**KPMG**

# Cashless Transaction Review

**City of Mississauga**

Final Report

October 2021

# Disclaimer

This report has been prepared by KPMG LLP ("KPMG") for Corporation of the City of Mississauga ("Client") pursuant to the terms of our engagement agreement with Client dated June 10, 2021 (the "Engagement Agreement"). KPMG neither warrants nor represents that the information contained in this report is accurate, complete, sufficient, or appropriate for use by any person or entity other than Client or for any purpose other than set out in the Engagement Agreement. This report may not be relied upon by any person or entity other than Client, and KPMG hereby expressly disclaims any and all responsibility or liability to any person or entity other than Client in connection with their use of this report. Upon publishing the report, it is the Client's duty to exclude any sensitive and confidential information that may not be shared publicly.

# Table of Contents

# 1. Executive Summary

As Canada's sixth-largest city, the City of Mississauga (referred to as "City" or "Mississauga") is responsible for the provision and management of over 332 services for 777,000 citizens. The City processes upwards of $1.5 billion in payments for services such as property taxes, recreation program fees, transit, development applications, payment of provincial offences, marriage licenses, and more.

In recent years, the City has seen several shifts in citizen preferences and the way that citizens pay for these services. Most notably, there has been a shift from paper-based transactions (cash and cheques) to credit cards, as well as a shift from in-person payments to online platforms. The City did well to respond to these shifts by initiating several payments modernization initiatives across Divisions. This included being one of the first municipalities to institute an online platform for building permits (ePlans), adopting PRESTO for transit fares, implementing remote deposit capture (RDC) for cheques, and other transformational projects.

However, during the COVID-19 pandemic, cashless payment trends were accelerated as citizens became less reliant on cash and face-to-face interactions. In response, the City eliminated the acceptance of cash in some Divisions (e.g., Building, Vital Statistics) and scaled back cash operations in others (e.g., Library). As the COVID-19 pandemic continues, the City is keen to understand whether there is an opportunity to capitalize on these shifts in citizen preferences and push towards more cashless and digital transactions for their revenue services.
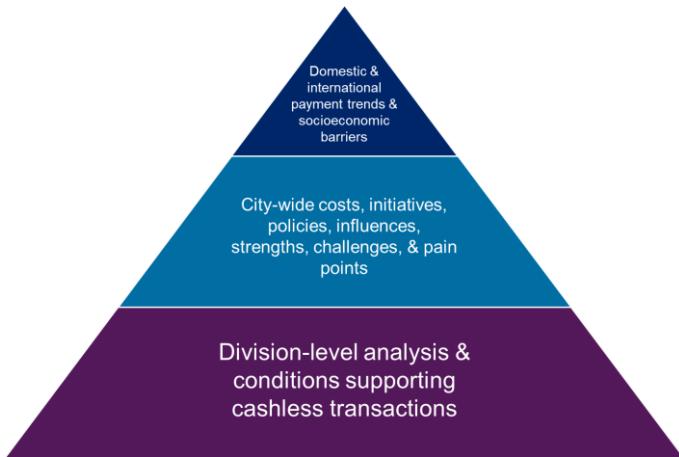
A formal Cashless Transaction Review took place from June 2021 to October 2021 to determine the City's ability (i.e., can they go cashless) and appetite (i.e., should they go cashless) for revenue-generating services. To answer these questions, the Review analyzed individual City Divisions to i) distill the common conditions that were required for the City to go cashless, and ii) identify the gaps and stickiness that needed to be addressed for the City to be fully cashless. This Review was done in close collaboration with City Stakeholders, a Core Working Group, and an appointed Steering Committee. Each stakeholder group was designed to better understand interdepartmental relationships, identify appropriate candidates for interviews, and guide the overall development of this report to ensure the City's transition to cashless payment systems is efficient, effective, and impactful.

## Objectives, Scope and Work Plan

The **primary objective of the Review** was to determine the City's capacity and capability to become cashless. This required an assessment of the City's Divisions, operations, demographics, citizen preferences, and other considerations. It also required comparative analysis (i.e., industry trends and data) as well as City-level insights to determine where there were opportunities to better address citizen habits, socioeconomic barriers, or emerging payment trends.

As the City operates public goods, there is a commonly held belief that Mississauga must ensure that no citizen is 'left behind' when paying for services. Therefore, citizen inclusion remained at the forefront of each discussion to help ensure that an equity lens was applied throughout the Review.
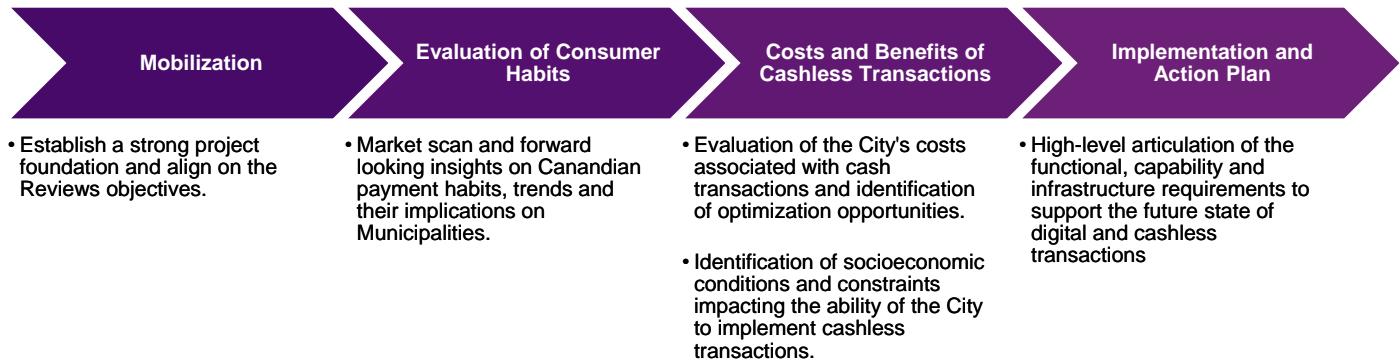
*Figure 1: Scope of Cashless Transaction Review*



Domestic & international payment trends & socioeconomic barriers

City-wide costs, initiatives, policies, influences, strengths, challenges, & pain points

Division-level analysis & conditions supporting cashless transactions

The **scope of the Review** is illustrated in *Figure 1*. As agreed by the City, the in-scope Divisions included Animal Shelter, Building, Compliance and Licensing, Courts, Library, Municipal Parking, Recreation, Transit, and Vital Statistics.

The **workplan for the Review** was segmented into four primary phases, which are illustrated below.

*Figure 2:* Workplan and Activities for the Review

| Mobilization | Evaluation of Consumer Habits | Costs and Benefits of Cashless Transactions | Implementation and Action Plan |
|---|---|---|---|
| • Establish a strong project foundation and align on the Reviews objectives. | • Market scan and forward looking insights on Canadian payment habits, trends and their implications on Municipalities. | • Evaluation of the City's costs associated with cash transactions and identification of optimization opportunities.<br><br>• Identification of socioeconomic conditions and constraints impacting the ability of the City to implement cashless transactions. | • High-level articulation of the functional, capability and infrastructure requirements to support the future state of digital and cashless transactions |

This workplan and the opportunities presented throughout the Review are grounded in an evidence-base that draws on several sources of data and information. This included primary research and interviews with the City as well as secondary research and analysis of industry-leading practices. This included primary research and interviews with the City, as well as secondary research and analysis of industry-leading practices.

— A review of more than 40 documents;

— An evaluation of 9 City Divisions;

— More than 30 hours of stakeholder interviews with 20 City and Division-level staff;

— Two review sessions with the appointed Steering Committee; and

— A review of relevant leading practices.

See Section 2.4 for more information about our approach.


## Current State Findings

The Review of the City's current payments practices took a macro to micro lens in understanding the influencing factors that impact cashless transactions at different operating levels. This included examining the impact of citizen preferences, legal implications (primarily the City's requirement to accept cash as a payment option), socioeconomic conditions, and cash-handling policies. By understanding what is happening at the national and City-level, the engagement team was able to provide insights on the City's cashless initiatives within each Division. It is important to re-emphasize that staff and stakeholders consistently acknowledged the City's focus on inclusion, equity, and their responsibilities to citizens as a 'public commodity'. This friction between being a 'public good' and the pursuit of efficient payment operations is believed to be the root cause of several pain points and opportunities within the Divisions. The current state findings and common themes across the City and Divisions include:

— **There is a negative perception associated with refusing cash as a payment method**. This is shared by both citizens and Divisions as the City must provide equitable access to services to all demographics. Opportunities should address the stickiness of cash and socioeconomic barriers faced by cash-dominant populations. In total, four[1]

---
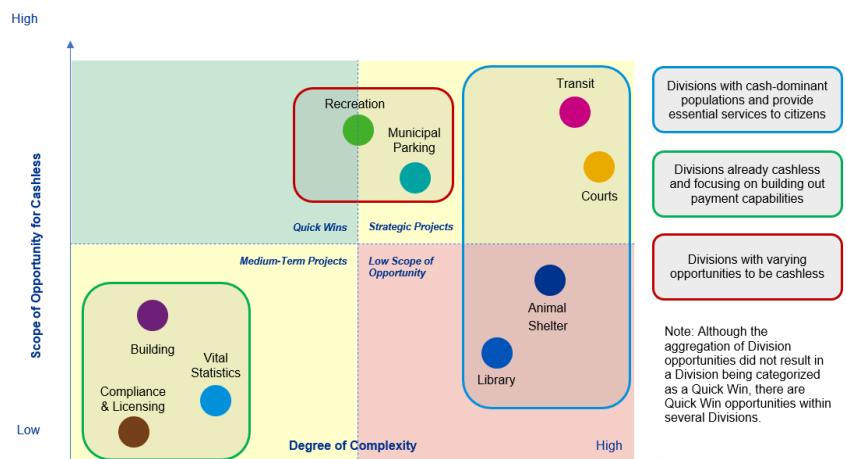
[1] Courts, Library, Animal Shelter, and Transit

Divisions have identifiable demographics that use cash out of preference or necessity. Divisions with unbanked and underbanked populations (i.e., where cash is a necessity) are likely to receive the most public backlash in their pursuit of cashless operations.

— **One standard approach to going cashless will not be effective due to the diversity in business and operating models across Divisions:** A one-size-fits-all approach to cashless transactions is not likely to be successful across the City. It may not even be successful within individual Divisions that have diverse services (e.g., Recreation). It should be recognized that Divisions fall on a spectrum that spans from good candidacy for cashless transactions (low complexity, high opportunity) to extremely challenging to go cashless (high complexity, low opportunity). See *Figure 3* for an illustration of the complexity and opportunity to go cashless across the in-scope Divisions.

— **There has been mixed success in payment initiatives targeted at changing payment needs and citizen preferences:** Divisions continue to make changes to their payment operations and technologies in response to shifting citizen habits. However, it was noted that some of these initiatives were slow to implement (e.g., Pay-by-Phone for Municipal Parking) and some continue to cause challenges and inefficiencies for Divisions (e.g., EFTs for Building).



*Figure 3: High-level Directional Mapping (Based on City Inputs)*

— **Adoption challenges persist across some of the Divisions:** Despite having cashless alternatives available, there are still challenges with the adoption of these solutions in some Divisions. Certain demographics remain sticky to their use of cash and prefer the convenience and anonymity of cash payments. Adoption challenges are most common in small-value, in-person transactions.

— **A better appreciation and understanding for the costs of cash is required:** The Review was unable to determine if there is a material difference between the costs incurred to handle cash versus the costs of digital and online payments. While some costs are reported on a City-wide basis in the general ledger (e.g. armored courier fees), there is difficulty evaluating cash costs at the Divisional and Service level due to data challenges. This information is fundamental in determining the costs and benefits of cashless opportunities (e.g., to compare the increase in interchange fees against the reduction of cash handling costs).

— **A better appreciation and understanding of Division revenues and payments are needed:** The different maturity levels of decentralized systems led to inconsistent data, Division insights, and quantifiable opportunities to become cashless. This creates challenges in prioritizing cashless initiatives for the City to focus their efforts.

The Review's complete current state findings are included in Section 3 of the report.


## City and Division Opportunities, High-level Implementation Roadmap and Next Steps

The combination of the jurisdictional scan, City-level analysis and Divisional assessment led to 12 opportunity areas to support the City in the pursuit of cashless transactions (scope of opportunity varies by Division, underlying service, and citizen segments). These have been categorized below according to their overarching theme, complexity, and scope of the opportunity.

**A. The City should take a tailored, Division-by-Division approach to cashless transactions.**

A homogenous approach to cashless transactions will not be successful across the City. Instead, the City needs to consider the unique payment needs and demographics of each Division and service area. However, where possible, learnings and insights should be shared to accelerate opportunities that are common across Divisions.

**B. The City should evaluate opportunities to standardize cashless capabilities and common assets for cash transactions, as feasible.**

Legacy cash infrastructure and processes may not meet the needs of today's citizens and Divisions. The City should identify the minimum infrastructure that is required to handle cash across each of the Divisions. This may include optimizing armoured car routes, coin-counting operations, and the appropriate cash handling policies and procedures to balance the risk-reward of cash on hand (e.g., determine the appropriate dollar value of cash on hand, per Division).

**C. The City should address gaps in providing cashless alternatives to citizens.**

There were several Division areas where cashless alternatives were limited, which led to in-person cash transactions (e.g., Library, Recreation's membership renewals). The City should evaluate, address, and prioritize the high-value opportunities to provide cashless alternatives to citizens. This could include enhancing online payment capabilities (e.g., an online payment portal), digitizing services (e.g., online applications), etc.

**D. The City should review and address implementation challenges in current, in-flight cashless initiatives.**

Several Divisions noted challenges with their implementation of cashless alternatives. These included IT constraints, delayed timelines, and manual workarounds. There should be a focus on reviewing the implementation efforts of cashless initiatives and dedicating resources (e.g., people, budget, etc.) to resolving the challenges.

**E. The City should define targeted communication and adoption plans in Divisions where cash usage continues to be material, despite cashless alternatives.**

There will need to be considerable behaviour change and communications to continue to shift citizen preferences and habits towards digital and online payments. These initiatives need to directly target the barriers faced by each cash-dominant demographic and address potential cash incentives (e.g. credit card service fees). The City should prioritize Divisions where cash usage continues to be material, despite cashless payment alternatives.

**F. The City should identify opportunities to standardize reporting of revenue and costs for consolidation at the City-wide level.**

Timely access to complete, accurate, and granular data and information considerably impacted the opportunities identified throughout the report. A centralized system of record for all payment transactions, appropriate data governance and ownership, as well as standardized reporting of revenues and costs could all support future cashless transaction initiatives.

**G. The City should prioritize change management and central coordination of initiatives that promote cashless transactions as feasible.**

Central coordination and dedicated resources (such as a City-level task force) can help ensure that the City has the appropriate capacity and capabilities to execute on cashless opportunities. Centralization can also help ensure that activities are integrated across disparate Divisions. Dedicated resources should be from impacted functional areas (e.g., Treasury, Information Technology, Digital Services) as well as Divisions that can share knowledge and learnings on transitioning to cashless operations. This complement of resources (hybrid structure) should balance the knowledge of City and Division operations with efficiencies from traditional project management.

| Division-Level Opportunities | | | |
|---|---|---|---|
| Enhance/address online and digital capabilities | A capability gap was identified that impacted the citizen's ability to pay for Division services online or via digital tools. This led to more in-person and cash payments. | — Animal Shelter<br>— Compliance & Licensing<br>— Library<br>— Municipal Parking<br>— Vital Statistics | **Most Common** ↑ |
| Address demographic specific barriers | Cash-dominant demographics experienced payment barriers that influence the way they pay for Division services. | — Animal Shelter<br>— Courts<br>— Library<br>— Recreation<br>— Transit | |
| Create consistent payment experiences | An inconsistent payment experience was noted within the Division. For example, some service areas accepted a payment type, while other service areas did not. | — Compliance & Licensing<br>— Municipal Parking<br>— Recreation | |
| Address cashless implementation challenges | There were challenges implementing payment initiatives to reduce or eliminate cash due to disparate revenue collection across revenue sources and payment types. | — Building<br>— Municipal Parking<br>— Transit | |
| Determine the costs of processing cash | There were challenges associated with determining the cash-handling costs. | — All cash accepting Divisions | |

For the City to successfully address these opportunities, it will need a dedicated transformation program with adequate resources, a practical and focused plan, sustained executive-level support, and cross-Division project leadership. Most importantly, it will require cooperation and collaboration with front-line workers that directly engage with the citizens of Mississauga. Based on our experience in similar large transformations, we believe fragmented, part-time efforts typically do not result in material and sustainable change.

Section 4 presents our implementation roadmap with prioritized actions for each of the 22 opportunities.

## Quantifying Cashless Opportunities

In 2020, the Review analyzed $140.7 million in Division revenues. Of these revenues, cash collections were estimated to be $7.3 million (approximately 5.2%) based on data provided by the City. These figures represent currently available data from each Division, as well as data from the general ledger and other sources (e.g., Division payment and financial systems). However, this data may not be reflective of actual revenues and cash transactions due to differences in Division systems, operating models, COVID-19 impacts, and assumptions made during the analysis. It is also important to highlight that:

— Different in-scope Divisions reflect a range of cashless transactions, from 45.3% to 4.5% (non-cashless Divisions). There were three cashless Divisions included in the analysis that are not represented in the range. Cash collections excluding the cashless Divisions (Building, Compliance & Licensing, and Vital Statistics) were approximately 6.2% of revenues across the six remaining Divisions.

— City efforts, citizen requirements and preferences, COVID-19, and the ease of implementation all impact each Division's ability to go cashless. These operating and demographic conditions will influence whether a Division will be able to successfully transition to cashless payments as well as the minimum cash levels that they are likely to achieve.

— Each Division will need to evaluate the reasons for its citizens to use cash and practical opportunities to transition to online payments.

By using some of the same tactics to successfully transition Divisions to cashless operations, the City could likely find efficiencies to reduce cash usage similar to some of the Divisions that have already began the process.

— 3%-5% of transactions in Divisions where cash is a necessity (Library, Courts, Animal Shelter, Transit)

— 5%-15% of transactions in Divisions where cash is a preference (Municipal Parking, Recreation)

These are high level estimates only based on current cash-usage patterns in some of the Divisions as well as Bank of Canada research into unbanked and underbanked populations. Actual reductions will vary based on each Division's citizens, lines of businesses, operating models, capabilities, and other factors. The table below presents a Division-by-Division analysis of potential cash reductions and costs reductions informed by the review.

| Estimated potential cash and cost reduction across non-cashless Divisions | | | | | | |
|---|---|---|---|---|---|---|
| **Cost Estimates[2][3]** | | | | **Scenario 1** | **Scenario 2** | |
| Average Cost of Processing Cash | | | | **4.70%** | **9.40%** | |
| Average Cost of Cashless Transactions | | | | **2.45%** | **1.75%** | |
| **Division Grouping A (cash is a necessity for certain demographics/services)** | | | | | | |
| In general, cash usage could be reduced to **5%-15%** of revenues | | | | | | |
| | | | | | **Potential Cash Reduction** | |
| **Grouping A** | **2020 Revenue** | **Cash %** | **2020 Cash** | **5% of Revenues as Cash** | **15% of Revenues as Cash** | **Cash reduced to 5%** | **Cash reduced to 15%** |
| Library* | $135,348 | 35.7% | $48,356 | $6,767 | $20,302 | $41,588 | $28,054 |
| Courts | $5,666,805 | 25.3% | $1,431,906 | $283,340 | $850,021 | $1,148,566 | $581,886 |
| Animal Shelter | $644,297 | 10.6% | $68,325 | $32,215 | $96,645 | $36,110 | N/A |
| Transit* | $94,139,724 | 4.9% | $4,602,684 | $4,706,986 | $14,120,959 | N/A | N/A |
| **Total Cash Reduction - Grouping A** | | | | | | **$1,226,264** | **$609,939** |
| **Division Grouping B (cash is a preference for certain demographics/services)** | | | | | | |
| In general, cash usage could be reduced to **3%-5%** of revenues | | | | | | |
| | | | | | **Potential Cash Reduction** | |
| **Grouping B** | **2020 Revenue** | **2020 Cash %** | **2020 Cash** | **5% of Revenues as Cash** | **15% of Revenues as Cash** | **Cash reduced to 3%** | **Cash reduced to 5%** |
| Municipal Parking* | $939,688 | 45.3% | $425,603 | $28,191 | $46,984 | $397,412 | $378,619 |
| Recreation* | $14,275,711 | 4.5% | $645,393 | $428,271 | $713,786 | $217,122 | N/A |
| **Total Cash Reduction – Grouping B** | | | | | | **$614,534** | **$378,619** |
| **Total Cash Reduction** | | | | | | **$1,840,798** | **$988,558** |
| | | | | | | | |
| **Total Potential Cost Reduction (Scenario 1 – Lower Cost of Cash, Higher Cashless Fees)** | | | | | | **$41,418** | **$22,243** |
| **Total Potential Cost Reduction (Scenario 2 – Higher Cost of Cash, Lower Cashless Fees)** | | | | | | **$140,821** | **$75,625** |

---

[2] Assumed to be all-in costs. Percentages represent costs incurred per transaction.
[3] Estimates in the costs of processing cash reflect Bank of Canada (2020) and IHL Group (2018) research. Estimates in the cost of cashless transactions provided by the City.

*Divisions with small-value transactions that drive the use of cash and may impact the achievable reductions.

The estimates for cashless transactions are based on general averages from other Divisions that are more cashless. Actual cash usage will need to be determined based on detailed analysis of each Division's data on revenue (type and composition), citizen segments, capabilities, costs, barriers, etc.

Therefore, to fully understand, quantify, and have confidence in the costs savings associated with the reductions above the City should complete an in-depth assessment of processing cash in-house (e.g., within Divisions) and externally (e.g., Armoured Car Services). Ideally, this analysis should look determine and cost the minimum infrastructure and cash levels are for each segment of Divisions. The City will also need to understand the costs associated with cashless transactions.[4]

## Conclusion

While the City has made progress towards cashless transactions, there are several factors that continue to drive cash – namely the lack of capabilities and low adoption rates. To push past the existing barriers and become a more cashless municipality, the City must consider and coordinate both City-level and Divisional changes. However, these initiatives should continue to keep the equity of citizens and Divisions as one of the top priorities. This may lead to tension between efficient cash operations and what the City is expected to provide for its citizens.

---

[4] To support the estimation of cash and cost reductions the project team obtained revenue and cash data from the City. The values included above may not be reflective of actual revenues and cash transactions due to differences in Division systems, operating models, COVID-19 impacts, and assumptions made during the analysis. Further refinement of revenue and costs data may change the accumulated values and findings of cash and cost reductions.

10

# 2. Engagement Overview

## 2.1    CONTEXT

Historically, Cash has been an ingrained part of our communities and way of living. However, recently there has been a growing shift towards alternative payment methods. These shifts have had varying impacts on the City as they were challenged to adjust to new citizen payment preferences. To respond, the City undertook transformational changes in many Divisions, including implementing online payment platforms, modernizing POS systems, exploring pay-by-phone capabilities, and other initiatives.

Over the last 18 months, the City was further tested by the COVID-19 pandemic and the movement away from in-person interactions. The City responded to the new reality and quickly instituted remote service delivery, suspended cash payments, closed the Cashier's Desk, and made other adjustments to ensure that they could continue to safely and effectively deliver services to staff and citizens. Notably, several City Divisions successfully minimized or eliminated the use of cash as a payment method during the pandemic. This incited further discussion regarding the capacity and capability of becoming a cashless municipality.

## 2.2    BACKGROUND AND OBJECTIVE
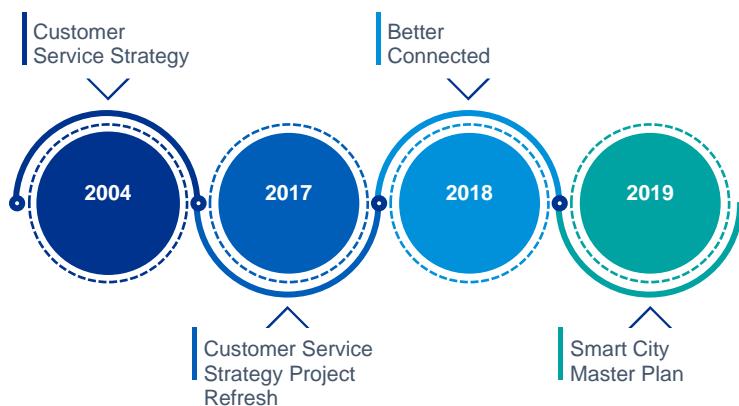
To evaluate the feasibility of going cashless, the City undertook a review of digital payments and cash transactions for its revenue services from May 2021 to September 2021. This review took a top-down approach to analyze market trends, municipal trends, and Divisional trends to identify actionable opportunities for the City to become more cashless. Beyond answering whether the City could go cashless, the Review also analyzed individual City Divisions to i) distill the common conditions that were required for the City to go cashless, and ii) identify the gaps and stickiness that needed to be addressed for the City to be fully cashless. This Review was done in close collaboration with City Stakeholders, a Core Working Group, and an appointed Steering Committee. These stakeholder groups were designed to better understand interdepartmental relationships, identify appropriate candidates for interviews, and guide the overall development of this report to ensure the City's transition to cashless payment systems is successful.

### Current and Past Initiatives

As smartphones and digital platforms continue to innovate payments in Canada, there is an expectation for governments and public sector entities to adopt these new technologies and alternative payment platforms. Public opinion of governmental services has shifted from 'good enough for government' to 'we expect more from government'. Over the past 17 years, digital modernization has grown as a priority for Mississauga as the City aims to become an engaged, diverse, and thriving place to call home.

— In 2004, the City launched its first Customer Service Strategy initiative aimed at creating better interactions between the City and its citizens in the most effective way possible. This initiative led to the

**Figure 4:** *The City's Initiative Roadmap*

implementation of current City practices such as ePlans, MiWay Customer Ambassadors, Pingstreet Application and Online Services, and Facility Bookings.

— In 2017, the City launched another Customer Service Strategy Project aimed at addressing the upcoming digital expectations of citizens. The City found that since 2004, citizens expected 24/7 service, instant resolution, accuracy, and the ability to self-serve consistently across all digital channels the City offered. This four-year implementation strategy led to 15 initiatives that were designed to improve citizen service within the City, including developing service standards and implementing a City-wide knowledge base.

— In 2018, the City launched the 'Better Connected' initiative with a vision to create better digital services by putting citizens' needs at the centre of design. Inspired by the UK's Government Digital Services (GDS) that set practical and measurable objectives for user experience, Ontario developed the Ontario Digital Service (ODS) that adapted a similar people-centred approach and set the standard for digitization within the public sector. The initial findings of the initiative highlighted that the City must put more thought into citizens' needs and that the City required a shared vision amongst their different service areas. Although the City possessed adequate digital capabilities, there was little communication with citizens as well as inconsistency with digital processes and skills of City employees.

— In 2019, the City established the Smart City Master Plan to effectively integrate physical, digital, and human systems in their environment to deliver a sustainable, prosperous, and inclusive future for everyone. This plan provided a framework to address citizen concerns and approach digital projects and transformations to enable a sustainable, empowered, and inclusive city. An important outcome of this initiative was *Wireless Mississauga* – free public Wi-Fi – and digital services through the City's website, apps, and other platforms.

It is important to note the significance of the foundation laid by these initiatives as integral pillars that will enable the success of a cashless Mississauga. This report goes into further discussion on the role of digital literacy and appropriate infrastructure on the social, cultural, and economic implications and how they shape the future of the City in Section 3.2.

## 2.3   SCOPE OF CASHLESS TRANSACTION REVIEW

Seeking to further improve payment operations and management, the City of Mississauga undertook an evaluation of its ability to transition to cashless transactions for key revenue services. This Cashless Transaction Review sought to gain an understanding of current City and Division-level payment practices, procedures, costs, volumes, and values for the various revenue-generating services. The scope of the review included:

1.  An evaluation of citizen habits and how citizens currently pay for goods and services at a macro level in Canada, as well as how payments are being made for high-volume City services including Recreation, Transit, Property Taxes, and Development Applications.

2.  An evaluation of the costs of managing cash, including cash handling activities, theft, and banking expenses, based on the available data.

3.  The potential benefits of moving towards cashless transactions for the City and its citizens, including reduced costs, improved citizen experiences, and reduced risk of fraud.

4.  Identification of considerations such as social and political barriers towards going cashless, including any potential discrimination on low-income individuals, legislation requiring the acceptance of cash, and examples of other payment modernization initiatives in municipalities.

5.  Other barriers to implementation, including digital infrastructure, security and privacy concerns, and the potential for increased costs.

6.  A high-level action plan detailing a Division-level road map on how the City can move toward adopting cashless payments for its services based on the Review.

Based on the available data and collective discussions with City stakeholders, it was established that detailed opportunities and implementation plans for a cashless transition would not be part of the scope of this Review. Instead, this report provides insights and high-level opportunities to advance cashless transactions throughout the City. These opportunities will be organized and sequenced according to their scope (i.e., size of the opportunity) and degree of complexity.

Notably, the Cashless Transaction Review was limited by the quantitative data readily available on cash and cashless transactions. As Divisions may have different payment capture and execution systems, data collection on each payment type within Divisions was inconsistent. As such, this review focused on understanding the cash usage and trends at the Division-level and relied on qualitative data from stakeholder interviews to understand citizen behaviour, preferences, and cash-dominant revenue streams.

## 2.4   APPROACH TO THE REVIEW

The overarching objective of the review was to assess the City's ability and opportunity to adopt cashless transactions for its revenue services. To achieve this objective the review was broken down into four key phases.

*Figure 5:* **Approach for the Cashless Transaction Review**

| I. Mobilization | II. Evaluation of Consumer Habits | III. Costs and Benefits of Cashless Transactions | IV. Implementation and Action Plan |

### I.        Mobilization

In this phase, the engagement team collaborated with City's stakeholders to identify key project objectives, desired outcomes, and expectations of the review. This phase also outlined the foundational questions that the review would need to answer to determine if the City had the ability and appetite to go cashless. These included:

— Are cash transactions increasing or decreasing within Divisions, and why?

— Are the costs of cash increasing or decreasing within Divisions, and why?

— What operational and demographic conditions, when present, enable a Division to transition to cashless transactions?

— What opportunities exist at the City-level and Division-level to become more cashless?

— What are the risks and other considerations that influence the City's ability to become more cashless?

During mobilization, the engagement team also aligned on the scope of the review and identified the nine Divisions to participate. The Divisions selected by the City included Animal Shelter, Building, Compliance and Licensing, Courts, Library, Municipal Parking, Recreation, Transit, and Vital Statistics[5]. The detailed list of individuals that were engaged within each Division is provided in *Appendix D: List of* Interviewees.

Stakeholder interviews were conducted with Supervisors and other operational people within each Division to develop a baseline understanding of their payments' practices and demographics. For each Division, this included understanding

---

[5] The divisions identified by the City included the largest cash takers as well as Divisions that recently went cashless. Divisions that were deemed out of scope should be reviewed internally by the City for their potential to go cashless.

their payment processes, cash handling practices, roles, responsibilities, target demographic, and information and technology. The detailed interview guide provided to all interviewees can be found in *Appendix E: Interview Guide*.

The interviews were complemented by a desktop review of relevant documentation provided by the City, such as City-wide payment handling policies and guidelines, Divisional performance reports, mandates, and other material. A detailed list of documents is provided in *Appendix F: List of Documents Reviewed*.

## II.      Evaluation of Consumer Habits

Completed through a two-part jurisdictional scan, this phase focused on identifying emerging payment trends, socioeconomic barriers, consumer habits and other payment-related strengths, weaknesses, risks, and barriers for cash transactions.

(I)      The market scan on the Canadian payments landscape reviewed five years of Canadian transactions, by payment type. The analysis identified and quantified future trends in Canadian payments, shifts in consumer behaviours and provided an outlook on the impact of emerging technologies on the future of payments. These findings were then contrasted with institutional knowledge of Canadian municipality operating environments to provide perspectives and considerations for the City's cashless ecosystem.

(II)      The socioeconomic analysis examined the impact of going cashless on various demographics and communities in Mississauga. The research conducted during this phase answered some fundamental questions on the role of cash as a payment method, public perception, and the responsibilities of municipalities as a provider of public services.

The findings from both the jurisdictional scan and Divisional interviews were consolidated to develop a Fact Sheet for each in-scope Division. These short, informal reports described the function of each Division, their current payment processes, cash handling policies, key challenges, and potential opportunities for reducing or eliminating cash as a payment method. Fact Sheets were socialized and validated with each Divisions' interviewee and City staff for accuracy.

## III.      Costs and Benefits of Cashless Transactions

This phase included the identification of opportunities to move towards cashless payments across each of the Divisions. Opportunities were based on the unique perspectives provided by each Division leader, industry trends, and were validated for feasibility and practicality. Similar to the Division Fact Sheets, potential opportunities and action items were shared with the City's stakeholders to gather feedback and align on future state considerations.

## IV.      High-level Implementation and Action Plan

Finally, City and Division action items were identified and sequenced according to each Division's capability and appetite to become more cashless. This prioritization included considerations for costs and revenues, identifiable barriers, local and global payment trends, expected citizen behaviour, potential risks, and mitigations.

The roadmap was defined based on two major factors - scope of opportunity and degree of complexity (explained in further detail in Section 4) – to categorize high versus low opportunity Divisions.

