohns.ca/water-street-infrastructure-project

REC - 48 Conduct a public engagement process to discuss the concept and introduction of off-peak pricing to select existing metered spaces in the downtown.

On-street spaces in commercial areas have high demand and comparable high market value as they are conveniently located directly adjacent to area businesses. Figure 6 shows an initial concept of where off-peak paid parking is likely to have the most beneficial effect. If implemented, a lower than normal off-peak rate would be appropriate for these areas. This would reduce the impact of the change on downtown visitors while still encouraging parking turnover to provide convenient parking and is sensitive to the business community. If implemented, meters that are affected by these off-peak rates would receive a clear identifying marker (such as a supplementary sticker) that identifies them as being in operation during off peak periods.

Figure 6: Conceptual Off-Peak Meter Area

Currently the most benefit to paid off-peak parking is likely to occur during the day (8am to 6pm) on Saturday. It is recognized that there is benefit to considering off-peak meter operations during busy evenings and on Sundays. The periods during which a change such as this would be in effect would form part of the engagement process recommended in REC - 48.

Introducing off-peak paid parking would represent a small step in the direction of more appropriate management of the public resource that is our on-street parking downtown. By applying off-peak parking rates only to the highest demand streets within downtown we would also ensure that the parking demand is better distributed through the downtown core.

REC - 49 Revise this section of the report based on the engagement process conducted in REC - 48 and implement any required changes to metered parking.

New Rickett's Road Paid Parking Area

There are approximately 33 free parking spaces along the south side of Rickett's Road between St. Clare Avenue and Buckmaster's Circle. These spaces primarily provide parking to people destined to St. Clare's Mercy Hospital and are in very high demand.

REC - 50 Introduce approximately 33 multi-space metered parking stalls along the south side of Rickett's Road between St. Clare Avenue and Buckmaster's Circle operating with a standard base hourly rate of $1.50 for the first four hours and a premium rate of $3.00 per each additional hour.

This would require the installation of two or three multi-space payment kiosks and the construction of approximately 285 metres of sidewalk along the south side of the roadway extending between existing sidewalk along St. Clare Avenue and existing sidewalk north of Buckmaster's Circle.

Most other parking in the immediate area of the St. Clare's is either metered or controlled by lot permits managed by Eastern Health. By introducing additional short-term meters to this area the City will open additional parking inventory to visitors of St. Clare's. Turnover of these spaces will contribute to the availability of parking in the area throughout the day. Currently this area is used mostly by long term parkers. These people will be inconvenienced by this change, however, long term parkers are generally better able to travel slightly longer distances to find acceptable parking. The majority of on-street parking in the area of St. Clare's Mercy Hospital is already tightly controlled by signed restrictions, metering, or residential permit parking.

City Funded Off-Street Parking

The City has invested significant public dollars into structured off-street parking in the downtown. The additional 461 public spaces provided at 351 Water and Metro Park (on Duckworth Street at Bell Street) cost the public approximately $9,000,000 (9 million dollars) to construct.

The agreement to construct these spaces shared the financial responsibility and risk of the project between the City and the private garage operator. The City covered a portion of the capital costs of construction as a public investment in downtown parking and the private operator covered a portion of the cost based on expected future revenue from the parking. This revenue expectation was based on the agreement that managing the price of parking in the garages would fall to the operator as part of their overall portfolio.

As the perception of the lack of parking in the downtown continues it will be important to consider whether there is a true physical shortage or simply a lack of parking available at a price the market is willing to bear.

REC - 51 Retain parking management control over any public use parking supply developed, in whole or in part, by the City.

Recommendations:

REC - 46 Expand the currently delegated authority to staff to introduce paid parking in areas of high parking demand that would benefit from managed parking.

REC - 47 Conduct an engagement process to determine the appropriate parameters for a parklette program and develop the necessary policy and tools to implement such a program.

REC - 48 Conduct a public engagement process to discuss the concept and introduction of off-peak pricing to select existing metered spaces in the downtown.

