

# Hamilton Municipal Cemeteries Asset Management Plan 2024



# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

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## SUMMARY AND QUICK FACTS

### SERVICE PROFILE



The purpose of Hamilton Municipal Cemeteries is to provide service for those looking for a final resting place for themselves or for their loved ones. This includes providing compassionate care, respectful spaces and services, and proficient delivery of services achieved through efficient administration, maintenance, and management of the municipal cemeteries.

### ASSET SUMMARY

#### Replacement Value

**\$29.5M**

**FAIR CONDITION**

Average Age of **33** years  
or **31%** of the average  
remaining service life



### LEVEL OF SERVICE SUMMARY

- Customers felt that Hamilton Municipal Cemeteries performance was **GOOD** in providing services in the last 24 months.
- Customers felt neutral about Hamilton Municipal Cemeteries providing **AVERAGE** value for money when providing infrastructure and services.



ASSET HIGHLIGHTS				
ASSETS	QUANTITY	REPLACEMENT COST	AVERAGE CONDITION	STEWARDSHIP MEASURES
Cemeteries Infrastructure	40	\$26.8M	Fair	Staff Inspections and Building Condition Assessments
Fleet and Equipment	245	\$2.71M	Poor	Biannual Inspections completed by Fleet Services

### DATA CONFIDENCE



# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

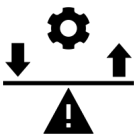
## DRIVERS

**Population change** – Hamilton’s population will continue to grow and Hamilton Municipal Cemeteries will continue to see growth in cemetery services and land needs.

**Aging population** – increased growth in the elderly demographics will increase the death rate of Hamilton’s overall population. Hamilton Municipal Cemeteries can expect increased demand for cemetery services and land needs.

**Changing customer preferences** – increased demand for cremation services and products including columbaria, niches, and scattering gardens.

## RISK



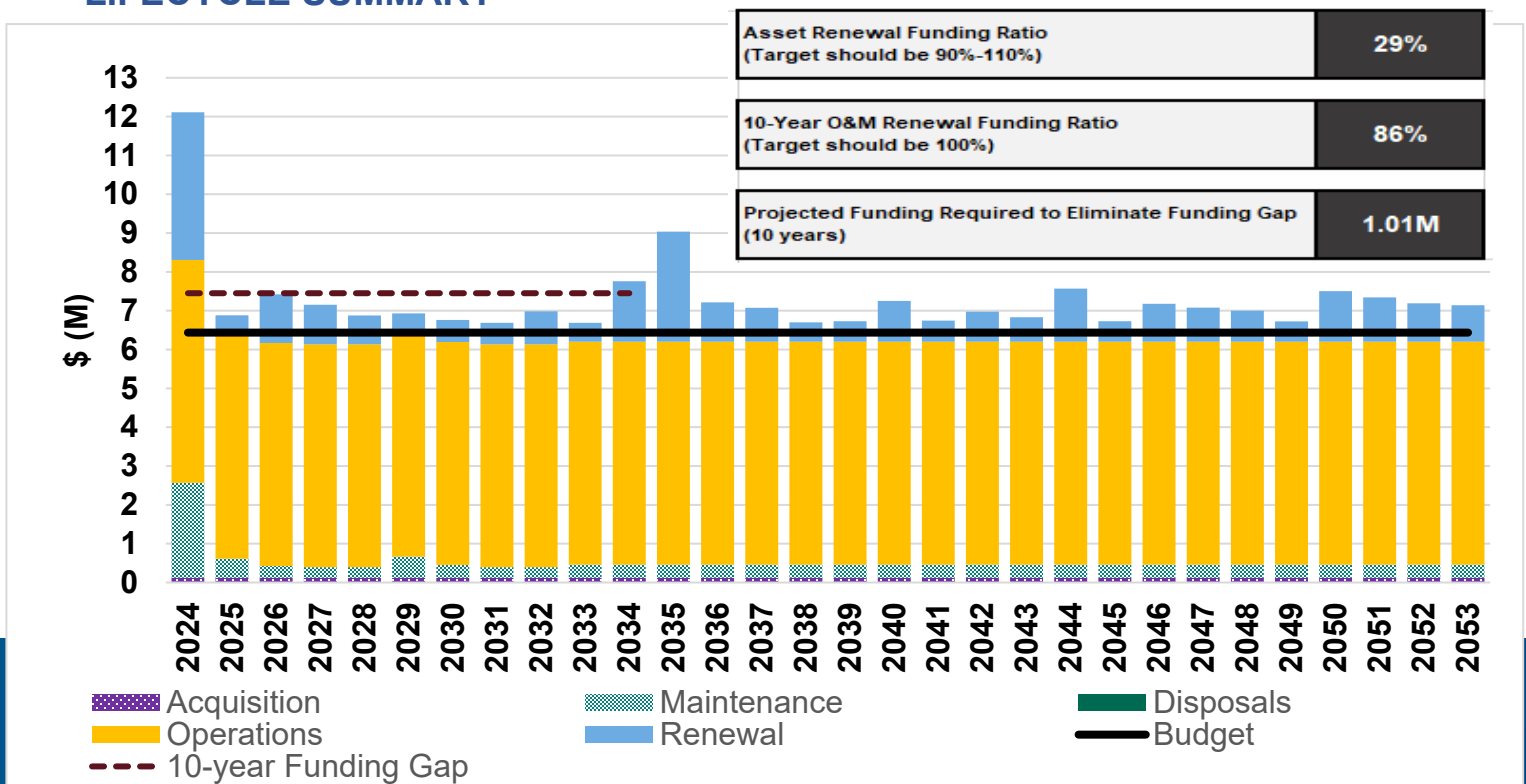
- No critical assets have been identified for the cemeteries service area. Some risks facing Hamilton Municipal Cemeteries are maintaining relinquished cemeteries in perpetuity without additional funding, and excessive deterioration of assets with insufficient funding for maintenance and renewal.

## CLIMATE CHANGE MITIGATION



- Natural Burial Area opened at Mount Hamilton Cemetery where remains to return to the earth organically as part of a natural ecosystem
- Targeted mowing reductions and no-mow areas
- Piloting electric small equipment

## LIFECYCLE SUMMARY



# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

## 1. INTRODUCTION

Hamilton Municipal Cemeteries provides administration, maintenance, and management of municipal cemeteries as well as end-of-life services for residents and their families within the City of Hamilton. The purpose of this Asset Management Plan (AM Plan) is to ensure that Hamilton Municipal Cemeteries has the required assets to deliver effective, sustainable and respectful Cemeteries services to the City.

This AM Plan is intended to communicate the requirements for the sustainable delivery of services through the management of assets, compliance with regulatory requirements (i.e. O. Reg 588/17<sup>1</sup>) and required funding to provide the appropriate levels of service over the 2024-2053 planning period.

The Hamilton Municipal Cemeteries section assets include cemetery infrastructure including laneways, fencing and buildings, and commemorative assets, such as mausolea and columbaria. Vehicles, machinery, and equipment are used by Cemetery Staff to provide cemetery services, maintenance, and management of cemetery properties.

Since Sunday, February 25, 2024, the City of Hamilton experienced a cyber incident that disabled some of the IT systems. As a result, this AM Plan was created based on the data that was accessible at the time of publication.

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<sup>1</sup> (Government of Ontario, 2017)



# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

## 2. BACKGROUND

The information in this section is intended to provide background on Hamilton Municipal Cemeteries service areas by providing a service profile, outlining legislative requirements and defining the asset hierarchy used throughout the report. This section will provide the necessary background for the remainder of the AM Plan.

### 2.1 SERVICE PROFILE

Listed below are related documents reviewed in preparation of the Asset Management Plan:

- Asset Management Plan Overview Document; and,
- City of Hamilton Cemeteries Business Plan Strategy and Land Needs Assessment (2014)<sup>2</sup>.

Additional financial-related documents are identified in **Section 10** Plan Improvement and Monitoring.

#### 2.1.1 SERVICE HISTORY

For over 150 years Hamilton Municipal Cemeteries has been serving residents, providing lasting remembrance tributes, comfort to families and preservation of family and local history for future generations. Hamilton Cemetery, located on Burlington Heights between Cootes Paradise to the West and Burlington Bay to the East, is Canada's first and oldest municipally-owned cemetery with the first burial at the site in 1850. Many of Hamilton's municipal cemeteries are like museums, with their headstones serving as a record of local culture and social history.