# 2.5 STAKEHOLDER ENGAGEMENT

As outlined during the first phase of the review, stakeholder engagement was to consist of four major elements:

**I.    Mobilization and Working Group Interactions**

Formal mobilization activities helped to ensure that all team members were aligned on engagement objectives, outcomes, and expectations of the review. Mobilization engagement included the City's Working Group for the Cashless Transaction Review.

Weekly meetings were also held with the Working Group to regularly update key stakeholders on progress. Additional working sessions were scheduled with the Working Group throughout the engagement to establish key research questions, validate fact sheets, review quantitative data sets, etc.

**II.   Steering Committee Reviews**

To facilitate the upward exchange of information to the City's senior leaders, the project team had two sessions with the appointed Steering Committee to discuss progress, findings and analysis, risks/issues, and outputs.

**III.  Stakeholder Interviews and Validation**

Throughout the review, over 20 stakeholders were engaged from the City of Mississauga. These stakeholders represented nine City Divisions and that account for 93.1% of the City's revenues. Interviews were conducted with frontline workers to gain a better understanding of each Division's payment operations, cost, revenues, current challenges, and opportunities to reduce cash. These interviews provided opinions, insights, trends and other observations on cash and transactions handled by each Division.

# 2.6 LIMITATIONS, EXCLUSIONS AND ASSUMPTIONS

Given the limitations associated with the data collection across Divisions, an in-depth quantitative assessment of cash handling costs was outside the scope of the review. While the City is working towards more effective information and data management, the City does not possess comprehensive 'payment type' data sets that are required for an in-depth quantitative assessment. As a result, the analysis relied on a robust qualitative evidence-base, such as interviews, focus groups and continued validation from the Core Working Group. While these activities were structured to be broad-based and representative, they are not comprehensive, given the constraints.

The scope of the review also excluded the following:

- Detailed activity/process-level mapping and testing;

- Primary research and interviews with citizens;

- The adequacy and effectiveness of existing payment modernization activities in place;

- Specific data points to support the implementation of City of Mississauga's payments transformation methodologies;

- Legal review; and

- Technological capabilities and requirements.

# 3. Summary of Current State Analysis

## 3.1 OVERVIEW

The review of the City's current payments practices took a macro to micro lens in understanding the influencing factors that impact decision making at different operating levels. This included examining the impact of consumer preferences, legal implications, socioeconomic conditions, and cash-handling policies. The project team also looked to gain an understanding of how different municipalities handled payments during COVID-19 and its potential impact on long-term consumer habits.

The three components of the current state analysis included:

- **Jurisdictional Scan and Industry Trends Analysis** – A market scan and lessons learned from relevant cashless initiatives to understand how to build a resilient, future-focused action plan for City of Mississauga.

  - o *Canadian Payments Trends:* Research focused on historical payments-related trends, including the preferred payment types of Canadians, transaction volumes, values, and other metrics.

  - o *Socioeconomic Analysis:* Study of socioeconomic conditions and barriers to cashless transactions as well as insights on federal and municipal legislative, social, and political constraints to cashless transactions.

- **City of Mississauga Current State Analysis**– High-level analysis of cash transactions for most revenue services as well as notable cost drivers for cash transactions.

- **City Division Analysis** – Qualitative and quantitative assessment of City Divisions to identify key challenges and prioritize high-level opportunities to improve cash payments.

Each component is further discussed below.

# 3.2   JURISDICTIONAL SCAN AND INDUSTRY TRENDS ANALYSIS

## Canadian Payments Trends

In recent years, there have been several shifts in consumer preferences and the way Canadians pay for services. Most notably there has been a shift from paper-based transactions (cash and cheques) to credit cards as well as a shift from in-person payments to online platforms. Since 2008, cash has been surpassed by debit cards and online transfers in overall transaction value, and by debit cards and credit cards in volume. Figure 6 and Figure 7 illustrate this decline of cash by value and volume, respectively.

Given the impact of COVID-19 on payments, including the need to reduce face-to-face commerce and limit contact with payment devices, consumers have adjusted their habits to prefer contactless payments. This has led to further acceleration towards e-commerce and digital payments with many verticals and merchant segments seeing shifts towards B2C digital channels at unprecedented levels. This not only includes mainstream verticals like fashion and groceries, but also healthcare, professional services, education, and small-business commerce across geographies.

*Figure 6:* ***Canadian-wide Transaction Value by Payment Type***



Rapid change and transformation do not come without significant costs. The shift to digital is driving up merchants' payments-acceptance costs, which are expected to rise from 6 to 10% as commerce migrates to higher-cost channels. Just as importantly, merchants also face higher decline and fraud rates on digital transactions, with ramifications for customer experience. Studies suggest that merchants perceive cash to be fast and convenient to use, as well as the cheapest method to accept, as it provides instant liquidity and no fees. Nevertheless, contactless payments have become an important part of omni-channel and cross-channel experiences. Businesses that create awareness around their contactless payment acceptance tend to win more customers and be better positioned for growth. Similarly, transitioning to cashless payments will allow the City of Mississauga to deliver improved experiences and alternatives for citizens, while reducing the burden on payment system management. At the same time, the City should be mindful of the potential drawbacks including additional fees, compatibility issues, and revenue leakage.

*Figure 7:* ***Canadian-wide Transaction Volume by Payment Type***

### Decline of Cash Payments

Cash has historically been a preferred payment method due to its speed, ease of use, and convenience for low-value transactions. However, with emerging technologies, digital payment methods have surpassed cash in most of these areas. Compared with other payments types, cash transactions have seen a major decline since 2008.

Over the same 10 years, the average value of cash transactions has fluctuated – ranging from $17.52 to $21. In a US study conducted by the Federal Reserve Bank, citizens who preferred cash are consistent in their use and used it about 80% of the time. However, if the amount of the transaction was less than $20, the probability increases to 91% (versus 57% if it was greater than $20). In comparison, debit cards are primarily used for medium-value transactions and credit cards are typically reserved for large-value transactions.

**The Decline of Cash Volume and Value (2008 - 2019)**
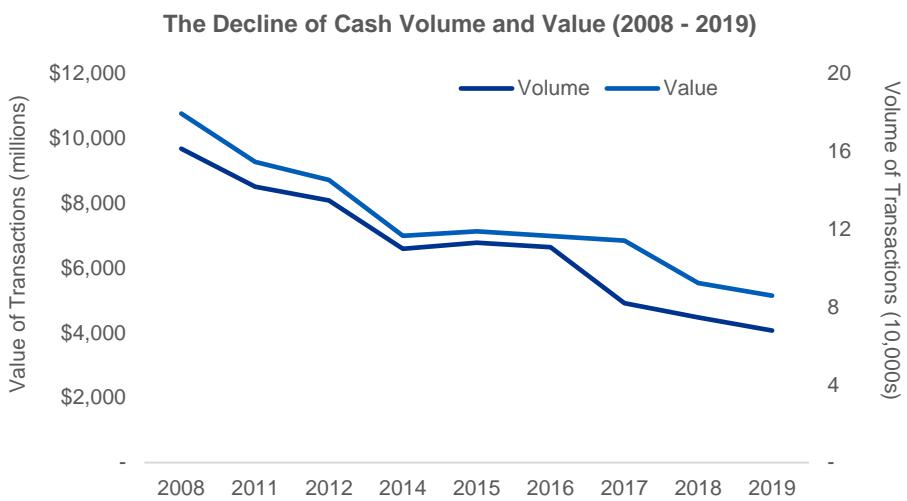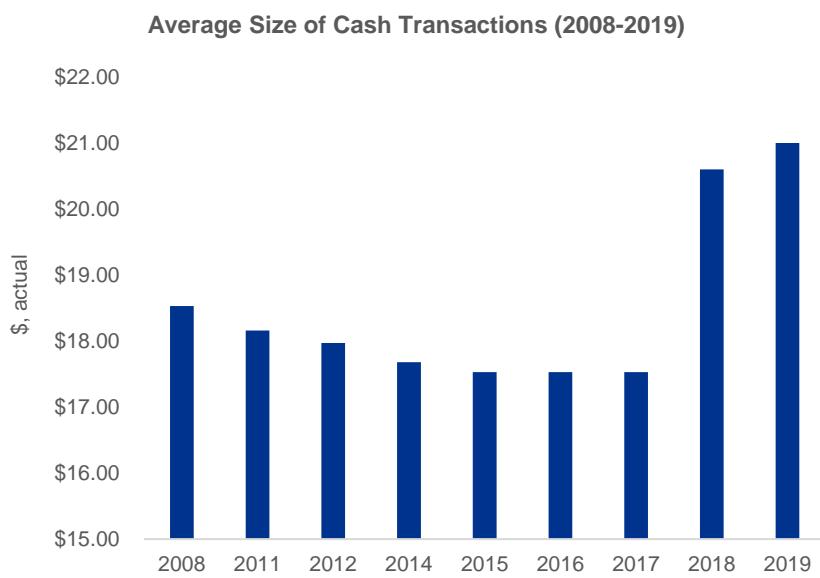


*Figure 9:* ***Canadian-wide Size of Cash Transactions***

**Average Size of Cash Transactions (2008-2019)**



Additionally, as digital literacy and infrastructure continue to improve, customers have quickly accepted new payment types (e.g., contactless payments). For late adopters, creating awareness and incentives for contactless payment alternatives are key to improving adoption and user experience, which may better position the City for long-term digital growth.

While most people move towards a cashless society, certain demographics tend to prefer cash as their primary payment methods. Similarly, institutional habits (e.g., paying a parking meter in cash) continue to be another major driver in maintaining the presence of cash transactions.

Looking back on previous City initiatives, learnings suggests that some of these barriers can be overcome by change management, communication, and citizen engagement.

### Emergence of New Payment Providers within Municipalities

The disparity of City operations results in complexities that make responding to these trends challenging. Given the diversity of their citizens and wide range of service offerings, several municipalities have turned to third-party alternatives to fulfill their citizens' preferences (e.g., *paytickets.ca*, *Payment Vision*). However, the additional fees and technological challenges (e.g., IT integration) associated with these services can be a deterrent to both citizens and municipalities, despite their conveniences.

## Socioeconomic Analysis

The socioeconomic and legislative analysis identified trends, similarities, and differences between payment practices and policies at different government levels. This section explores these concepts as well as identifies the socioeconomic conditions required for the City to go cashless. One key finding was that payment and operational synergies can be enabled through monetary or policy support

It's important to emphasize that, as a public service, the City bears the responsibility and moral obligation to cater to citizen needs. The City must recognize the heightened level of sensitivity and be aware of the impact of cashless transactions on all its citizens.

### Canadian Socioeconomic Barriers

The socioeconomic barriers found within the Canadian market typically challenged the unbanked and cash-dominant populations. The two main drivers of these challenges were a lack of literacy skills and access to digital infrastructure. These challenges were not necessarily geographic dependent and were found throughout most populations.

Literacy skills – specifically digital literacy and economic literacy – have been found to foster higher adoption rates of non-contactless payments (i.e., traditional payment types, such as cash). To illustrate, countries with higher literacy rates have witnessed higher success with contactless payments. Sweden is a prime example of a country with high literacy rates and is believed to be on track to be fully cashless by 2023. Although literacy is not the sole contributing factor, it plays a role in the success of the overall initiative. In addition, the Bank of Canada has linked higher levels of economic literacy to having greater awareness and trust in financial institutions. Overall, people are more comfortable with digital payments when they are educated on the subject.

Consumers' access to digital infrastructure may also impact their ability to use contactless payments. With the rise of digitization, digital devices, and platforms continue to be introduced to promote the use of online and remote payments (e.g., online shopping and digital banking). Individuals that lack access to this infrastructure are limited in their ability to use contactless payments. Consumers without sufficient access to digital technologies will likely default to using cash or other payment methods. The City should be aware of these socioeconomic challenges and barriers when evaluating its decision to implement cashless transactions.
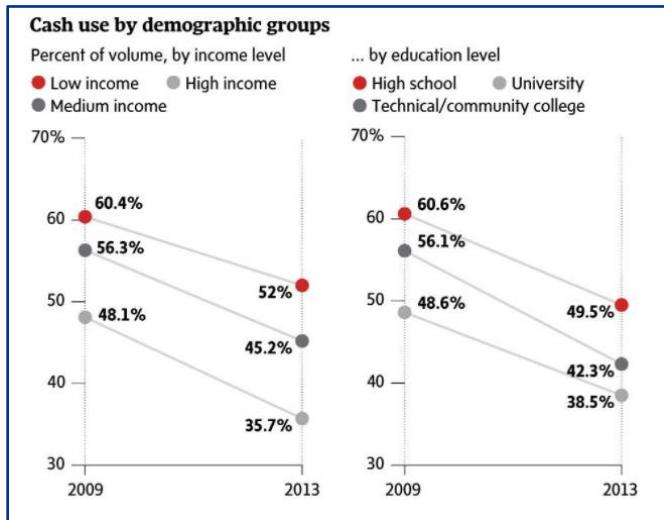
### Socioeconomic Cash Drivers

To address the socioeconomic barriers that drive the use of cash in the Canadian market, several fundamental questions must be understood:

— Why certain populations continue to use cash and what are the key barriers to cashless transactions?

— What are the macro trends and efforts to address the drivers of cash (e.g., at the federal level)?

— How critical are these barriers when transitioning to a cashless society?

— How will these barriers evolve in the future?


Initial research linked some of the socioeconomic barriers above with other demographic conditions such as income level, age, data security and privacy concerns, and homelessness. Each of these is described further below.

## Figure 10: **Bank of Canada Review Spring 2015**



**Cash use by demographic groups**
Percent of volume, by income level ... by education level
● Low income ● High income  ● High school ● University
● Medium income  ● Technical/community college

(2009) 60.4% (Low income); 56.3% (Medium income); 48.1% (High income)
(2013) 52% (Low income); 45.2% (Medium income); 35.7% (High income)

(2009) 60.6% (High school); 56.1% (Technical/community college); 48.6% (University)
(2013) 49.5% (High school); 42.3% (Technical/community college); 38.5% (University)

### Income and Education

Low-income Canadians tend to be in a cohort of the population that prefers to use cash. This is because income presents several unique barriers to access payments. For example, income has been directly linked to the accessibility of digital infrastructure and literacy rate. In the past, Canadian municipalities have attempted to address this barrier by implementing education programs and funds that target low-income populations[6].

### Data Security and Privacy Concerns

Individuals that have security and privacy concerns with contactless payments are motivated by the anonymity of cash. Like household income, this factor is also associated with digital literacy and knowledge of appropriate infrastructure. As younger generations become exposed to digital platforms at an earlier age, these concerns are well-positioned to reduce over time. However, the current distrust in digital payments continues to drive the demand for cash within Canada. To combat this, many financial institutions have implemented change management initiatives to address consumer concerns and influence payment preferences. Most recently, the Big 5 Banks (i.e., Royal Bank of Canada, Bank of Montreal, Toronto-Dominion Bank, Canadian Imperial Bank of Commerce, Bank of Nova Scotia) have introduced the 'universal banker', whose sole purpose is to push and normalize digital payments within populations that have lower levels of education and awareness.

### Age

Age has consistently been recognized as a major influencer of cash usage, most notably with Seniors. Older populations are typically less comfortable with cashless payment alternatives due to a lack of knowledge and experience with new technologies. Financial institutions across Canada are again addressing this challenge through specific resource centers dedicated to this demographic. Looking to the future, age is expected to become a less prominent factor in driving cash use – with future generations expected to have a higher adoption rate to digital payments.

### Homelessness and Remoteness

Homeless individuals or those living in remote areas tend to rely on cash due to limited access to banks. As urban areas (i.e., Mississauga) have higher homeless populations, the City should take this into consideration when moving to cashless transactions. Specifically, the city should consider where homelessness and remoteness result in citizens using cash out of necessity – and what Divisions (e.g., Transit, Library, Courts, etc.) this trend is most present.

### Public Perception of a Cashless Society

There is generally positive public perception of going cashless among Canadian populations. With 1 in 10 Canadians reporting to already be cashless as of 2017, the use of cash has continued to decline year-over-year. The COVID-19 pandemic has furthered the nation's perspective on going cashless. Acting as a catalyst for the late adopters, many citizens were left with no choice but to rely on contactless payments during the pandemic. With 63% of Canadians who used digital or contactless payment for the first time during COVID-19 reporting they are likely to continue using them, and 80% indicating they were satisfied with the experience, the decline of cash is expected to continue well into the future.

*As discussed and confirmed with the City Working Group, Steering Committee, and the City's legal representation, it is important to note that there are no legal obligations for a public service entity to accept cash as tender. The laws implemented by the Bank of Canada state that both parties in the transaction must agree on a payment method, meaning either party can accept or refuse various payment methods. However, the Bank of Canada has advocated for the*

---

[6] The success of these programs was not evaluated as part of this review.

*continued acceptance of cash during the COVID-19 pandemic to avoid extra burden on those adversely impacted by limited payment options.*

## Key Takeaways
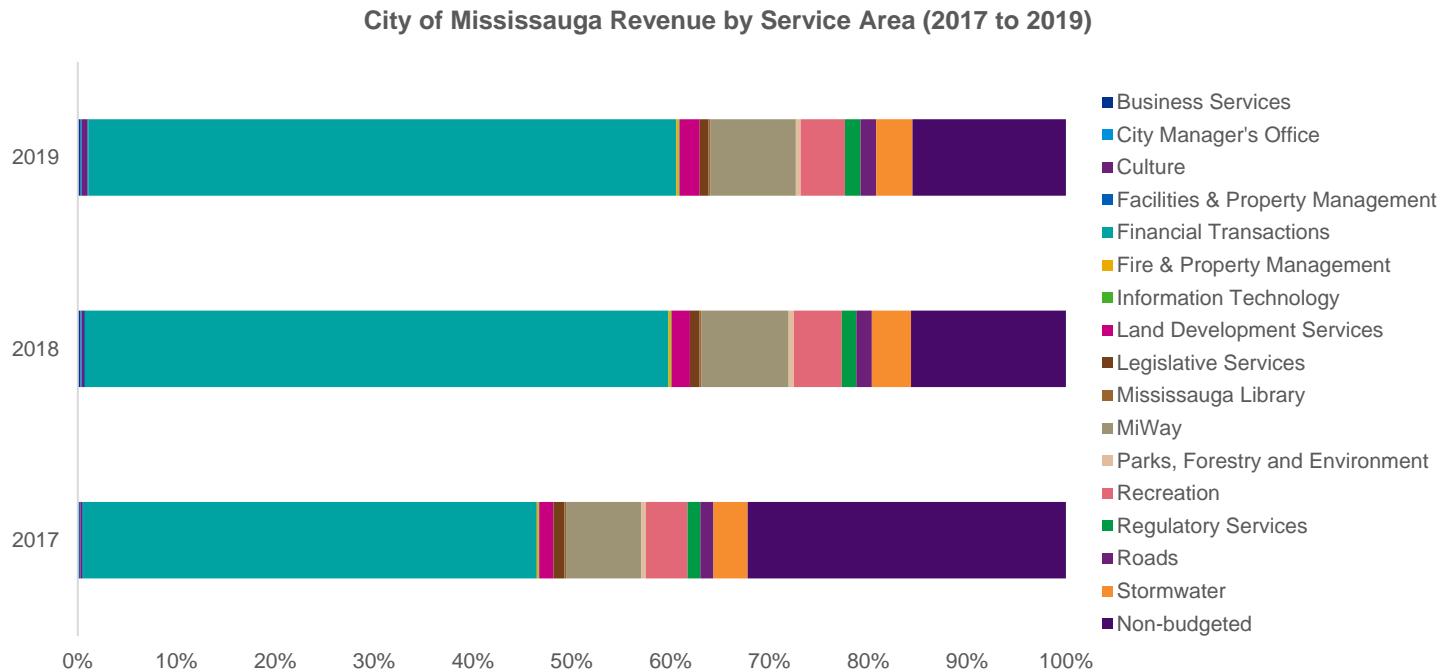
1) Overall, there is a downward trend in Canadians' use of cash as other payment alternatives are becoming more preferred (e.g., contactless, digital).

2) COVID-19 has accelerated this shift by limiting physical interactions and transactions.

3) Providing citizens seamless access to digital infrastructure can reduce the barriers to adopt digital payments. For Canadian unbanked and underbanked populations, this would provide more opportunity to participate in contactless channels.

# 4. Summary of City-Level Analysis

## 4.1 CITY OF MISSISSAUGA OVERVIEW

Each year, the City of Mississauga manages the receipts of over $1.5 billion in payments for a broad range of services. This includes property tax payments, recreation program fees, transit services, development applications, payment of provincial offences, marriage licenses and more. With over 5,750 full-time employees (FTEs) across four major departments, the City is responsible for delivering more than 332 services for citizens and corporate customers. Managing a large budget and offering a diverse set of services results in highly complex payments and operations within the City. As a result, the City is constantly seeking opportunities to improve citizen experiences and meet the growing expectations of citizens.

*Figure 11:* ***City of Mississauga Revenue Breakdown***



**City of Mississauga Revenue by Service Area (2017 to 2019)**

**Transitioning Into a 'Smart City'**

Mississauga is currently categorized as a 'Smart City', with a digital ecosystem that ensures the City's neighbourhoods are supported through digital infrastructures, systems, and processes. Some digital amenities found within the City include North America's largest Public Service Network of communications fibre, City-wide Wi-Fi, an LED lighting grid that saves energy and an Internet of Things (IoT) grid to aid with various services such as air quality control. With 1,100 Wi-Fi access points that constituted over eight million hours of free public Wi-Fi use in 2018, it is evident that citizens are adopting the growing digital infrastructures found within the City.

Accessibility and transparency are also core principles of service provision at the City. Typically, private sector organizations implement initiatives when there is a financial benefit to do so. Conversely, as a public entity, the City must consider the impact to vulnerable and underrepresented citizens in addition to financial justification.

22

**Changing Citizen Preferences**

Citizen demand is slowly shifting away from cash as expectations for digital and contactless payments rise. To meet this need, Mississauga has made investments in technology and infrastructure to support a digital shift and go cashless. However, some Divisions still prefer to offer both cash and cashless alternatives to pay for the same service (e.g., parking meters in Mississauga take credit cards and cash). This operational preference tends to lead to adoptability challenges (i.e., citizens not using cashless infrastructure) and can continue to drive the use of cash within Divisions.

Some Divisions have taken steps to nudge citizens towards alternative payment methods and shift citizen demand away from cash (e.g., transit cash fares are more expensive than PRESTO fares). However, political constraints and citizen preferences remain some of the key barriers and conditions that impact their ability to go fully cashless. Despite the benefits associated with cashless payments, the City cannot move forward without sufficiently addressing citizens' concerns and preferences.

**Challenges to Going Cashless**

Mississauga faces similar barriers to cashless payments as other municipalities and private corporations, which include socioeconomic divides between key demographics (e.g., access and income disparity). For example, lower-income areas of the City continue to see higher cash usage. Additionally, the lack of digital literacy amongst cash-dominant populations is consistent with the Canadian market trend. Although 76% of the City's population feels comfortable with emerging payment technologies and digital initiatives, other demographics are resistant to cashless transactions due to a variety of factors (e.g., unbanked, security fears). Addressing these concerns is crucial in ensuring that no citizen is left behind as the City implements cashless transactions.

## Impact of COVID-19

On March 11th, 2020, the World Health Organization (WHO) declared the COVID-19 outbreak a global pandemic. Businesses and governments were forced to make rapid changes to their operations to ensure compliance with new protocols and regulations. The City was no exception and underwent significant changes to meet federal regulations and provincial regulations. At the time of this review, the City is currently under COVID-19 regulations and limited operations.

During the pandemic, temporary measures were implemented to eliminate cash, including the closure of cashiers at City Centre, curbside services, and a temporary cashless pop-up Library. These measures were generally well-received by Divisions and citizens as they reduced administrative burden and offered convenient payment alternatives. For Divisions that have successfully transitioned to cashless operations, many expect to maintain these practices post-pandemic.

## State of the City's Payments Modernization

Over the past decade there have been numerous efforts to modernize payments within the City. In addition to City-wide initiatives, Divisions have also taken measures to address operational inefficiencies and capitalize on opportunities to implement contactless payments.

— **For Divisions with in-flight and planned digital initiatives prior to the pandemic**, the heightened demand for online services has emphasized the importance of these projects. For example, Library has introduced an online payments platform that allows citizens to pay off Library fees – which has been met with positive reception from citizens.

— **For other Divisions**, payments modernization and cashless strategies became a priority following the onset of the pandemic as many were afforded the opportunity to advance digital and cashless payments.

Overall, Divisions are continuing to implement payments modernizations to meet the growing citizen expectations for cashless and digital payments. As Divisions undertake these initiatives, the City needs to play a central role in overseeing payments projects to ensure there is consistency and coordination across the municipality.

**City-Wide Policies and Procedures for Cash**

City-wide policies and procedures are implemented to regulate cash-handling and promote standardization across Divisions. However, as noted throughout the review, the City operates vastly different services that cater to different demographics. This may bring into question the applicability of these policies across the entire City, versus taking a Division-by-Division perspective. The latter which could tailor cash handling policies based on the level of cash processed by the Division.

Standard operating procedures (SOPs) are one way the City promotes Divisions to tailor their cash operations to meet their needs. These SOPs recognize that infrastructure, processes, and other supports for cash vary across Divisions.

**City-Wide Cash Costs**

Timely access to complete, accurate, and granular cash costs considerably impacted the opportunities identified. This is because it was challenging to compare cash costs against contactless and digital payments. However, the analysis was able to note some trends in payment costs at the City-level and contrast this will the availability of other cost data.

*Figure 12:* **City-wide Cost of Armoured Vehicles**

**Total Cost of Armoured Vehicles**
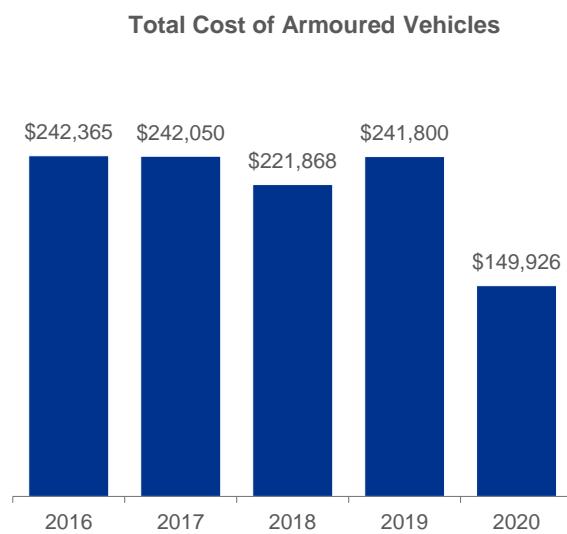


*Figure 13:* **Complexity of Determining Payment Costs**

| | Included in Analysis | Data Location |
|---|---|---|
| Armoured Courier Costs | Yes | City* |
| Staff Costs for Handling Cash | Limited | Division |
| Payment Platform/Provider Service Fees | Limited | Division |
| Bank Fees | No | City |
| Credit Card Interchange Fees | Yes | City* |

*Allocated out to Divisions

For example, while the value of cash processed by the City has declined from 2016 to 2019, the total cost of armoured remained consistent (or proportionality increased relative to cash values). This is illustrated in *Figure 12*. *Figure 13* illustrates the complexity of determining payment costs for the purposes of this review.

*An in-depth analysis on the City-wide and Divisional costs of cash was not conducted as part of this review. This limitation was partly due to the inability to aggregate consistent cost information across Divisions. Presented here are some figures related to cash costs, however, insights on the implications for the City or Divisions are limited.*

**Key Takeaways**

1) Within some Divisions the City of Mississauga is reasonably prepared to go cashless from an operational and infrastructure perspective. In other Divisions the major barrier to go cashless is citizen preference and necessity.

2) As a public service with an obligation to meet citizen demands and expectations, the City's transition to cashless operations should be contingent on adequate preparation and awareness among citizens – as well as viable payment alternatives.

3) The COVID-19 pandemic presents a unique opportunity for the City to become more cashless. It can act as a catalyst to shift citizen payment preferences towards cashless payments.
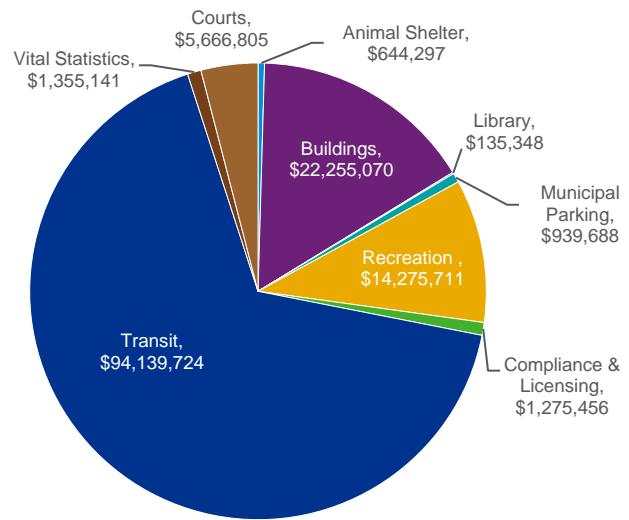
# 4.2   CITY DIVISION OVERVIEW

The last component of the current state assessment included a deeper look into the nine in-scope Divisions: Animal Shelter Services, Compliance and Licensing, Courts, Library, Municipal Parking, Recreation, Transit, and Vital Statistics. These City Divisions were selected by the Working Group as they account for 93.1% of the City's revenues and are a representative sample of the remaining Divisions. Opportunities from this assessment are expected to reflect similar actions for the out-of-scope Divisions, however, this would need to be validated and confirmed through further analysis. In general, the Division analysis can be summarized in three overarching themes (bold text below) and five categories of opportunities (table below).

## There is significant inconsistency in operations across City Divisions.

- There is significant variation in Divisional business models, operations, revenues, and services, which challenges a standardized approach to cashless transactions.

- Each Division (and potentially service area) may need a tailored approach to cashless transactions.

- Divisions typically have sufficient alternative payment options to cash transactions, but the variation in these payment alternatives across Divisions creates complexities.

- Different Divisions are at different stages of their cashless transition journey – while some Divisions have already made the transition to cashless, others have found it more difficult to make the switch.

*Figure 14: **Total Revenue by In-scope Division (2020)***

- Many factors impact the disparity in Division's cashless readiness and timeline. This review has identified common factors across Divisions that, if present, can better ensure a successful transition to cashless payments. These conditions include having cash-dominant revenue streams or cash-dominant populations as well as a centralized payment desk (e.g., cashier) or the availability of online/alternative payment methods.

## City-wide cash handling policies create a fragmented operating model and duplication of overhead contributing to the City's overall cash costs.

- There is a trade-off that the City needs to address when considering going cashless. Operating silos between Divisions grant autonomy but add complexity across the City. This may create a fragmented operating model and most likely increase overall payment costs across all Divisions.

- The City follows a city-wide cash handling policy that is challenged to meet the diverse cash needs of all Divisions. Cash handling policies are supplemented by additional operating procedures in Divisions, where required.

- The City has expressed the importance of a shared vision and a simplified, consistent approach to address citizen expectations.

**Existing payment modernization initiatives may not be coordinated.**

- Many Divisions are already pursuing payment modernization programs, such as Recreation's plan to adopt Interac e-Transfer as a payment method for services. When these initiatives are done in isolation (i.e., Division-by-Division), they can cause disparity and contribute to a fragmented citizen experience across the City.

- Ensuring communication and consistency across Divisions is essential to meet citizen expectations and provide a sustainable, City-level solution.

At a high-level, the opportunities identified in the City Division level analysis can be further categorized into five major areas. These opportunities are detailed in Section 5.

| Division-Level Opportunities | | |
|---|---|---|
| **Enhance/address online and digital capabilities** | A capability gap was identified that impacted the citizens' ability to pay for Division services online or via digital tools. This led to more in-person and cash transactions. | — Animal Shelter<br>— Compliance & Licensing<br>— Library<br>— Municipal Parking<br>— Vital Statistics |
| **Address demographic specific barriers** | Cash-dominant demographics experienced barriers that influence the way they pay for Division services. | — Animal Shelter<br>— Courts<br>— Library<br>— Recreation<br>— Transit |
| **Create consistent payment experiences** | An inconsistent payment experience was noted within the Division. For example, some service areas accepted a payment type, while other service areas did not. | — Compliance & Licensing<br>— Municipal Parking<br>— Recreation |
| **Address cashless implementation challenges** | There were challenges in implementing payment initiatives to reduce or eliminate cash due to disparate revenue collection across revenue sources and payment types. | — Building<br>— Municipal Parking<br>— Transit |
| **Determine the costs of processing cash** | There were challenges in determining the costs associated with cash payments. | All cash accepting Divisions |

# 4.3 SUMMARY OF CITY DIVISION ANALYSIS

## Animal Shelter Services

### Division Overview

Animal Shelter Services is the City of Mississauga's main center for all matters related to animal care. The Division provides a wide range of animal services (e.g., pet adoptions, pet licenses, emergency animal services) and its main revenue streams are pet licenses (74.8%), adoption fees (6.2%), and donations (6.1%). The Division processes a broad range of transaction values (e.g., from $5.25 to $518.11 in 2020) across all payment types: cash (11%), debit card (9%) and credit card (80%).

### Emerging Themes:

- There is a considerable range of payment values and payment types for Animal Shelter Services – from smaller license fees to extensive animal bills. The collection of payments through a centralized payment desk offers citizens the ability to pay for most services, with most payment types.

- Demographic preferences and the centralized payment desk continue to drive the use of cash within the Animal Shelter Division. Therefore, in addition to initiatives to modernize payments, equal efforts from Animal Shelter would be required to shift citizen demand away from cash and towards contactless payments. Effective change management and communications will be vital to the success of these initiatives.