REC - 49 Revise this section of the report based on the engagement process conducted in REC - 48 and implement any required changes to metered parking.

REC - 50 Introduce approximately 33 multi-space metered parking stalls along the south side of Rickett's Road between St. Clare Avenue and Buckmaster's Circle operating with a standard base hourly rate of $1.50 for the first four hours and a premium rate of $3.00 per each additional hour.

REC - 51 Retain parking management control over any public use parking supply developed, in whole or in part, by the City.

7. Policy and Communications

City Policy and By-Law Changes

Many City Policies and By-Laws are currently out of date and need to be updated. Additional changes will be required to reflect the recommendations of this Strategy.

REC - 52 Update City By-Laws and Policies as required to support the recommendations of this Paid Parking Management Strategy.

Affected policies and By-Laws include:

- Organization - Retention Schedules - City Issued Traffic Tickets
  http://www.stjohns.ca/policies.nsf/nwPolicyNum/01-02-01
- Parking & Traffic - Parking - Parking Meter Exemption Permits
  http://www.stjohns.ca/policies.nsf/nwPolicyNum/07-01-02
- Parking & Traffic - Parking - Cancellation of Parking Tickets
  http://www.stjohns.ca/policies.nsf/nwPolicyNum/07-01-01
- Commercial Vehicle Parking By-Law
  http://www.stjohns.ca/bylaws.nsf/nwByLawNum/1350
- Parking Meter Regulations
  http://www.stjohns.ca/bylaws.nsf/nwByLawNum/1541

- Residential Parking Area By-Law
  http://www.stjohns.ca/bylaws.nsf/nwByLawNum/1440
- Ticketing Amendment By-Law
  http://www.stjohns.ca/bylaws.nsf/nwByLawNum/1368

As mentioned above, one example of an updated by-lay would be to adjust the rules concerning out of order meters.

REC - 53 Allow free parking in metered spaces that are out of service for any reason, other than being designated a no parking zone, but retain the maximum parking duration applicable to the area as an enforceable restriction.

Another example policy that should be reviewed is the Downtown Parking Standard contained within the St. John's Development Regulations[25]. This review should consider how parking requirements in the downtown interact with the paid parking inventory available (and constructed since the regulations were enacted). The review should further consider allowing a more flexible approach to parking requirements and/or parking relief in the downtown to facilitate high quality development and business activity in this important area of the City. This review may also be considered as part of a more holistic review of parking requirements in the City's Development Regulations.

REC - 54 Review Downtown Parking Standards contained within the City's Development Regulations to consider more flexibility.

Delegated Authority

Some recommendations in this strategy delegate the authority to implement changes in parking management to staff. The goal of this delegated authority is to allow staff to act and react more quickly in developing a well-managed paid parking system for the City. In these items no authority over prices are delegated to staff. Delegation of authority only covers minor changes to meter duration and parking permit details as well as an expanded authority to identify the locations that paid parking should be implemented.

Delegated authority should, in no way, be interpreted by staff, present or future, as carte-blanch to make any and all changes. This authority is intended to facilitate relatively minor tweaks and optimizations to the paid parking system. It is not intended to make wholesale implementation changes, make policy changes, or commit to large financial obligations.

The desired outcome of the delegated authority recommendations is to establish a clear division between parking strategy and implementation. Council should set the overall strategy for managing this public resource and this Paid Parking Management Strategy is intended to provide

[25] Section 9.1.2(2) of the 1994 Development Regulations and Section 8.6 of the 2017 Draft Development Regulations

Council with that opportunity. Minor operational decisions required in order to best realize the overall strategy are, through this document, intended to be delegated to staff.

This approach also means that it is not directly the choice of Council in cases when an unpopular decision needs to be made. This won't necessarily reduce public complaints but will allow the City to rely on an established strategy as guiding changes rather than a specific Council vote.

As changes are planned through this delegated authority they will be communicated to Council through Information Notes. Changes that are public facing will also have a communication campaign planned in advance of implementation.