Cemeteries are among the most valuable of historical resources, revealing information about settlement patterns, historical events, religions, lifestyles, and genealogy. Cemeteries were also some of the first parks, providing the public with beautiful outdoor gathering spaces at a time when parks were still on the horizon of city planning. This tradition continues today with local cemeteries showcasing a variety of creative horticulture and landscaping.

The City operates 70 cemeteries across the municipality making it the largest municipal cemetery portfolio in Canada. The service area stretches the entire municipality with a wide variety of sites, from historical family burial grounds to modern-day grounds with a suite of service offerings.

The Environmental Services Division (Parks and Cemeteries Section) of the Public Works Department is responsible for the administration, operation, and maintenance of municipally-owned cemeteries. The City provides a range of traditional cemetery services and products, including single/multiple grave lots, full burial (adult, child and veteran), cremation burial (urn gardens), columbaria niches, mausolea crypts, memorial benches, memorial trees, plaques, vases, emblems, flower beds, family history research and upright and flat markers. More

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<sup>2</sup> (Lees+Associates Cemetery Planners, 2014)

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recently, natural burials are now available to residents seeking an alternative to traditional burial practices.

Hamilton Municipal Cemeteries is a Licensed Cemetery Operator, issued by the Bereavement Authority of Ontario (BAO).

### 2.1.2 SERVICE FUNCTION

Hamilton Municipal Cemeteries provides service for those looking for a final resting place for themselves or for their loved ones. Staff are committed to providing compassionate care, respectful spaces and services, and proficient delivery of services.

Services include:

- Maintenance and management of 70 active and inactive cemeteries;
- Sales of interment rights, and products/services such as benches, urns, vaults, and providing grave side tents and chairs to support funerals;
- Burial and disinterment; and,
- Historical family searches and historical walking tours.

Hamilton benefits from these services in several ways, including:

- Established infrastructure, systems, staffing and outreach programs;
- Strong support from funeral homes, councillors, and the community;
- A significant supply of undeveloped lands and a variety of burial options with the opportunity to be buried in your community; and
- Infilling opportunities at some inactive cemeteries.

In order to deliver cemetery services, Hamilton Municipal Cemeteries requires assets. Some ways assets support the delivery of the service include:

- The provision of final resting place options including columbaria, and the equipment required to perform interment;
- Site works including laneways, stormwater management, lighting, and pathways, that allow cemetery properties to function at the desired level of service;
- Equipment and resources to maintain cemeteries and services at the desired level of service; and
- Administrative equipment to support the delivery of services.

### 2.1.3 USERS OF THE SERVICE

Hamilton Municipal Cemeteries receive hundreds of requests for services per year, such as interment sales, products (e.g., benches, urns, funeral support items), burial and disinterment,

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graveside services and historical family searches. Staff assist with many interments each year, completing 1371 burials in 2022.

Programs include:

- Historical walking tours;
- Remembering services and outreach events (e.g., Remembrance Day, trees of remembrance, field of flags);
- End-of-life planning services; and,
- Memorial bench program.

Customers are often those dealing with the loss of a loved one or considering making arrangements for themselves or for a loved one but also include visitors who are grieving a loved one, making family connections, studying genealogy, and enjoying the greenspace and scenery.

Hamilton Municipal Cemeteries provide a diverse range of services located at sites in all communities of the City allowing residents to choose a resting place close to their homes and families. **Table 1** identifies the number of Hamilton Municipal Cemeteries in each community.

**Table 1: Cemetery Details**

COMMUNITY	NUMBER OF CEMETERIES
Ancaster	11
Dundas	6
Flamborough	13
Glanbrook	12
Hamilton	16
Stoney Creek	12

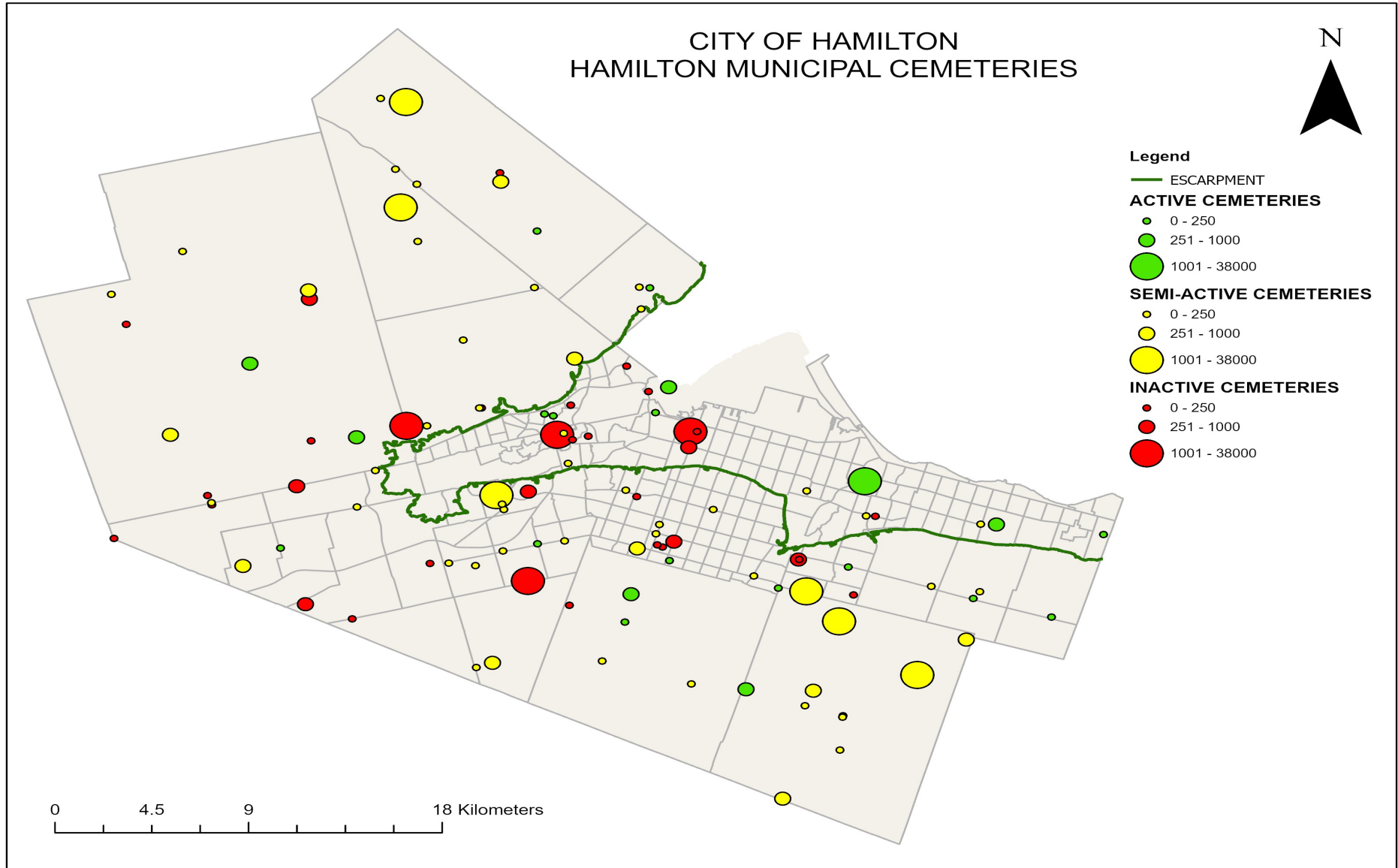
Based on the 2021 (2016) Census results, Hamilton’s population is 569,353 (536,917), and the average household size is 2.5 (2.5) people.<sup>3</sup> During the period of 2008 to 2012, 37 percent of Hamilton residents that chose in-ground casket burial chose to do so at a municipal cemetery and 21 percent of Hamilton residents that chose cremation interred their remains at a municipal cemetery.<sup>4</sup>

<sup>3</sup> (Census Profile, 2021 Census of Population, 2021)

<sup>4</sup> (Lees+Associates Cemetery Planners, 2014)

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Figure 1: Map of Hamilton Municipal Cemetery Locations



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## 2.1.4 UNIQUE SERVICE CHALLENGES