- Donation boxes require cash handling and bank deposit processes. There is no appetite to discontinue these revenue streams due to negative public perception. However, the elimination of cheque handling could reduce the frequency of bank deposits and related costs.

- Online renewals and online payments continue to be adopted by citizens. However, most payments are still made with the citizen present – as this is the nature of the business model. This reality will perpetuate the stickiness and use of cash at the centralized payment desk.

## Building

### Division Overview

The Building Division is the City of Mississauga's central service area for all matters related to the building and development of residential and commercial properties. The Division provides a wide range of services (e.g., issuing building permits and development applications, inspections, planning future developments) and its main revenue streams are from building permits (79.1%) and development applications and inspections (20.0%). The Division took a proactive approach to modernizing payments by enabling online transactions through the implementation of its ePlans applications in 2016.

### Emerging Themes:

- Building exemplifies how addressing the conditions to going cashless can result in long-term success in going cashless. The Division took a proactive approach to payments and online transactions, undergoing a change management initiative in 2016 that simplified the transition to cashless payments during COVID. At first, this investment was challenging, and Building was left with additional overhead costs due to their expanded finance role (see Case Study below). Despite these challenges, citizens appreciated the transition to online payments.

- Post-COVID, the Division will likely see success in remaining cashless as they possess adequate infrastructure to accept online payments. However, they will need to address the increase in administrative payment responsibilities as well as improve technical workflows (e.g., ePlans, EFT process) to fully realize the benefits of being cashless.

- Building primarily has corporate customers and high-value transactions, which tend to have different payment needs and expectations then other citizens and Divisions. These high-value transactions typically mean that the Building's customers are less price-sensitive to transaction fees that can be a key barrier to going cashless.

---

## Division Case Study: Challenges arising from transitioning to cashless too quickly.

During the COVID-19 pandemic, the closure of Building's customer service counter meant that the Division needed to quickly adapt to be a cashless Division – as in-person payments were no longer accepted. Although the Division has had an online payment option (ePlans) since 2016, their digital platform was not capable of processing all payments throughout the permit workflow. Therefore, the Division needed to quickly implement a workaround to collect payments that were outside of ePlans' capability.

An Electronic Funds Transfer (EFT) process was implemented to collect these payments. However, this presented several immediate challenges:
— The Division was not equipped to take on a greater financial role to process and reconcile EFT payments
— The EFT process was not "predictable", meaning that the Division did not have a sense of the work effort required to handle EFT payments each day (which made it challenging to resource)
— EFT transactions could be for small-value payments, which did not align the payment mechanism to the dollar-value of the transaction (i.e., high-effort for small-value)

This Case Study exemplifies what can happen when Divisions push (or are forced) to become cashless without understanding the new ways of working, operating requirements, technology changes, or other preconditions to have a successful transition. Reflecting on their current situation, Building would have liked to take the time to test and optimize the EFT process, or build out a solution in ePlans, or consider other payment alternatives that would meet their needs without the added administrative burden and overhead.

In the near-term, Building can absorb the costs associated with building a new solution into their fee structure. However, an in-depth analysis of the additional costs associated with new payment solutions versus those incurred throughout the EFT process (including labour costs) should still be undertaken. As it is understood, the EFTs represent a relatively small proportion of Building revenue.

---

## Compliance & Licensing

### Division Overview

Compliance and Licensing is a Section of Enforcement in the Transportation and Works Department, focused on providing business licenses and permits[7]. This Section provides a wide range of services (e.g., fixed, and mobile business licenses, trade business licenses, lottery licenses) and its main revenue streams are from business licensing fees (83.4%), charity gaming licenses (9%), and swimming pool enclosure fees (5%). Compliance and Licensing has successfully transitioned to cashless payments during the COVID-19 pandemic and is expected to remain cashless[8].

### Emerging Themes:

---

[7] Although Compliance and Licensing is a Section within the City, the report refers to 9 Divisions throughout the analysis.
[8] As payments received by the Division were processed through Cashiers, the cashless transition by cashiers resulted in Compliance and Licensing also becoming cashless.

- Compliance and Licensing predominantly serves corporate citizens in Mississauga but maintains a citizen service counter and mail-in cheque option to serve non-corporate citizens.

- Over the past five years, there has been a natural transition to cashless payments as the Division has observed a decline in cash usage and frequency of cash transactions. The Division responded by implementing a 'card-not-present' payment option (e.g., online, pay-by-phone, remote) for limited, time-sensitive transactions. However, this payment option is not available for all service types.

- Although the Division has transitioned to cashless payments, the development of an online payment platform has been delayed due to a backlog of IT projects at the City-level.

- Although online payments have grown to be a preferred payment method, there are concerns that the system is not entirely user friendly and has difficulty providing support and troubleshooting citizen challenges (compared to in-person payments and support). For Compliance and Licensing to continue to push the bounds of cashless transactions, they must address some of the risks and barriers to online payments.

## Courts

**Division Overview**

The Provincial Offences Act Courthouse is a Section within the City's Legislative Services Division that specializes in all matters related to municipal and provincial law and enforcing compliance towards the legal system[9]. Courts provides the settlement of tickets, fines, and penalties, as well as court proceedings for municipal and provincial cases. The Division's main revenue streams are parking tickets, provincial charges, and other legal fines[10].

**Emerging Themes:**

- Unlike City Divisions where services are demand driven (e.g., Recreation), payments made to Courts are a mandatory obligation to the City. Therefore, there must be heightened awareness to citizen preferences when considering different payment methods. If the City is mandating payment, there could be poor public perception to limiting the payment types as well.

- Any failures in payment processing would have significant, negative consequences for the citizen. Since Courts are an essential service that directly impacts the legal livelihood of their citizens, there is more risk associated with changes in their payment processes. These risks have created high barriers to change that have restricted Courts' ability to modernize their payment systems like other City Divisions. In addition, Ministry regulations and the required immediacy of payments are uncompromisable considerations that Courts must adhere to.

- There are widely held opinions that cash is institutional to Courts. Although cash is declining, the continued acceptance of cash is likely to be inevitable in the near-term. This need is further exemplified by demographic divides that drive the use of cash from certain populations (e.g., unbanked, and underbanked citizens).

- Courts should determine if there is a financial benefit to removing the transaction fee for citizens using the online payment platform, to encourage more online payments from price sensitive citizens.

---

[9] Although The Provincial Offences Act Courthouse is a Section within the City, the report refers to 9 Divisions throughout the analysis
[10] Percentages not provided

## Library

### Division Overview

Library is the City of Mississauga's central service area for all matters related to public libraries. The Division is responsible for overseeing 18 library facilities throughout the City and provides physical spaces for programs and collections to promote education to citizens. The Division also provides a wide range of other services (e.g., library collections, online content) and its main citizen-centric revenue streams are fines (36%) (i.e., library lending, loans, collections, non-resident fees), lost material (20%), and photocopy charges (15%)[11].

### Emerging Themes:

- As a 'public good', Library must be aware of their citizen segments and needs to ensure their resources stay accessible to all demographics.

- Small value transactions (e.g., printing services) and the use of centralized payment desks (i.e., cashiers) continue to drive the use of cash within the Division. Therefore, Library should focus on shifting the remaining citizen demand for cash towards contactless payment methods. Effective change management and communications are vital to the success of these initiatives.

- Library has made considerable efforts to digitize the payment for small fees, including the recent introduction of an online payment platform to pay off library fees. These initiatives have been positively received and adopted by citizens, and Library may consider further efforts to digitize payments. However, decisions for future modernization of fees should consider the potential elimination of late fees that is currently under Council's review.

## Municipal Parking

### Division Overview

The Municipal Parking Division is responsible for all matters related to parking infrastructure and zoning requirements for developers. The Division provides a wide range of services such as public parking, zoning requirements, and planning, and its main sources of revenue are downtown parking garage permits (60%) and pay and display parking permits (32%).

### Emerging Themes:

- Municipal Parking serves a wide range of demographics, from individual citizens to corporations and developers, which results in complex payment needs. Cash is a dominant payment method for street parking due to the nature of small-value transactions and immediacy it offers.

- The City owns the payment infrastructure (i.e., parking payment machines) which can accept cash and there is no appetite to move to fully cashless parking machines in the next 15 years (based on City inputs). Services such as parking permits also face challenges in transitioning to fully online payments, as permits need to be physically distributed to citizens.

- Despite buy-in from the Division and the City, there are enforcement challenges that need to be considered when migrating to online payments. If transactions are not immediately posted and integrated into the enforcement software it could result in tickets being issued in error.

---

[11] The Division receives a large portion of revenue from provincial grants and property leases, which have been excluded from this analysis to focus on the citizen-centric revenue services.

- As part of the parking payment review, the City is exploring plate-based parking alternatives that are cost-saving and user-friendly. This initiative should be reviewed when considering the Division's transition to cashless payment systems.

- The Division is continuing to take steps to gradually decrease its reliance on cash (e.g., considering Pay-by-phone initiatives, reducing parking machines) while incorporating change management and communications campaigns to shift citizen preferences.

- Limited financial resources restrict the Division's ability to implement multiple payment initiatives at once. Without additional budget or financial commitments, Municipal Parking will have to continue to be selective on the initiatives they implement (e.g., it would be difficult to implement multiple projects at once).

## Recreation

### Division Overview

Recreation provides services and programs to residents through collaboration and community engagement. The Division contains both centralized and decentralized sections accounting for multiple independent services throughout the City. The Division provides a wide variety of services and operations, including recreation programs and drop-in sessions (e.g., aquatics, fitness, and community programs), courses, lessons, leagues, rooms, and sports amenity rentals. The Division's main revenue streams are programs (18%), sports amenity rentals (16%), and golf green fees (15%).

### Emerging Themes:

- Recreation is a large division with both decentralized and centralized sections with considerable variety in their services and operations. This results in a wide range of payment needs and alternatives from the Division and its citizens. (E.g., purchase of food from concessions, one-time room or sport amenity rentals, long term seasonal contracts for rooms and/or sport amenities, events such as weddings, payment for programs and memberships, golf tee times). This means that the Division is a good candidate to explore cashless payments on an ad-hoc, or service-by-service approach - starting with high-opportunity areas like the C-Café.

- There are unique conditions to going cashless within each service area. Some services have higher barriers to going cashless (such as community pools), while others present more favourable conditions (wedding services). In addition, cash payments vary by demographic and location. In areas with low cash volumes, Recreation has started to push towards cashless payments. This indicates that with the right conditions, there is feasibility to going cashless.

- Recreation has undertaken an initiative to update their system software to replace their obsolete system which has come to end of life and will no longer be supported by the vendor. Expected to be completed in 2-3 years, this updated software is expected to promote and increase the use of online booking and payments. The Division is in a good position to explore cashless payment implementation on a service-by-service approach, starting with high-opportunity areas like the C-Café.

## Transit

### Division Overview

The Transit Division is the third largest municipal transit service provider in Ontario and accounts for 59.4% of the City's revenue. Within Transit, MiWay operates two conventional, fixed-route transit services: MiExpress, providing frequent service on limited-stop routes; and MiLocal, providing service on regular and school routes. The Division's largest revenue streams are fare box tickets (35.7%), period passes (4.5%), and school contracts (4.1%).

**Emerging Themes:**

- Transit serves one of the most expansive networks of citizens within the City. Their citizens include individuals from of all demographics, socioeconomic backgrounds, and geographies. However, there are some populations that are more prevalent within Transit and use cash (lower-income individuals). Specifically, MiWay noted that they face challenging equality issues when considering a transition to cashless payment methods.

- After Community Services, Transportation & Works is the largest department within the City. The Division's size and complexity may complicate the internal and external efforts to pursue cashless and payment modernization initiatives. The integration with PRESTO also adds to the complexity of cashless transactions via the need to accommodate a consistent citizen experience across the Transit networks.

- Most of Transit's revenue is collected through cashless methods. However, cash still makes up makes up 14% of MiWay's revenues – which remains significant from a cash volumes and values perspective (~$1M/month pre-COVID). Therefore, the Division has extensive cash handling operations and costs to accept cash at every station and on every route.

## Vital Statistics

**Division Overview**

The Vital Statistics Division is responsible for the statutory duties of the municipal clerk as well as duties under the Vital Statistics Act. The Division's main revenue streams are marriage licenses (22.2%), burial permits (19.5%), and commissioner of oath fees (2.6%). The Division successfully transitioned to cashless payments during COVID-19 and is expected to remain cashless in the future. This move received positive public response due to improved customer communication and support during the transition.

**Emerging Themes:**

- When a citizen books a Vital Statistics appointment, they are informed immediately that cash is not an accepted form of payment both in-person and online. Although this practice supports the Division in remaining cashless, it may place an additional administrative burden on other areas (i.e., the use of cashiers to accept cheque payments).

- Post-COVID, Vital Statistics can evaluate a shift to becoming a permanently paperless Division by removing the acceptance of cheques, while continuing customer communication and support initiatives. Vital Statistics has successfully transitioned to cashless payments during the COVID-19 pandemic and is expected to remain cashless in the future.

- Typically, Vital Statistics does not interact with cash-dominant populations. Based on the City's input, moving towards cashless transactions has not limited the accessibility of their services to any demographic.

## Summary of City and Divisional Analysis

The City and Divisional analysis pointed to several emerging themes and opportunities for consideration.

1   The City is challenged in the diversity of Division operations. The complexity across the breadth of revenue and service areas creates inconsistent payment capabilities and experiences across the City. For citizens, this creates confusion and poor satisfaction, as they often engage across multiple city services. This also leads to data and information challenges at the City-level, as Divisions have different payment capture and execution systems.

2   The City has a very diverse set of citizens that access their services. Some of these demographics have sufficient access to cashless payment alternatives (e.g., credit cards, EFTs), while others use cash out of necessity. The latter will create significant challenges in pursuing cashless operations, as this population will be unable to access City services without a viable payment alternative that meets their needs.

3   The review was unable to provide a quantitative perspective on the costs associated with cash transactions due to a lack of data. Without this perspective, it will be challenging to determine when moving to cashless operations will be more beneficial than continuing to accept cash – from a cost-benefit viewpoint. However, even if the financial benefits of going cashless outweigh the costs, the City still needs to consider the socioeconomic impact of moving to cashless transactions.

# 5. Opportunities and Implementation Plan

## 5.1    GUIDING PRINCIPLES

The analysis suggests that the City of Mississauga should continue their current path to transition to more cashless payments across all City Divisions. A strong starting point for this future-looking analysis is to develop guiding principles that can be used to help the City make decisions around their future state of payments. Guiding principles allow stakeholders to align core business needs, prioritize organizational and citizen needs under one framework, and make consistent and rational operational decisions.

The City should consider the following guiding principles to help ensure success in implementing the opportunities identified throughout the Cashless Transaction Review:

A.  **Emphasis on Citizen Satisfaction:** Opportunities emphasize and enhance citizen satisfaction with City payments.

B.  **Cost-Benefit Balance:** Opportunities consider the relative costs and benefits of shifting citizen preferences.

C.  **Risk-Based Approach:** Opportunities ensure that there is heightened attention to demographic and operational challenges for high-risk Divisions.

D.  **Accessibility:** Opportunities promote accessibility, are intuitive, and provide both the citizen and the City with a streamlined payment solution.

E.  **Minimal Disruption:** Opportunities with technology and operational changes do not disrupt City services.

F.  **Innovation:** Opportunities allows services to be resilient, adaptive, and reactive to changing environments and citizen needs.

G.  **Forward Looking:** Opportunities are proactive to payment trends and support the future delivery of modernized services.

## 5.2    OVERARCHING OPPORTUNITIES

The Cashless Transaction Review included an assessment of the City's global capabilities to support cashless payments. Several City-wide opportunities were identified that can enable cashless payments within each of the Divisions. These global opportunities are summarized below.

**Opportunity #1 The City should take a tailored, Division-by-Division approach to cashless transactions.**

Given the differences across each Division in terms of their revenue, transaction sizes, services, and demographics, it is crucial to take a tailored approach to each Division's cashless pursuits. Divisions that serve specific demographics familiar with cashless payments (e.g., Vital Statistics) face lower barriers than Divisions that service a wide range of demographics and socioeconomic backgrounds (e.g., Library, Transit). Some Divisions have already transitioned to cashless operations and are now focusing on process improvement and optimization (e.g., Building), while other Divisions require further analysis to determine where opportunities are within their Division (e.g., Recreation). A tailored, Division-

by-Division approach will allow the City to successfully transition some Divisions to cashless transactions first, and then apply their learning and experience towards more complicated Divisions afterwards.

## Opportunity #2 The City should evaluate standardizing cashless capabilities and common assets for cash transactions.

The breadth of City operations means that Mississauga could likely benefit from standard cashless capabilities and common cash assets across Divisions. Standardizing capabilities may lead to operational efficiencies as Divisions are able to leverage existing platforms and processes for their cashless transition. For example. Divisions that require applications to be approved before a payment is made (e.g., Building, Compliance and Licensing) may be able to share common digital tools to facilitate this workflow.

In addition, legacy cash infrastructure is typically not rationalized at the same rate as cash decline. This results in a mismatch between the operating model to support cash and the actual cash being processed by the Division. There are opportunities to re-assess the minimum viable cash infrastructure within Divisions for cash processing, including anticipated volumes for the future. For example, this assessment should look to answer whether the Transit coin room, which once processed over $90M in cash annually, has been appropriately scaled back to process $10M. Minimum viable cash infrastructure should also look for efficiencies across Divisions, such as the consolidation of counting and handling cash. Each of the opportunities to reduce cash infrastructure should consider the long-term outlook for cash.

## Opportunity #3 The City should address gaps in providing cashless alternatives to citizens.

There were several Division areas where cashless alternatives were limited, which led to in-person cash transactions (e.g., Library, Recreation). The City should evaluate, address, and prioritize the high-value opportunities to provide cashless alternatives to citizens. This could include enhancing online payment capabilities (e.g., an online payment portal), digitizing services (e.g., online applications), or tap/contactless POS systems.

The cost of these alternatives should be assessed against the anticipated benefits. For example, a complex and expensive online platform to provide cashless alternatives may not be warranted in a Division that processes low amounts of cash transactions or has in-person services (e.g., Animal Shelter, Library). Instead, a better return may be realized by focusing on contactless payments with citizens.

## Opportunity #4 The City should review and address implementation challenges in current, in-flight cashless initiatives.

Several Divisions noted challenges with their implementation of cashless alternatives. These included IT constraints (Vital Statistics), delayed timelines (Municipal Parking), and manual workarounds (Building). Each of these can create complexities in business processes and poor citizen experiences that negate the benefits of the initiative. There should be a focus on reviewing the implementation efforts of cashless initiatives and dedicating the resources (e.g., people, budget, etc.) to resolving any challenges.

## Opportunity #5 The City should define targeted communication and adoption plans in Divisions where cash usage continues to be material, despite cashless alternatives.

There will need to be considerable behaviour change and communications to shift citizen preferences and habits towards digital and online payments. These initiatives need to directly target the barriers faced by each cash-dominant

demographic. They should also prioritize Divisions where cash usage continues to be material, despite cashless payment alternatives.

For example, one of the major barriers identified across several Divisions (e.g., Animal Shelter, Library, Transit) for moving to cashless transactions was poor public perception and resistance to change from cash-dominant demographics. The City should prioritize communications strategies, additional staff training, and contingency planning to ensure the shift to cashless transactions is successful. Some Divisions may require more effort (e.g., Animal Shelter, Municipal Parking) due to institutional habits that drive the stickiness of cash payments within the Division. By combining payment modernization efforts with change management initiatives, these Divisions can attempt to shift the remaining citizen demand for cash towards alternate payment methods. The City's use of change management initiatives will complement the gradual transition to fully cashless transactions across Divisions.

**Opportunity #6 The City should identify opportunities to standardize reporting of revenue and costs for consolidation at the City-level.**

The City currently operates with a mix of highly integrated payment systems and systems that are unable to communicate with each other. This results in duplication of efforts (e.g., dual entries), increases in the likelihood of errors, and increases complexities in obtaining data. Consequently, timely access to complete, accurate, and granular data and information considerably impacted the opportunities identified throughout the report. A centralized system of record for all payment transactions, appropriate data governance and ownership, as well as standardized reporting of revenues and costs, could all support future cashless transaction initiatives.

**Opportunity #7 The City should prioritize change management and central coordination of initiatives that promote cashless transactions as feasible.**

Central coordination and dedicated resources (such as a City-level task force) can help ensure that the City has the appropriate capacity and capabilities to execute on cashless opportunities. Centralization can also help ensure that activities are integrated across disparate Divisions. Dedicated resources should be from impacted functional areas (e.g., Treasury, Information Technology, Digital Services) as well as Divisions that can share knowledge and learnings on transitioning to cashless operations. This complement of resources (hybrid structure) should balance the knowledge of City and Division operations with efficiencies from traditional project management.

# 5.3 DIVISIONAL OPPORTUNITIES

The emerging themes and analyses from each of the Divisions revealed several consistent areas of opportunity across the City. These higher order categories create clusters of Divisional opportunities depending on:

— The conditions for going cashless that each Division satisfied;

— Where the Division lies on its transformation journey to becoming cashless;

— The necessity of cash within prominent demographics; and

— The existing infrastructure and capabilities supporting cashless payments.

Each of the emerging themes are summarized and described below. The table also indicates which Divisions' opportunities align with each theme.

| Division-Level Opportunities | | | |
|---|---|---|---|
| Enhance/address online and digital capabilities | A capability gap was identified that impacted citizens' ability to pay for Division services online or via digital tools. This led to more in-person transactions and cash payments. | — Animal Shelter<br>— Compliance & Licensing<br>— Library<br>— Municipal Parking<br>— Vital Statistics | **Most Common** |
| Address demographic specific barriers | Cash-dominant demographics experienced payment barriers that influenced the way they pay for Division services. | — Animal Shelter<br>— Courts<br>— Library<br>—  Recreation<br>— Transit | |
| Create consistent payment experiences | An inconsistent payment experience was noted within the Division. For example, some service areas accepted a payment type, while other service areas did not. | — Compliance & Licensing<br>— Municipal Parking<br>— Recreation | |
| Address cashless implementation challenges | There were challenges in implementing payment initiatives to reduce or eliminate cash due to disparate revenue collection across revenue sources and payment types. | — Building<br>— Municipal Parking<br>— Transit | |
| Determine the costs of processing cash | There were challenges in determining the costs associated with cash payments. | — All cash accepting Divisions | |

## High versus Low Opportunity Divisions

Following the categorization of opportunities into the themes above, an opportunity matrix was developed to illustrate each Division's scope and complexity to going cashless.

'Scope of Opportunity' refers to the opportunity for advancement within each Division. This refers to the potential benefits (financial and non-financial) that the Division could achieve via cashless operations. For example, Divisions identified to be **higher opportunity** tend have a higher proportion of cash transactions (volume) or a large amount of cash processed by the Division (value). This may indicate that there is a lot of operational efficiencies and positive citizen experiences to be gained by transitioning to cashless operations. Conversely, Divisions with **lower opportunity** are already cashless. See Figure 15 for a comparison of cash as a percentage of Divisional revenues.

**Cash as a Percentage of Divisional Revenues (2020)**
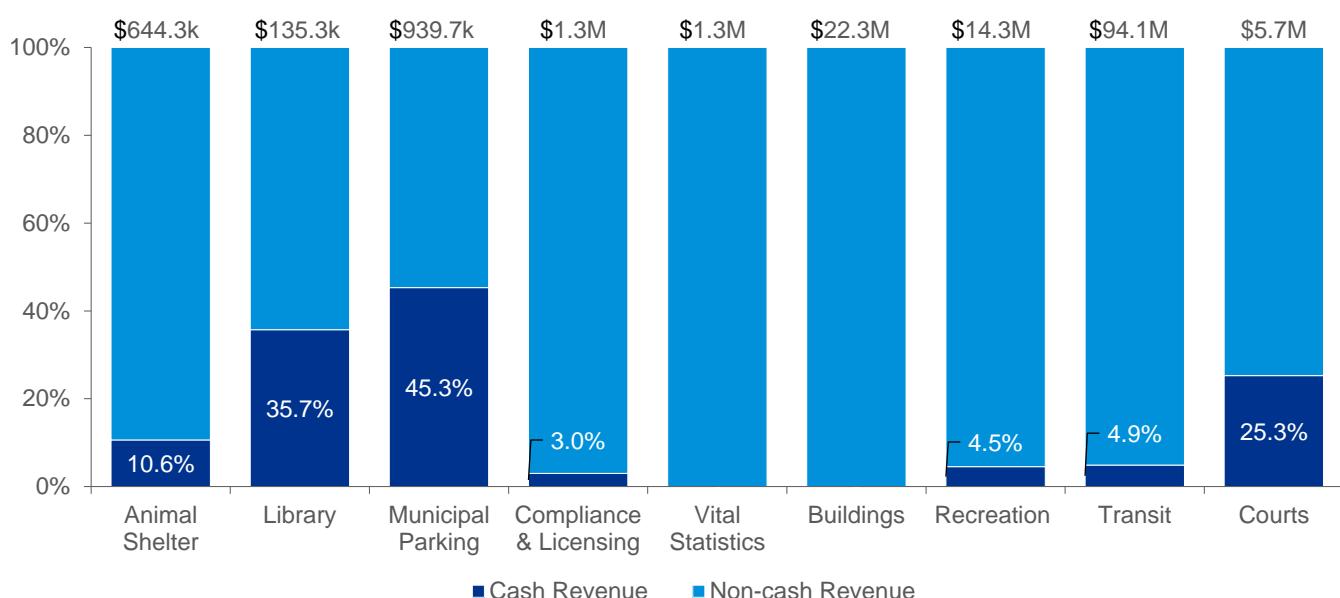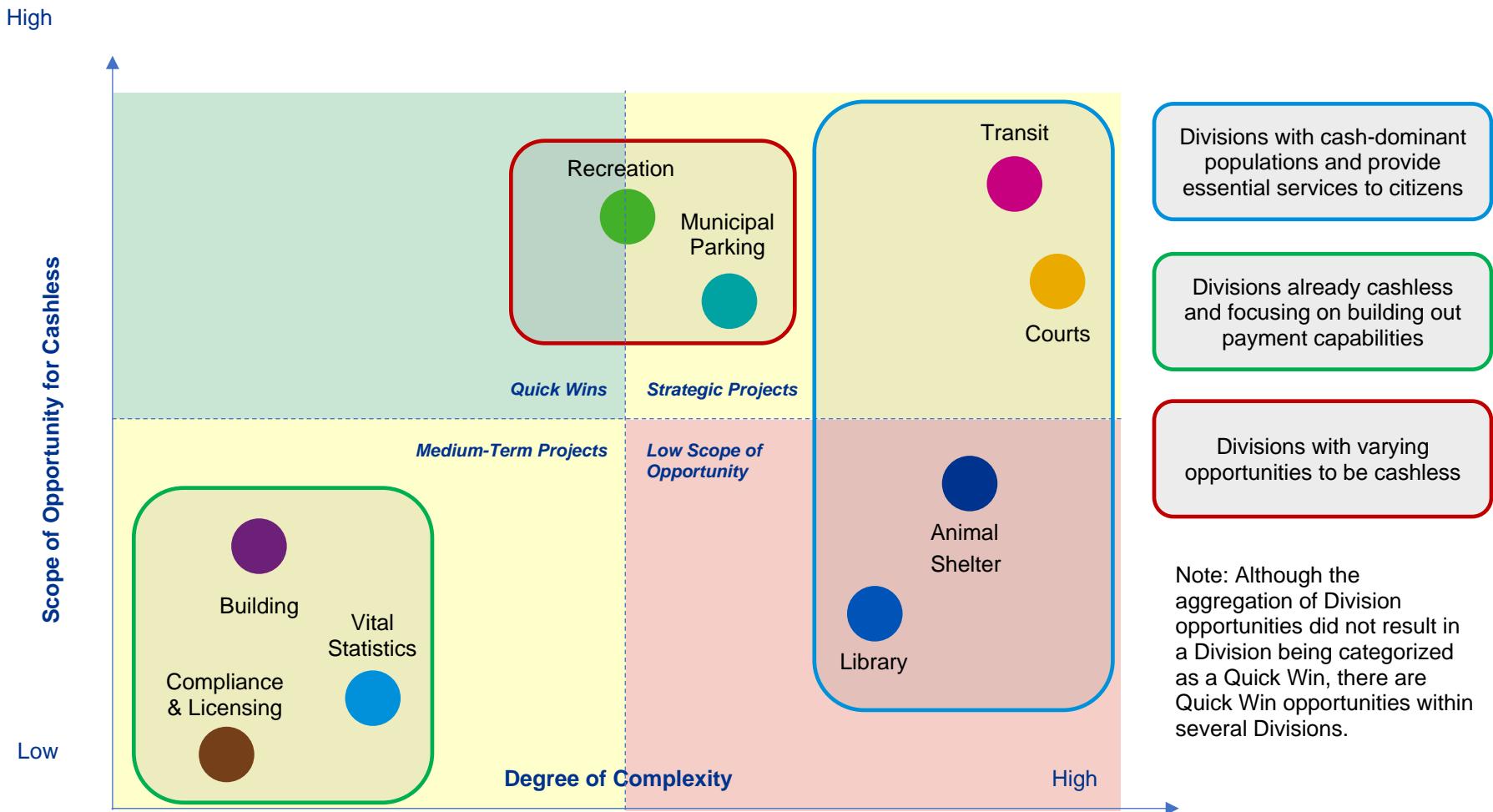


Figure 15: *Cash as a Percentage of Division Revenue (2020)*

**Degree of complexity** is a subjective measure based on citizen readiness, capabilities, citizen segments, operational readiness, and other relevant factors that determine how complicated it would be to move to cashless transactions for the Division. Divisions with a high degree of complexity exhibit additional challenges when considering cashless operations, such as demographics using cash out of necessity.

By categorizing Divisions into these four quadrants, the City can group and sequence opportunities into a logical roadmap. This prioritization is intended to provide high level directional inputs for Divisions with relatively higher versus lower opportunities, compared to their relative complexity.

Figure 16: **High-level Directional Prioritization (Based on City Inputs)**

The nine in-scope City Divisions can be categorized into four major streams:

***Medium-term Projects***

This quadrant indicates the Divisions that have a low degree of complexity and a low scope of opportunity to go cashless, as their transition to cashless operations are already underway or complete. The Divisions categorized in this group are: Compliance and Licensing, Building, and Vital Statistics.

— Compliance and Licensing and Vital Statistics have transitioned to fully cashless operations as a result of the permanent closure of cashiers as a public facing service. These Divisions will need to work through their operational challenges without cash as a payment alternative. The City should prioritize these Divisions and emulate their learnings and success in other Divisions.

— The third Division under this category, Building, began to transition to cashless payments in 2016. This was accelerated by the cashiers' decision to transition to cashless transactions during COVID-19. For more information on Building's transition to cashless operations, see *Division Case Study: Challenges arising from moving too quickly to cashless transactions*.

***Low Scope of Opportunity:***

This quadrant indicates the Divisions with a high degree of complexity and a low scope of opportunity to go cashless. Although these Divisions possess the adequate infrastructure and processes to go cashless, they are met with other barriers and challenges (e.g., cash-dominant demographics). The Divisions categorized in low scope of opportunity projects are: Animal Shelter and Library.

***Quick Wins:***

This quadrant indicates the Divisions with a low degree of complexity and a high scope of opportunity to go cashless. While these Divisions pose to benefit from being cashless, they require some level of investment in infrastructure and capabilities within the Division to achieve this. The Division categorized as a quick win project is Recreation[12].

***Strategic Projects:***

This quadrant indicates the Divisions with a high degree of complexity and a high scope of opportunity to go cashless. These Divisions will likely require significant effort towards implementing cashless transactions. These Divisions should pursue being cashless in long-term and should be reassessed for changes on a regular basis. The Divisions categorized in major projects are: Courts, Transit, and Municipal Parking.

The following section outlines the opportunities identified for each of the Divisions during the review. All figures were validated with the City for accuracy.