Long Term Parking Management

This Paid Parking Management Strategy brings together many existing By-Laws, policies, practices, issues, opportunities, and industry best practice. The recommendations are expected to be implemented over several years and many of the impacts that these changes will have are not precisely know. For this reason there is significant flexibility built into the strategy to allow staff to act and react quickly in key areas to adjust the implementation of this strategy for the benefit of the residents of St. John's. In addition to this ability to adjust course it is also important to consider how the overall strategy is working from time to time.

REC - 55 Review the Paid Parking Management Strategy every five years to ensure the content and recommendations remain relevant and continue to align with City vision.

In general, changes to the City's Paid Parking Management Strategy should be approved by Council and take the form of an amendment to the corresponding section of this document.

Public Engagement and Communications

Communication with citizens is critical to the success of the proposed parking changes. The City should be upfront with the public with a transparent accounting of the high costs associated with parking meter theft and the rationale behind the proposed changes.

The recommendations in this Strategy will be realized through a multi-year phasing in of various policies, technologies, hardware, processes, pricing, and other changes. Some of these will be internal to the City and the general public is not likely to have much interest. However, many of the recommendations will result in clear changes on the ground in areas of paid parking. Each of these changes will need to be preceded and accompanied by a clear communication plan.

REC - 56 Develop a communications plan that informs residents of each change to the existing paid parking system as they occur and provides information to the public on the added features and operation of paid parking system and any new technology and hardware introduced.

In addition to clearly communicating changes as they are implemented there are a few recommendations (REC - 17, REC - 42, REC - 47, REC - 48) to conduct a public engagement program as a precursor to implementing a particular change.

REC - 57 Develop a public engagement strategy for each of the recommendations in this Strategy that are identified for further public discussion. This strategy must include a plan for how the input received will be incorporated into the resulting recommendations and decisions.

Cost Implications

Each communication campaign and engagement process will require significant staff effort and marketing expenses. The cost of each will be assessed as these projects are brought to council in advance of implementation.

Recommendations

REC - 52 Update City By-Laws and Policies as required to support the recommendations of this Paid Parking Management Strategy.

REC - 53 Allow free parking in metered spaces that are out of service for any reason, other than being designated a no parking zone, but retain the maximum parking duration applicable to the area as an enforceable restriction.

REC - 54 Review Downtown Parking Standards contained within the City's Development Regulations to consider more flexibility.

REC - 55 Review the Paid Parking Management Strategy every five years to ensure the content and recommendations remain relevant and continue to align with City vision.

REC - 56 Develop a communications plan that informs residents of each change to the existing paid parking system as they occur and provides information to the public on the added features and operation of paid parking system and any new technology and hardware introduced.

REC - 57 Develop a public engagement strategy for each of the recommendations in this Strategy that are identified for further public discussion. This strategy must include a plan for how the input received will be incorporated into the resulting recommendations and decisions.

8. Summary of Recommendations

Recommendation		Type	Strategic Value (Consequences of non-adoption)	Timeline / Dependencies
REC - 01	Establish a cashless system as an end goal for paid parking in the City of St. John's and ensure the transition to a cashless system be planned and managed carefully in recognition of social equity issues raised above.	Strategic Policy	Critical (main tool in response to theft is eliminated)	Ongoing
REC - 02	Maintain status quo of allowing coin payment for existing meters in the system.	Operational Policy	Moderate (less user friendly system)	Ongoing
REC - 03	Install new meters with the cash payment option disabled, in carefully targeted areas, as part of a phased trial of a cashless replacement program for new parking meter hardware.	Action	Critical (main tool in response to theft is eliminated)	Following REC - 23
REC - 04	Review the cashless rollout strategy once cashless meter hardware has been operating for a full calendar year.	Follow Up	High (no feedback on success/failure)	REC - 10 + 1 year
REC - 05	Coordinate the installation of new meter hardware with any roadway improvement projects that may arise from time to time.	Operational Policy	Low (missed opportunities / potential waste)	Occasional
REC - 06	Incorporate "pay stations" where determined to be most effective as part of the required hardware replacement program.	Operational Policy	High (system inefficiencies)	As rollout occurs following trials REC - 04 and REC - 30
REC - 07	Implement a pay-by-plate system for all upgraded metered areas.	Strategic Policy	Critical (many other RECs not possible)	With REC - 23
REC - 08	Leverage the technology and back-end system requirements of a pay-by-plate system to improve the paid parking service the City provides.	Strategic Policy	Critical (many other RECs not possible)	With REC - 23
REC - 09	Use multi-space metered areas as a test bed for a Cashless	Operational	High (less effective	With REC - 10