Hamilton Municipal Cemeteries has several unique service challenges including:

- In Ontario, the Funeral, Burial and Cremation Services Act, 2002 stipulates that cemetery owners must set aside a portion of the interment rights fee and/or portions of fees from the other products and services provided to be kept in a trust fund known as the Care and Maintenance Fund. This trust is intended to fund the care and maintenance required of the cemetery in perpetuity;

The Act mandates that municipalities assume responsibility for any burial site that is not being maintained or is abandoned. The BAO will direct the City of Hamilton to assume this responsibility. As a result, the City currently owns and maintains numerous cemeteries that are historical, inactive, and have no dedicated Care and Maintenance Fund to provide for their perpetual care. This can place a strain on existing funding without any additional cost allocations provided. These assumed assets may require significant initial maintenance activities at turnover to stabilize and bring the assets up to a serviceable condition;

- Consumers are increasingly price-conscious, while also accustomed to choosing from a wide array of products and services. Trends in preference from burial toward cremation are expected to continue to increase. There is also a trend toward consumer desire for more natural and environmentally friendly end-of-life options. The City has also developed a new natural burial section at Mount Hamilton Cemetery to meet this demand in the community;
- A Business Plan Strategy and Land Needs Assessment was completed in 2014 to provide strategic direction to Hamilton Municipal Cemeteries. Given the time that has passed and changes that have occurred in the City, an updated plan will be undertaken in 2024 to identify needs and guide plans for future growth;
- Land needs for cemeteries are assessed for each area of the City to ensure residents can be buried in their local areas. Lands that are appropriate for cemetery use are scarce in some areas and can be costly to acquire. Strategic planning is required such that when opportunities arise the City is in a position to move quickly to acquire the properties; and,
- Existing assets are aging while existing funding for maintenance and renewal is limited and not sufficient to complete all desired planned maintenance activities or replace assets at the optimal time. Asset data and records are limited and stored in a variety of formats and locations. Assets are diverse and maintenance procedures are not standardized and documented for all assets.

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## 2.2 LEGISLATIVE REQUIREMENTS

The most significant legislative requirements that impact the delivery of Hamilton Municipal Cemeteries services are outlined in **Table 2**. These requirements are considered throughout the report, and where relevant, are included in the levels of service measurements.

**Table 2: Legislative Requirements**

LEGISLATION OR REGULATION	REQUIREMENT
<p><b>Funeral, Burial and Cremation Services Act, 2002</b></p>	<p>The Funeral, Burial and Cremation Services Act (FBCSA) is the main law respecting funerals, burials, cremations, alkaline hydrolysis and related bereavement supplies and services within the province of Ontario.</p> <p>By law, funeral establishments, cemeteries, crematoriums, alternative dispositions and transfer service operators as well as funeral directors and sales representatives must be licensed. The act also outlines consumer rights related to bereavement supplies and services.</p> <p>The Bereavement Authority of Ontario (BAO) is responsible for most of the FBCSA.</p> <p>This legislation stipulates that cemetery owners must provide “care and maintenance” of their properties and that they must do so in perpetuity.</p>
<p><b>City of Hamilton By-law No. 12-151 By-law respecting the City of Hamilton’s cemeteries</b></p>	<p>By-law for the operation of cemeteries owned by the City of Hamilton.</p>

## 2.3 ASSET HIERARCHY

In order to deliver services, Hamilton Municipal Cemeteries requires assets. The Cemeteries Service Area has been broken down into three asset classes for the purpose of this AM Plan:

- Cemeteries Infrastructure:** refers to physical assets located at cemetery locations including buildings, pathways, furnishings including benches, laneways, fencing and signs. This also includes utilities such as stormwater facilities, lighting, electrical, and irrigation;
- Commemorative Assets:** refers to columbaria and mausoleums assets; and,

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- **Fleet and Equipment:** refers to all fleet and equipment that support the delivery of cemetery services.

**Table 3 : Asset Class Hierarchy**

SERVICE AREA	HAMILTON MUNICIPAL CEMETERIES		
ASSET CLASS	CEMETERIES INFRASTRUCTURE	COMMEMORATIVE ASSETS	FLEET AND EQUIPMENT
	<ul style="list-style-type: none"> <li>• Signs and Wayfinding Features (including entryways and section markers)</li> <li>• Garden Beds</li> <li>• Water and Irrigation Systems</li> <li>• Pathways and Furnishings</li> <li>• Laneways</li> <li>• Fencing</li> <li>• Retaining Walls</li> <li>• Utilities (stormwater, electrical, lighting)</li> <li>• Facilities (including soil storage)</li> </ul>	<ul style="list-style-type: none"> <li>• Columbaria and Niches</li> <li>• Mausoleum</li> </ul>	<ul style="list-style-type: none"> <li>• IT Equipment</li> <li>• Large Equipment and Attachments</li> <li>• Trucks and Vehicles</li> <li>• Small Equipment</li> <li>• Interment Equipment</li> <li>• Sales Equipment</li> </ul>

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

## 3. SUMMARY OF ASSETS

This section provides a detailed summary and analysis of the existing inventory information as of October 2023 including age profile, condition methodology, condition profile, asset usage, and performance for each of the asset classes. *Table 4* displays the detailed summary of assets for the **Hamilton Municipal Cemeteries** service area. The sources for this data are a combination of data included in the City's database information. It is important to note that inventory information does change often, and that this is a snapshot in time of information.

The City owns approximately **\$29.5 million** in **Hamilton Municipal Cemeteries** assets. To calculate the average age and condition, a weighted average calculation has been completed based on replacement cost and excludes assets where information is currently unavailable.

Assets are a weighted average of **33 years** in age which is **31%** of the average remaining service life (RSL); however, age data is only available for fleet, equipment, and facilities assets. Based on the limited age data available, the overall data confidence for age and remaining service life is **Low**.

The assets are on average in **Fair** condition however there are a number of categories for many assets where there is no condition data available. Based on the limitations of the data, the overall data confidence for the condition is **Low**. For most assets, this means that the City should be completing preventative, preservation and maintenance activities as well as operating activities (e.g., inspection, cleaning) to prevent any premature failures.

The Corporate Asset Management (CAM) Office acknowledges that some works and projects are being completed on an ongoing basis and that some of the noted deficiencies may already be completed at the time of publication. In addition, the assets included below are assets that are assumed and in service at the time of writing.

Data confidence associated with asset information is also presented in *Table 4*. Data confidence descriptions are outlined on **page 31**, in the [AM Plan Overview](#). The replacement costs below are typically a Low-Medium data confidence level for categories with data available. Due to the overall number of assets with incomplete data, the overall replacement value confidence level is **Low**. For most Facility assets, these replacement costs are calculated using an internal tool which encompasses current market rates, building type and size. Fleet and Equipment assets replacement costs were gathered from the most recent purchase price for similar assets. Replacement values for other items are generally based on inflated values of original purchase, recent purchase price for similar assets, or replacement cost estimates based on staff expert opinion.

A continuous improvement item identified in *Table 29* is to implement an asset registry for all Hamilton Municipal Cemeteries assets which includes key database fields and follows the newly developed City Data Standard. The Cemeteries section is currently implementing the City's Enterprise Asset Management (EAM) System which will improve the asset inventory in future iterations of the AM Plan.