---

[12] Although the aggregation of Division opportunities resulted only Recreation categorized as a Quick Win, there are Quick Win opportunities within several Divisions

| 1. Animal Shelter Services (2020 Revenue: $644.3k; 0.5% of in-scope revenue) | Category: Low Opportunity, High Complexity |
|---|---|

| Divisional Summary | Quantitative Trends |
|---|---|
| — There are three primary revenue sources for Animal Shelter: pet licenses (74.8%), adoption fees (6.2%), and donations (6.1%). The Division relies on a centralized payment desk that accepts most in-person payments.<br>— Cash has declined steadily since 2016 as online bookings and payments continue to be adopted by citizens. However, some demographics (e.g., low income) still use cash out of necessity and see Animal Shelter as an essential service.<br>— Cash is likely an essential payment means for the Division in the near-term. The focus should be on opportunities to reduce cash – versus eliminating cash. | — Cash as a percentage of total revenue has declined by 4.3% from 2016 to 2019. It declined an additional 2.9% from 2019 to 2020.<br>— Cash accounted for 10.6% of total revenues collected in 2020.<br>— Cash costs have increased by 3.0% from 2016 to 2020, despite a 57.2% decrease in cash received. |

| # | Context & Challenge | Potential Opportunity & Rationale | Anticipated Benefits | Risks & Operational Considerations | Next Steps & Action Items |
|---|---|---|---|---|---|
| 1.1 **M** **L** | **In-person visits and the Division's centralized payments desk drive the stickiness of cash payments.**<br>— Online registration and payments are available for the Divisions largest revenue generating service (Licenses). However, some populations still prefer to pay in-person.<br>— Having already invested in online payment capabilities, the Division could benefit from pushing demographics who use cash out of preference to their online platforms.<br>Pet License Revenue: $482.1k<br>Cash Transactions: 7.9% | **Incentivize the use online payment platform for available services.**<br>— Minimize the opportunity for people to pay with cash by incentivizing license renewals online (e.g., email out renewal notices with a link to the online platform)<br>— When citizens call in for payment, offer support with the payment platform vs. offering to take payment over the phone<br>— Create training materials and documents to walk citizens through online payments when they come in to pay in cash<br>Total Cash Transactions: $68.3k | — Reduced administrative burden to collect and count cash payments (e.g., due to automated reconciliation of online payments)<br>— Easier to reimburse/refund payments made in error<br>— Reduced phone call volumes and staffing requirements<br>— Better payment data on citizen purchasing habits | — Cash-dominant demographics (e.g., Seniors and low-income segments) may be resistant to change<br>— Higher fees and transaction costs associated with debit and credit card transactions<br>— Lost revenue if relying heavily on financial incentives to push online payments (e.g., discounts)<br>— Resilience of online payment platform to handle increased scale and service<br>  — Technological failures could result in significant challenges for the Division (e.g., manually reconciling payments) | — Explore financial and non-financial incentives to move citizens online (e.g., one-time rebates)<br>— Evaluate the costs of each incentive against the costs associated with cash transactions (e.g., what is the incremental benefit of moving a transaction online)<br>— Define supports required to educate populations on their online payment options (e.g., educational pamphlets, online videos, etc.) |

| 1.2 **L** **L** | **Clients prefer to make charitable donations in-person, with cash.** | **Modernize donation payments to reduce cash acceptance.** | — New payment technologies (e.g., NFC/Tap) can result in a more efficient digital experience and may increase the likelihood of donations (i.e., if people aren't carrying cash they can still donate) | — There is very little appetite to discontinue cash donation boxes due to negative public perception. Emphasis should be on reducing cash donations and replacing them with contactless payments | — Engage in market-sounding initiatives and cost-benefit analysis to explore contactless payment options for donations |
|---|---|---|---|---|---|
| | — Animal Shelter has a donation box at their centralized payment desk for cash donations<br>— These donations need to go through the same cash handling/deposit process as other transactions (i.e., incur similar costs associated with cash transactions)<br><br>Total Donations Revenue: $39.1k<br><br>Cash Transactions: 22.5% | — Consider alternative ways to collect in-person donations, such as *HSBC's Pay Tribute* box or *Tap to Donate* options that allows donors to support initiatives through a contactless payment option<br>— Allow citizens to round up transactions to the nearest dollar and donate the "change" to the charity (directly at the POS)<br>— Educate people on the option to donate via Animal Shelter's website<br><br>Donation Cash Transactions: $8.8k | — Organizations globally have found impressive ROIs per device (e.g., upwards of 340%) within 12 months of implementation<br>— Donations and donor behaviour are easier to track and monitor. Engagement and donation location data can help inform future campaigns | — Additional expenses associated with initial setup before accepting cashless donations | |

**Scope of Opportunity:** **L** **M** **H**     **Degree of Complexity:** **L** **M** **H**

| 2. Building (2020 Revenue: $22.3M; 15.8% of in-scope revenue) | Category: Low Opportunity, Low Complexity |
|---|---|

| Divisional Summary | Quantitative Trends[13] |
|---|---|
| — There are two primary revenue sources for Building: permits (79.1%) and development applications and inspections (20%). <br> — Building took a proactive approach to payments modernization by enabling online transactions in 2016. During COVID-19, the Division transitioned to cashless payments. <br> — Post-COVID, the Division will likely see success in remaining cashless, as they have online capabilities and low customer demand for cash payments. <br> — This Divisions corporate demographic and high fees could also be a factor in the low demand for cash. | — Building has migrated to fully cashless operations since the beginning of the COVID-19 pandemic. |

| # | Context & Challenge | Potential Opportunity & Rationale | Anticipated Benefits | Risks & Operational Considerations | Next Steps & Action Items |
|---|---|---|---|---|---|
| 2.1 **L** **M** | **The transition to cashless payment systems was costly and added significant overhead and process complexity.** <br> — It was noted that business processes were not ready for the cashless transition. Building was not prepared to take on more of a financial role. <br> — Therefore, there is duplication within the administration and overhead of payment processing. <br> — Additional efforts are required to work towards smoothing out cashless processes, specifically within EFT processing. | **Integrate and automate technology systems and processes that support cashless transactions.** <br> — Develop appropriate financial processes to handle small-value payments and payments currently outside of ePlans workflow <br> — Explore systems and business processes to improve EFT process and automatically reconcile payments with customer accounts (e.g., front-end banking validation) | — Cost savings from reduced administrative burden and overhead <br> — Appropriate payment solutions that align payment value with payment type (e.g., not using EFT for small-dollar transactions) <br> — Less manual entry errors and streamlined back-end payment processes | — Considerable investment may be required to solve for manual workarounds <br> — Unclear if existing technology can be integrated or if it would need to be upgraded | — Conduct study on operational efficiencies to identify opportunities to reduce duplication throughout the payments process <br> — Determine the appropriate target operating model to integrate the enhanced financial role for Building |

**Scope of Opportunity:** **L** **M** **H**     **Degree of Complexity:** **L** **M** **H**

[13] Cash as a percentage of total revenue was not provided for the Review

| 3. Compliance and Licensing (2020 Revenue $1.3M; 0.9% of in-scope revenue) | Category: Low Opportunity, Moderate Complexity |
|---|---|

| Divisional Summary | Quantitative Trends |
|---|---|
| — The three largest revenue streams for this Division are: business licensing fees (83.4%), charity gaming licenses (9%), and swimming pool enclosure fees (5%).<br>— Compliance and Licensing went cashless as a result of the COVID-19 pandemic.<br>— Dealing with primarily corporate customers, Compliance and Licensing faced lower barriers towards going cashless. For the small population of cash-dominant customers, the Division had dedicated communications to prepare them for the transition. | — Cash as a percentage of total revenue increased by 1.2% from 2016 to 2019 but declined by 4.3% from 2019 to 2020.<br>— Cash accounted for 3.0% of total revenue in 2020, down from 7.3% in 2019.<br>— 2020 Cash Transactions: $38k (Pre-COVID: $125k). No cash has been accepted since the start of the pandemic. |

| # | Context & Challenge | Potential Opportunity & Rationale | Anticipated Benefits | Risks & Operational Considerations | Next Steps & Action Items |
|---|---|---|---|---|---|
| 3.1 <br> L <br> H | **Limited capability of online / digital payment platforms drives in-person and manual interactions.**<br><br>— Customers have the option make payments online. However, this is currently limited to only a few services (e.g., STA applications). It is understood that the existing online capabilities can be leveraged for most licenses.<br>— The Division is in the middle of transitioning all services online. However, this process has been slow due to IT challenges and other capacity constraints.<br><br>Non-Online Payments: 100% | **Continue to prioritize the development of online application and payment capabilities.**<br><br>— Work through implementation challenges to continue to improve the digital services offered online<br>— Plan to support the behavioural shift from demographics that prefer use paper-based applications and payments<br>— Explore other payment mechanisms that are conducive to online platforms (e.g., EFT, pre-authorized debits, e-Transfers, etc.) | — Improved flexibility for corporate customers and a better citizen experience using digital tools<br>— Easier to track the status of applications and payments<br>— Reduced manual effort to take in-person applications and payments | — May be challenging to shift the behaviours of corporate customers who have established payment processes (e.g., need the new solutions to meet their payment and record keeping needs)<br>— Complex applications may still require manual reviews and could be challenging to digitize<br>— Higher fees and transaction costs associated with debit and credit card transactions | — Determine the services that have the highest percentage of in-person applications and payments. Focus IT efforts on the highest opportunity areas.<br>— Evaluate cost of online payments against in-person administrative costs.<br>— Evaluate resilience of online payment platform for increased scale and service |

44

| 3.2 **L M** | **Cheque payments drive the frequency of cash pickups and paper-based handling costs.**<br>— Cheque are processed by Cashiers where they are scanned to deposit. However, there are very high volumes of cheques going through this process.<br>— Many individuals respond to paper renewal notifications by mailing-in cheques, even though the cashiers no longer accept it as a form of payment in-person.<br>— 75% of renewal fees paid by cheque. | **Phase out mail-in renewal notices and introduce paperless alternatives, such as email notices.**<br>— Shift towards electronic forms of communications and send renewal notices through email or other digital channels.<br>— Business owners can be redirected to the online payment platform where they can view and manage all their licensing needs (assuming the capability is available). | — Reduced costs associated with mailing out renewal notices to customers<br>— Better citizen experience and satisfaction from faster payment processing times (compared to mailing in cheques)<br>— Reduced staffing needs for in-person administration<br>— Lower cheque handling costs | — Higher fees and transaction costs associated with debit and credit card transactions<br>— Increased administrative burden during transition period if both digital and physical notices are sent out | — Evaluate cost of transitioning applications and payments online against cheque collection costs.<br>— Engage in market-sounding analysis to validate the uptake of digital renewals<br>— Develop change management strategies and plans to nudge demographics from cheques to online payments. |
|---|---|---|---|---|---|

**Scope of Opportunity:** L M H **Degree of Complexity:** L M H

| 4. Courts (2020 Revenue: $5.7M; 4.0% of in-scope revenue) | Category: High Opportunity, High Complexity |
|---|---|

| Divisional Summary | Quantitative Trends |
|---|---|
| — The Division's main revenue streams are parking tickets, provincial charges, and other legal fines[14].<br>— As Courts payments are a mandatory obligation to the City (i.e., payments are not made by choice), there must be heightened awareness to customer preferences. If the City is mandating payment, there could be poor public perception for limiting payment types.<br>— Some demographics (e.g., low income) use cash out of necessity. For these customers, cash is an essential payment means for the Division in the near-term. Courts should focus on opportunities to reduce cash – versus eliminating cash. | — Cash as a percentage of total revenue has declined by 2.3% from 2016 to 2020.<br>— Cash accounted for 32.3% of total revenue in 2020. |

| # | Context & Challenge | Potential Opportunity & Rationale | Anticipated Benefits | Risks & Operational Considerations | Next Steps & Action Items |
|---|---|---|---|---|---|
| 4.1<br>H<br>M | **Current payment platforms may discourage online payments because of additional charges.**<br>— Although the option for online payments exists, an additional charge of up to $3.00 is added<br>— Price sensitive customers may choose over-the-phone or in person payments to avoid fees<br>— Customers want certainty that payments are cleared and settled. It is believed that in-person interactions provide more reassurances<br>Court Revenue: $5.7M<br>Cash Transactions: 25.3% | **Explore eliminating transaction fees for customers using the online payment platform.**<br>— Determine if there is financial benefit to removing the surcharge as to encourage online payments from price sensitive customers<br>— Increase awareness of online payment options to customers that come in to make payments in-person. Provide reassurance that they are safe and secure alternatives to in-person transactions | — Increased online payments resulting in a better payment/digital experience<br>— Increased data collection opportunities and insights<br>— Reduced administrative burden as a result of better payment processing | — Additional expenses associated with reducing the online third-party platform payment surcharge; potentially needing to be subsidized by the City so that the entire fee is collected | — Conduct cost-benefit analysis of absorbing interchange fees with cash handling costs (e.g., armored car service, cash-on-hand allowance)<br>— Explore other payment providers or renegotiate with the current online payment partner (www.paytickets.ca) to reduce or remove the $3.00 online surcharge<br>— Explore the feasibility of integrating other online courts services (i.e., court filings, paperwork) to the online platform |

**Scope of Opportunity:** L M H    **Degree of Complexity:** L M H

---

[14] Percentages not provided for the Review

| 5. Library (2020 Revenue: $135.3k; 0.1% of in-scope revenue) | Category: Low Opportunity, High Complexity |
|---|---|

| Divisional Summary | Quantitative Trends |
|---|---|
| — The primary citizen-centric revenue sources for this Division come from fines and charges (36%), lost material (20%), and photocopy charges (15%).<br>— Being perceived as a public good, the Library must be aware of the different customer segments they serve. Some demographics (e.g., low income) use cash out of necessity as opposed to a preference.<br>— To avoid alienating vulnerable populations, Library should focus on opportunities to reduce cash rather than eliminating cash.<br>— Cash remains a significant payment method due to smaller-value transactions and the immediacy it offers. | — Cash as a percentage of total revenue has declined by 11.5% from 2016 to 2019 and declined by 13.2% from 2019 to 2020.<br>— Cash accounted for 35.7% of total revenues collected in 2020. |

| # | Context & Challenge | Potential Opportunity & Rationale | Anticipated Benefits | Risks & Operational Considerations | Next Steps & Action Items |
|---|---|---|---|---|---|
| 5.1<br><br>L<br><br>H | **Different payment options across Library services creates a fragmented citizen experience.**<br>— The discrepancy between online and in-person payment services can create confusion and frustration with citizens<br>— This creates complexities within the Division, as some services may not lend well to online booking and payments (e.g., printing) | **Evaluate the long-term alternatives to build out online payment and booking capabilities.**<br>— Two long-term options. i) significant investment in technology to support digital capabilities, or ii) reduce revenues to become a "free" service<br>— Determine the costs to transition in-person services and payments to the online platform. Evaluate this against the benefits of continuing to collect these fees. | For i)<br>— Better citizen experience and satisfaction using digital platforms<br>— Increased adoption and use of the existing online platform<br>— Reduced staffing needs for in-person administration, including cash handling and collection costs<br>— Increased data collection opportunities and insights<br>For ii)<br>— Better citizen satisfaction from free services<br>— Better adoption and use of library resources (greater community impact) | For i)<br>— Current online platform may not be able to support the migration of all in-person Library services (e.g., 3D printer availability)<br>— Additional costs associated with adding features to existing online platform or developing a new online platform<br>— Integration challenges between the booking, payment, and reconciliation of online platform<br>For ii)<br>— More difficult to budget and fund library services to cover all operational costs. | — Perform a cost-benefit analysis with respect to the cash costs versus online payment alternatives<br>— Evaluate which in-person Library services are lower in complexity and feasibility to transition online<br>— Create communications and educational awareness to support customers with booking services through the online platform<br>— Evaluate the impact of going "late fee free" (decision still under Council deliberation) on each alternative. |

| 5.2 | **Small-value transactions and in-person services drive the use of cash.** | **Shift people to cashless and online alternatives for Library services.** | — Lower cash collection and transaction handling costs | — Cash handling process still needs to be followed if any amount of cash is accepted by the Division. Which may limit the incremental gains of reducing cash. | — Develop communication strategies that address the barriers within cash-dominant populations |
| L M | — Small dollar cash transactions are very sticky and difficult to transition to cashless alternatives | — Work towards digital tools and platforms that can be adopted for all Library services. (e.g., a loadable library card that can be used for all fees and fines) | — Better citizen experience and satisfaction using digital platforms | — Cash-dominant demographics (e.g., Seniors and low-income segments) may feel alienated as they may cash as a necessity. | — Evaluate the cost of incentivizing people to move online against the reduced cash handling costs. |
| | — Some cash-dominant demographics view library resources as an essential service, which should therefore not limit payment types | — Communicate and incentivize customers to use the new payment alternatives by offering reduced fees, one-time discounts, and other tactics. | — Reduced staffing needs for in-person administration, including cash handling and collection costs | — There may be poor public perception as some customers feel that Library is a provider of public goods, and should not restrict payment types | Note: Given the closure of library services during the COVID-19 pandemic, the success of previous payment modernization initiatives cannot be measured accurately. The City should conduct further analysis to understand the success of these efforts. |
| | — Online platforms typically allow for access to digital services (e.g., eBooks, online resources) rather than serve as a payment platform. Especially for smaller fees. | | | — Reduced revenue associated with discounted fees, fines, and increased interchange fees | |
| | — Lack of online payments may drive the continued use of cash | | | — Potential complexity due to the uncertainty around fees and fines | |
| | Library Citizen-centric Revenue: 135.3k | | | | |
| | Cash Transactions: 35.7% | | | | |

**Scope of Opportunity:** L M H    **Degree of Complexity:** L M H

| 6. Municipal Parking (2020 Revenue: $937.9k; 0.7% of in-scope revenue) | | | | Category: High Opportunity, Moderate Complexity | |
|---|---|---|---|---|---|
| **Divisional Summary** | | | | **Quantitative Trends** | |
| — The primary revenue sources for this Division come from pay and display parking permits (32%) and Downtown parking garage permits (60%). Municipal parking serves a range of customers from individual citizens to corporate customers – resulting in complex payments needs.<br>— Cash is a dominant payment method due to smaller-value transactions and institutional habits.<br>— As part of the parking payment review, the City is exploring plate-based parking alternatives that are cost-saving and user-friendly. This initiative should be reviewed when considering their transition to cashless payment systems. | | | | — Cash as a percentage of total revenue has declined by 4.1% from 2016 to 2020.<br>— Cash accounted for 45.3% of total revenues collected in 2020. | |
| # | **Context & Challenge** | **Potential Opportunity & Rationale** | **Anticipated Benefits** | **Risks & Operational Considerations** | **Next Steps & Action Items** |
| 6.1<br>M<br>H | **Limited online capabilities drive in-person, cash transactions.**<br>— Parking permit forms are available online but there is no option for online payment (i.e., the process to buy/renew parking permits drives in-person, cash transactions)<br>— Citizens must go to the Cashier's desk for payment to pick up a physical parking pass<br>— Using the E-City platform as a COVID-19 workaround limits functionality and information transfer<br>Parking Permit Revenue: $72.7k (Pre-COVID: $257.5k) | **Improve digital capabilities and transition to online submission and payment of parking permits.**<br>— Minimize the opportunity for people to pay with cash for parking permits and other services by presenting viable online alternatives<br>— E.g., allow citizens to apply and pay for permits online. Then mail out permits centrally and provide temporary (printable) passes until permanent passes arrive | — Better digital/citizen experience by using online forms and payments<br>— Reduced staffing needs for in-person administration and transactions<br>— Able to pre-emptively send electronic notices and forms, which can reduce the time spent with no valid permit<br>— Lower cash collection and handling costs | — Current technology is unlikely to be able to support online submission of parking permits and online payments from the enforcement side<br>— Additional costs associated with mailing out permits to customers, as well as the development of temporary passes<br>— Disconnect from enforcement, who are working on separate projects to support online payments | — Explore the feasibility for online parking services (submission and payment) as well as temporary parking permits<br>— Evaluate the audit regulations for mailing out permits |
| 6.2<br>H | **The City's current cash-based parking meters have a perceived 15-year lifespan remaining.** | **Evaluate the costs and benefits of cash versus cashless parking metres.** | — Improved citizen experience through ability to pay with more digital payment alternatives | — Uncertainty of benefits without a detailed evaluation of costs associated with cash | — Evaluate cost of transitioning to non-cash parking meters with |

| | | | | |
|---|---|---|---|---|
| **H** | — The last review of parking systems identified no changes to these machines for 15 years<br>— The City owns the infrastructure for metered parking machines and leases the operating system from Precise ParkLink<br>— These machines drive the acceptance and use of cash<br>Metered Parking Revenue: $873.2k (Pre-COVID: $1.8M)<br>Cash Transactions: 45.0% | — If the analysis is favourable, gradually phase out cash-dominant payment machines with non-cash infrastructure<br>— For new procurements and replacements, transition to non-cash meters that can be integrated into the City's existing parking infrastructure<br>Metered Cash Transactions: $392.9k (Pre-COVID: $825.2k) | — Lower cash collection costs (including mandatory audits by meter)<br>— Able to upgrade to new payment technologies (e.g., NFC/Tap) resulting in a more efficient digital experience | parking metres versus online parking payments<br>— Significant investment to replace and integrate legacy infrastructure<br>— Integration challenges between the new and old machines<br>— Limitation from the enforcement team as they are unable to enforce online payments currently<br>— Potential for increased costs from service fees | current cash handling costs<br>— Work with Precise ParkLink to identify viable solutions (e.g., determine if their *Touchless Parking Solutions* can be leveraged as a hardware and software solution) |
| 6.3<br>**M**<br>**H** | **Challenging rollout of modernized payment initiatives.**<br>— To decrease reliance on cash, the City plans to undertake a Pay-by-Phone initiative<br>— However, this has taken considerable time to deploy, which could result in new initiatives become redundant quickly | **Address current implementation challenges associated with Pay-by-Phone initiative.**<br>— Identify and support completion of Pay-by-Phone payments<br>— A regular, thorough review of the pay-by-phone initiative will help the City understand its success and value in rolling out more broadly | — Lower cash collection costs and counting Ability to redistribute parking meters as a result of Pay-by-Phone<br>— Optimize legacy infrastructure (e.g., ability to reduce and spread out existing parking machines in areas that adopt pay-by-phone) | — Determine ROI and payback period of new system<br>— Citizens may find it more onerous to pay over the phone and it could be unclear when the parking expires<br>— Update back-end technology integration to support new digital tools and collection of information over IVR<br>— Limited funds and investment to rollout other potential initiatives | — Conduct regional level assessment of performance and adoption of pay-by-phone<br>— Understand the barriers to using pay-by-phone and incentivize customers to use the service<br>— Consider physically expanding coverage of the pilot (i.e., wider geography) or adding other digital mediums (e.g., mobile application). |

**Scope of Opportunity:** L M H          **Degree of Complexity:** L M H

| 7. Recreation (2020 Revenue $14.3M (Pre-COVID $50.1M); 10.1% of in-scope revenue) | Category: High Opportunity, Moderate Complexity |
|---|---|

| Divisional Summary | Quantitative Trends[15] |
|---|---|
| — There are three primary revenue sources for Recreation: programs (18%), sports amenity rentals (16%), and golf green fees (15%).<br>— This Division offers a diverse range of services that vary in their level of centralization, revenue streams, transaction volumes and values, and demographics resulting in complex payments needs. This creates inconsistency in the citizen experience.<br>— Some services have higher barriers to going cashless (e.g., community pools), while others present more favorable conditions (e.g., wedding services) | — Cash as a percentage of total revenue has declined by 1.8% from 2016 to 2019 and declined by 1.9% from 2019 to 2020. |

| # | Context & Challenge | Potential Opportunity & Rationale | Anticipated Benefits | Risks & Operational Considerations | Next Steps & Action Items |
|---|---|---|---|---|---|
| 7.1<br>H<br>L | **Due to the breadth of recreation services, a generic approach cannot be taken for transitioning to cashless operations.**<br>— Some service areas have low cash usage and decentralized operations are good candidates for going cashless[16].<br>— e.g., C-Café is highly decentralized and operates independently from other parts of Recreation, serving a highly adaptable customer base.<br>— However, these opportunities remain uncertain due to the breadth and depth of this review (Division-level) | **Validate the feasibility of going cashless within some service areas.**<br>— Conduct a detailed feasibility analysis within the Division to determine where the highest opportunities to go cashless are<br>— Understand citizens serviced by each segment and the cash drivers.<br>— Take an incremental approach towards going cashless, slowly integrating their services over time when the conditions to going cashless are favorable | — Gradual reduction of administrative burden and cash costs within the Division<br>— Lower cash collection and handling costs<br>— Ability to pilot cashless service areas and learn from their implementations<br>— Better citizen experience and satisfaction from digital payments | — Higher fees and transaction costs associated with debit and credit card transactions<br>— Some demographics may feel that payment options do not meet their needs or preferences<br>— Fragmented citizen experience could create confusion and dissatisfaction<br>— Evaluate resilience of relevant payment technology for increased scale and service<br>— Technological failures could result in significant challenges for the Division (e.g., manually reconciling payments) | — Evaluation of the cost and benefits of transitioning service areas to cashless transactions (e.g., costs of cash against transaction fees and system enhancements)<br>— Identify high opportunity areas within the Division and additional investment required in payments infrastructure to enable cashless operations.<br>— Develop implementation roadmap for cashless transition in high opportunity service areas.<br>— Promote the use of new software capabilities and ability to use online booking and payment system |

---

[15] Increase/decrease of cash costs were not provided for the Review
[16] Low cash usage service areas were not provided for the Review

| | | | | |
|---|---|---|---|---|
| | Cash Transactions: 4.5% (Pre-COVID: 6.4%) | | | |
| 7.2 **M** **H** | **In-person visits within some Division services drive the stickiness of cash payments.**<br>— For example, online registration and payment are available for some recreation programs but not others<br>$ Revenue: $185.9k<br>Cash Transactions: 16.0% | **Incentivize the use of the online payment platform for available services.**<br>— Where capabilities currently exist, minimize the opportunity for people to pay with cash by pushing registration fees payments online<br>— Where the capability does not exist, evaluate the opportunity to digitize the service against the costs.<br>Total Cash Transactions: $68.3k | — Reduced administrative burden to collect and count cash payments (e.g., due to automated reconciliation of online payments)<br>— Easier to reimburse/refund payments made in error<br>— Reduced phone call volumes and staffing requirements | — Cash-dominant demographics (e.g., Seniors and low-income segments) may be resistant to change<br>— If cash operations and processes need to be maintained there is likely to be low benefit.<br>— Higher fees and transaction costs associated with debit and credit card transactions | — Explore the ability to move additional services to the online payment platform (e.g., Swimming or Recreational Lessons, Space Booking)<br>— Promote the use of new software capabilities and ability to use online booking and payment systems.<br>— Develop implementation roadmap for cashless transition in high opportunity service areas. |

**Scope of Opportunity:** L M H    **Degree of Complexity:** L M H

| 8. Transit (2020 Revenue: $94.1M (Pre-COVID: $107.3M); 66.9% of in-scope revenue) | Category: High Opportunity, High Complexity |
|---|---|

| Divisional Summary | Quantitative Trends |
|---|---|
| — Transit accounts for 59.4% of the city's revenue. The Division's largest sources of revenue are fare box tickets (35.7%), period passes (4.5%), and school contracts (4.1%).<br>— Despite the low percentage of cash revenue, Transit is one of the largest cash collecting Divisions within the City. This requires significant operations to count and deposit cash. However, the PRESTO card implementation has shifted most of Transit's revenue to be collected through cashless methods.<br>— Being perceived as a public good, Transit must be aware of the different customer segments they serve. Some demographics (e.g., low income) use cash out of necessity as opposed to a preference.<br>— To avoid alienating vulnerable populations, Transit should focus on opportunities to reduce cash rather than eliminating cash. | — Cash as a percentage of total revenue has declined by 2.7% from 2016 to 2019 and declined by 7.2% from 2019 to 2020.<br>— Cash accounted for 4.9% of total revenue in 2020, down from 14.8% in 2016 (25.5% YoY decline)<br>— Cash costs have not materially changed since 2016, despite cash collections falling by 9.9% of total revenues in the same period. |

| # | Context & Challenge | Potential Opportunity & Rationale | Anticipated Benefits | Risks & Operational Considerations | Next Steps & Action Items |
|---|---|---|---|---|---|
| 8.1<br><br>H<br><br>H | **For fare box collections there are sticky demographics that prefer, or out of necessity, pay in cash**<br>— It is understood that a significant percentage of cash transactions are from disadvantaged populations<br>— Transit believes that the biggest barrier to going cashless is continuing to accommodate these demographics<br>Fare Box Revenue: $42.3M (Pre-COVID: $90.2M)<br>Cash as a % of Fare Box Revenue: 10.9% (Pre-COVID: 14.4%) | **Increase communications and outreach programs to shift citizen habits to cashless payments.**<br>— Evaluate sticky cash segments and the barriers that exist in going cashless (e.g., look at locations and specific routes that are cash-dominant)<br>— Evaluate access to PRESTO card machines to determine if the stickiness is supply or demand driven<br>— Consider levers such as educating citizens on the benefits of using PRESTO and other cashless payment types for MiWay (e.g., convenience, cheaper fares) | — More efficient transit operations (e.g., quicker loading times, less cash through the coin room, etc.)<br>— Increased data collection with PRESTO and cashless payments<br>— Improved customer experience (e.g., no change for cash fares) | — Cash-dominant demographics (e.g., low-income segments) may be resistant to change<br>— Lost revenues associated with PRESTO fees and higher cash fares (e.g., for youth riders cash fare is $4 and single PRESTO fare is $2.35).<br>— PRESTO as a service provider is responsible for most of the marketing for transit services leaving MiWay with limited control over communication efforts. MiWay would likely need to bear the costs associated with Mississauga/demographic specific communications | — Develop communication strategies and tactics that address the barriers within cash-dominant populations<br>— Monitor success and collect data on customer perception and preferences from transit programs<br>— Determine if the cost of collecting and counting the cash against the lost revenue from cash fares<br>— Review of cash infrastructure to determine if the legacy processes and technologies are relevant to the current level of cash – whole business model change and review to go from $90M in cash and $10M in cash |

| | | | | | |
|---|---|---|---|---|---|
| | | Fare Box Cash Transactions: $4.6M (Pre-COVID: $12.9M) | | | |
| 8.2 **H** **H** | **Some fare pricing strategies encourage cash payments.** — MiWay offers Senior riders $1 fare by cash (vs. $2.10 for PRESTO single fares). — Post-device refresh, PRESTO devices now have the capability to do time-based fares. This is on Transit's medium-term roadmap. Discount Fare Cash Revenue: $323.3k (Pre-COVID: $811.2k) | **Work with PRESTO to implement dynamic pricing strategies for different fare types.** — Automatically charge reduced/discounted fares to profiles that meet certain conditions (e.g., Seniors at certain times of the day) — Reduce or eliminate paper based LUMs | — Digital payments allow for dynamic pricing strategies (e.g., cheaper demographics, time of day, etc.) — More efficient transit operations (e.g., quicker loading times, less cash through the coin room, etc.) — Consolidate product offerings to simplify user experience | — There may be significant investment and infrastructure costs associated with introducing new ticketing products — Need to educate users that the system will apply the discount automatically. | — Work with PRESTO to introduce and implement dynamic pricing products (e.g., for Seniors and Youths) — Introduce time-based pricing capabilities as updated during the Device Refresh. Prepare for the rolled out in 2022. |
| 8.3 **M** **H** | **Open Payments will disrupt the way transit users pay for fares.** — As a partner of Metrolinx, MiWay will enable Open Payments in the near-term. — Open Payments and e-Tickets (UTM) are some of the big initiatives to reduce cash. — PRESTO commission (9%) is an influencer on the types of revenues that are sought by the Division. Transit Revenue: $94.1M (Pre-COVID: $107.3M) | **Prepare communications and strategies to shift cash payments to open payment products.** — Collaborate with PRESTO to rollout Open Payment solutions allowing riders to pay for transit fares directly through credit or debit cards — Look at global open payments initiatives to understand how debit/credit card fares could cannibalize cash or PRESTO fares | — Reduce fare evasion and revenue leakage as more people have payment methods readily available — Faster boarding time reduces route cycle — Improved data collection and business intelligence | — Significant operational and technology risk from Open Payments transformation — Challenging to create consistent experiences and maintain co-fares with GO and TTC. Cannot abandon non-cash fares in areas that only accept cash (e.g., need to be aware of the connectivity with other providers) | — Understand and evaluate the shift in revenues as fares more from PRESTO cards to Open Payments (e.g., interchange fees vs. commissions paid to PRESTO). — Identify outreach opportunities with other City Divisions to reduce coordination costs and increase ROI of affordable transit programs |

**Scope of Opportunity:** (L) (M) (H)   **Degree of Complexity:** [L] [M] [H]

| 9. Vital Statistics (2020 Revenue: $1.4M; 1.0% of in-scope revenue) | **Category:** Low Opportunity, Low Complexity |
|---|---|

| **Divisional Summary** | **Quantitative Trends** |
|---|---|
| — There are three primary revenue sources for Vital Statistics: marriage licenses (22.2%), burial permits (19.5%), and commissioner of oaths fees (2.6%).<br>— Cash payments are no longer accepted by the Division. This move has received positive public response due to the communication and support during the transition. | — Vital Statistics has migrated to fully cashless operations since the beginning of the COVID-19 pandemic. |

| # | Context & Challenge | Potential Opportunity & Rationale | Anticipated Benefits | Risks & Operational Considerations | Next Steps & Action Items |
|---|---|---|---|---|---|
| 9.1<br>**L**<br>**M** | **Vital Statistics' online platform has limited capability to book and make online payments.**<br>— Vital Statistics is currently implementing enhancements to their online capabilities. The understanding is that the capabilities exist but are not being appropriately leveraged.<br>eStore Revenue: $349k | **Continue to build out options for citizens to pay online for Division services.**<br>— Prioritize the digitization of high value services (e.g., where there is the greatest benefit to move the service online)<br>— Develop workaround processes for complex applications or where the customers select the wrong payment amount | — Citizens can pre-pay for services and pick up documents in person more efficient interactions<br>— Reduced administrative costs to take payments in-person<br>— Division can focus more time on servicing customers<br>— Can solve for sliding scales, where the citizen selects the fee they are told to pay. | — Additional expenses associated with set up and integration of online payments<br>— Need to solve for complex applications that could be challenging to put online (e.g., where manual review is required) | — Address current implementation challenges such as capability to use drop down menus and options to pay for services.<br>— Prioritize the onboarding of services to the platform that offer the highest value |

**Scope of Opportunity:** **L** **M** **H**    **Degree of Complexity:** **L** **M** **H**

# 5.4 NEXT STEPS AND HIGH-LEVEL ACTION PLAN

The diversity of municipal operations will require the City to take a Division-by-Division approach to going cashless. This will require the City to identify Division-specific roadmaps that address their unique needs, while building common capabilities – where feasible. The City should use the findings and opportunities in this report to prioritize and sequence its action plan.