	Recommendation	Type	Strategic Value (Consequences of non-adoption)	Timeline / Dependencies
	Paid Parking System.	Policy	testing of cashless)	
REC - 10	Transition all parking spaces in Churchill Square to paid parking.	Strategic Policy	Critical (many other RECs not possible)	Follows REC - 11 and REC - 17
REC - 11	Procure approximately eight multi-space pay stations to manage the central parking lot and a portion of the perimeter spaces in Churchill Square.	Action	High (many other RECs much more difficult)	Follows REC - 23
REC - 12	Maintain approximately 40 of the existing cash-accepting single-space meters at perimeter parking spaces adjacent to Terrace on the Square.	Operational Policy	High (more negative impact on users)	With REC - 10
REC - 13	Set an initial base rate of $0.75 per hour for all parking in Churchill Square when transitioning to all paid parking.	Price Setting	Critical (poor value vs impact balance)	With REC - 10
REC - 14	Double the base hourly parking rate after the first four hours of parking as long stay premium pricing at multi-space meters in Churchill Square.	Price Setting	Critical (no turnover management)	With REC - 10
REC - 15	Maintain the current 2 hour maximum restriction on the 40 spaces in Churchill Square that will continue to operate with existing coin accepting hardware.	Operational Policy	Moderate (more impact on users)	With REC - 10
REC - 16	Maintain existing parking arrangements with outdoor vendors regardless of changes to the paid parking system in Churchill Square.	Strategic Policy	Low (complaints)	With REC - 10
REC - 17	Engage with the employers in Churchill Square to determine the parking needs of employees and develop parking permit rates that are appropriate for these needs. This should include consideration for permits that vary in cost based on employment type.	Action - Engagement	Critical (no parking option tailored to employees)	As soon as concurrent with REC - 23 (first key step)
REC - 18	Implement a monthly parking permit for Churchill Square, based on the engagement in REC - 17, that would be open	Strategic Policy	Critical (no parking option tailored to	With REC - 10 after REC - 17

	Recommendation	Type	Strategic Value (Consequences of non-adoption)	Timeline / Dependencies
	only to those that can demonstrate proof of employment in the area defined through public engagement.		employees)	
REC - 19	Convert 21 metered parking spaces on Rickett's Road to multi-space meter hardware with the installation of multi-space pay stations.	Action	High (reduced trial data)	Anytime following REC - 23
REC - 20	Convert 31 metered parking spaces on Cathedral Street to multi-space meter hardware with the installation of multi-space pay stations.	Action	High (reduced trial data)	Anytime following REC - 23
REC - 21	Convert 20 metered parking spaces on Cavendish Square to multi-space meter hardware with the installation of multi-space pay stations.	Action	High (reduced trial data)	Anytime following REC - 23
REC - 22	Double the base hourly rate at multi-space meters to a premium long stay rate for parking beyond four hours at new multi-space meters on Rickett's Road, on Cathedral Street, and on Cavendish Square.	Price Setting	High (no turnover management)	With REC - 19, REC - 20, REC - 21
REC - 23	Procure a pay-by-phone parking system that is capable of serving as the foundation for the other recommendations in this strategy.	Action	Critical (many other RECs not possible)	First key step
REC - 24	Implement a start duration model in the recommended pay-by-phone system.	Strategic Policy	Moderate (system inefficiencies)	With REC - 23
REC - 25	Upgrade the City's back-end paid parking management system to serve the recommendations of this Strategy.	Strategic Policy	Critical (many other RECs not possible)	With REC - 23
REC - 26	Explore integration and incentive opportunities available through a pay-by-phone platform.	Action - Study	Low (less positive user experience)	Anytime following REC - 23
REC - 27	Trial the replacement of parking meters with pay-by-phone only payment in two locations – Westerland Road and Harbour Drive – and explore coordination with MUN pay-by-	Action	Low (no testing data for this configuration)	Anytime following REC - 23