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**Table 4 : Detailed Summary of Assets**

CEMETERIES INFRASTRUCTURE				
ASSET CATEGORY	NUMBER OF ASSETS	REPLACEMENT VALUE	AVERAGE AGE (% RSL)	AVERAGE EQUIVALENT CONDITION
Signs and Wayfinding Features	No Data	No Data	No Data	No Data
<b>Data Confidence</b>				
Garden Beds	52	No Data	No Data	No Data
<b>Data Confidence</b>	Low			
Water Taps and Irrigation Systems	464 - Water Taps No Data – Irrigation Systems	\$0.46M	No Data	No Data
<b>Data Confidence</b>	Low	Low		
Pathways and Furnishings	No Data	No Data	No Data	No Data
<b>Data Confidence</b>				
Laneways	28 km	\$18.7M	No Data	3-Fair
<b>Data Confidence</b>	Medium	Medium		Medium
Fencing	2.6 km	\$0.87M	No Data	3-Fair
<b>Data Confidence</b>	Medium	Medium		Medium
Retaining Walls and Barriers	3	No Data	No Data	No Data
<b>Data Confidence</b>	Low			
Utilities (stormwater, lighting, electrical)	No Data	No Data	No Data	No Data
<b>Data Confidence</b>				
Facilities	9	\$6.8M	35 (31%)	4-Poor
<b>Data Confidence</b>	High	Medium	High	Low
<b>SUBTOTAL</b>		<b>\$26.8M</b>	<b>35 (31%)</b>	<b>3-Fair*</b>
<b>DATA CONFIDENCE</b>		<b>Medium*</b>	<b>High</b>	<b>Medium*</b>

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COMMEMORATIVE ASSETS				
ASSET CATEGORY	NUMBER OF ASSETS	REPLACEMENT VALUE	AVERAGE AGE (% RSL)	AVERAGE EQUIVALENT CONDITION
Columbaria and Niches	118	No Data	No Data	2-Good
<b>Data Confidence</b>	Low			Medium
Mausoleum	1	No Data	No Data	No Data
<b>Data Confidence</b>	High			No Data
<b>SUBTOTAL</b>	No Data		No Data	2-Good
<b>DATA CONFIDENCE</b>				Medium

FLEET AND EQUIPMENT				
ASSET CATEGORY	NUMBER OF ASSETS	REPLACEMENT VALUE	AVERAGE AGE (% RSL)	AVERAGE EQUIVALENT CONDITION
IT Equipment	18	\$0.03M	3 (44%)	3-Fair
<b>Data Confidence</b>	High	Medium	High	Low
Large Equipment and Attachments	32	\$1.22M	8 (25%)	4-Poor
<b>Data Confidence</b>	High	Medium	High	Low
Trucks and Passenger Vehicles	16	\$1.06M	8 (22%)	4-Poor
<b>Data Confidence</b>	High	Medium	High	Low
Small Equipment	178	\$0.4M	8 (39%)	4-Poor
<b>Data Confidence</b>	Medium	Medium	Medium	Low
Interment Equipment	No Data	No Data	No Data	No Data
<b>Data Confidence</b>				No Data
Sales Equipment	No Data	No Data	No Data	No Data
<b>Data Confidence</b>				No Data
<b>SUBTOTAL</b>	\$2.7M		8 (26%)*	4-Poor*
<b>DATA CONFIDENCE</b>	MEDIUM*		HIGH*	LOW*

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<b>TOTAL</b>	<b>\$29.5M</b>	<b>33 (31%)*</b>	<b>3-FAIR*</b>
<b>DATA CONFIDENCE</b>	<b>LOW**</b>	<b>LOW**</b>	<b>LOW**</b>

\*Weighted average by replacement value

\*\*Overall data confidence for Average Age (%RSL) and Average Equivalent Condition is based on subject matter expert opinion rather than weighted average by replacement value due to the overall lack of data and number of categories with no data available

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN


## 3.1 ASSET CONDITION GRADING

Condition refers to the physical state of the cemeteries assets and is a measure of the physical integrity of these assets or components and is the preferred measurement for planning lifecycle activities to ensure assets reach their expected useful life.

Since condition scores are reported using different scales and ranges depending on the asset, **Table 5** below shows how each rating was converted to a standardized 5-point condition category so that the condition could be reported consistently across the AM Plan. A continuous improvement item identified in **Table 29**, is to review existing internal condition assessments and ensure they are revised to report on the same 5-point scale with equivalent descriptions.

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

**Table 5: Equivalent Condition Conversion Table**



EQUIVALENT CONDITION GRADING CATEGORY	CONDITION DESCRIPTION	% REMAINING SERVICE LIFE	FACILITIES CONDITION INDEX (FCI)	COLUMBARIA CONDITION	LANEWAY ASPHALT QUALITY ASSESSMENT – SEVERITY LEVEL	FENCE CONDITION
<b>1 Very Good</b>	The asset is new, recently rehabilitated, or very well maintained. Preventative maintenance required only.	>79.5%	N/A	N/A	1	N/A
<b>2 Good</b>	The asset is adequate and has slight defects and shows signs of some deterioration that has no significant impact on asset’s usage. Minor/preventative maintenance may be required.	69.5% – 79.4%	< 5%	EXCELLENT	2	Good – No Issues
<b>3 Fair</b>	The asset is sound but has minor defects. Deterioration has some impact on asset’s usage. Minor to significant maintenance is required.	39.5% - 69.4%	>= 5% to < 10%	GOOD	3	Fair - No Poor condition components, 4/7 or fewer fair condition components
<b>4 Poor</b>	Asset has significant defects and deterioration. Deterioration has an impact on asset’s usage. Rehabilitation or major maintenance required in the next year.	19.5% - 39.4%	>= 10% to <30%	FAIR	4	Poor – 1 or more poor condition components or >4 fair condition components
<b>5 Very Poor</b>	Asset has serious defects and deterioration. Asset is not fit for use. Urgent rehabilitation or closure required.	<19.4%	>= 30%	N/A	5	N/A

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

The following conversion assumptions were made:

- For assets where a condition assessment was not completed, but age information was known (Fleet, IT Equipment, Small Equipment), the condition was based on the percent of remaining service life;
- Facilities Condition Index was based on ranges provided by a consultant who has completed the Building Condition Assessment (BCA) for the City which corresponds to a 4-point scale; therefore, facilities will not be able to attain a score of 1–Very Good; and,
- For Columbaria, Laneways, and Fences, condition was based on overall condition rating produced by staff visual inspection.

## 3.2 ASSET CLASS PROFILE ANALYSIS

This section outlines the Age Profile, Condition Methodology, Condition Profile, and Performance Issues for each of the asset classes.

- The age of an asset is an important consideration in the asset management process as it can be used for planning purposes as typically assets have an estimated service life (ESL) where they can be planned for replacement. Some lower cost or lower criticality assets can be planned for renewal based on age as a proxy for condition or until other condition methodologies are established. It should be noted that if an asset's condition is based on age, it is typically considered to be of a low confidence level. Although typically, age is used when projecting replacements beyond the 10-year forecast to predict degradation;
- Condition refers to the physical state of assets and is a measure of the physical integrity of assets or components and is the preferred measurement for planning lifecycle activities to ensure assets reach their expected useful life. Assets are inspected/assessed at different frequencies and using different methodologies to determine their condition which are noted in this section; and,
- Finally, there are often insufficient resources to address all known asset deficiencies, and so performance issues may arise which must be noted and prioritized.

### 3.2.1 CEMETERIES INFRASTRUCTURE PROFILE

The asset profile information for Cemeteries Infrastructure asset classes is included in each section below and includes an age profile, the condition methodology used, the condition profile, and asset usage and performance.

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

## 3.2.1.1 AGE PROFILE

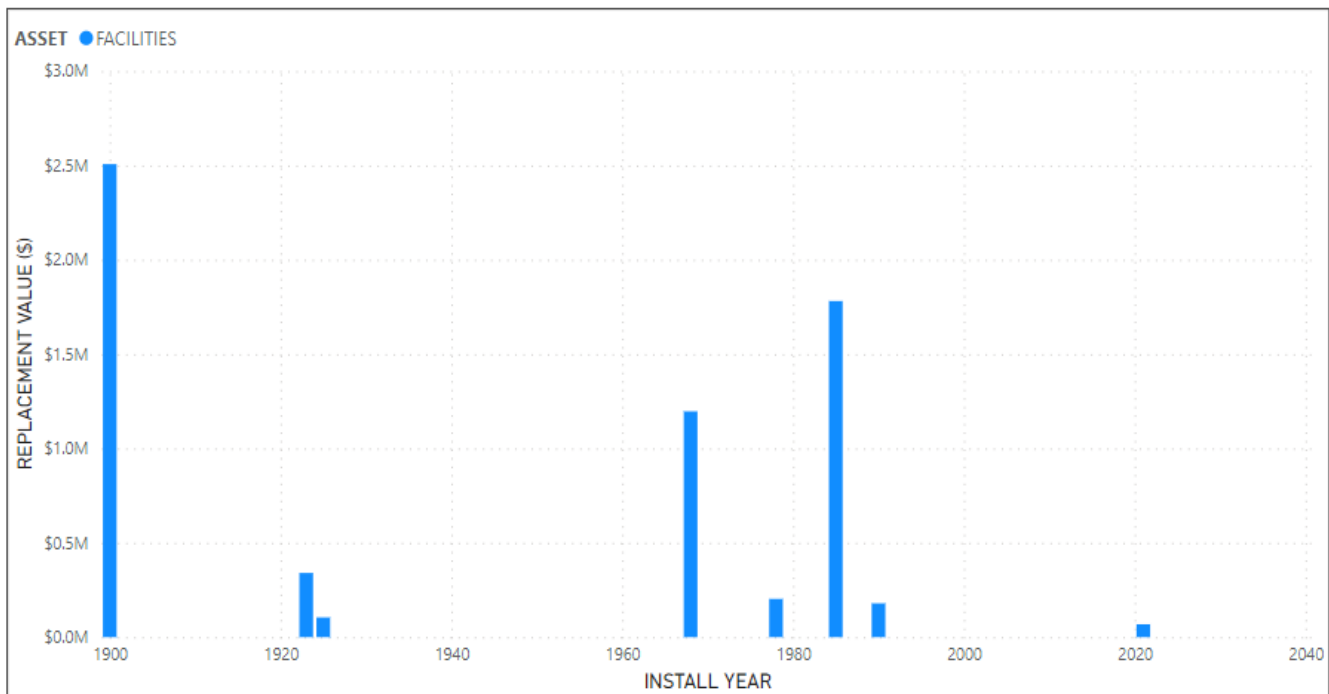
The only asset category in the Cemeteries Infrastructure asset class with known age data at this time are Facilities.