The City's next steps should continue to balance the risks, costs, and benefits of going cashless within each Division. These actions can be summarized according to the thematic opportunities identified throughout the report. By understanding what needs to be done in the near- and long-term, the City can take an incremental approach towards their cashless objectives.

| Opportunity Theme | Next Steps and Actions | Divisions |
|---|---|---|
| **A tailored, Division-by-Division approach** | — Quantitatively determine the largest opportunities to go cashless after completing a cost-benefit analysis<br>— Validate the complexity associated with each Division's cashless transformation through deeper assessment of capabilities and planned investments<br>— Create a transformation team to work on the roadmap to progress quick wins, strategic projects, and medium-term projects (see illustrative example below) | **All – City-wide Opportunities** |
| **Standardize cashless capabilities and common cash assets** | — Identify cashless capabilities within (and across) Divisions<br>— Determine if the capability can be standardized (utility), or is unique to the Division in their provision of service<br>— Assess whether cash infrastructure can be centralized across Divisions with low cash volumes (or consolidated across a few Divisions based on common needs)<br>— Re-evaluate cash handling policies and procedures for relevance and appropriateness within each Division (e.g., whether Divisions should have different requirements for cash on hand) | |
| **Address gaps in providing cashless alternatives** | — Review the prioritization of Divisional opportunities to become more cashless and focus efforts on high-value areas (e.g., where there a high scope of opportunity)<br>— Look to leverage existing digital portals and platforms as ways to close capability gaps in the near-term | |
| **Address implementation challenges in current, in-flight cashless initiatives** | — Complete an objective review of cashless implementations and identify the root cause of challenges<br>— Define targeted communication plans that address specific barriers<br>— Determine if there is appropriate governance and escalation pathways for implementation challenges<br>— Address currently known implementation challenges | |
| **Targeted communications and adoption plans for Divisions with high cash usage** | — Determine the City-wide communication needs and supports for Divisions to go cashless | |

| | | |
|---|---|---|
| | — Secure Council and senior leader support for cashless mandates<br>— Determine appropriate KPIs and benchmarking data to measure the success of cashless transitions | |
| **Standardize reporting, including City-level revenues and costs** | — Undertake a technology assessment to determine the City-wide barriers that contribute to inconsistent data and reporting<br>— Work to close data and information gaps | |
| **Prioritize change management and central coordination** | — Stand up a cross-functional implementation team that is dedicated to cashless transformation across the City<br>— Determine their mandate and how they will be funded | |
| **Enhance online and digital capabilities** | — Through discovery, design, and planning phases determine the requirements for online and digital capabilities for each Division<br>— Determine if existing systems or infrastructure can satisfy requirements or if new solutions are required<br>— Evaluate the costs and benefits of solutions against the costs of cash and in-person payments | — Animal Shelter<br>— Compliance & Licensing<br>— Library<br>— Municipal Parking<br>— Vital Statistics |
| **Create consistent payment experiences** | — Identify payment discrepancies between service areas/LOBs within each Division (e.g., where there are inconsistencies within a Division)<br>— Determine the preferred payment method (for both the City and its citizens) and work towards a consistent multi-channel experience | — Compliance & Licensing<br>— Municipal Parking<br>— Recreation |
| **Address cashless implementation challenges** | — Identify capacity constraints (e.g., resources, skillsets, timing) within in-flight and planned cashless initiatives<br>— Identify the support required and gaps to be addressed<br>— Seek leadership support in easing implementation challenges | — Building<br>— Municipal Parking<br>— Transit |
| **Address demographic specific barriers** | — Identify the specific barriers that are creating stickiness within cash-dominant demographics<br>— Determine strategies to help shift behaviour, tailoring for stickiness due to necessity (must pay with cash) or preferences (want to pay with cash) | — Animal Shelter<br>— Courts<br>— Library<br>— Recreation<br>— Transit |
| **Determine the costs of processing cash** | — For each cash accepting Division, undertake a detailed analysis of the costs associated with accepting and handing cash (including labour costs)<br>— Use this analysis to evaluate the costs and benefits of the opportunities above | All cash accepting Divisions |

The illustrative roadmap below shows how the City could consider prioritizing and sequencing Division-specific opportunities. This roadmap is based on the following assumptions:

— **Start with areas of high opportunity and low complexity**. This allows the City to address quick wins and begin to realize benefits from cashless operations (e.g., identify revenue streams capable of going cashless in the near-term).

  — For example, customers that begin using pay-by-phone for Animal Shelter may wish to continue using pay-by-phone for other City services, such as Municipal Parking. Creating a consistent citizen experience may facilitate a more natural shift to cashless transactions.

— **In parallel, prioritize a mix of strategic projects and medium-term projects**. Alongside addressing the areas of high opportunity, the City can focus on opportunities with a longer time horizon. It is likely that some of these initiatives require transformational changes to operations and technology but may result in significant benefits to the City.

  — Each of these opportunities need to be explored and analyzed further to validate their feasibility and priority. However, this analysis needs to be designed and sequenced in a logical way – at the City and Division level.

— **Finally, reassess low reward opportunities** to see whether the above initiatives and changes have impacted their scope or complexity.

Figure 17 outlines the high-level roadmap the City can consider to move towards cashless transactions. Some additional context on each of the phases is provided below.

### Phase 1: Quick Wins and Priority Opportunities

These opportunities satisfy most (or all) of the conditions to go cashless in the short-term. The City and Divisions can begin transitioning immediately.

### Phase 2: Incremental Changes and Long-Term Strategic Initiatives

These opportunities satisfy some conditions to going cashless. As a result, the City and individual Divisions need to work on the outstanding areas to make the opportunity feasible and implementable.

### Phase 3+: Low Priority or Very High Complexity

These Opportunities are unable to go cashless with their current operations and demographics. Major changes (both internal and external) may be required for these to become feasible.
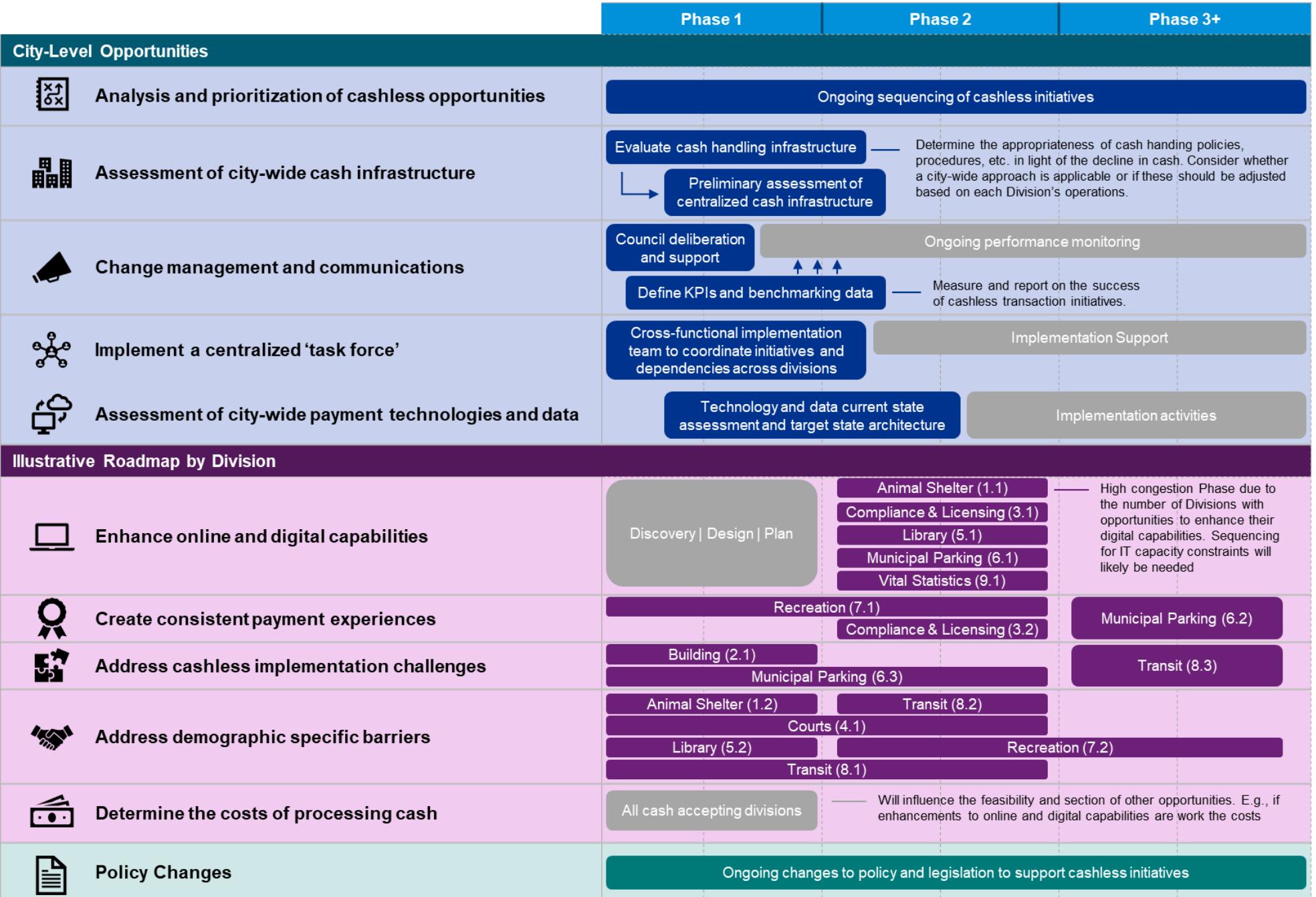
*Figure 17: **Illustrative High-Level Cashless Roadmap***

# 6. Challenges and Mitigation Strategies

## 6.1    POTENTIAL CHALLENGES

The City can expect several common transformation challenges along its transition to cashless payments. A few of these have been identified below along with possible mitigating actions.

| Risk | Severity | Mitigation |
|------|----------|------------|
| **Poor public perception**<br><br>One of the major risks identified across several Divisions was poor public perception and resistance to change from cash-dominant demographics. Unbanked populations, Seniors, and younger demographics may be cash-dominant and may not have alternative methods of payment if cash were not accepted. This would leave a portion of the population unable to access the services offered by the City. This was noted to contradict the core values and purpose of the City. | **High** | ***Carefully approach cash-dominant demographics and ensure adequate alternatives are present before a complete transition to cashless payments.***<br><br>Cashless payments can improve citizen satisfaction and experience in many ways, from improving convenience to reducing transaction times and security risks. The centre of this positive payment experience is consistency across channels. This multi-channel experience needs to be considerate to accommodate individual citizen and Division payment needs. Portals that promote access, availability, self-service, and social equity can all contribute to an enhanced multi-channel payment experience.<br><br>However, the primary goal of the City is to serve public needs, which includes citizens from all demographic and socioeconomic backgrounds. By emphasizing citizen satisfaction while moving to cashless payments, the City can ensure that fewer citizens will feel alienated or neglected by the changes being made above. |
| **Data privacy and security concerns**<br><br>Citizens that frequently pay with cash, most notably Senior and low-income residents, may not adopt online payments due to a fear of online data breach and privacy concerns. They also prefer to be physically present at the time of payment. | **Moderate** | ***Improve digital literacy through communication and change management initiatives.***<br><br>Communications and change management are critical to support behavioural shifts. These need to be prioritized alongside awareness campaigns, legislation, and policy enhancements. Information protection should also be at the core of implementing new payment solutions. |
| **Payment technology failures**<br><br>In a cashless Division, technology failures can cause significant challenges as there would be limited alternatives for citizens to make payments. Given the immediacy of payments in certain Divisions (e.g. | **High** | ***Test existing and new systems for resilience.***<br><br>Adequately stress test online payment platforms and other high-volume payment channels for their ability to handle increased traffic. Ensure that technical workarounds and manual processes are scalable if required. |

| | | |
|---|---|---|
| Courts, Transit), this could negatively impact the livelihood of citizens. | | |
| **Data collection and availability**<br><br>As identified in this review, the City does not have a view (and cannot easily obtain one) of all payment activity across the City. Considerable technology complexities are limiting the business intelligence and insights that could be used to support key payment decisions. | **Moderate** | **Create a centralized payments system of record.**<br><br>A centralized payments system of record captures every payment that is executed across the City. Even with a composite architecture solution (e.g., disparate systems), relevant integrations and data management support this City-wide view of payments. |
| **Continued fragmented operating model, customer experience, and data.**<br><br>The lack of a unified payment system can continue to grow as a barrier for the City in the long-term. Decision-making processes will continually be hindered due to lack of a strong evidence base backing payment modernization initiatives. | **High** | **Identify options for standardizing operations and capabilities based on feasibility.**<br><br>Evaluate common assets that are applicable to be shared across Divisions. Identify opportunities for standardizing revenue and cost reporting at the City level. |

# 6.2 CHANGE MANAGEMENT

To implement the opportunities identified in Section 4 and address the cashless challenges and risks above, the City of Mississauga would require a target state for payments that addresses current challenges and the future needs of its citizens. This target state will require greater coordination, integration, and presence of risk-management practices across all Divisions.

Both the transition to the target state (i.e. implementation) and ongoing operations require the balance of implementation efforts with business-as-usual responsibilities. This will require significant change management to translate, action, and sustain new ways of working across City Divisions. Effective change management anticipates the barriers to transformation and incorporates strategies to overcome friction throughout the journey. Some considerations to ensure a smooth transition include:

I. Establishing a centralized governance structure responsible for overseeing cashless transformation activities (i.e. a Programme governance).

II. Acquiring baseline data on performance metrics and outcomes – and measuring improvements.

III. Engaging with a diverse set of internal and external stakeholders with differing interests and influence.

IV. Ensuing that those involved in the process have the right skillsets, training, and knowledge.

V. Having a full-time core-team of dedicated resources and champions to implement and embrace the new processes.

VI. Using different approaches to activities, including pilots and proof of concepts in one or more functions before rolling the initiative out to the broader enterprise.

VII. Emphasizing responsive, proactive, and executive sponsorship to lead changes.

VIII. Using regular communication to broadcast successes, milestones, and other early benefits of the initiative.

IX. Anticipating concerns and skepticism for each stakeholder group and planning communication strategies to target their needs and known issues.

The visual below presents the four foundation phases of change management. It also includes the objectives and key activities that the City should consider alongside the cashless opportunities.

| | 1. Make it Known | 2. Make it Real | 3. Make it Happen | 4. Make it Stick |
|---|---|---|---|---|
| **Objective** | Communicate the vision and case for change. Begin to build ownership and consensus of the desired future state. | Translate the vision for change into reality for partners and stakeholders (both internal and external). Bring them along on the change journey. | Move operations towards the desired future state. Equip stakeholders for success and encourage adoption of new ways of working. | Ensure there is capability across City Divisions to sustain the change. |
| **Key Activities** | – Establish a clear vision and case for change<br>– Communicate widely<br>– Employ leading practices for change leadership | – Implement a stakeholder engagement and communications plan | – Drive progress on the project<br>– Proactively manage project milestones and risks | – Measure the impact of change<br>– Employ critical success factors for sustainable change |

# 6.3  CONCLUSION

The City of Mississauga operates many diverse services across a highly complex operating environment. This reality of municipal operations means that the City faces a wide set of considerations and barriers along their cashless journey. Most notably, transitioning to a fully cashless municipality will be highly dependent on the City's ability to offer viable payment alternatives to cash-dominant and underbanked demographics. This barrier becomes more significant when cash is used to access essential City services, such as Transit, Animal Shelters, Library, and Courts. These Divisions will need to carefully assess and understand the needs of their most at-risk populations when working to reduce cash.

However, this does not mean the City cannot take incremental and gradual steps to reduce or eliminate cash across individual Divisions. When the risk of alienating vulnerable populations is addressed and demographic barriers are not present, Divisions have shown success in fully transitioning to cashless operations (e.g., Building, Vital Statistics, Compliance and Licensing). For these Divisions, the next step in their payments journey is optimizing their operations and capabilities for a cashless future.

There are also other Divisions that fall in between these two categories. For example, Recreation and Municipal Parking present opportunities to become more cashless within some of their service areas. For these Divisions, there should be a focus on building out Division-wide capabilities that support cashless operations, while maintaining cash as an accepted payment alternative. Once payment capabilities have matured, the Divisions may consider transitioning citizens to fully cashless services.
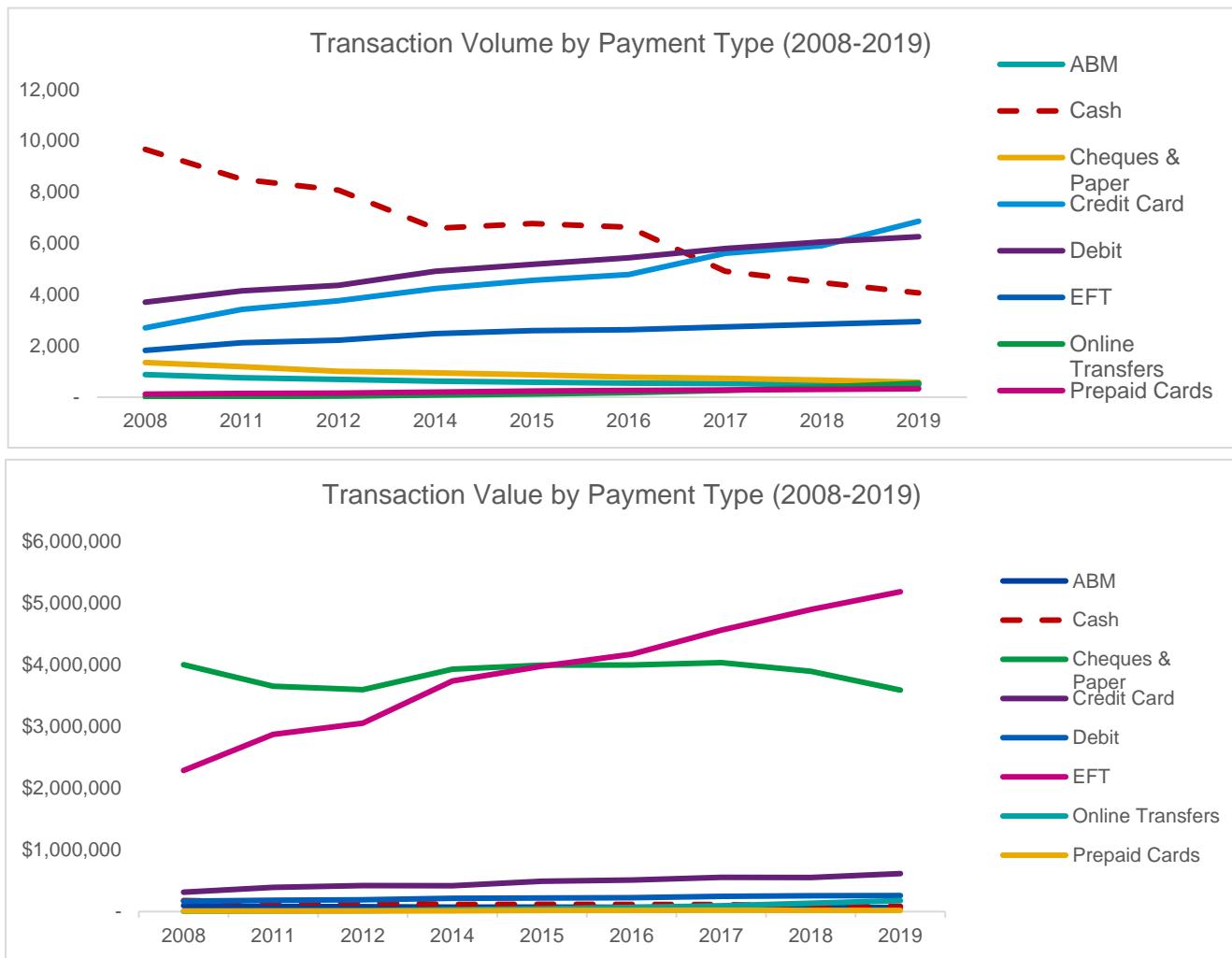
Finally, to support all Divisions along their cashless journey, the City should tackle 'global' challenges that impact and influence the use of cash at the City-level. These include assessing their minimum viable cash infrastructure, centralized project management, technology and data changes, and other supports. Taking this top-down approach, in addition to the bottom-up Divisional changes, will help ensure the long-term success of cashless initiatives. In parallel, the City should plan and implement ongoing change management initiatives to address specific concerns and barriers of its citizen segments across all its Divisions.

# 7. Appendix

## APPENDIX A: CANADIAN PAYMENT TRENDS JURISDICTIONAL SCAN

**What are the current payment *trends, emerging themes, behaviours,* and *preferences* in Canada? Among consumers? Across industries?**

In 2019, the Canadian payments market consisted of 22 billion transactions worth over $2.2 trillion. Since 2014, the total payments market has increased by an average of 1% per year in volume, and 5% per year in value because of increased public expenditure and a variety of other factors (covered below).



Transaction Volume by Payment Type (2008-2019)



Transaction Value by Payment Type (2008-2019)

Across different payments types between 2014 and 2019, cash transactions have seen a major decline as point-of-sale payments migrate towards card payments. The displacement created by a 38% drop over the five-year period in cash. Credit cards have demonstrated substantial growth, with more than a 62% increase in volume relative to 2014. EFT and cheque transactions together represent just over 15% of total transaction volumes and 87% of total payment value. Since 2014, there has been a continuing shift away from cheques and sustained growth in EFT volumes and values.

Prior to the COVID-19 pandemic, consumer behaviors suggested that 64% of Canadians who did not shop online are concerned about the security of their personal information. Among those who do shop online, 21% often abandoned a cart because of concerns about the safety of their personal information. However, due to the acceleration towards e-commerce and digital payments, many verticals and merchant segments are seeing shifts towards B2C digital channels at unprecedented levels. This not only includes mainstream verticals like fashion and groceries, but also healthcare, professional services, education, and small-business commerce across geographies.

Some key drivers for using cash are speed, ease of use, convenience (the consumer having cash/coins on hand) and low value transactions (transactions under $15). Given the impact of COVID-19 on payments (e.g., the need to reduce face-to-face commerce and limit contact with payment devices) consumers have adjusted their payment preferences and contactless payments usage and acceptance have quickly accelerated. Specifically, contactless payments have become a driving differentiator: If all other factors were equal (price, selection and location), nearly two-thirds (63%) of consumers would switch to a new business that installed contactless payment options," according to Visa.

Payment transformations do not come without significant costs. The shift to digital is driving up merchants' payments-acceptance costs, which are expected to rise by a $8 billion (to $15 billion) or from 6 to 10 percent as commerce migrates to these higher-cost channels. Just as importantly, merchants also face higher decline and fraud rates on digital transactions, with ramifications for customer experience. Finally, studies also suggest that merchants perceive cash to be fast and convenient to use as well as the cheapest method to accept as it provides instant liquidity and no fees.

## What are the potential impacts of these trends municipal payment and revenue collection systems?
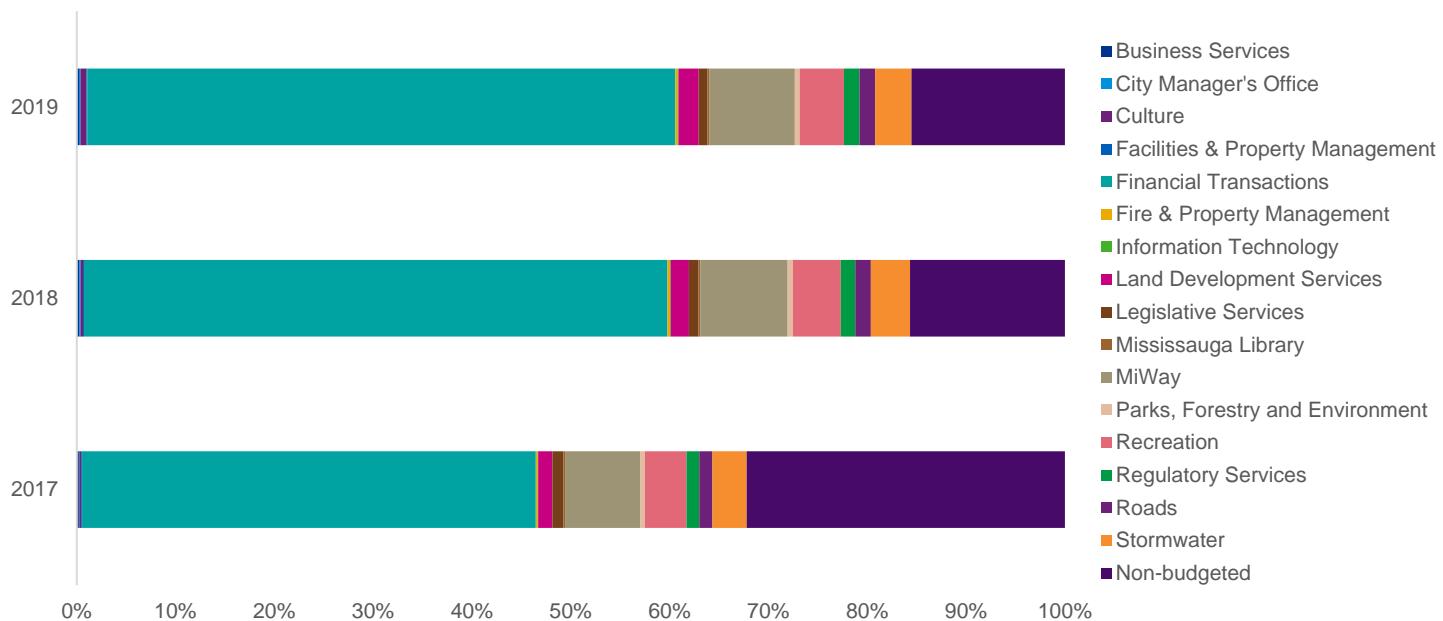
The impact of these trends on municipalities largely depends on a Division-by-Division perspective. The revenue streams, users, customers, service provision and several other factors play key roles in helping understand the impact on a city.

Over the years, municipal expenditure responsibilities have increased, while revenue growth has not kept pace. According to a study conducted by the Munk School of Global Affairs, municipalities continue to receive the smallest share of the 'economic pie'. For every household tax dollar paid in Ontario, cities collect only 9 cents. That said, municipalities have interaction points with on a more regular, and granular basis than any other level of government. Using the Municipal Reference Model (MRM) as a reference point, revenue generation from municipalities can generally be categorized into four major streams:

1) Service Fees (toll roads, business licensing, construction permits, land registration, waste, public parking etc.)

2) Fines for Violations (parks, residential units, roads, and infrastructure)

3) Charges or Taxes (property, vacant land, hotel occupancy, carbon etc.)

4) Asset Monetization (naming rights, billboards, parks, beaches etc.)

At the City of Mississauga, the revenues by service area from 2017 to 2019 are broken down below:

## City of Mississauga Revenue by Service Area (2017 to 2019)



The distribution of these revenues highlights some key issues that mirror the challenges above. For example, municipalities must address and accommodate citizens of all backgrounds. This creates complexities in service provision, operating models and payments as demographics accessing city services may have different needs and preferences. Unlike businesses that may have a defined target audience and user base, municipal governments are responsible for service provision to all citizens.

### What are the high-level roles and responsibilities of the players within the Canadian payments industry?

Some of the relevant stakeholders within the municipal payments' ecosystem are cardholders, merchants, acquirers, payment gateways, operators, clearing houses, and issuers. Each of these are described below.

*Cardholders*

Cardholders receive a debit/credit card from an issuing bank (e.g. CIBC, RBC, etc.) and use that card to pay for services at a merchant. Cardholders are bound by a cardholder agreement, many of which include limited liability for unauthorized charges. Therefore, if their card is used without their consent, they have reduced liability for the charges.

*Merchants*

Merchants provide goods and services to customers/citizens in exchange for payment. To accept card payments, merchants must be connected to a payment gateway via acquirers. For these transactions, a merchant sends card information to the issuing back and requests payment authorization for the purchase. Merchants typically pay fees for the infrastructure and applications used to accept card payments. These fees typically cannot be passed on to customers as 'convenience fees' or credit card fees.

For cash transactions there is less infrastructure and fees required to accept a payment. Therefore, cash is often preferred by merchants as they receive the entire payment amount for their goods and services.

*Acquirers*

Acquires provide merchants with access to card networks and supply them with the necessary infrastructure (e.g., POS terminals) for card transactions. The acquiring bank typically also pays the interchange fee to the issuing bank for card transactions.

*Issuers*

Issuers provide cards to cardholders, extend credit, and other services as outlined in the cardholder agreement. They also authorize transactions based on the availability of funds in a cardholder's account.

*Payment Gateways*

Payment Network Gateways (PNGs) include software that allows the transfer of the transaction data from the merchant to the acquiring bank. This is done by tokenizing, encrypting, and securely forwarding information captured at the point of sale. PNGs are typically required for most card transactions.

*Operators*

Operators are responsible for authorizing and processing non-cash transactions on behalf of merchants. They communicate with both the issuing and acquiring banks and ensures that sufficient funds are available to complete the transaction.

*Clearing House*

Clearing house facilitate that exchange and settlement of transactions between financial institutions (including acquirers and issuers). In Canada, Payments Canada's Lynx and ACSS systems service as national clearing houses.

## Are there any expected changes in regulations/compliance that would impact cash/cashless transactions?

Due to COVID-19, many businesses have opted to be more cashless and are asking customers to use debit, credit, or mobile applications for payment of in-person transactions. According to The Bank of Canada, it is up to sellers to determine what kinds of payment they will accept for transactions, and there is "no law" that would require anyone to accept bank notes (i.e., cash) or any other form of payment for a commercial transaction. However, Bank of Canada states that in certain circumstances, refusing to take cash in a store may violate provincial human rights codes. Leaders from organizations such as Canadian Civil Liberties Association (CCLA) warned that a store's no-cash policy could inadvertently discriminate against seniors, people who are disabled, impoverished or people who just don't have credit or debit cards.

## What are the emerging operational practices and technology solutions that are being used to improve overall payment efficiency?

### PaySimply

"PaySimply" offers convenient payment methods for city taxes and services. Citizens can use a credit card, Interac e-Transfer, PayPal or Alipay to pay for these services online. They can also make in-person payments with cash or debit cards at any one of 6,000 Canada Post outlets. PaySimply caters to over 500 municipalities in Canada.

### PaymentVision

"PaymentVision" provides customized government services to accept payments online, over-the-phone, by text, with a payment application, or in-person. Using their payment gateway technology, government agencies can accept credit cards, debit cards, check, ACH, or cash payments 24 hours a day, 7 days a week.

**Paytickets.ca**

"Paytickets.ca" is an online service provided by RBC and Teranet that gives citizens the ability to pay speeding and parking fines online. This is a vendor hosted system that limits the technical efforts for governments as it provides an out-of-the-box solution. To take payment, users enter ticket and credit card details into the website and the payment is transferred to Integrated Court Offences Network (ICON). This system updates the Ministry of the Attorney General records and sends revenue to the Ontario Service Area the next day.

The tools above provide options and alternatives for citizens while reducing the burden on the municipal governments for payment system management. However, as with other third-party systems, these solutions also have drawbacks including additional fees, compatibility issues and revenue leakage.

# APPENDIX B: SOCIOECONOMIC ANALYSIS

**What are the biggest socioeconomic barriers facing Canadian unbanked populations (or people without other means of payment than cash)? What accommodations do these populations need?**

The socioeconomic barriers found within the Canadian market typically challenged the unbanked and cash-dominant populations. The two main drivers of these challenges were a lack of literacy skills and access to digital infrastructure. These challenges were not necessarily geographic dependent and were found throughout most populations.

### *Literacy Skills*

Literacy skills – specifically digital literacy and economic literacy – have been found to foster higher adoption rates of non-contactless payments (i.e., traditional payment types, such as cash). To illustrate, countries with higher literacy rates have witnessed higher success with contactless payments. Sweden is a prime example of a country with high literacy rates and is believed to be on track to be fully cashless by 2023[17]. Although literacy is not the sole contributing factor, it plays a role in the success of the overall initiative. In addition, the Bank of Canada has linked higher levels of economic literacy to having greater awareness and trust in financial institutions. Overall, people are more comfortable with digital payments when they are educated on the subject [18].

#### *What can the City do?*

To accommodate this barrier, the City of Mississauga can begin educating their citizens about digital payment methods and the benefits towards going cashless. This can allow the citizens of Mississauga to increase their level of digital and economic literacy, which are factors towards trusting a governing body's financial decisions and willingness to go cashless. Clear communications towards any change management initiative will be critical in the success of the project.

### *Digital Infrastructure*

Consumers' access to digital infrastructure may also impact their ability to use contactless payments. With the rise of digitization, digital devices, and platforms continue to be introduced to promote the use of online and remote payments (e.g., online shopping and digital banking). Individuals that lack access to this infrastructure are limited in their ability to use contactless payments. Consumers without sufficient access to digital technologies will likely default to using cash or other payment methods. The City should be aware of these socioeconomic challenges and barriers when evaluating its decision to implement cashless transactions[19].

#### *What can the City do?*

Providing citizens seamless access to digital infrastructure can allow them to access funds online. For Canadian unbanked populations, this would provide more opportunity to participate in the economy. In addition, quick responses to inquiries from citizens is essential when providing seamless access to digital infrastructure. Citizens that don't understand how to use the platforms will not use them.