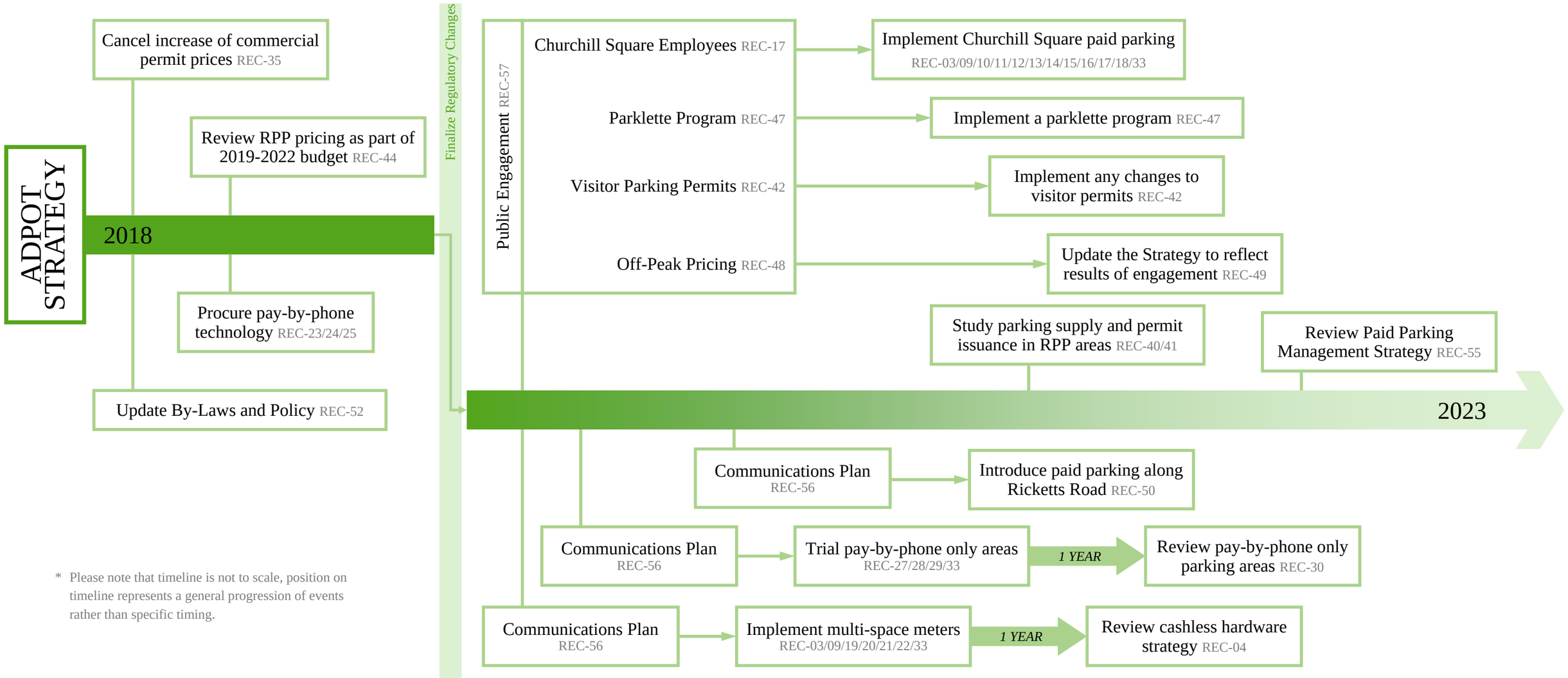
	Recommendation	Type	Strategic Value (Consequences of non-adoption)	Timeline / Dependencies
	phone system for Westerland Road.			
REC - 28	Operate pay-by-phone only areas with a base price + premium long stay model rather than a set maximum parking duration.	Price Setting	Moderate (no turnover management)	With REC - 27
REC - 29	Set the base price duration, for the purposes of the base price + premium long stay model, to four hours on Westerland Road and to three hours on Harbour Drive	Price Setting	Moderate (no turnover management)	With REC - 27
REC - 30	Review these pay-by-phone only areas after a one year trial period to determine if pay-by-phone only is a viable payment scheme.	Follow Up	High (no feedback on success/failure)	REC - 27 + 1 year
REC - 31	Adopt a policy of setting time and location specific rates for parking meters and permits based on demand.	Strategic Policy	Critical (violates paid parking fundamentals)	Ongoing
REC - 32	Review standard metered parking pricing and recommend to Council adjustments of up to $0.25 per hour (increase or decrease) up to twice per calendar year. Cashless meter rates may be adjusted in multiples of $0.05.	Price Setting	Critical (violates paid parking fundamentals)	Annual review
REC - 33	Review parking trial area pricing and recommend to Council adjustments of up to $0.25 per hour (increase or decrease) up to six times per calendar year. Cashless meter rates may be adjusted in multiples of $0.05.	Price Setting	Critical (trial periods much less effective)	Ongoing review duringREC - 10, REC - 19, REC - 20, REC - 21, REC - 27
REC - 34	Review commercial permit parking pricing and recommend to Council adjustments of up to $30.00 per month (increase or decrease) a maximum of once per calendar year.	Price Setting	Critical (violates paid parking fundamentals)	Annual review
REC - 35	Complete an initial round of price adjustments for commercial permits based on the 2017 demand as shown in Table 6.	Action	Low (complaints)	Immediate
REC - 36	Delegate the authority to City staff to make changes to maximum parking duration in paid parking areas.	Delegation	Low (system inefficiencies)	Ongoing