Hamilton Municipal Cemeteries has nine Facilities, including one soil storage building at Woodland Cemetery. The data confidence for the age of facilities is typically High because this information was recorded at the time of construction. At this time, age data is not known for any other Cemeteries Infrastructure assets.

The age profile of the Facilities assets is shown in **Figure 2**. An analysis of the age profile is provided below. For Facilities assets, the data confidence for age is typically high because the date of construction was formally recorded.

Several of the Facilities are historical in age; one at Hamilton Cemetery, and two at Woodland Cemetery. The Estimated Service Life for these assets is essentially undetermined as they would not likely be replaced given their setting and context in the history of the cemetery. These buildings, however, will require significant ongoing operations and maintenance costs to maintain. For the purposes of the average facilities ages and Estimated Service Life these four buildings were considered to be historical and were removed from the calculation so as not to weight the calculation. The remaining service life and age in the Detailed Asset Summary, **Table 4**, is more reflective of the age and condition of the buildings and their eventual asset renewal needs. Other facilities were primarily built from the late 1970s to the mid-1980s. Based on a service life of 50 years, these buildings are approaching the end of their estimated service life.

**Figure 2 : Facilities Age Profile**



# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

## 3.2.1.2 CONDITION METHODOLOGY AND PROFILE

Condition data is not available for many Cemeteries Infrastructure assets. A comprehensive asset inspection program for all assets should be developed identifying the frequency of inspection and developing 5-point scales for use during inspection so a condition can be determined. Condition assessment frequency should also be determined for asset categories, so condition is being reviewed and updated on a regular basis to better identify asset service lives. This has been added as a Continuous Improvement item in **Table 29**.

Condition for Cemeteries Facilities is determined based on the results of a Building Condition Assessment (BCA) completed by the Corporate Facilities and Energy Management (CFEM) division. The BCA identifies necessary major and minor maintenance activities in a 10-year forecast with projected costs, and outputs a detailed report outlining methodology, overall findings and condition.

BCAs are completed on Cemeteries Facilities every five years and output a score called a Facility Condition Index (FCI) which is considered to be a high confidence level source for condition. The FCI is calculated based on a ratio of the estimated cost of maintenance/repair work required on the facility to the total replacement cost of the facility. The 10-year forecast from the BCA's were incorporated into the maintenance plan shown in **Section 8.2**.

The condition conversion from FCI to the standardized 5-point scale used in this AM Plan is shown in **Table 5**. As per **Table 5** there is no FCI value that can give a Very Good condition rating.

BCA information was not available for the two historical buildings and soil storage facility at Woodland Cemetery. The soil storage was built in 2021 and was assumed to be in Good condition based on age. Due to the historical nature of the other two buildings, condition could not be determined. These are both small accessory buildings at Woodland Cemetery (Back Shop and Equipment Storage)

A condition assessment of Laneways and Fencing was completed in 2018-2019 by seasonal staff. Visual inspections were performed to produce condition scores further described in **Table 5**.

**Table 6: Inspection and Condition Information**

ASSET	INSPECTION FREQUENCY	LAST INSPECTION	CONDITION SCORE OUTPUT
Laneways	Ad Hoc	2018-19	5-point Scale
Fencing	Ad Hoc	2018-19	3-point Scale
Facilities	5-Year Regular Facilities Inspection	2019 Mantecon	% Facilities Condition Index (FCI)
All Other Identified Assets	Ad Hoc	Ad Hoc	N/A



# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

## Condition Profile

The condition profile of the City’s assets is shown in **Figure 3**. As mentioned in **Section 3.1**, the original condition grades were converted to a standardized condition category for report consistency.

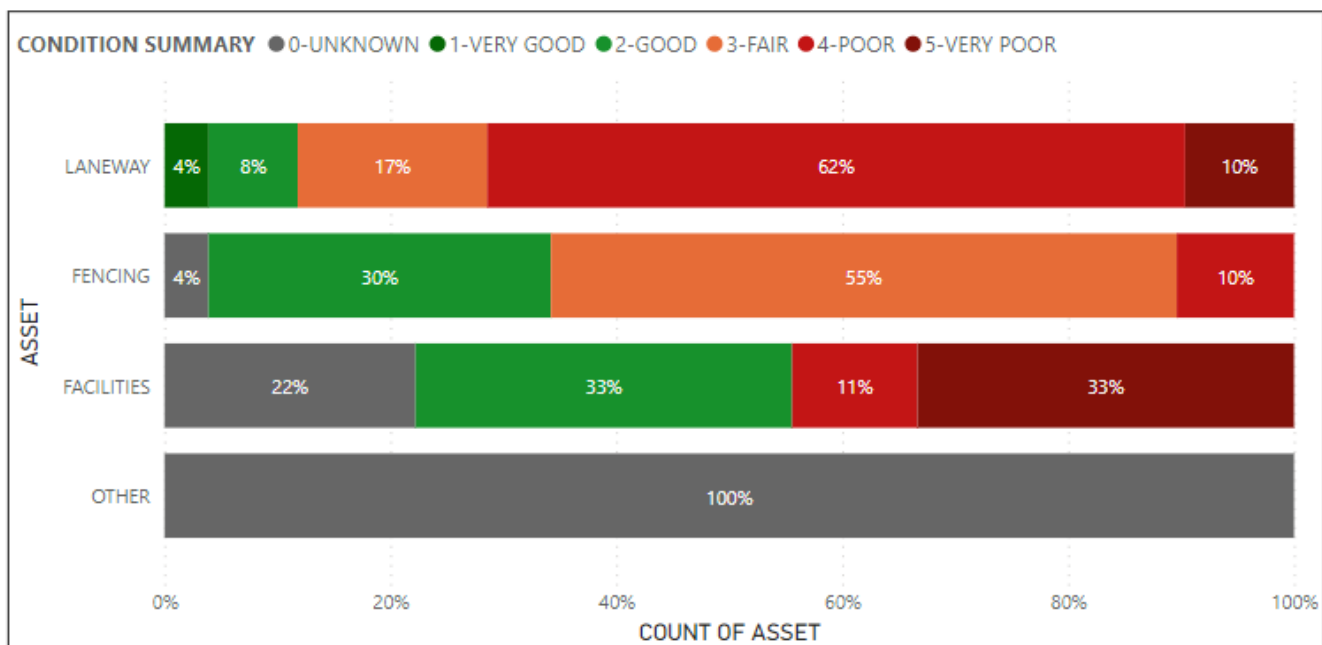
Nearly 75 percent of the Laneways in cemeteries are in poor or worse condition. Laneways are the main way of travelling respectfully throughout the cemetery and should be maintained to provide an ideal pathway for vehicles and pedestrians in the cemetery that is free from ponding water, mud and surface irregularities.