---

[17] Kaila, Shivam. *Journey of Cashless Road to Sweden: Opportunities and Barriers for India.* Link.
[18] Bank of Canada. *Measuring and Evaluating Strategic Communications at the Bank of Canada.* Link.
[19] Kaila, Shivam. *Journey of Cashless Road to Sweden: Opportunities and Barriers for India.* Link.
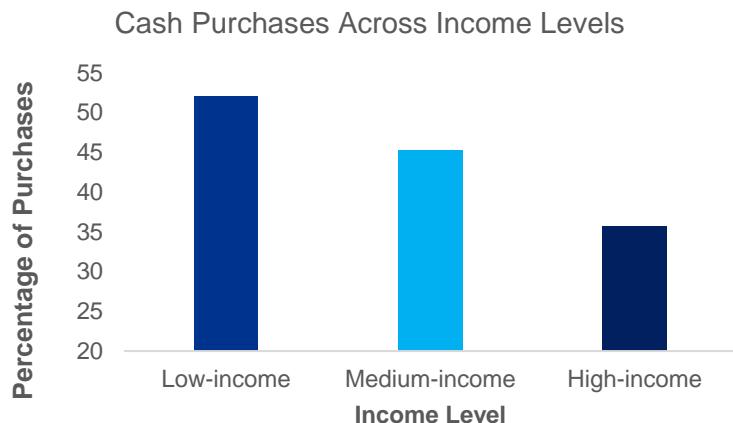
## What are the socioeconomic factors that continue to drive the use of cash?

### *Income Level*

Low-income Canadians tend to be in a cohort of the population that prefers to use cash. This is because income presents several unique barriers to access payments. For example, income has been directly linked to the accessibility of digital infrastructure and literacy rate. In the past, Canadian municipalities have attempted to address this barrier by implementing education programs and funds that target low-income populations[20].

### Cash Purchases Across Income Levels



*What can the City do?*

Realizing that low-income is a multifaceted situation with many factors to consider, the City can consider providing incentives to these populations to better prepare them for a transition to go cashless. Providing digital infrastructure and the communication around how to properly use these new features would improve the well-being of this population, especially those facing multiple barriers (e.g. language barriers as well).

### *Data Security and Privacy Concerns*

Individuals that have security and privacy concerns with contactless payments are motivated by the anonymity of cash. Like household income, this factor is also associated with digital literacy and knowledge of appropriate infrastructure. As younger generations become exposed to digital platforms at an earlier age, these concerns are well-positioned to reduce over time. However, the current distrust in digital payments continues to drive the demand for cash within Canada. To combat this, many financial institutions have implemented change management initiatives to address consumer concerns and influence payment preferences. Most recently, the Big 5 Banks (i.e., Royal Bank of Canada, Bank of Montreal, Toronto-Dominion Bank, Canadian Imperial Bank of Commerce, Bank of Nova Scotia) have introduced the 'universal banker', whose sole purpose is to push and normalize digital payments within populations that have lower levels of education and awareness. Another factor that may influence security and privacy concerns is digital literacy rates. For example, as India explores barriers towards going cashless, privacy was a main concern for individuals not familiar with non-contact payments. Contrastingly, Sweden, with high digital literacy rates, was less prone to privacy concerns[21]. Although not the defining factor, higher levels of digital literacy has proven to decrease security concerns of a population.

*What can the City do?*

As mentioned, economic literacy was found to increase an individual's trust in a financial institution[22]. In addition, digital literacy has been linked to worries regarding privacy and security in comparable countries. Providing adequate education in these areas could mitigate potential fears about privacy from the City.

### *Age*

Age has consistently been recognized as a major influencer of cash usage, most notably with Seniors. Older populations are typically less comfortable with cashless payment alternatives due to a lack of knowledge and experience with new

---

[20] Bank of Canada. *Spring Review 2015*. Link.
[21] Kaila, Shivam. *Journey of Cashless Road to Sweden: Opportunities and Barriers for India.* Link.
[22] Bank of Canada. *Measuring and Evaluating Strategic Communications at the Bank of Canada.* Link.

technologies. Financial institutions across Canada are again addressing this challenge through specific resource centers dedicated to this demographic. Looking to the future, age is expected to become a less prominent factor in driving cash use – with future generations expected to have a higher adoption rate to digital payments[23].

*What can the City do?*

Like Financial Institutions, the City can provide additional support to their Senior populations. Providing quick response times to inquiries and efficiently communicating changes would aid in the initiative. Currently, there have been initiatives from Divisions where clear communication and education on the updated process has allowed for a seamless transition, even for Seniors.



As of November 2020, **30% of Canadian seniors** do not use the internet

***Homelessness & Remote Areas***

Homeless individuals or those living in remote areas tend to rely on cash due to limited access to banks. As urban areas (i.e., Mississauga) have higher homeless populations, the City should take this into consideration when moving to cashless transactions. Specifically, the city should consider where homelessness and remoteness result in citizens using cash out of necessity – and what Divisions (e.g., Transit, Library, Courts, etc.) this trend is most present[24].

*What can the City do?*

Mississauga is a suburb surrounded by urban places and therefore remote areas are less of a concern. However, the City would benefit from being mindful of their homeless population and the City services they may require, most notably transit.

## What is the general public perception of going cashless?

There is generally positive public perception of going cashless among Canadian populations. With 1 in 10 Canadians reporting to already be cashless as of 2017, the use of cash has continued to decline year-over-year[25]. The COVID-19 pandemic has furthered the nation's perspective on going cashless. Acting as a catalyst for the late adopters, many citizens were left with no choice but to rely on contactless payments during the pandemic. With 63% of Canadians who used digital or contactless payment for the first time during COVID-19 reporting they are likely to continue using them, and 80% indicating they were satisfied with the experience, the decline of cash is expected to continue well into the future[26].

---
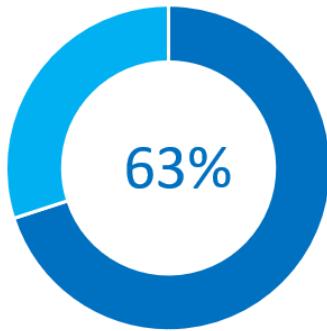
[23] Scotiabank. *Senior Resource Centre.* Link.
[24] Bank of Canada. *Money and Payments in the Digital Age.* Link.
[25] CTV News. *Are Canadians ready to go cashless after coronavirus?* Link.
[26] Forrester. *The Impact of COVID-19 on Payments in Canada.* Link.
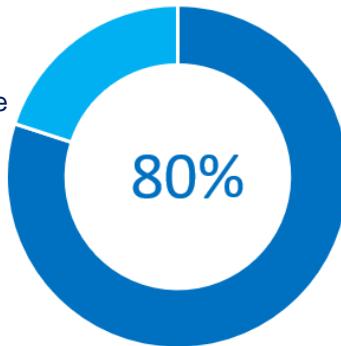
**63% of Canadians** are likely to continue to use contactless payment post-pandemic

63%

**80% of Canadians** were satisfied with their experience using contactless payments

80%

*What does this mean for the City?*

Without action, the citizens of Mississauga will slowly shift towards a cashless economy following the COVID-19 pandemic. To support this change in consumer habits, the City can prepare themselves by installing appropriate and sustainable methods of payment. Being conscious of the Senior demographic, the City will have to accommodate their unfavourable view of going cashless.

## Do municipalities and other public sector entities have a legal obligation to accept cash?

Similar to businesses in Canada, there is no legal obligation for municipalities or public sector organizations to accept cash; regardless of it being a legal tender. The laws implemented by the Bank of Canada state that both parties in the transaction must agree on a payment method, meaning either party can accept or refuse various payment methods[27].

However, an important factor to consider is the moral obligation of a public sector entity to accept cash. As a public service, it is in a municipalities best interest to cater to their citizen's needs. If cash tender is the preferred method of payment, it would put citizens at a disadvantage to not accept this tender. Supporting this point, the Bank of Canada has advocated for the continued acceptance of cash as a payment method throughout the COVID-19 pandemic[28]. Their reasoning is that forced contactless payments may create undue burden on those that depend on cash and have limited payment options.

In 2017, **1 in 10** Canadians claimed to already be fully cashless

*What can the City do?*

Being a public sector organization, it is essential for the City to remain conscious of consumer payment preferences when considering the potential to go cashless. However, the City can shift consumer preferences in a direction they believe to be positive for citizens. In areas where it is possible to go cashless, implementing nudges towards non-contact payment can potentially shift consumer demand away from cash. For example, Vital Statistics has already observed a positive public response when they shifted to become fully cashless. By providing an abundance of communication and support, even the consumers that prefer cash tender have little to no issues with the transition.

## What impacts do the shifts in payment trends or new payment innovations have on socioeconomic conditions? Are payment trends amplifying the barriers/challenges to going cashless?

There are short-term and long-term implications when considering future payment trends and their impact on socioeconomic conditions. It is important to distinguish between these horizons, as barriers and challenges should be approached differently during each phase.

---

[27] Bank of Canada. *Legal Tender Status in Canada.* Link.
[28] Ibid.

*Short-Term*

Current payment trends show that Canadians are shifting towards non-contact payments as cash steadily declines year over year.  To adapt to these changing consumer preferences, many businesses within Canada have updated their payment infrastructures to prioritize contactless forms of payment. A 2021 Visa study shows that 82% of **small and medium sized enterprises (SMEs)** have adopted new digital technologies since the beginning of the COVID-19 pandemic as more than half of their consumers use contactless payment when possible[29]. Moreover, 74% of respondents expected their customers to continue preferring contactless payment forms post-pandemic.

In the short-term, these payment trends amplify the barriers to going cashless for those that prefer in-person, contact payments. Although there are initiatives targeted towards modernization payments, there is less support for those adversely affected by the rise of contactless payment methods.

*Long-Term*

There is strong evidence that Canada will slowly become a cashless nation in the long-term. This is consistent with comparable countries already on track to become completely cashless[30]. This may be further advanced by pressure from Canadian technologists to introduce a nationwide digital currency. 'Keep up with the times or get left behind' is the message being sent to the Bank of Canada regarding a Canadian digital currency. While the Bank of Canada has indicted there is no interest in succumbing to this pressure soon, they have interest in preparing regulation for future purposes[31].

In the long-term, payment trends are expected to lower the barriers to going cashless. As access to digital literacy and digital infrastructure increases, future populations will not face the same barriers as the current population

*What does this mean for the City?*

There is strong evidence that nations will slowly become more cashless. To respond to this trend, the City can choose to be proactive or reactive to change. Proactiveness includes beginning to nudge citizens towards cashless payments early and prepare their infrastructure for the impending change. By spearheading robust initiatives targeted at the largest barriers to being cashless, the City can begin to bridge the gaps in the short-term to attain a sustainable future.

---

[29] Visa. *Back to Business Study 2021 Outlook.* Link.
[30] Ibid.
[31] Bank of Canada. *Money and Payments in the Digital Age.* Link.
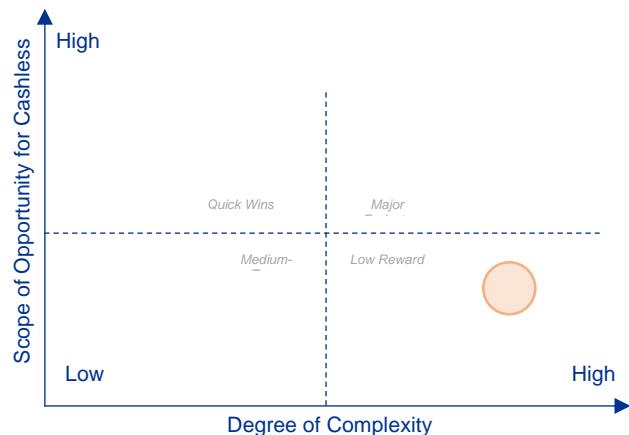
*Please note that the Fact Bases below contain qualitative insights and understanding from conversations with each Division. Therefore, to maintain the integrity of those conversation there was minimal refinement of the outputs – as to maintain the <u>Division's perspective</u>. Each Fact Base was validated with the Division for accuracy of the information.*

# Animal Shelter

### Executive Summary

**Description of Division:**

Animal Shelter is the City of Mississauga's main center for all matters related to animal care. Providing a wide range of animal related services, the overall goal of this Division is to promote responsible pet ownership.



**Services offered:**

Pet adoptions, pet licenses, by-law violations, caring for homeless and lost pets, emergency animal services, responding to animal related emergencies 24/7, educational outreach programs, rescuing domestic pets and wildlife.

**Revenue streams:**

Licenses, ticket fines, donations, adoptions, service fees, 10-day quarantine.

---

**Overall conclusion on going cashless:** *Challenging*

*Is the division capable of going cashless?*

Yes, Animal Shelter possesses the appropriate infrastructure to support cashless transactions. There are alternate payment methods that could replace the need for cash. However, the stickiness of cash in the Division stemming from consumer preferences makes the feasibility of going cashless difficult.

*What are the key barriers to going cashless?*

A significant number of citizens still prefer to pay with cash. These include Seniors, lower-income individuals, and other circumstantial conditions. It was noted that going cashless would put these demographics at a disadvantage. In addition, Animal Shelter leverages a centralized, in-person payment desk (i.e., cashier) to take all forms of payments for all revenue streams. Therefore, a unified approach to cash and payments is likely required across revenue streams – as to reduce citizen confusion and promote equality.

*What is the likely timing for cashless payments?*

---

There is a low likelihood that cashless transactions will be successful in the short-term. Many citizens and revenue streams continue to have cash use. There will have to be a significant effort by Animal Shelter and change in consumer preferences for cashless transactions to be successful.

*Overall, should this division prioritize going cashless?*

Overall, there is a moderate opportunity for the Division to go cashless. Although capable, there is push from citizens to continue taking cash as a method of payment. Animal Shelter wishes to offer and push alternative payment channels to cash, while still offering cash as a payment choice.

**Conditions for Going Cashless:**

| Cash Dominant[32] Revenue Streams | Cash Dominant Populations | Centralized Payment Desk/ Cashier | Online/Alternative Payment Methods | Overall Complexity of Going Cashless |
|---|---|---|---|---|
| Y | Y | Y | Y | Moderate |

**Emerging Themes**

- There is a considerable range of payment values and payment types for Animal Shelter Services – from smaller license fees to extensive animal bills. The collection of payments through a centralized payment desk offers customers the ability to pay for most services, with most payment types.

- Demographic preferences and the centralized payment desk continue to drive the use of cash within the Animal Shelter Division. Therefore, in addition to initiatives to modernize payments, equal efforts from Animal Shelter would be required to shift citizen demand away from cash and towards contactless payments. Effective change management and communications will be vital to the success of these initiatives.

- Donation boxes require cash handling and bank deposit processes. There is no appetite to discontinue these revenue streams due to negative public perception. However, the elimination of cheque handling could reduce the frequency of bank deposits and related costs.

- Online renewals and online payments continue to be adopted by customers. However, most payments are still made with the customer present – as this is the nature of the business model. This reality will perpetuate the stickiness and use of cash at the centralized payment desk.

| Payment and Cash Trends |
|---|
| **Trend Identified** |
| 1. **Online payments** |

---

[32] Refers to revenue streams where cash was deemed to be material by the Division.

a. Since the beginning of the COVID-19 pandemic, there has been an increase in online payments. However, revenues have dropped overall, meaning the pandemic has affected both the cash and demand for services. This also may indicate there is a portion of consumers that are reluctant to switch to online payments.

2. **Citizen segments**

    a. Older demographics, ethnic communities (location contingent), formerly incarcerated people, and trade workers with confiscated pets are the citizen segments that predominantly pay in cash. Seeing as these segments make up a significant portion of total revenues, Animal Shelter tries their best to accommodate these populations.

**Key Insights:** While some citizens have shifted to cashless, there is a significant portion that have not; most notably seniors. While the Canadian market has rapidly adapted to contactless payment methods, citizens in the Animal Shelter Division have lingered with their previous preferred methods. Dedicating time and resources to these populations are important to ensure that they are properly educated on potential cashless initiatives.

## Payments and Cash Handling Process

**Overview of Payment Processes:**

- Citizens have the option to pay online or in-person for Animal Shelter services.

    o Online, citizens have the option to pay with Credit Card (Visa/MasterCard).

    o In person, citizens have the option to pay by Credit and Debit card, cash, or cheque.

        ▪ For card payments, Animal Shelter leverages POS terminals provided by Global Payments and back-end applications Chameleon to capture payment information and reconcile accounts.

        ▪ For cash payments, citizens are given receipt at payment desk for proof of purchase.

*Payment Modernization Initiatives:*

- Animal Shelter is currently undertaking several initiatives to modernize their payment processes including:

    o Updating online channels (Completed)

        ▪ Includes a more integrated system that provides a more user-friendly experience for citizens, whilst still leveraging only card payments.

        ▪ Key challenges or lessons learned

            • *Emails previously going to junk, in the process of reviewing and ensuring citizen communication is efficient.*

            • *Taking payments over the phone was noted to be an easy process for citizens.*

    o New cheque scanning process (Recently started)

        ▪ Cheques can be remotely deposited via Remote Deposit Capture (RDC) technology. This provides quicker imaging, processing, and clearing of cheque payments

    o Collecting payments over the phone (Recently started)

        ▪ Citizens may now use Credit cards, Mastercard and Visa debit cards to make payments via phone call.

**Overview of Cash Handling Process:**

- The cash handling procedure for Animal Shelter consists of:

    o Cashiers verify till at beginning of shift and start with $75 cash float

    o After close, cashiers verify their till amount to be reconciled daily

        ▪ Daily reporting takes roughly 30 minutes to complete

    o After being reconciled, cash stored in an on-site vault

    o Armored car company, Valguard comes twice a month to collect cash from vault

        ▪ During the COVID-19 pandemic cash pickups only occurred once a month, but residents were concerned why it took so long to cash cheques.

- Employees: 1 FTE

*Cash Standard Operating Procedures:*

- Follows the City's descriptive cash handling policies

    o ADM 001-034, ADM 129

- Updated twice a year, or as needed

*Cash Audits:*

- Frequency: Once a year

## Payment Risks & Barriers

1. **Poor public perception**

    a. Negative perception associated with refusing cash as a method of payment, especially for the donation fund. Seeing as the City is a public service, refusing a citizen's preferences would paint the City in a bad light, leading to resistance from the public.

2. **Adversely impacting specific demographics**

    a. Senior citizens, which are the dominant cash payers, would have no method of payment if cash were not an option. This would leave a portion of the population unable to access the services offered by Animal Shelter.

3. **Poor perception of privacy and security**

    a. Citizens that frequently pay with cash, most notably seniors, are skeptic of online privacy. They prefer to physically be present at the time of payment, for information sharing frightens them. In addition, these populations have not adapted to most pandemic procedures, meaning they would be disadvantaged in a cashless society.

4. **Cash dominant initiatives**

    a. Animal Shelter offers a donation box at their centralized payment desks that currently only accept cash. Without an alternative, this Division would lose the ability to accept citizen donations towards a good cause – ultimately impacting the charities which they donate to.

**Key Insights:** The City they must take extra precautions when addressing risks since they are a public service that caters to their citizens. Taking a slower and more inefficient approach with favourable public perception may prove to be more beneficial in the long tun. Any action plan to change the current process must be thoroughly communicated with the public as to avoid misconception and negative publicity, such as the City refusing donation money.

## Opportunities & Future Outlook

1. **Animal Shelter future projects (Long-term)**

   a. Animal Shelter currently has projects in their pipeline that are intended to modernize their payment space. These projects include updated online channels, a cheque scanning process, and collecting card payments over the phone. If successful, these projects will provide more options for contactless payment and demote the use of cash.

2. **Unified Approach (Long-term)**

   a. Operating through a centralized payment desk, Animal Shelter would require an 'all or nothing' approach when considering going cashless. It would be confusing or citizens for only specific services to accept cash and difficult for Animal Shelter to decide which services would not accept cash.
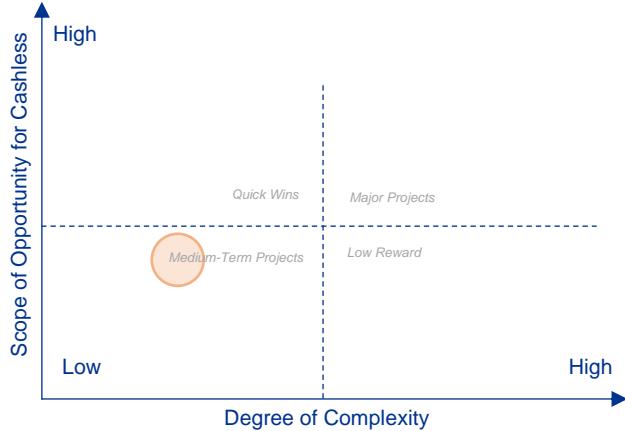
**Key Insights:** In the short-term, citizens are expected to continue using their previous preferred methods of payment. With Animal Shelter's new initiatives, they can shift citizen preferences towards digital and contactless payments, a unique opportunity. There is adequate infrastructure and processes set for Animal Shelter to go cashless, it's a matter of citizen preference.

# Building

## Executive Summary

**Description of Division:**

The Building Division is the City of Mississauga's central service area for all matters related to building and development. Dealing with residential and commercial properties, Building's vision is to further the expansion and development of Mississauga while ensuring resident satisfaction.



**Services offered:**

Issuing building permits and development applications, reporting City planning data, inspecting properties, zoning, planning future developments, maintaining historical building reports.

**Revenue streams:**

Building permits, building applications, signs, zoning and occupancy, planning, inspection fees, approvals and compliance and other miscellaneous services.

---

**Overall conclusion on going cashless:** *Not Challenging*

*Is the division capable of going cashless?*

Yes, the Building Division is very capable of going cashless. Since 2016 they've undertaken several initiatives to migrate payments online. Building has managed to go completely cashless during the COVID-19 pandemic and is expected to remain cashless in the future. Additional improvements to existing business systems technology will be necessary to facilitate a complete migration.

*What are the key barriers to going cashless?*

Currently, there are no key barriers preventing Building from going cashless. However, some responsibilities that were typically done by cashiers could still be improved as they are absorbed into Building's operations. It was noted that there could be additional efforts towards simplifying these processes.

*What is the likely timing for cashless payments?*

There is a high likelihood that cashless transactions will be successful in the short-term. Building plans to keep their cashless operations active following the COVID-19 pandemic and reopening of City services. There is possible consideration to accepting cash at a reduced capacity, but no valid concern yet.

*Overall, should this division prioritize going cashless?*

Yes, this Division has already prioritized going cashless since 2016. As a result of their proactive approach to online payments they've been successful in becoming a cashless Division. The next step is to simplify their business processes and integrate back-end systems to truly benefit from being a cashless Division.

**Conditions for Going Cashless:**

| Cash Dominant Revenue Streams | Cash Dominant Populations | Centralized Payment Desk/Cashier | Online/Alternative Payment Methods | Overall Complexity of Going Cashless |
|:---:|:---:|:---:|:---:|:---:|
| N | N | N | Y | Low |

**Emerging Themes**

- Building exemplifies how addressing the conditions to going cashless can result in long-term success in going cashless. The Division took a proactive approach to payments and online transactions, undergoing a change management initiative in 2016 that simplified the transition to cashless payments during COVID. At first, this investment was challenging, and Building was left with additional overhead costs due to their expanded finance role (see Case Study below). Despite the challenges, citizens appreciated the transition to online payments.

- Post-COVID, the Division will likely see success in remaining cashless as they possess adequate infrastructure to accept online payments. However, they will need to address the increase in administrative payment responsibilities as well as improve technical workflows (e.g., ePlans, EFT process) to fully realize the benefits of being cashless.

- Building primarily has corporate customers and high-value transactions, which tend to have different payment needs and expectations then other citizens and Divisions. These high-value transactions typically mean that the Building's customers are less price-sensitive to transaction fees that can be a key barrier to going cashless.

## Payment and Cash Trends

1. **Online payments**

   a. Since 2016, there has been a shift towards online payments– largely due to the efforts of the Building Division. Since the beginning of the COVID-19 pandemic, all payments have been able to seamlessly migrate to digital platforms. While there are limited similarities in trends to other cashless Divisions, Building's situation is vastly different as the variations in planning and building fees are significant and can range from $100 to $2 million.

2. **Corporate citizen preferences**

   a. Corporate citizens are less price sensitive and tend to be indifferent towards payment fees and charges. They can also be more advanced with payments as they are processed through dedicated payable departments. This contrasts the other City Divisions where citizens are the primary citizen of services. However, Building must be mindful of lesser service-related fees and citizens paying for them who in most cases are residents. While these volumes are relatively limited, there is political risk in not addressing this.

**Key Insights:** Citizens of Building are used to digital and online payments, which is why the Division was able to make the seamless transition during the COVID-19 pandemic. Paired with their corporate citizen base, Building has high potential to remain cashless in the short and long-term.

## Payments and Cash Handling Process

**Overview of Payment Processes:**
- Citizens use digital payment platforms to pay for Building services.

- o Online, citizens have the option to pay with Credit and Debit card through the Division's e-payment platform, Global Payments.
  - ▪ Building related fees and planning fees
- o All over-the-counter services have migrated to online or EFT payments
  - ▪ This is a cumbersome process to verifying banking details and fill out PDF forms.

*Payment Modernization Initiatives:*
- There are no current payment modernization initiatives in Building's pipeline
  - o All modernization initiatives are centered around simplifying the current migration to online platforms.
    - ▪ Additional improvements to existing business systems technology will be necessary to facilitate a complete migration.

**Overview of Cash Handling Process:**
- Since COVID-19 the cash handling processes have been eliminated from this Division.

*Cash Standard Operating Procedures:*
- Should Building decide to resume accepting cash at a reduced capacity, they would follow the City's descriptive cash handling policies
  - o ADM 001-034, ADM 129
- All Planning and Building related fees and services are legislated within the Building Code Act through our Building By-law and the Planning Act. Fee studies are conducted every 5 years. While not typical, legislation provides additional requirements for the method of payments, amount of deposits and refund processing.

*Cash Audits:*
- N/A since COVID-19

## Payment Risks & Barriers

1. **Division specific regulations**

    a. Unique to Building, the Division must follow the 'Building Code Act' in addition to City regulations. To date, the Act has proven to benefit the Division with its initiative to go cashless, as it allows the Division to be tax neutral. However, this adds a layer of complexity to the regulations that the Division must follow.

**Key Insights:** Dealing with a different citizen base than most City Divisions, Building faces drastically lower barriers towards going cashless. With no immediate risks, the only potential threat facing this Division is the additional regulations they must comply with.

## Opportunities & Future Outlook

1. **Simplifying business processes (Short-Term)**

    a. Anticipating future cashless operations, Building's next step is to integrate more robust technologies to simplify the business process. It was noted that there is currently a lot of duplication in the Division's overhead that could benefit from more integrated technologies.
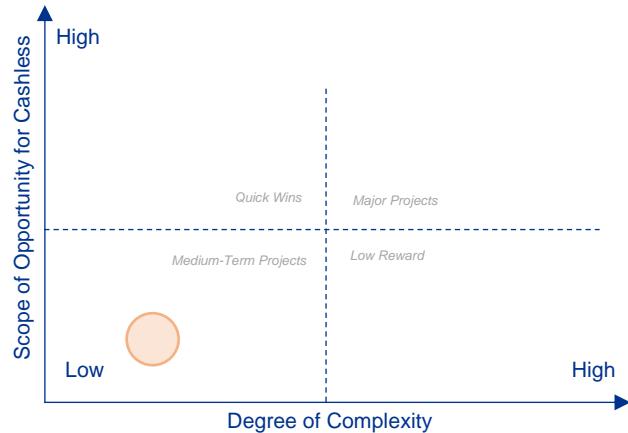
**Key Insights:** Building possessed an abundance of opportunity to go cashless prior to making the formal transition. Taking a proactive approach to shift citizen preferences paired with citizen willingness to migrate to digital platforms has allowed the Division to migrate to cashless operations. Now, the Division's focus should be aimed towards simplifying the process and making it as user-friendly and smooth as possible.

# Compliance and Licensing

## Executive Summary

### Description of Division:

Compliance & Licensing is a section of Enforcement in the Transportation and Works Department Division of the City of Mississauga focused on providing business licenses and permits in the City of Mississauga. The overall goal of this Division is to effectively and efficient enable businesses with the required documentation to ensure they are compliant with the municipal bylaws.



### Services offered:

Fixed and Mobile Business Licenses, Trade Business Licenses, Lottery License, Temporary Patio Program, Short-term Accommodation License, Renewals, Swimming Pool Enclosure Permits, Noise, Fence & Lighting Exemptions, Compliance Inspection & Verification Letter fees, Appeal Fees, Charity Gaming – Lottery Licensing.

### Revenue streams:

License & Permit fees, Exemption fees, Swimming Pool Enclosure Inspection Request fees, General Inspection and Verification fees,

Gaming – Lottery Licensing fees

---

**Overall conclusion on going cashless:** *Excellent candidate*

*Is the division capable of going cashless?*

Yes, the Compliance and Licensing has already began to change the ways they work. Having already begun to transition towards cashless operations as a result of the COVID-19 pandemic, this division undertook an exemplary change management program to adequately prepare their internal and external stakeholders for this shift. By recognizing the change in client expectations, clearly communicating with citizens, and having convenient alternative payment methods, they were able to remove cash usage in the department without creating discrepancies in their citizen experience. The decision to remove cash was directed by the Revenue Cashier department, since the majority of transactions occur through cheque.

*What are the key barriers to going cashless?*

Due to a very small population of citizens preferring to pay with cash, the shift did not see significant barriers in going cashless. However, it is important to note the continued usage of cheques as a payment method due to their acceptance of mail-in license renewal options – with 75% of fees paid by cheque. This may necessitate the continuance of cash handling processes as cheques typically follow the same deposit process as cash.

*What is the likely timing for cashless payments?*

There is a high likelihood that cashless transactions will be successful in the in a long-term plan. Understanding that adequate systems and communications to citizens must be enacted before considering migrating to a fully cashless operation, Compliance & Licensing foresees this initiative being a long-term goal. There would likely be a minimal effort by citizens to ensure that it is successful.

*Overall, should this division prioritize going cashless?*

Overall, there is a high opportunity for the Division to go cashless. Given their existing infrastructure, availability of alternative payment methods and proven capability, this division would receive high levels of acceptance from citizens to permanently removing cash as a method of payment.

**Conditions for Going Cashless:**

| Cash Dominant Revenue Streams | Cash Dominant Populations | Centralized Payment Desk/Cashier | Online/Alternative Payment Methods | Overall Complexity of Going Cashless |
|:---:|:---:|:---:|:---:|:---:|
| N | N | N | Y | Low |

**Emerging Themes**

- Compliance and Licensing predominantly serves corporate citizens in Mississauga but maintains a citizen service counter and mail-in cheque option to serve non-corporate citizens.

- Over the past five years, there has been a natural transition to cashless payments as the Division has observed a decline in cash usage and frequency of cash transactions. The Division responded by implementing a 'card-not-present' payment option (e.g., online, pay-by-phone, remote) for limited, time-sensitive transactions. However, this payment option is not available for all service types.

- Although the Division has transitioned to cashless payments, the development of an online payment platform has been delayed due to a backlog of IT projects at the City-level.

- Although online payments have grown to be a preferred payment method, there are concerns that the system is not entirely user friendly and has difficulty providing support and troubleshooting citizen challenges (compared to in-person payments and support). For Compliance and Licensing to continue to push the bounds of cashless transactions, they must address some of the risks and barriers to online payments.

**Payment and Cash Trends**

1. **Online payments**

    a. As card and online transactions become more prevalent, the City council has approved the development of an online platform on the City's website for applying and managing licenses.

2. **Corporate citizen preferences**

    a. Corporate citizens, in general, are typically easier to communicate with and prepare for change than individual citizens. Citizens are typically open-minded while making licensing and permit payments. From the City's perspective, businesses are typically more resilient making it easier to implement changes in their service.

**Key Insights:** As fewer and fewer people carry cash with them and lean towards contactless forms of payments, the likelihood of negative repercussions from the shift to cashless reduces significantly. Adequate notice, rigorous change management and communication initiatives are the backbone of a successful transition to cashless payment systems. However, the division expects to see corporate citizens continue to mail in license renewals with cheque payment, driven by institutional habits, they will likely cut one cheque for a total amount of several licenses.

**Payments and Cash Handling Process**

**Overview of Payment Processes:**
- Citizens have the option to pay online, in-person by appointment, and by mail-in for most licensing services.
- Online, citizens have the option to pay with credit cards via the City of Mississauga website through the Licensing portal for STA applications but not for renewals.

- o
  - o In person, citizens have the option to pay by cheque, Credit and Debit card
    - ▪ For card payments, Compliance & Licensing leverages POS terminals provided by Global Payments and back-end applications Amanda program', INFOR, Charity Gaming Program, and BOE to capture payment information and reconcile accounts.
  - o Many individuals respond to paper renewal notifications by mailing-in cheques, even though the cashiers no longer accept it as a form of payment in person

*Payment Modernization Initiatives:*
- - Compliance & Licensing is currently undertaking an initiative to modernize their payment processes including:
  - o Developing an online payment platform (recently started)
    - ▪ Many citizens have come to expect this payment form
    - ▪ Increases flexibility for payments but may impact citizen experience as low opportunities available for providing support and guidance
    - ▪ Limited resources available

**Overview of Cash Handling Process:**
- - Since COVID-19 the cash handling processes have been eliminated from this Division. The acceptance of cash has been eliminated but most payments are made by cheque.

*Cash Standard Operating Procedures:*
- - Should Compliance & Licensing decide to resume accepting cash at a reduced capacity, they would follow the City's descriptive cash handling policies
  - o ADM 001-034, ADM 129

*Cash Audits:*
- - Compliance & Licensing have not accepted cash only payment as per directions provided by the Cashier services that they would no longer accept cash.

## Payment Risks & Barriers

1. **Lack of options create limitations**

   a. Negative perception associated with refusing cash as a method of payment, especially considering the difficulties caused by COVID-19 on business-owners. Seeing as the City is a public service, refusing preferences could result in backlash from business owners.