Recommendation		Type	Strategic Value (Consequences of non-adoption)	Timeline / Dependencies
REC - 37	Adopt a policy of implementing duration based pricing where found to be appropriate as a tool to manage turnover and demand while providing flexibility to users.	Strategic Policy	High (system inefficiencies)	Ongoing
REC - 38	Adopt a policy of allowing price, stay duration, and other incentives within the paid parking system to encourage desired parking behaviour (such as cashless payment or frequent turnover).	Strategic Policy	Moderate (less positive user experience)	Ongoing
REC - 39	Do not limit reparking but track it through system upgrades and, should an issue be identified, introduce a policy to limit the area and/or times within which reparking would be prohibited. This new policy would take the form of an amendment to this section of the Paid Parking Management Strategy.	Action - Study	Low (issue remains unquantified)	Ongoing following REC - 23
REC - 40	Complete a study of: parking supply in the RPP areas; effects of any visitor permit changes (REC - 42); and, eligibility criteria for residential permits.	Action - Study	Critical (no information to guide policy)	Following REC - 42
REC - 41	Bring forward a recommendation to council on how to manage the total number of RPP permits issued based on the study in REC - 40. This recommendation would take the form of an amendment to this section of the Paid Parking Management Strategy.	Action	High (public concerns related to RPP use not addressed)	Following REC - 40
REC - 42	Conduct a public engagement process to gather feedback on changing the current annual visitor parking permits for RPP areas and incorporate feedback into permit program changes.	Action - Engagement	Critical (no feedback to develop permit program)	As soon as concurrent with REC - 23 (first key step)
REC - 43	Move toward a policy of setting the price of the annual residential parking permit based on a revenue neutral price target based on recouping the cost to the City of administering	Price Setting	High (program continues to require operatational subsidy)	Anytime following REC - 23