Fencing is in generally Fair condition, however, most of the perimeter fencing is permitted to fail and then subsequently removed at the end of life as it does not provide a health and safety purpose and public access to cemeteries is permitted. Decorative or historic fencing is maintained. When completing the Lifecycle Model further described in **Section 8**, renewal of perimeter fencing was not included and ultimately this asset class will be eliminated as fencing reaches the end of life.

Nearly half of the Facilities by count are in Poor condition or worse however it should be noted that by replacement value 84% of Facilities are in poor condition. Facilities account for a substantial portion of the financial value of Hamilton Municipal Cemeteries assets and replacement will be costly. Some buildings serve as sales and customer service locations where the comfort of families is important, and the impression made by the buildings will leave an impression on those considering accessing Hamilton Municipal Cemeteries services.

Other assets in this category do not have any available condition information.

**Figure 3: Cemeteries Infrastructure Condition Distribution**



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## 3.2.1.3 ASSET USAGE AND PERFORMANCE

Assets are generally provided to meet design standards where available. The largest performance issues with Cemeteries Infrastructure involve poor condition of assets or its components. The known service performance deficiencies in **Table 7** are identified using information from the 2019 Building Condition Assessment (BCA) inspection data and discussions with Hamilton Municipal Cemeteries staff.

**Table 7: Known Service Performance Deficiencies**

ASSET	LOCATION	SERVICE DEFICIENCY	DESCRIPTION OF DEFICIENCY
CEMETERIES INFRASTRUCTURE	Laneways	Poor asphalt condition	72% of laneways were rated as Poor or Very Poor condition. Asphalt is significantly deteriorated due to a lack of maintenance and renewal.
	Facilities	Eastlawn Cemetery and Mount Hamilton Cemetery Buildings	Buildings are past or close to the end of estimated service life and both in Poor or Very Poor condition based on FCI.
		Hamilton Cemetery Main Building	Historical building built in 1900. Footings and foundation in Fair condition. It is recommended to repair the footings and foundations as required, following an appropriate study.
		Multiple Buildings	Improvements required at multiple buildings where there are improper infrastructure connections and servicing, inadequate design of amenities for use and more.

## 3.2.2 COMMEMORATIVE ASSETS PROFILE

The asset profile information for commemorative asset classes is included in each section below and includes an age profile, the condition methodology used, the condition profile, and asset usage and performance.

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

## 3.2.2.1 AGE PROFILE

The age profile of the Commemorative Assets is not known at this time.

## 3.2.2.2 CONDITION METHODOLOGY AND PROFILE

Condition of Columbaria was produced by visual inspection completed in 2022 by Cemeteries staff.

Condition of the Mausoleum is not known at this time.

A comprehensive asset inspection program for all assets should be developed identifying the frequency of inspection and developing 5-point scales for use during inspection so a condition can be determined. Condition assessment frequency should also be determined for asset categories, so condition is being reviewed and updated on a regular basis to better identify asset service lives. This was added as a Continuous Improvement item in **Table 29**.

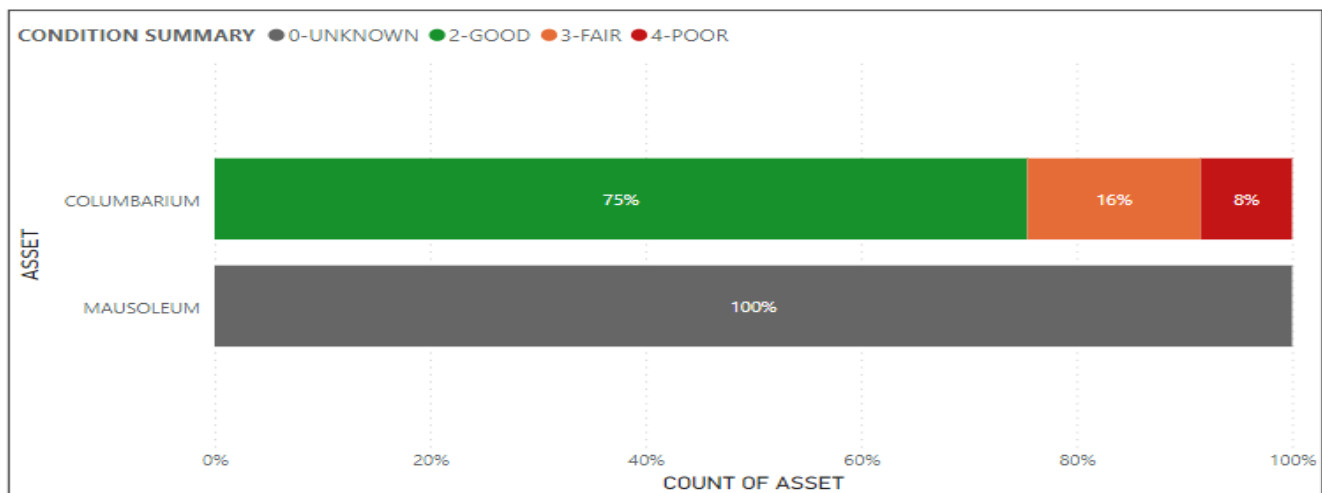
**Table 8: Inspection and Condition Information**

ASSET	INSPECTION FREQUENCY	LAST INSPECTION	CONDITION SCORE OUTPUT
Columbaria	2-year Cycle	2022	3-point Scale
Mausoleum	Ad Hoc	Ad Hoc	NA

### Condition Profile

The Columbaria are generally in Good condition. Mausoleum condition is unknown at this time.

**Figure 4: Commemorative Assets Condition Profile**



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## 3.2.2.3 ASSET USAGE AND PERFORMANCE

Assets are generally provided to meet design standards where available. Due to the commemorative nature of these assets, they will generally be maintained in perpetuity rather than replaced.

**Table 9: Known Service Performance Deficiencies**

ASSET	LOCATION	SERVICE DEFICIENCY	DESCRIPTION OF DEFICIENCY
Commemorative Assets	Various	Deterioration or failure	Age-related deterioration of private monuments and commemorative assets at times require work to maintain safety. For example, in 2024 vault repairs at Hamilton Cemetery. A CI Item has been added to <b>Table 29</b> to document responsibilities.

## 3.2.3 FLEET AND EQUIPMENT PROFILE

The asset profile information for Fleet and Equipment asset classes is included in each section below and includes an age profile, the condition methodology used, the condition profile, and asset usage and performance.

### 3.2.3.1 AGE PROFILE

The age profile of the Fleet and Equipment assets is shown in **Figure 5**. For Fleet and Equipment assets, the data confidence for age is typically high because age is generally known with the exception of interment and sales equipment, which are replaced as needed.