2. **Adversely impacting specific demographics**

   a. As online platforms can be accessed from anywhere at any time, providing citizen service is challenging for citizens that may be struggling with the platform.

**Key Insights:** The Compliance and Licensing division must recognize the degree of severity associated with the negative repercussions of going cashless. By developing a better understanding of their citizens, this division can identify and pre-emptively mitigate for deal-breakers when considering programs such as this. Dealing with primarily corporate citizens, Compliance and Licensing faces drastically lower barriers towards going cashless. With no significant risks, the only potential risk they face is the possibility of alienating certain citizen segments.

## Opportunities & Future Outlook

1. **Remove mail-in notices (Medium-Term)**

   a. As cheques are phased out, the City can begin to shift towards electronic forms of communications and send renewal notices through email. Through this, business owners can be redirected to the online payment platform where they can view and manage all their licensing needs. Overall, this would consolidate the payment systems in this division even further and create a direct line of communication with their clients in case of future changes.

2. **Permanently shift to Cashless systems (Short-Term)**

   a. The Compliance and Licensing team can continue to communicate with clients regarding the acceptable forms of payments and build clear expectations with all relevant stakeholders.
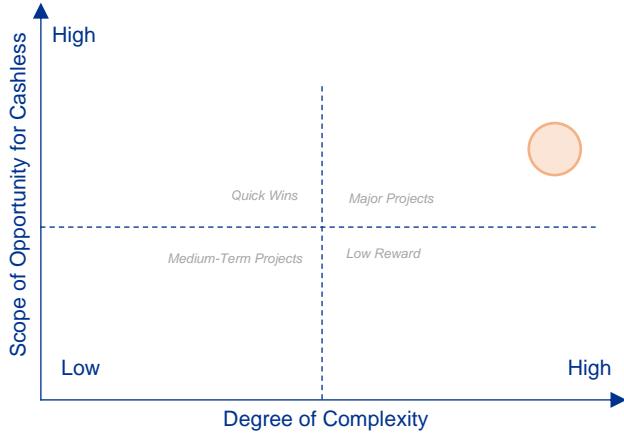
**Key Insights:** Leveraging the flexibility of business owners as citizens, Compliance and Licensing can use this opportunity to permanently remove cash as a payment option. Additionally, with many everyday services such as utility bills and credit card statements moving to online platforms already, the City can follow on a similar pathway to begin moving willing citizens to online renewal notices and application processes in the medium to long term.

# Courts

## Executive Summary

### Description of Division:

Courts is the City of Mississauga's judicial Division specializing in all matters related to municipal and provincial law. Enforcing compliance towards the legal system, Courts promote safety to the residents of Mississauga.

### Services Offered:

Settlement of tickets, fines, and penalties, court proceedings for municipal and provincial cases.

### Revenue Streams:

Parking expenses, provincial charges, ticket fines.



---

**Overall conclusion on going cashless:** *Challenging*

*Is the division capable of going cashless?*

Yes, Courts possesses the appropriate infrastructure to support cashless transactions, such as over the phone payments and a centralized payment desk to accept debit and credit cards. Courts is more limited by the citizen readiness for cashless transactions.

*What are the key barriers to going cashless?*

A significant portion of citizens still prefer (or have to) to pay their Court fees with cash. It was noted that going cashless would put these demographics at a disadvantage due to their limited payment alternatives. In addition, turning away anyone trying to pay their legal fees with cash is not in the public's best interest and result in very poor public perception.

*What is the likely timing for cashless payments?*

There is a low likelihood that cashless transactions will be successful in the short-term. Existing provincial bylaws still dictate that cash must remain the form of payment used by the Courts Division to compensate witnesses. Even with a significant effort by Courts to drive citizen preferences away from cash, it would be in the Division's best interest to continue using cash when considering public perception.

*Overall, should this division prioritize going cashless?*

Overall, there is a low opportunity for the Division to realize significant benefits to going cashless. Although capable, there is a perceived obligation for Courts to continue accepting cash to best serve their citizens. Courts believes that continuing to offer all forms of payment is in their best interest.

---

**Conditions for Going Cashless:**

| Cash Dominant Revenue Streams | Cash Dominant Populations | Centralized Payment Desk/Cashier | Online/Alternative Payment Methods | Overall Complexity of Going Cashless |
|---|---|---|---|---|
| Y | Y | Y | Y* | High |

*Part 3 expenses require citizens to come in and set a trial date*

**Emerging Themes:**

- Unlike City Divisions where services are demand driven (e.g., Recreation), payments made to Courts are a mandatory obligation to the City. Therefore, there must be heightened awareness to citizen preferences when considering different payment methods. If the City is mandating payment, there could be poor public perception to limiting the payment types as well.

- Any failures in payment processing would have significant, negative consequences for the citizen. Since Courts are an essential service that directly impacts the legal livelihood of their citizens, there is more risk associated with changes in their payment processes. These risks have created high barriers to change that have restricted Courts' ability to modernize their payment systems like other City Divisions. In addition, Ministry regulations and the required immediacy of payments are uncompromisable considerations that Courts must adhere to.

- There are widely held opinions that cash is institutional to Courts. Although cash is declining, the continued acceptance of cash is likely to be inevitable in the near-term. This need is further exemplified by demographic divides that drive the use of cash from certain populations (e.g., unbanked, and underbanked citizens).

- Courts should determine if there is a financial benefit to removing the transaction fee for citizens using the online payment platform, to encourage more online payments from price sensitive citizens.

## Payment and Cash Trends

1. **Consistency in payment methods**

    a. Courts has stayed open throughout the COVID-19 pandemic and seen no significant changes in payment methods. This indicates that citizen preferences are likely to remain unchanged without effort from the Division.

2. **Deterrence of additional charges**

    a. Although providing the option for online payments, some citizens are off put by the additional $3.50 charge. Instead, they will use over-the-phone or in person payment methods. This exemplifies that citizens are aware of costs and sensitive to price changes.

**Key Insights:** Courts' current payment platforms discourage online payments because of the additional charges. This means that the price sensitivity of citizens has an influence on payment trends. In addition, these demographics are unlikely to change payment preferences unless incentivized to do so.

## Payments and Cash Handling Process

**Overview of Payment Processes:**
- Citizens have the option to pay online, over the phone, by mail, or in-person for Court services.
    - Online, citizens have the option to pay with Credit and Debit card via www.paytickets.ca
    - In person, citizens have the option to pay by Credit and Debit card or cash.
        - For card payments, Courts leverages POS terminals provided by Ingenico Move/5000 and Global Payments and back-end applications ICON and Ticket Payments to capture payment information and reconcile accounts.
        - For cash payments, citizens are given receipt at payment desk for proof of purchase.

- - Via mobile, citizens have the option to pay with Credit or Debit card (via www.paytickets.ca credit card only or calling in to our court office credit card only)
  - Courts used to only accept cheque payments via mail but have begun accepting cheques over the counter since 2019.

*Payment Modernization Initiatives:*
- There are no current payment modernization initiatives in Courts' pipeline. Modernization is being considered for online payments possibly a new platform most initiatives are centered around files and paperwork.

**Overview of Cash Handling Process:**
- The cash handling procedure for Courts consists of:
  - Cashiers verify till at beginning of shift and start with $100 cash float that comes from the safe that is in the vault room. Every cashier has their own unique code to the safe that is in the vault room.
  - At every break, including lunch, cashiers count and verify their till amount. These counts are reconciled daily at close of the night and they fill out a cash sheet for both POA payments along with By-law payments.
  - After being reconciled, cash stored in an on-site safe in the vault room, deposited every morning and verified by supervisor.
  - Armored car company, Valguard, comes daily to collect cash from safe in the vault room (every business day, holidays not included)
- Employees 17

*Cash Standard Operating Procedures:*
- Unique to Courts, follow procedures and rules set out by the ministry of attorney general
- Follows the City's descriptive cash handling policies
  - ADM 001-034, ADM 129
- Updated twice a year, or as needed

*Cash Audits:*
- Frequency not identified

## Payment Risks & Barriers

1. **Finality of payment**

   a. Cash payments have immediate finality (i.e., are irrevocable at the time of the transaction). The immediacy of cash transactions creates a perception that other payment types are slower than cash. This may present a barrier as citizens wish to have their Court fees "done and paid for" as quick as possible to avoid late penalties.

2. **Demographic divide**

   a. Unbanked citizens, who use cash out of necessity, would have very limited methods of payment if cash were not an option. This would leave a portion of the population unable to access the services offered by Courts. In addition, many senior citizens would likely have a difficult time adjusting to the new processes – which would put them at a disadvantage and potentially impact their livelihood.

3. **Payment technology and process failures**

   a. In the event of a POS or other payment failure, there would be limited alternatives for citizens to pay off any fines if the Division were to go cashless. Understanding the immediacy of payments, this would negatively impact the livelihood of citizens.

4. **Ministry regulations**

   a. The Division must compensate witnesses with cash via the 'Witness Float Box'. Currently, there is no option to pay out witnesses in any other payment form. This regulation complicates Courts' ability to go cashless since they are required to keep cash on hand.

**Key Insights:** There are high barriers to going cashless within Courts. Aside from the ministry requirements, the livelihood of citizens is expected to be negatively impacted if the Division were to go cashless. Unless there is an equivalent method of payment that addresses the need for immediacy and unbanked populations, it is in the Division's best interest to prioritize the wellbeing of their citizens.

## Opportunities & Future Outlook

1. **Unified Approach (Long-Term)**

    a. Operating through a centralized payment desk for POA matters and by-law matters, Courts is the only office that accepts payments in person for both these matters since City Hall closed the cashier's department. Courts would require that the POA matters not affect the public's livelihood before considering going cashless and the 'all or nothing' approach to going cashless. It would be confusing for citizens if only specific services are to accept cash and difficult for Courts to decide which services would not accept cash.
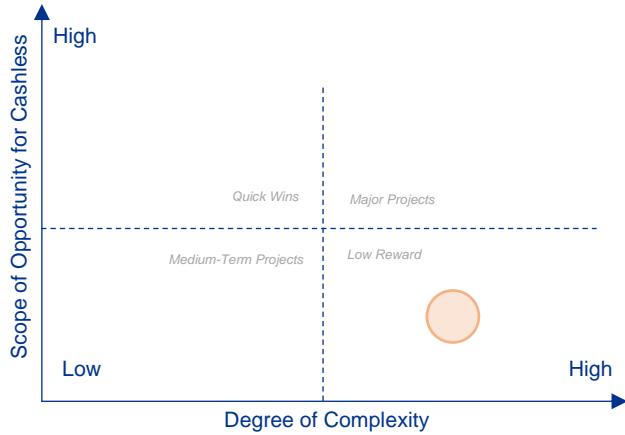
**Key Insights:** Although the Division wishes to push for alternate payment forms, they ultimately wish to continue accepting cash. Until all services capable of operating efficiently without cash, it is unlikely that Courts will entertain the notion of being fully cashless.

# Library

## Executive Summary

**Description of Division:**

Library is the City of Mississauga's main center for all matters related to public libraries. Currently, Library oversees 18 facilities throughout Mississauga, including the large Central Library. Providing physical spaces for programs and collections in addition to online reservoirs content, Library aims to make their resources as accessible as possible to promote education to citizen.



Scope of Opportunity for Cashless (vertical axis: Low to High)
Degree of Complexity (horizontal axis: Low to High)

Quadrants: Quick Wins, Major Projects, Medium-Term Projects, Low Reward

**Services Offered:**

Library collections (books, e-books, audiobooks, newspapers, magazines), online content, entertainment movies and TV access, public computers, library cards, programs (reading clubs, summer programs, etc.), printing, Maker technologies.

**Revenue Streams:**

Fines and charges (library lending, loans, collections, non-citizen fees), printing, exam proctoring, lease properties and grants, 3D printing (Maker).

---

**Overall conclusion on going cashless:** *Challenging*

*Is the division capable of going cashless?*

Yes, Library possesses the appropriate infrastructure to support cashless transactions. There are alternate payment methods that could replace the need for cash. However, the stickiness of cash in the Division stemming from small value transactions and citizen preferences makes the feasibility to going cashless more challenging.

*What are the key barriers to going cashless?*

A significant number of citizens still prefer to pay with cash. These include Seniors, younger children, and other circumstantial conditions – such as unbanked populations. It was noted that going cashless would put these demographics at a disadvantage. In addition, Library leverages a centralized, in-person payment desk (i.e., cashier) to take all forms of payments at each facility. Therefore, a unified approach to cash and payments is likely required across revenue streams – as to reduce citizen confusion and promote equality.

*What is the likely timing for cashless payments?*

There is a moderate likelihood that cashless transactions will be successful in the short-term. Library has put effort and thoughtful consideration towards cashless operations. These include discussions around eliminating library fines altogether and temporarily setting up a cashless Pop Up Library. The timing for cashless payments is contingent on these decisions made by the Division – eliminating small fees is likely to accelerate the timeline.

*Overall, should this division prioritize going cashless?*

Overall, there is a moderate opportunity for the Division to go cashless. Library is less optimistic with going cashless given the technology that is currently at their disposal. In addition, it is in the Divisions best interest to sacrifice efficiency to prioritize citizen preferences. Library wishes to align their future operations to support going cashless before officially migrating to being cashless.

**Conditions for Going Cashless:**

| Cash Dominant Revenue Streams | Cash Dominant Populations | Centralized Payment Desk/Cashier | Online/Alternative Payment Methods | **Overall** Complexity of Going Cashless |
|---|---|---|---|---|
| Y | Y | Y | Y | Moderate |

**Emerging Themes:**

- As a 'public good', Library must be aware of their citizen segments and needs to ensure their resources stay accessible to all demographics.

- Small value transactions (e.g., printing services) and the use of centralized payment desks (i.e., cashiers) continue to drive the use of cash within the Division. Therefore, Library should focus on shifting the remaining citizen demand for cash towards contactless payment methods. Effective change management and communications are vital to the success of these initiatives.

- Library has made considerable efforts to digitize the payment for small fees, including the recent introduction of an online payment platform to pay off library fees. These initiatives have been positively received and adopted by customers, and Library may consider further efforts to digitize payments. However, decisions for future modernization of fees should consider the potential elimination of late fees that is currently under Council's review.

### Payment and Cash Trends

1. **Online payments**
   a. Since the beginning of the COVID-19 pandemic, there has been an increase in online payments. However, there is no evidence to dictate whether this change in payments was a necessity or a change in citizen preferences.

2. **Citizen segments**
   a. Seniors, younger demographics, and unbanked individuals are the citizen segments that predominantly pay in cash. Aligning with the Library's vision to provide ubiquitous access to citizen, the Division tries their best to accommodate these populations.

3. **Cash payment for small-value transactions**
   a. Citizens prefer to pay smaller fees (less than $10) in cash, partially because of transaction limits on Debit cards. The nature of small fees found within Library facilitates this trend.

**Key Insights:** The citizens that Library prioritizes, younger demographics embarking on their education journey, are one of the citizen segments that predominantly pay in cash. In addition, the types of fees these demographics face tend to be small valued transactions that are typically paid in cash. Therefore, there is no current motivation for these demographics to consider cashless payments. To meet the conditions to going cashless, Library must address these trends and provide options for these target demographics to shift towards cashless payments.

### Payments and Cash Handling Process

**Overview of Payment Processes:**
- Citizens have the option to pay online or in-person for Library services.
    - Online, citizens have the option to pay for programs with Credit and Debit card via CLASS.
    - Library fines and fees can be paid through an online e-Fines portal through the library website.
    - In person, citizens have the option to pay by Credit and Debit card, or cash.

- For card payments, Library leverages POS terminals provided by Global Payments and back-end applications CLASS and ILS (Integrated Library System – Workflows) to capture payment information and reconcile accounts.
- For cash payments, citizens are given receipt at payment desk for proof of purchase.
  o Library does not accept cheque as a form of payment anymore.
    - Only accept cheques for donations and administrative requirements.

*Payment Modernization Initiatives:*
- Library is currently undertaking several initiatives to modernize their payment processes including:
  o Updating online channels (Completed, Oct. 2020)
    - Introduced an integrated system for citizens to pay off library fees online, whilst still leveraging only card payments.
    - Key challenges: cannot pay with debit or Visa debit cards. Only for credit card payments.
      - Lessons learned: Have yet to see impacts on adoption rate when in-library payment is available as well
  o Updating POS terminals (Completed, July 2021)
    - Key Challenges: tap payment not yet available. Should be available in next upgrade.
      - Lessons learned: No direct citizen impact. Staff impact with amount of time and training required to successfully integrate.

**Overview of Cash Handling Process:**
- The cash handling procedure for Library consists of:
  o Cashiers verify till at beginning of shift and start with $100/$150 cash float
  o After close, cashiers put cash in safe where it gets reconciled the next morning
    - Daily reporting takes roughly 60 minutes per location to complete
  o After being reconciled, cash stored in an on-site safe
  o Armored car company, Valguard, comes once a week to collect cash from safe
    - The City signed with a new armored courier service recently, Valguard
- Employees not provided

*Cash Standard Operating Procedures:*
- Follows the City's descriptive cash handling policies
- Updated twice a year, or as needed by Corporate Policy Consultant
- Follows departmental Standard Operating Procedures (SOPs) for cash handling
  o ADM 001-034, ADM 129
  o SOPs have a formal review process every 5 years but are updated in-between as needed

*Cash Audits:*
- Frequency not identified

**Payment Risks & Barriers**

1. **Small Library fees and payments**

   a. There are a considerable number of Library fees with low value ranges, such as a $0.35 per day late fee for overdue books. Realizing the trend of paying low-value fees with cash, switching to cashless would likely be faced with dissatisfaction from citizens.

2. **Adversely impacting specific demographics**

   a. Senior citizens, younger demographics, and unbanked populations would have limited method of payment if cash were not an option. This would leave a portion of the population unable to access the services offered by Library – directly contradicting the Division's vision.

3. **Revenue leakage**

   a. Switching operations to cashless would increase the amount of revenue leakage from card fees. Although potentially offset by reducing cash handling costs, this may overall increase the cost of operations for Library. It was noted that revenue leakage was not currently a concern since it accounts for such a small value of Library's budget.

4. **Impact on Employees**

      a. If Library were to go cashless, frontline employees would be the ones having to work through citizen dissatisfaction. Dealing with complaints and having to provide extra citizen service to compensate the changes, this would lead to a considerable amount of work for the frontline employees.

**Key Insights:** Library must take extra precautions when addressing their risks and barriers since they are arguably the most public service of all City Divisions. Their citizens are highly sensitive to changes in operations, meaning there is little room to compromise their demands. However, the main barriers associated with Library going cashless all stem from their operations. This indicates that a targeted and slow-paced roadmap is the most beneficial way for the Division to address these conditions.

### Opportunities & Future Outlook

1. **Temporary cashless Pop Up Library (Long-Term)**

   a. Library has established a temporary cashless Pop Up Library during the COVID-19 pandemic. Although it is too early to gauge citizen satisfaction and permanent feasibility, this pilot project will provide early insight on Library's ability to go cashless. Realizing this pop up only offers limited services and caters to a small sample size of citizens and needs, insights from this project are not representative of other locations within the City.

2. **Unified Approach (Short- and Long-Term)**

   a. Operating with centralized payment desks, Library would require a unified approach when considering going cashless. Accepting cash in only certain locations or only for certain services would create citizen confusion and likely lead to dissatisfaction.
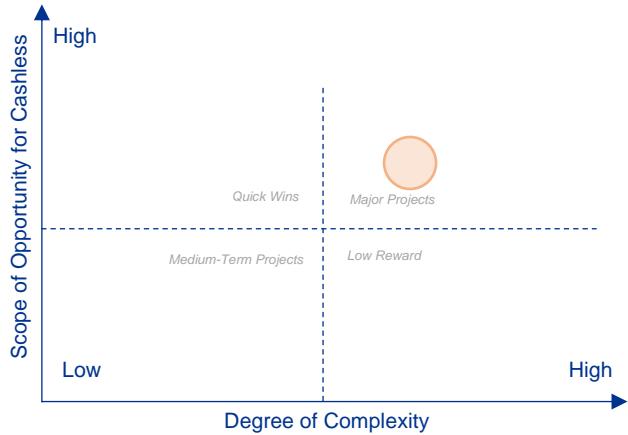
**Key Insights:** Due to the stickiness to cash and technology limitations within the Division, there is low potential for Library to go cashless soon. However, by independently addressing their conditions to cashless, Library can begin to set targets for long-term goals. The results of the pilot project at the Pop-Up Library can provide early insights on the appetite for Library to go cashless – realizing the needs of other locations differ.

# Municipal Parking

## Executive Summary

**Description of Division:**

Municipal Parking is the City Section focused on all matters related to parking infrastructure and zoning requirements for developers. Encompassing planners, strategists, project leaders and analysts, this section works alongside many stakeholders to provide adequate parking services for citizen.



**Services offered:**

Public parking, zoning requirements, strategy services, planning services, permit services, application services, operation of parking infrastructure.

**Revenue streams:**

Parking meters, parking and industrial permits, multi-visit cards, renting parking spaces (construction, filming, etc.), development and adjustment applications.

---

**Overall conclusion on going cashless:** *Challenging*

*Is the division capable of going cashless?*

Yes, Municipal Parking possesses the appropriate infrastructure to support cashless transactions. There are alternate payment methods that could replace the need for cash. However, due to the typically smaller value purchases, many citizens prefer to pay with cash in order to avoid additional card fees and convenience. Municipal Parking relies on the Parking Enforcement section to monitor and police paid parking areas. Currently, the technology used by Parking Enforcement is not capable of receiving data produced by electronic parking technologies such as pay-by-phone.

*What are the key barriers to going cashless?*

Due to the small fees associated with parking meters and the possibility of additional card transaction fees, there is a mismatch of incentives that creates a major barrier for the Municipal Parking division. Another major challenge for this division is the disconnect between payment and enforcement as validity for vehicles is checked physically. Lastly, the current parking machines accept cash which would require significant levels of investment to remove as a feature, a spending that would likely not have positive public reception.

*What is the likely timing for cashless payments?*

There is a low likelihood that the implementation of only cashless transactions as an option to purchase parking will be successful in the short-term. The division is exploring the option of enabling phone payments as an additional option which could possibly distract from an alternative payments projects being accepted.

*Overall, should this division prioritize going cashless?*

Overall, there is a low opportunity for the Division to go fully cashless. As competitive pricing for parking is considered one of the key benefits of Mississauga, additional costs that could be associated with cashless payments may be met with resistance.

**Conditions for Going Cashless:**

| Cash Dominant Revenue Streams | Cash Dominant Populations | Centralized Payment Desk/Cashier | Online/Alternative Payment Methods | Overall Complexity of Going Cashless |
|---|---|---|---|---|
| Y | Y | Y | Y | High |

**Emerging Themes:**

- Municipal Parking serves a wide range of customers, from individual citizens to corporations and developers, which results in complex payment needs. Cash is a dominant payment method for street parking due to the nature of small-value transactions and immediacy it offers.

- The City owns the payment infrastructure (i.e., parking payment machines) which can accept cash and there is no appetite to move to fully cashless parking machines in the next 15 years (based on City inputs). Services such as parking permits also face challenges in transitioning to fully online payments, as permits need to be physically distributed to customers.

- Despite buy-in from the Division and the City, there are enforcement challenges that need to be considered when migrating to online payments. If transactions are not immediately posted and integrated into the enforcement software it could result in tickets being issued in error.

- As part of the parking payment review, the City is exploring plate-based parking alternatives that are cost-saving and user-friendly. This initiative should be reviewed when considering the Division's transition to cashless payment systems.

- The Division is continuing to take steps to gradually decrease its reliance on cash (e.g., considering Pay-by-phone initiatives, reducing parking machines) while incorporating change management and communications campaigns to shift citizen preferences.

- Limited reserves restrict the Division's capability to implement cashless initiatives. Without further investment, Municipal Parking will have to pick and choose the most beneficial initiatives – it would be difficult to rollout multiple at once.

| Payment and Cash Trends |
|---|

1. **Cash payment for small-value transactions**
   a. There are a considerable number of parking fees of low value. Like the Library division, citizens prefer to pay with cash for small-value transactions due to a variety of motivations such as avoiding fees associated with card payments and using up cash on-hand.

2. **Online payments**
   a. Since the beginning of the COVID-19 pandemic, there has been an increase in online payments and use of apps to pay for services like parking. However, there is no evidence to dictate whether this change in payments was a necessity or a change in citizen preferences. Regardless, Parking can use this trend to further the use of online payments and services.

**Key Insights:** Being categorized as a "Public Good", parking must be aware of their citizen segments and needs. It is also important to recognize trends and patterns stemming from citizen behaviours that can be altered or influenced in order to create alignment for all parties. As cash is the preferred form of payment for small value transactions, Municipal Parking can use that to their benefit to introduce additional parking passes and products to consolidate payments into less frequent larger value transactions.

## Payments and Cash Handling Process

**Overview of Payment Processes:**
- Citizens have the option to pay online or in-person for certain Municipal Parking services.
  - Online, citizens have the limited option to pay for permits with Credit and Debit card via the City's e-city web store.
    - Solving for a way to sell permits without taking cash – current system does not allow for e-permits.
  - In person, citizens have the option to pay by Credit and Debit card or cash for all other Municipal Parking Services.
    - For cash payments, citizens are given receipt for proof of purchase.
  - For street parking, citizens have the option to pay with Credit and or cash.
    - Extra 3.5% fee is paid by city for each credit card transaction for public parking
    - All forms of payment result in a physical parking ticket for citizens to make visible on their vehicle.

*Payment Modernization Initiatives:*
- Municipal Parking is currently undertaking several initiatives to modernize their payment processes including:
  - Pay by phone pilot initiative (Timeline TBD)
    - During the pilot, citizen will have the option to pay for a parking pass via mobile and inputting their card information.
  - Moving to a plate-based system (Recently started)
    - Shifting away from the pay and display system (i.e. parking tickets), the plate-based system is expected to integrate enforcement and payments within the Division.
  - Electronic permits (To be completed in 2022)
    - Municipal Parking plans to introduce electronic permits by 2022, allowing for citizens to access this service remotely and use online channels to pay.

**Overview of Cash Handling Process:**
- The cash handling procedure for Municipal Parking's parking meters consists of:
  - Citizens place cash into the parking meter, where it is stored in the secured meter until pick up
  - Special purpose cars collect sections of parking meters throughout the week, randomized for safety purposes.
    - Technicians are the ones that do the collections since machines are sensitive and may require technical fixes.
  - Cash is dropped off into the Transit coin room, each machine is counted and reported separately into SAP for parking and audit purposes.
    - Counting for each meter separately is noted to take more time, roughly XX minutes to complete this stage – unlike Transit which use the same coin room.
  - The coin count is reconciled with the respective parking meter and stored in an on-site vault
  - Armored car company, Garda, comes daily to collect cash from the coin room located at Central Parkway (CPY)

*Cash Standard Operating Procedures:*
- Follows the City's descriptive cash handling policies
  - ADM 001-034, ADM 129
- Updated twice a year, or as needed
- Municipal Parking Coin Collection SOP

*Cash Audits:*
- Frequency not identified; the counts are audited by City Finance Division each time coin is collected.

## Payment Risks & Barriers

1. **Immediacy of Payments**

    a. Cash payments have an immediacy from a parking standpoint, in that, a cashier can physically hand someone a parking permit once payment has been completed. The immediacy of cash transactions creates a perception that other payment types are slower than cash. This may present a barrier as citizens wish to have their parking fees "done and paid for" as quick as possible to avoid tickets and penalties.

2. **Adversely impacting specific demographics**

    a. Senior citizens, which are the dominant cash payers, would have no method of payment if cash were not an option. This would leave a portion of the population unable to access the parking services.

3. **Technical integration between payment and enforcement**

    a. The disconnect between payment and enforcement as validity for vehicles is checked physically presents a major challenge for this division. Better integration is required between enforcement and payments.

4. **Limited online services**

    a. In its' current state, online platforms and e-permits do not offer the same product lines and services as would be available in-person. Similar to Transit, many citizens rely on discounted products such as monthly passes etc. that continues to deter them from leveraging these alternative payment and service methods.

**Key Insights:** Municipal parking sits in a unique position in comparison to other sections across the city due to many of the challenges outlined above. For any successful solution to be implemented, it must create consistency and ease of use across the citizen experiences, allow for integration with other stakeholders involved with service provisioning and address the immediacy of payments.

## Opportunities & Future Outlook

1. **Payment enhancements and technical integration (Medium-Term)**

    a. One-way payment options can be enhanced is shifting to a plate-based payments from the current pay and display system. While pay and display offers citizens a familiar interface and an intuitive way to pay for parking, plate-based systems offer convenience and cost-saving opportunities for citizens. Alternatively, pay-by-phone methods are an upcoming, convenient alternative that can address citizen concerns and confusion around rates and times. This recommendation was made in the City's Parking Master Plan and Implementation Strategy and the Municipal Parking section is currently undertaking the required planning to implement.

2. **Reducing reliance on cash (Long-Term)**

    a. In the long run, the Municipal Parking division noted several opportunities that can be considered to reduce the reliance on cash as a payment method. Some ways include spreading out cash accepting machines, introducing more products online such as e-permits, and other digital payment opportunities.
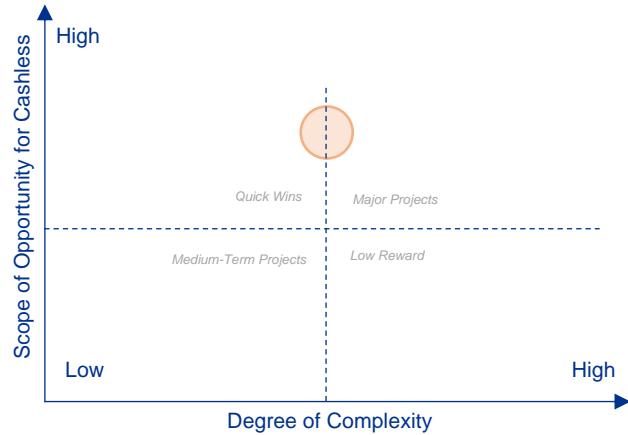
**Key Insights:** City of Mississauga's Municipal Parking division plays in an interesting space due to the availability of options for improvement and integration of cashless payment. By leveraging third-party alternatives and continuing to monitor the success of the pay-by-phone initiative, the Municipal parking division can begin their journey to going cashless in the short and medium term.

# Recreation

## Executive Summary

**Description of Division:**

The Recreation Division provides responsive, innovative services and programs to citizens through collaboration and community engagement ensuring Mississauga remains a healthy, active, dynamic community. Areas of responsibility include recreation programs and drop-in sessions (i.e. aquatics, fitness, and community programs), courses/lessons, leagues, room and sports amenity rentals, community/stakeholder engagement, event coordination, golf, food services and operations, and administration and capital management of recreation facilities.

**Services offered:**

Instructional and therapeutic programs, drop-in programs, sports leagues, room rentals, sports amenity rentals, golf, food services banquets and events, restaurant (at City Hall), sport and community group support.

**Revenue streams:**

Room rentals, indoor and outdoor sport amenity rentals (i.e. ice pads, soccer fields, pools etc.), banquets and events, c-café restaurant, golf courses (Lakeview GC and BraeBen GC), programs (including camps, instructional and drop-ins), sports leagues, license agreements with various businesses and organizations for a variety of purposes such as food and beverage vending, naming rights, long term space rentals etc.), memberships.

---

**Overall conclusion on going cashless:** *Challenging*

*Is the division capable of going cashless?*

Varying. The Recreation Division has both decentralized and centralized sections accounting for multiple and independent services throughout the City. While there are some areas that possess the conditions to make a seamless transition to going cashless, there are other areas that will find higher barriers to implementation.

*What are the key barriers to going cashless?*

As a result of the Division's breadth of services and locations, there is a higher complexity to going fully cashless. Cash dominant services, locations, and populations continue to drive the demand for cash within Recreation. These include low-cost services like vending machines, unbanked populations like children, and low-income areas in the City. It was noted that going cashless would disadvantage these demographics by potentially excluding them from Recreation's services. In addition, the Division accepts all common tenders (credit, debit, and cash), for most of their services – at different locations. Therefore, discontinuing cash in one area may cause citizen confusion and a perception of inequality.

*What is the likely timing for cashless payments?*

There is a low likelihood that cashless transactions for all services will be successful in the short-term. It is likely that Recreation will begin migrating high-opportunity services in the short-term and focus on low-opportunity services in the long-term. High-opportunity areas include services such as the C-Café and wedding venues. Low-opportunity areas include services with a centralized payment desk and a less conducive citizen base, such as concession stands and pro shops. There will likely have to be a

---

significant effort by Recreation to shift citizen preferences in low-opportunity services for cashless transactions to be successful.

*Overall, should this division prioritize going cashless?*

The opportunity to go cashless depends on the service line. Although capable, there is push from certain services to continue taking cash as a method of payment. Recreation wishes to undertake an incremental approach towards going cashless, slowly integrating their services over time when the conditions to going cashless are favourable.

**Conditions for Going Cashless:**

| Service Type | Cash Dominant Revenue Streams | Cash Dominant Populations | Centralized Payment Desk/Cashier | Online/Alternative Payment Methods | Overall Complexity of Going Cashless |
|---|---|---|---|---|---|
| **Community Centres & Food Services** | Y | Y | Y/N* | N | High |
| **Citizen Service Centre** | N | N | Y | Y | Moderate |
| **Third Party Vendors** | Y | Y | N | N | Moderate |

*\*Community centres and concession stands have centralized payment desks*

**Emerging Themes:**

- Recreation is a large division with both decentralized and centralized sections with considerable variety in their services and operations. This results in a wide range of payment needs and alternatives from the Division and its citizens. (E.g., purchase of food from concessions, one-time room or sport amenity rentals, long term seasonal contracts for rooms and/or sport amenities, events such as weddings, payment for programs and memberships, golf tee times). This means that the Division is a good candidate to explore cashless payments on an ad-hoc, or service-by-service approach - starting with high-opportunity areas like the C-Café.