	Recommendation	Type	Strategic Value (Consequences of non-adoption)	Timeline / Dependencies
	and enforcing the program.			
REC - 44	As part of developing the 2019-2022 budget, conduct public engagement to inform the process described in REC - 43.	Action - Engagement	High (no feedback on price adjustments)	Tied to 2019-2022 Budget development
REC - 45	Delegate the authority to staff to make minor changes to the parking permits available, such as: application process, definitions of intended permit use, and eligibility criteria to align with and support the intent of the RPP program.	Delegation	Moderate (system inefficiencies in program)	Ongoing
REC - 46	Expand the currently delegated authority to staff to introduce paid parking in areas of high parking demand that would benefit from managed parking.	Delegation	Moderate (system inefficiencies)	Ongoing
REC - 47	Conduct an engagement process to determine the appropriate parameters for a parklette program and develop the necessary policy and tools to implement such a program.	Action - Engagement	Low (system improvement not made)	As soon as concurrent with REC - 23 (first key step)
REC - 48	Conduct a public engagement process to discuss the concept and introduction of off-peak pricing to select existing metered spaces in the downtown.	Action - Engagement	Low (continued parking management inefficiency in off-peak)	As soon as concurrent with REC - 23 (first key step)
REC - 49	Revise this section of the report based on the engagement process conducted in REC - 48 and implement any required changes to metered parking.	Action	Low (engagement results not reflected in strategy)	Following REC - 48
REC - 50	Introduce approximately 33 multi-space metered parking stalls along the south side of Rickett's Road between St. Clare Avenue and Buckmaster's Circle operating with a standard base hourly rate of $1.50 for the first four hours and a premium rate of $3.00per each additional hour.	Action	Low (continued inefficiency of management in this area)	Anytime following REC - 23
REC - 51	Retain parking management control over any public use parking supply developed, in whole or in part, by the City.	Strategic Policy	Critical (wholistic management lost)	Ongoing
REC - 52	Update City By-Laws and Policies as required to support the	Action	Critical (regulatory	Immediate

	Recommendation	Type	Strategic Value (Consequences of non-adoption)	Timeline / Dependencies
	recommendations of this Paid Parking Management Strategy.		framework mismatch)	
REC - 53	Allow free parking in metered spaces that are out of service for any reason, other than being designated a no parking zone, but retain the maximum parking duration applicable to the area as an enforceable restriction.	Strategic Policy	Critical (failure to address regulatory gap)	As part of REC - 52
REC - 54	Review Downtown Parking Standards contained within the City's Development Regulations to consider more flexibility.	Strategic Policy	Moderate (development hurdle remains)	As part of Dev Reg review/update
REC - 55	Review the Paid Parking Management Strategy every five years to ensure the content and recommendations remain relevant and continue to align with City vision.	Follow Up	High (no trigger to update over time)	In 5 years
REC - 56	Develop a communications plan that informs residents of each change to the existing paid parking system as they occur and provides information to the public on the added features and operation of paid parking system and any new technology and hardware introduced.	Action	Critical (no public communication)	As required for other recommendations
REC - 57	Develop a public engagement strategy for each of the recommendations in this Strategy that are identified for further public discussion. This strategy must include a plan for how the input received will be incorporated into the resulting recommendations and decisions.	Action	Critical (no public engagement)	As required for REC - 17, REC - 42

Paid Parking Management Strategy Timeline



* Please note that timeline is not to scale, position on timeline represents a general progression of events rather than specific timing.

Key Supporting Policy and Strategy:

REC-01 Commit to a cashless system over time
REC-02 Maintain cash acceptance at existing meters
REC-05 Coordinate new meter installation with improvement projects
REC-06 Incorporate multi-space meter pay stations
REC-07/08 Adopt a pay-by-plate system
REC-31 Set time and location specific rates for meters and permits based on demand
REC-32/34 Review paid parking rates and adjust over time
REC-37 Implement duration based pricing where appropriate
REC-43 Move towards setting revenue neutral RPP price
REC-45 Allow City staff to make minor changes to available parking permits as needed
REC-51 Retain parking management control over any City developed public parking