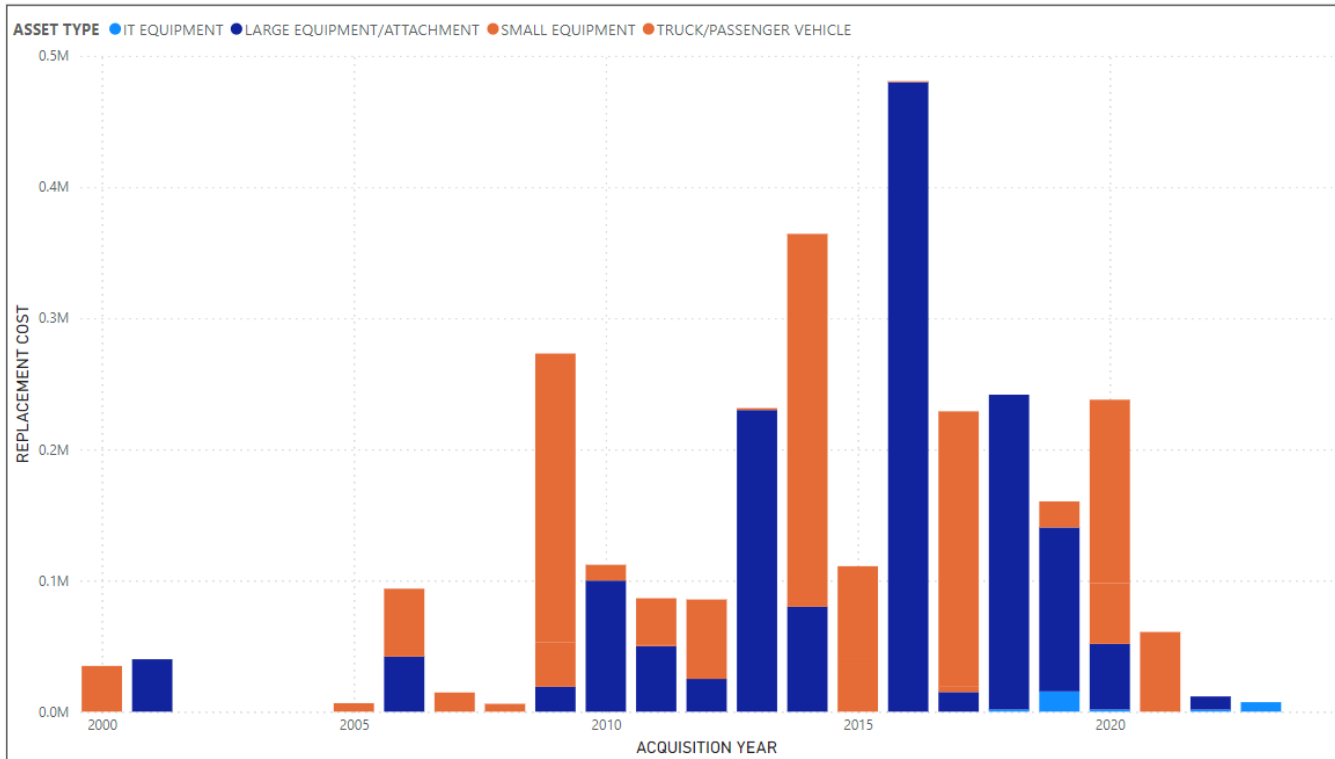
Large Equipment, Trucks and Passenger Vehicles are procured, and maintenance is managed with assistance from the City of Hamilton Fleet Services. Small Equipment is items such as push lawnmowers, leaf blowers, snowblowers and weed eaters are managed by Parks and Cemeteries section directly.

Most fleet assets including trucks, passenger vehicles, large equipment, and attachments have an estimated service life of 8-10 years. Small equipment assets have an estimated service life of 10 years. As shown in the figure, there are numerous equipment assets still in service with ages beyond 10 years. This profile includes extended-use vehicles. These are typically vehicles that have already had replacements put into service, but the area is maintaining the replaced vehicle for a period of time beyond the arrival of the replacement vehicle. A significant number

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

of vehicles are past the end of service life and not extended use and require replacement in the near term to adequately deliver Hamilton Municipal Cemeteries services. A continuous improvement item is to review the extended use of vehicles/equipment and develop a long-term strategy for the fleet and their usage, see the continuous improvement **Table 29** for more information.

**Figure 5: Fleet and Equipment Age Profile**



### 3.2.3.2 CONDITION METHODOLOGY AND PROFILE

As shown in **Table 10** below, the condition for Fleet and Equipment assets is based on age as there are no regular condition assessments completed on these assets which reflects condition data confidence of Low.

**Table 10: Inspection and Condition Information**

ASSET	INSPECTION FREQUENCY	LAST INSPECTION	CONDITION SCORE OUTPUT
Large Equipment and Attachments	Scheduled 2 times per year	Various	N/A - based on age
Trucks and Passenger Vehicles	Scheduled 2 times per year	Various	N/A - based on age
Small Equipment	None	N/A	N/A - based on age

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ASSET	INSPECTION FREQUENCY	LAST INSPECTION	CONDITION SCORE OUTPUT
IT Equipment	None	N/A	N/A - based on age
Interment Equipment	None	N/A	N/A
Sales Equipment	None	N/A	N/A

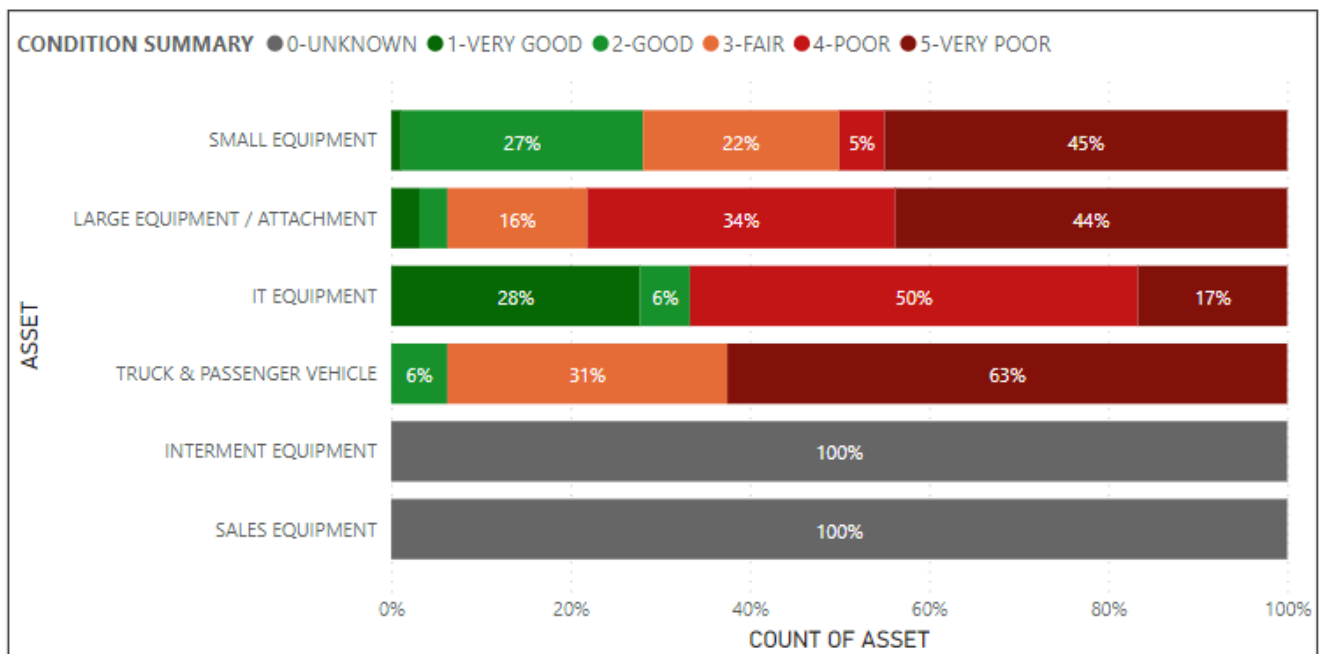
## Condition Profile

The condition profile of the Fleet and Equipment assets is shown in **Figure 6**. As mentioned in **Section 3.1**, the condition grades were based on age and estimated service life.

Condition of small equipment has been assumed based on age and an estimated service life of 10 years. Though this is considered low confidence data, it can be seen that 50% of small equipment assets are in poor or very poor condition.

The extended use vehicles have been included in the Condition details in the Figure and contribute to the increased percentage of Very Poor vehicles. Extended use vehicles are not included in the replacement value calculations as they are still in use but upon disposal are not intended to be replaced. A continuous improvement item is to review the extended use vehicles and develop a long-term strategy for the fleet and their usage, see the continuous improvement **Table 29** for more information.

**Figure 6: Fleet and Equipment Condition Distribution**



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## 3.2.3.3 ASSET USAGE AND PERFORMANCE

The largest performance issues with Fleet and Equipment assets involve assets exceeding their ESL as shown in **Table 11**.

**Table 11: Known Service Performance Deficiencies**

ASSET	LOCATION	SERVICE DEFICIENCY	DESCRIPTION OF DEFICIENCY
Fleet and Equipment	Large Equipment and Attachments	Many equipment pieces are at the end of service life.	78% of Large Equipment and Attachments are rated as Poor or Very Poor condition based on their age and estimated service life.
	Trucks and Passenger Vehicles	Many vehicles are at the end of service life.	63% of Trucks and Passenger Vehicles are rated as Very Poor condition based on their age and estimated service life contributing to higher maintenance costs and more downtime.
	Small Equipment	Many small equipment pieces at the end of service life.	50% of Small Equipment are rated Poor or Very Poor condition based on their age and estimated service life

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## 4. MUNICIPALLY DEFINED LEVELS OF SERVICE

Levels of service are measures of what the City provides to its customers, residents, and visitors, and are best described as the link between providing the outcomes the community desires, and the way that the City provides those services.