- There are unique conditions to going cashless within each service area. Some services have higher barriers to going cashless (such as community pools), while others present more favourable conditions (wedding services). In addition, cash payments vary by demographic and location. In areas with low cash volumes, Recreation has started to push towards cashless payments. This indicates that with the right conditions, there is feasibility to going cashless.

- Recreation has undertaken an initiative to update their system software to replace their obsolete system which has come to end of life and will no longer be supported by the vendor. Expected to be completed in 2-3 years, this updated software is expected to promote and increase the use of online booking and payments. The Division is in a good position to explore cashless payment implementation on a service-by-service approach, starting with high-opportunity areas like the C-Café.

**Payment and Cash Trends**

1. **Online payments**
   a. Since the beginning of the COVID-19 pandemic, there has been an increase in online payments. However, this push towards online payments occurred prior to the events of the pandemic – COVID-

19 has only further emphasized the need for online bookings and payment options. Recreation wishes to leverage this trend to further push their initial initiative of online booking and payments.

2. **Discontinuing cash in low cash areas**

   a. Areas with lower populations and cash volumes are beginning to close their banking machines. These include smaller venues closing their bank machines, and high-opportunity services like wedding venues. Looking forward, Recreation is looking to expand this initiative to other services, including the C-Café.

**Key Insights:** Some selected Recreation services have the capability of successfully going cashless if met with the appropriate conditions. If cashless options for certain service areas are feasible and will not disrupt our ability to provide the services that the community needs and wants, Recreation is open to exploring these options and potentially implementing cashless transactions.

## Payments and Cash Handling Process

**Overview of Payment Processes:**
- Depending on the service, Citizens have the option to pay-online, in-person or both.
  - Online, citizens have the option to pay with Credit and Debit card via the Recreation software system CLASS/Active Mississauga.
  - In person, citizens have the option to pay by Credit and Debit card, cash, or cheque.
    - For card payments, Recreation leverages POS terminals provided by Global and back-end applications CLASS to capture payment information and reconcile accounts.
    - For cash payments, citizens are given receipt at payment desk for proof of purchase.

*Payment Modernization Initiatives:*
- Recreation is currently undertaking several initiatives to modernize their payment processes including:
  - Updating system software (2-3 years)
    - Includes a more integrated system that provides a more citizen-friendly experience for citizens, whilst still leveraging card-only payments.
      - Current system is not adaptable to a predominant online presence
  - Incorporating Interac e-Transfer payments (not started)
    - Adding this payment form to help transition away from the use of cash. Noted that this option could work with the current system, but reconciliations would be difficult.
    - Not possible given the current e-transfer technology.

**Overview of Cash Handling Process:**
- The cash handling procedure for cashiers in Recreation consists of:
  - Cashiers verify till at beginning of shift, start with $300 cash float
  - After close, cashiers verify their till amount with secondary employee present - reconciled daily with sign off forms (normally there are two shifts a day, so this process is performed twice per day).
    - Daily cash float verification takes roughly 5 minutes to complete (times 4, so 20 minutes per day – once at start, once at end of shift for two employees)
  - After being reconciled, cash stored in an on-site safe
  - Armored car company, Valguard, comes once or twice per week depending on facility to collect cash from vault
    - 7-minute window for cash to be transferred into armored truck
- Employees: 6 (front desk staff plus one for verification times 2, coordinator of administration plus another staff for verification)

*Cash Standard Operating Procedures:*
- Follows the City's descriptive cash handling policies
  - ADM 001-034, ADM 129
- Operating specific rules for varying services
  - These are all covered under the cash handling SOPs noted above
- Updated every three years, or as needed

*Cash Audits:*
- Frequency: Once a week by Administrative Coordinator, Quarterly by Facility Manager.

## Payment Risks & Barriers

1. **Poor public perception**

   a. Negative perception associated with refusing cash as a method of payment, perceived as exclusion. Seeing as the City is a public service, refusing a citizen's preferences would paint the City in a bad light, leading to resistance from the public. Historically, citizens are not afraid to escalate complaints to management or leadership or call elected government officials demanding explanations.

2. **Adversely impacting specific demographics**

   a. Unbanked populations, which are a significant portion of cash payers, would have no method of payment if cash were not an option. This would leave a portion of the population unable to access the services offered by Recreation. Knowing that this contradicts the core values and purpose of the Division, it is likely to be met with negative reception.

3. **Breadth of services and locations**

   a. Recreation's services cater to different demographics and have different operations. This complexity and interconnectedness make it difficult for the Division to move towards cashless since it can lead citizen confusion. For example, having one service counter accept cash, but having another location not accept cash. It's important to note that decentralization is only a barrier for services and operations that are interconnected – it provides an opportunity for independent services (see opportunities and future outlook).

**Key Insights:** The risks and barriers for Recreation all stem from ensuring inclusivity for citizens. Being a Division that strives to be inclusive and provide recreational services for all citizens, there is little room for compromise. The key condition to going cashless from a risks and barriers perspective is to find alternate accommodation for unbanked populations and begin shifting citizen preferences away from cash.

## Opportunities & Future Outlook

1. **System software upgrades (Long-Term)**

   a. Recreation currently has a project in their pipeline that is intended to modernize their booking and payment process. This project includes updated online channels. If successful, these projects will provide more options for contactless payment and demote the use of cash.

2. **Independent service areas (Short-Term)**

   a. Certain service areas within Recreation have already expressed interest towards going cashless. For example, the C-Café was identified as a high-opportunity area, having roughly 30% of their transaction in cash but a more conducive citizen base. Since these areas are independent from other parts of Recreation, there is no risk of citizen confusion.

3. **Staggered Approach (Short- and Long-Term)**

   a. Operating with both centralized and decentralized components, Recreation would not require an 'all or nothing' approach when considering going cashless. Instead, the Division anticipates a staggered approach would be the most beneficial avenue to going cashless. Starting with high-opportunity areas and following with low-opportunity areas, this would be a unique journey that is expected to be executed in phases.
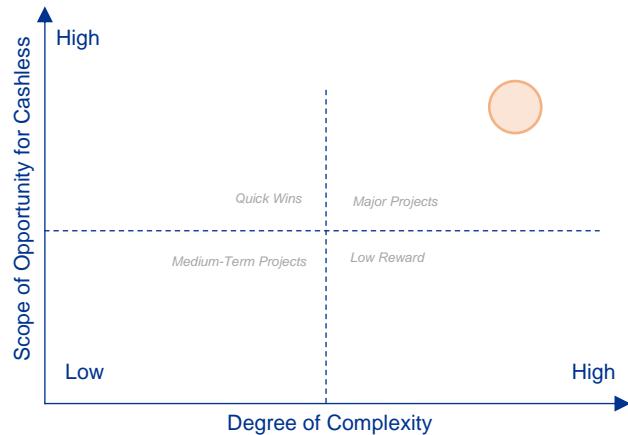
**Key Insights:** There's an abundance of moving pieces within Recreation, all at their own pace. However, this means there is ample opportunity within Recreation – with some areas expressing a readiness to go cashless. Setting a roadmap for quick wins and target areas could help Recreation identify where they can currently go cashless and how best to work towards satisfying the conditions to going cashless in lower opportunity areas.

# Transit

## Executive Summary

**Description of Division:**

Transit is one of the core services provided by the City of Mississauga. As the third largest municipal transit service provider in Ontario, MiWay brings in approximately 9% of the City's yearly revenue and provides more than 56 million rides with over 1.6 million service hours in a year.

**Chart (right side):**
- Y-axis: Scope of Opportunity for Cashless (Low to High)
- X-axis: Degree of Complexity (Low to High)
- Quadrants: Quick Wins, Major Projects, Medium-Term Projects, Low Reward
- A circle marker is positioned in the upper-right area (High Scope of Opportunity, High Degree of Complexity)

**Services offered:**

MiWay is Ontario's third-largest municipal transit service provider, operating conventional, fixed-route transit service. MiWay provides two types of service: MiExpress, providing frequent service on limited-stop routes; and MiLocal, providing service on regular and school routes.

**Revenue streams:**

Fare box revenues includes cash fare payment, ePurse fare payment, period passes, co-fare subsidy from GO Transit, special purpose ticket sales to not for profit organizations, special purpose ticket sales to food bank organizations, Affordable Transit Program (ATP) recoveries from Region of Peel, UPASS program (school contracts). Non-Fare box revenues includes On bus advertising, shelter advertising, PRESTO card sales, charter services, PRESTO sales commissions, and Road Occupancy permit.

---

**Overall conclusion on going cashless:** *Challenging*

*Is the division capable of going cashless?*

This division has low capability of going completely cashless due to a few key challenges. Despite the convenience, moving towards a cashless fare system can create barriers for low income riders seeking to use transit. As cash accounts for only 14% of their revenue, the current cash citizens are primarily unbanked or disadvantaged riders. However, since the implementation of the PRESTO card, cash usage has dropped significantly to approximately $315K per month during COVID ($1M per month pre-COVID). It has taken MiWay significant levels of efforts through marketing initiatives and incentive programs to encourage the shift towards PRESTO, however, they have reason to believe that closing the last gap would require even more input.

*What are the key barriers to going cashless?*

Transit believes that the biggest barrier to going cashless is accommodating certain demographics – who may not have other payment alternatives. As a "Public Good", Transit cannot limit citizen access to Transit services based on payment method.

*What is the likely timing for cashless payments?*

There is a low likelihood that cashless transactions will be successful in the short or medium term. The current cash dominant citizens, though not the majority, are the biggest challenge for transit due to their vulnerability and the lack of payment alternatives.

*Overall, should this division prioritize going cashless?*

---

Overall, there is low opportunity for the Division to go cashless. MiWay currently operates 81 bus routes across the City; for them to go cashless, the transition would have to be a simultaneous shift across every single bus in the city, not forgetting the public relations implications the shift would create.

**Conditions for Going Cashless:**

| Cash Dominant Revenue Streams | Cash Dominant Populations | Centralized Payment Desk/Cashier | Online/Alternative Payment Methods | Overall Complexity of Going Cashless |
|---|---|---|---|---|
| **Y** | Y | Y | Y | High |

**Emerging Themes:**

- Transit serves one of the most expansive networks of citizens within the City. Their citizens include individuals from of all demographics, socioeconomic backgrounds, and geographies. However, there are some populations that are more prevalent within Transit and use cash (lower-income individuals). Specifically, MiWay noted that they face challenging equality issues when considering a transition to cashless payment methods.

- After Community Services, Transportation & Works is the largest department within the City. The Division's size and complexity may complicate the internal and external efforts to pursue cashless and payment modernization initiatives. The integration with PRESTO also adds to the complexity of cashless transactions via the need to accommodate a consistent citizen experience across the Transit networks.

- Most of Transit's revenue is collected through cashless methods. However, cash still makes up makes up 14% of MiWay's revenues – which remains significant from a cash volumes and values perspective (~$1M/month pre-COVID). Therefore, the Division has extensive cash handling operations and costs to accept cash at every station and on every route.

### Payment and Cash Trends

**1. Citizen Segments**

   a. Lower income demographics and seniors struggle with the process of loading an additional card (i.e. PRESTO), maintaining the balance and using it on a regular basis as a payment method. Transit agencies struggle with these citizen segments as they cannot ethically 'leave citizen out in the cold' and must seek to accept fares from a variety of options that are available to citizens.

**2. Third party alternatives supporting cashless transition**

   a. PRESTO has been an easy solution for collecting revenue and they are doing a lot to encourage moving away from cash. The City of Mississauga is currently working alongside PRESTO and 905 Transit agencies to further develop PRESTO technology to meet the needs of our Transit citizens. These collaborations create opportunities to streamline processes which can make the overall transition easier in the long run.

**Key Insights:** Transit faces a major dilemma when it comes to going completely cashless. For a service provider working with all segments of the population, equity issues can severely impact their operations and public acceptance. Despite the pressures MiWay is facing from all sides to move towards cashless transactions, they believe that 14% is the most that they can press without negatively impacting vulnerable citizens.

### Payments and Cash Handling Process

**Overview of Payment Processes:**

- Citizens have the option to pay via their PRESTO card, special purpose tickets or with cash to board a MiWay bus
    - There are special purpose tickets sold to not for-profit organizations and Food Bank organizations to distribute to qualified members of their organizations.
    - PRESTO cards can be bought and loaded at City Centre Transit Terminal, Community Centres, online using debit or credit cards or at Shoppers Drug Mart locations
    - MiWay receives 2% of the sales for PRESTO loads and a daily deposit is made among the two organizations in accordance with the city's policies.
    - Period passes can be purchased at City Centre Transit Terminal, Community Centres, online using debit or credit cards or Shoppers Drug Mart. Revenues from these products are directly attributable to the city.

*Payment Modernization Initiatives:*
- City of Mississauga and PRESTO have undertaken several programs to modernize their payment systems
    - Simplifying fund management via PRESTO device refresh completed in the fall of 2020 enabling cellular connectivity on buses which results to immediate processing of transactions.
    - PRESTO Business Intelligence (BI) tool has been leveraged to deliver accurate data and reports that support business decisions by Transit Senior Management.
        - Device refresh has enhanced citizen experience in that the devices are modern and reliable and will support future fare collection methods such as open payments.

    - Removed Transit regular tickets in 2019. Only special purpose tickets continue to be sold only not for profit organizations and food bank organizations.

    - Introduction of EFT Payments setup almost complete and to start offering citizens the option by October 2021.
        - Not for profit organizations and food bank organizations will be given the option to pay for their special purpose tickets via EFT
        - Advertising agencies will be given the option as well
        - UPASS from School contracts that were previously paid through cheque will also be given the option to pay via EFT.

**Overview of Cash Handling Process:**
- When cash is accepted on a bus or at a station, the process is as follows:
    - At the end of each day, all 490 MiWay buses go to one of three garages in the City, Malton, Central Parkway (CPY), and Central Parkway Annex (CX).
    - The safe that collects cash on the bus is dropped into the main vault/safe at these locations.
    - Daily, all coins collected at CPY and CX are sent over to the coin room located at CPY where coin sorters and wrappers prepare the coins for daily bank deposit together with all bills collected.
    - On Tuesdays and Thursday, Garda world cash services transports all coins collected at Malton to the coin room located at CPY where coin sorters and wrappers prepare the coins for bank deposit together with all bills collected.
    - Daily all cash is then picked up by Garda world cash services from the coin room and taken to the bank for deposit
    - All revenues from coins and bills processed in the coin room are recorded at the end of the week in the Coin room weekly revenue sheet
- When cash sales are made at CCTT, the process is as follows:
    - At the end of the day all concession attendants from all three kiosks close their tills and balance PRESTO sales to the cash registers
    - Concession attendants count cash and prepare bank deposit package from the daily cash sales
    - Garda World cash services transport to the bank the cash sales from the prior day to the bank and deposit.
    - All revenues from sales including cash, debit card and ePurse payments are recorded at the end of the week on the CCTT weekly revenue sheet.

- Employees: Two revenue coordinators and One Revenue Supervisor are directly involved in the cash handling process of the coins and bills coming from the fare box on a daily basis.
**Cash Standard Operating Procedures:**
- Follows the City's descriptive cash handling policies
    - ADM 001-034, ADM 129

- SLAs define the settling of accounts across various stakeholders
  - o 04-06-07 Cash Float Administration
  - o 04-06-08 Petty Cash Fund Administration
  - o 04-11-07 Revenue Sheets
  - o 04-11-01 Corporate Overview of Collecting, Depositing and Recording Receipt of Funds
  - o COIN ROOM REVENUE HANDLING PROCESS

*Cash Audits:*
- Coin room audits and CCTT including cash float audits are done quarterly and monthly respectively.

## Payment Risks & Barriers

1. **Poor public perception**

   a. Negative perception associated with refusing cash as a method of fare payment for low-income segments. Seeing as the City is a public service, refusing a citizen's preferences would paint the City in a bad light, leading to resistance from the public. Transit must take extra precautions when addressing their risks and barriers since they are arguably the most public service of all City Divisions. Their citizens are highly sensitive to changes in operations, meaning there is little room to compromise their demands.

2. **Adversely impacting specific demographics**

   a. Senior citizens and other cash dominant riders would have no method of payment if cash were not an option. Senior citizens are offered $1 fares on MiWay transit and unless this offering could be accommodated in a cashless alternative, this would leave a portion of the population underserved.

3. **Revenue loss due to fare evasion**

   a. Consistency is a vital principal in transit as complex policies can frustrate riders resulting in fare evasion in the absence of a suitable alternative. As a public good, transit has an obligation to serve their citizens to best of their ability and cannot deny boarding if the payment system is at fault.

4. **Union challenges for equality**

   a. Transitions such as cashless transactions require high levels of internal buy-in to be successful. Due to the equality issues that could arise as a result of going cashless, employees and internal stakeholders including unionized individuals may feel resistance towards the initiative.

**Key Insights:** Similar to other divisions that cater to vulnerable populations, Transit must understand the impact of their decision to accept cash on underrepresented citizen groups. As one of the largest services provided by the city, this may result in a slower and more risk-averse approach to going cashless.

## Opportunities & Future Outlook

1. **Affordable Transit Programs (Long-Term)**

   a. As cash is the most expensive fare, the transit agency provides incentive programs alongside PRESTO to provide various types of discounts and passes to support specific segments – such as the ATP program for adults and Seniors. The program requires extensive risk management and governance structures to avoid misuse and revenue loss.

2. **Public Communications and Outreach Programs (Long-Term)**

   a. Work alongside other city Divisions that interact with similar populations to educate potential riders on payment products offered by MiWay and the benefits of using cashless methods in the forms of savings over time. Develop partnerships with such programs to create communication strategies and help unbanked populations realize the benefits of such products.
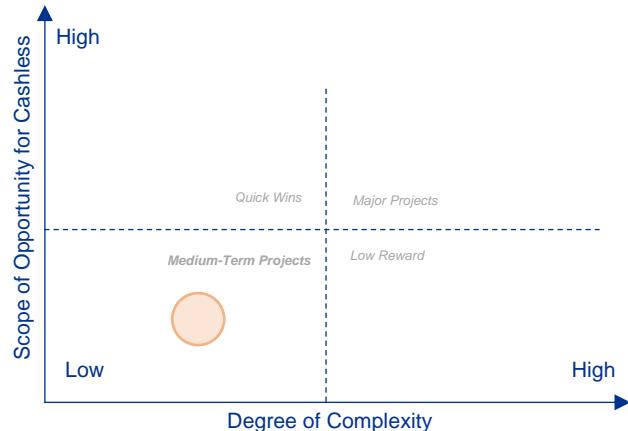
**Key Insights:** While it may be difficult to create a change overnight, the Transit Division certainly can begin to explore long term opportunities for influencing citizen behavior through awareness and education programs. There are many opportunities across city divisions to collaborate and create holistic support programs that address both the citizen and the city's objectives.

# Vital Statistics

## Executive Summary

**Description of Division:**

Vital Statistics is responsible for the statutory duties of the municipal clerk and duties under the Vital Statistics Act. It comprises several important services including marriage licenses, burial permits, drawing and documents. This division of the City of Mississauga works with the Clerk's Office and aims to measure and manage this data and shares it upwards with the Provincial and Federal governments.



**Services offered:**

Commissioner of Oaths ($35.00 per document), Issue Marriage Licenses ($150.00 each), Issue Burial permits ($55.00 each), Registration of Deaths, Freedom of Information Request form ($5.00)

**Revenue streams:**

Registration, licenses, and permit fees for all services listed above.

---

**Overall conclusion on going cashless:** *Complete*

*Is the division capable of going cashless?*

Yes, as a result of the COVID-19 pandemic, the Vital Statistics Division transitioned to cashless transactions. No cash payments are being processed and cheques are redirected to the Treasury team for payment processing by clerks' staff. Citizen is then provided a receipt from the treasury team, which is sent up to Clerks via pneumatic tube system.

*What are the key barriers to going cashless?*

Typically, certain age groups tend to prefer cash. However, this Division does not regularly interact with these demographics. On occasion, Seniors and young adults may have trouble with paying through cashless modes. However, sufficient payment alternatives are available.

*What is the likely timing for cashless payments?*

The transition to cashless payments has already been completed for this Division. Vital Statistics plans to keep their cashless operations active following the COVID-19 pandemic and reopening of City services.

*Overall, should this division prioritize going cashless?*

Yes, the division should continue their current trajectory and ensure any dependencies on cash are pre-emptively identified and accounted for. By leveraging the support of the Treasury department being in close proximity with them, Vital Statistics was able to seamlessly transition to removing cash as a payment method.

---

**Conditions for Going Cashless:**

| Cash Dominant Revenue Streams | Cash Dominant Populations | Centralized Payment Desk/Cashier | Online/Alternative Payment Methods | Overall Complexity of Going Cashless |
|:---:|:---:|:---:|:---:|:---:|
| N | N | N | Y | Low |

**Emerging Themes:**

- When a citizen books a Vital Statistics appointment, they are informed immediately that cash is not an accepted form of payment both in-person and online. Although this practice supports the Division in remaining cashless, it may place an additional administrative burden on other areas (i.e., the use of cashiers to accept cheque payments).

- Post-COVID, Vital Statistics can evaluate a shift to becoming a permanently paperless Division by removing the acceptance of cheques, while continuing customer communication and support initiatives. Vital Statistics has successfully transitioned to cashless payments during the COVID-19 pandemic and is expected to remain cashless in the future.

- Typically, Vital Statistics does not interact with cash-dominant populations. Based on the City's input, moving towards cashless transactions has not limited the accessibility of their services to any demographic.

## Payment and Cash Trends

1. **Better revenue management**

    a. According to the Vital Statistics group, since shifting to cashless payments, they have seen a significant improvement in data collection and management. Due to the traceable nature of card payments and all records updated in the SAP system, the team can track and measure payments more efficiently and accurately.

2. **Card payments**

    a. In line with country-wide payment trends, there has been a shift towards card payments and changes in citizen perception regarding their convenience and safety. Since the beginning of the COVID-19 pandemic, all payments have been able to seamlessly migrate to alternate solutions.

**Key Insights:** Proven by their transition to cashless payments during the COVID-19 pandemic, the division presents a high potential to remain cashless in the short and long term. With positive externalities such as improved records management, cashless systems can bring efficiencies throughout the division and act as the first step to an overall better functioning service.

## Payments and Cash Handling Process

**Overview of Payment Processes:**
- In order to pay for any documents or services from the Vital Statistics office, individuals can use Debit, Visa, Master Card, or American Express (in-person).
- This information is available on the City's website for any potential clients to be aware of and is also reminded when booking any appointments with the Division.
- Cheque payment is offered for applicable services which is then sent to the Treasury team to be processed and a receipt is sent back to Clerks via pneumatic tube system.

*Payment Modernization Initiatives:*
- There are no current payment modernization initiatives in the Vital Statistic Division's pipeline.

**Overview of Cash Handling Process:**
- Since COVID-19 the cash handling processes have been eliminated from this Division.

*Cash Standard Operating Procedures:*

- Should Vital Statistics decide to resume accepting cash at a reduced capacity, they would follow the City's descriptive cash handling policies

  - ADM 001-034, ADM 129

*Cash Audits:*
- Since COVID-19 the cash handling processes have been eliminated from this Division. Treasury team is used for processing cheques only.

## Payment Risks & Barriers

1. **Lack of options create limitations**

   a. Negative perception associated with refusing cash as a method of payment. Seeing as the City is a public service, refusing preferences could result in minor backlash from inconvenienced citizens.

**Key Insights:** Dealing with a very specific citizen base, Vital Statistics faced drastically lower barriers towards going cashless. With no immediate risks, the only potential threat facing this Division is the additional regulations they must comply with in the future.

## Opportunities & Future Outlook

1. **Create or integrate with an online payments platform (Medium-Term)**

   a. As the division begins to comfortably function without cash, they can begin to consider next steps and opportunities for simplifying business processes and integrate technology. While the transition to cashless was overall smooth, duplication in the overhead continues to be a prevalent issue that must be addressed.

2. **Permanently shift to Cashless systems (Short-Term)**

   a. Already having completed the process to a large extent, the Vital Statistics team can continue to communicate with clients regarding the acceptable forms of payments and build clear expectations with all relevant stakeholders. To complete their transition to permanent cashless systems, this division can explore the possibility of eliminating cash acceptance through the Treasury department in the long run.

**Key Insights:**  The push towards cashless as a result of COVID-19 illuminated the range of opportunities to improve the systems currently in place in the Vital Statistics division. The team should continue to capitalize on this opportunity to permanently remove cash as a payment option. By piggybacking on the development of new platforms in other streams such as Licensing, this division can also find opportunities for optimization in other areas that would indirectly create efficiencies in their payment systems as well.

# APPENDIX D: LIST OF INTERVIEWEES

**City Stakeholders**

| Name | Title |
|------|-------|
| Wesley Anderson | Manager, Financial & Treasury Services |
| Louise Cooke | Supervisor, Revenue – Customer Service |
| Lisa Teixeira | Manager, Revenue & Taxation |
| Mark Waugh | Manager, Treasury Services |
| Jeff Jackson | Director, Finance & Treasury |
| Shari Lichterman | Commissioner of Corporate Services and CFO |
| Andra Maxwell | Solicitor and Director of Legal Services |
| Erica Edwards | Manager, Materiel Management |
| Lucy Tersigni | Administrative Coordinator, Revenue & Materiel Management |

**Division Stakeholders**

| Name | Title |
|------|-------|
| Vali Miledi | Supervisor, Administrative Services |
| Greg Madeley | Supervisor, Animal Shelter |
| Jay Smith | Manager, Animal Shelter |
| Brad Stoll | Manager, Recreation |
| Mike Menary | Manager, Library Planning Dev & Analysis |
| Fawzia Raja | Library Business Consultant |
| Fritz Youaleu | Supervisor, Transit Revenue |
| Donabelle Higgs | Team Leader, Vital Statistics |
| Carmela Radice | Manager, Court Administration |
| Anthony Andreana | Manager, Building and Business Services |
| Jamie Brown | Manager, Municipal Parking |
| Lisa Christie | Manager, Vital Statistics |

# APPENDIX E: INTERVIEW GUIDE

As part of the City of Mississauga's Cashless Transaction Review, KPMG is conducting interviews to better understand cash handling across City departments. This interview guide serves as a reference for what will be asked and compared across different departments. The questions below are meant to guide the discussion, but feel free to add in additional context and feedback that you think is important to our review.

**Prior to Interview:**

**What is this interview about?**

The purpose of this interview is to speak with frontline workers in City departments to gain a better understanding of how cash is handled. By providing your unique perspective, KPMG can better analyze the current state of cash operations and work towards more practical solutions for the City to move towards cashless transactions.

**What will I be asked to do?**

You will be asked to provide opinions, insights, trends and other observations on cash and other transactions that you handle. This can include gradual changes over time (e.g., away from cheques), how COVID-19 has impacted transactions, etc.

**How will my interview be recorded? Who will it be shared with?**

The interview will not be recorded. Instead, we will be taking detailed notes throughout the conversation. Your responses will be shared with the KPMG and City project teams. We may also request your contact information for follow up questions that were not explored in the interview.

**Interview:**

Objectives: Understand each department's cash flow cycle and cost/revenue structure, identify barriers and opportunities to reduce cash, discuss payment trends and expected consumer behavior, discuss potential risks and mitigations.

**A. Business Model**

1. Can you describe the nature of your business model? Please emphasize the role of cash in each of the below.
   a. Revenue streams (sources and percentages)
   b. Types of payments (incl. current and trending cash volumes)
   c. Costs
   d. Expected growth
2. Other than the above, how does cash (or other transactions) impact your business model/ business decisions?
3. How do fees associated with payment types (card fee structures) impact the fees charged to consumers? Do you account for these charges in your annual budget?
4. If the City went Cashless, how would this impact your business/revenue models?

**B. Consumer Behaviour**

1. Describe your customer segments? Is there a distinguishable population that is more likely to pay in cash?
2. What has been the public response to contactless payments during the COVID-19 pandemic?
   a. Has there been a different reaction from different demographics/markets?
   b. Do you think contactless payment will be the new normal?

3. How do cash/contactless payments help or hinder citizen experience?
4. Is there adequate digital literacy, from both consumers and staff to support going cashless? If not, how do you propose educating these stakeholders?

## C. Operations

1. Describe the process for taking cash and cashless payments?
2. What is the current infrastructure to support these payments?
   a. Citizen data (what information is captured on each payment)
   b. Payment processing technology (terminals, back-end systems, etc.)
   c. Fraud and fraud management solutions
   d. Cash handling services (e.g., Garda, Brinks, etc.) and other third parties
   e. Banking relationships
3. Are there any initiatives to modernize payments in your department?
4. What are the current and key challenges you face in your operations?
5. If cash is one of your payment options, is it possible for the client to make cash payment elsewhere? For example, paying cash at a financial institution?
6. How do you see the future of your payment operations? What is needed to support this that you don't have?

## D. Risks, Challenges and Other Topics

1. What are the biggest risks you see from going cashless?
2. What are the biggest barriers to going cashless?
3. What is your hypothesis as to whether your division should go cashless?
4. Is there anything else not mentioned that you feel is important for us to know in our evaluation behind Mississauga going cashless?
5. Are there any questions you have for us?

## Post Interview:

Following the consolidation of responses we receive from all interviewed stakeholders; we will aggregate information to extract valuable feedback. We may also follow up with further questions to seek better clarity and context on your responses. This helps to ensure we have adequately captured the appropriate conversation and perspective.

We greatly appreciate your willingness to participate in this interview to further the wellbeing of Mississauga citizens. Should you have any questions or think of any additional information to share, please do not hesitate to reach out to us.

# APPENDIX F: LIST OF DOCUMENTS RECEIVED

| # | Document | Document Type | Date |
|---|----------|---------------|------|
| 1 | Cash Handling Survey | Word | 6/25/2021 |
| 2 | Cashiers Services - Elimination of Cash Transactions | PDF | 6/28/2021 |
| 3 | 2021 BP Org Structure | PDF | 7/27/2021 |
| 4 | 2021 BP Service Hierarchy | PDF | 7/27/2021 |
| 5 | CoM 2020 Financial Statements | PDF | 7/27/2021 |
| 6 | Corporate Overview of Collecting, Depositing and Recording Receipt of Funds | PDF | 7/27/2021 |
| 7 | Controlling Official Receipts | PDF | 7/27/2021 |
| 8 | Revenue Sheets | PDF | 7/27/2021 |
| 9 | Cash Loss from Operations | PDF | 7/27/2021 |
| 10 | Credit Card Security Procedures | PDF | 7/27/2021 |
| 11 | CoM 2017 Departmental P&L | Excel | 7/27/2021 |
| 12 | CoM 2018 Departmental P&L | Excel | 7/27/2021 |
| 13 | CoM 2019 Departmental P&L | Excel | 7/27/2021 |
| 14 | CoM 2020 Departmental P&L | Excel | 7/27/2021 |
| 15 | Smart City Master Plan | PDF | 7/27/2021 |
| 16 | 2020 Smart City Annual Report | PDF | 7/27/2021 |
| 17 | Customer Service Strategy | PDF | 7/27/2021 |
| 18 | Community Services Master Plans (Future Directions) | [Website](Website) | 7/27/2021 |
| 19 | Better Connected 2018 | PDF | 7/27/2021 |
| 20 | CoM Master Plans (Future Direction) | [Website](Website) | 7/27/2021 |
| 23 | SOP Business Requirements for Adopting ERA | PDF | 7/27/2021 |
| 24 | City Workers Interview Guide | Word | 8/2/2021 |
| 21 | Environics Report | PDF | 8/27/2021 |
| 25 | 2016 Revenue Sheets | Excel | 9/13/2021 |
| 26 | 2016 Transaction Costs | Excel | 9/13/2021 |

| 27 | 2017 Revenue Sheets | Excel | 9/13/2021 |
|----|---------------------|-------|-----------|
| 28 | 2017 Transaction Costs | Excel | 9/13/2021 |
| 29 | 2018 Revenue Sheets | Excel | 9/13/2021 |
| 30 | 2018 Transaction Costs | Excel | 9/13/2021 |
| 31 | 2019 Revenue Sheets | Excel | 9/13/2021 |
| 32 | 2019 Transaction Costs | Excel | 9/13/2021 |
| 33 | 2020 Revenue Sheets | Excel | 9/13/2021 |
| 34 | 2020 Transaction Costs | Excel | 9/13/2021 |
| 35 | 2021 Revenue Sheets | Excel | 9/13/2021 |
| 36 | 2021 Transaction Costs | Excel | 9/13/2021 |
| 37 | Cost Centre Chart of Accounts | Excel | 9/13/2021 |
| 38 | Cost Element Chart of Accounts | Excel | 9/13/2021 |
| 39 | Animal Services E-Store Revenue Sheets | Excel | 9/24/2021 |
| 40 | Compliance & Licensing Non-Revenue Sheets | Excel | 9/24/2021 |
| 41 | Planning and Building Revenue Sheets | Excel | 9/24/2021 |
| 42 | Vital Statistics Revenue Breakdown Sheets | Excel | 9/28/2021 |
| 43 | Library Revenue Sheets | Excel | 9/28/2021 |
| 44 | Recreation Revenue Sheets | Excel | 9/29/2021 |