O.Reg 588/17 does not define levels of service for Hamilton Municipal Cemeteries assets and therefore the City has developed municipally defined levels of service. Levels of service are defined in three ways, customer values, customer levels of service and technical levels of service which are outlined in this section. An explanation for how these were developed is provided in Section 7.5 of the AM Plan Overview.

### 4.1 SURVEY METHODOLOGY

To develop customer values and customer levels of service, a Customer Engagement Survey entitled *Let’s Connect, Hamilton – City Services and Assets Review: Parks and Cemeteries* was released on November 8, 2023, on the Engage Hamilton platform and closed on December 13, 2023. The survey results can be found in Appendix “A”.

The survey received submissions from 70 respondents and contained five questions related to the *Hamilton Municipal Cemeteries* service delivery. For the purposes of this report, data has been evaluated from a confidence level perspective (margin of error at 95% confidence in sample size) and a data consistency (standard deviation) perspective per **Table 12**. Based on the number of responses, a sample size of 70 correlates to a 95 percent confidence level with a 12 percent margin of error based on an approximate population size of 570,000. This error is significant and leads to uncertainty in the results. It is important to note that respondents could opt out of questions, and so different questions have different confidence levels depending on the opt-out rate for that question. In this survey, the opt-out rate was approximately 70 percent for some questions resulting in significant uncertainty and Low confidence making it difficult to make conclusions about the results of these questions.

**Table 12: Data Confidence Levels**

GRADE	DATA CONSISTENCY (STANDARD DEVIATION)	CONFIDENCE LEVEL (MARGIN OF ERROR AT 95% CONFIDENCE IN SAMPLE SIZE)
<b>Very High</b>	0 to 0.5 – results are tightly grouped with little to no variance in response	0% to 5% - minimal to no error in results, can generally be interpreted as is
<b>High</b>	0.5 to 1.0 – results are tightly grouped but with slightly more variance in response	5% to 10% - error has become noticeable, but results are still trustworthy
<b>Medium</b>	1.0 to 1.5 – results are moderately grouped together, but most respondents are generally in agreement	10% to 20% - error is a significant amount and will cause uncertainty in the final results



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GRADE	DATA CONSISTENCY (STANDARD DEVIATION)	CONFIDENCE LEVEL (MARGIN OF ERROR AT 95% CONFIDENCE IN SAMPLE SIZE)
<b>Low</b>	1.5 to 2.0 – results show a high variance with a fair amount of disparity in responses	20% to 30% - error has reached a detrimental level and results are difficult to trust
<b>Very Low</b>	2.0+ - results are highly variant with little to no grouping	30%+ - significant error in results, hard to interpret data in a meaningful way

For this survey, data consistency was also considered. A high data consistency means that respondents came to the same conclusion more often for a question, whereas a low data consistency means that there is a split in respondent’s opinions. Therefore, while Corporate Asset Management may be able to improve survey confidence levels over time by increasing the survey sample size, it may not be possible to improve data consistency over time as this depends on the opinions of the respondents and may require additional insight on why respondent’s opinions are split. A low consistency of data does not mean the data is wrong, but it does mean that it is difficult to make decisions using that information. Overall, Hamilton Municipal Cemeteries survey data consistency was typically Medium across all questions indicating most respondents are generally in agreement with results moderately grouped together.

While these surveys were used to establish customer values and customer performance measures, it is important to note that there were also limitations to the survey methodology which may further reduce the confidence level in the survey data. The survey was only released using an online platform and did not include telephone surveys and consequently there is no way to confirm the identity information provided in the survey. In addition, the survey did not control for IP addresses, and therefore it is possible that respondents could complete the survey more than once and skew the survey results.

Although there are limitations to the survey methodology and the number of responses was not at a high confidence level for the most recent survey, these results can be used to provide some context about the feelings customers have about the services that the Hamilton Municipal Cemeteries and Cemeteries section provides. However, decisions should not be made based on this survey alone and further investigation is required prior to proposing new levels of service. These survey results might point to trends or areas to consider further.

## 4.2 CUSTOMER VALUES

Customer values are what the customer can expect from their tax dollar in “customer speak” which outlines what is important to the customer, whether they see value in the service, and the expected trend based on the 10-year budget. These values are used to develop the level of service statements.

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00Customer Values indicate:

- What aspects of the service are important to the customer;
- Whether they see value in what is currently provided; and,
- The likely trend over time-based on the current budget provision.

As previously mentioned, the customer values below were determined using the results from the *Let’s Connect, Hamilton – City Services and Assets Review: Parks and Cemeteries*

**Table 13: Customer Values**

CUSTOMER VALUES	CUSTOMER SATISFACTION MEASURE	CURRENT FEEDBACK	DATA CONSISTENCY	EXPECTED TREND BASED ON PLANNED BUDGET (10-YEAR HORIZON)
Cemeteries Services are important.	2023 Parks and Cemeteries City Service and Assets Review	Based on average survey responses cemeteries services are important.	Medium	Maintain
Maintenance and management of cemeteries, graveside services, burials and interment, and end-of-life planning services are the most important services.		Based on average survey responses these services are important for the Cemeteries section to provide.	Medium	Maintain
Sales of interment rights, cemetery services, supporting products and historical family searches and tours are fairly important services.		Based on average survey responses these services are fairly important for the Cemeteries section to provide.	Medium	Maintain
Customers prefer to maintain rates and service levels.		The average survey respondent would prefer to minimize tax rate increases and maintain services in all surveyed service areas.	Medium	Maintain

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## 4.3 CUSTOMER LEVELS OF SERVICE

Ultimately customer performance measures are the measures that the City will use to assess whether it is delivering the level of service the customers desire. Customer level of service measurements relates to how the customer feels about the Hamilton Municipal Cemeteries service in terms of their quality, reliability, accessibility, responsiveness, sustainability and, over the course, their cost. The City will continue to measure these customer levels of service to ensure a clear understanding of how the customers feel about the services and the value for their tax dollars.

The Customer Levels of Service are considered in terms of:

<b>Condition</b>	How good is the service? What is the condition or quality of the service?
<b>Function</b>	Is it suitable for its intended purpose? Is it the right service?
<b>Capacity/Use</b>	Is the service over or underused? Do we need more or less of these assets?

In **Table 14** under each of the service measure types (Condition, Function, Capacity/Use) there is a summary of the performance measure being used, the current performance, and the expected performance based on the current allocation.

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**Table 14: Customer Levels of Service**

TYPE OF MEASURE	LEVEL OF SERVICE STATEMENT	SOURCE	PERFORMANCE MEASURE	CURRENT PERFORMANCE	EXPECTED TREND BASED ON PLANNED BUDGET
Quality/ Condition	Provide adequate Cemeteries services.	2023 Parks and Cemeteries City Service and Assets Review	Average survey respondent opinion on how Cemeteries have performed overall in the last 24 months in the service areas of historical family searches and walking tours, graveside services, burials and interment, and maintenance and management of cemeteries.	Good	Maintain
		<b>Confidence Level</b>		Low-Medium	
		<b>Data Consistency</b>		Medium	
		2023 Parks and Cemeteries City Service and Assets Review	Average survey respondent opinion on how Cemeteries has performed overall in the last 24 months in the service areas of end-of-life planning services and sales of interment rights, cemetery services and supporting products.	Average	Maintain
		<b>Confidence Level</b>		Low	
	<b>Data Consistency</b>		Medium		
	Be fiscally responsible when delivering services.	2023 Parks and Cemeteries City Service and Assets Review	Average survey respondent opinion on whether Cemeteries is providing good value for money when providing infrastructure and services.	Average	Maintain
	<b>Confidence levels</b>		Low		
	<b>Data Consistency</b>		Medium		

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## 4.3.1 CUSTOMER INDICES

The three indices calculated to assess how customer expectations for a service are aligning with the perceived performance for a service are listed below in **Table 15**. These indices are explained and analyzed in detail in the sections below.

**Table 15: Customer Indices**

CUSTOMER INDICES	AVERAGE RESULT
Service Importance Versus Performance Net Differential <sup>5</sup>	1
Net Promoter Score (%) <sup>6</sup>	-20
Service Rates Versus Value for Money Net Differential	-8

The information below is intended to provide context around the survey results to assist Hamilton Municipal Cemeteries with areas to further investigate before proposing any new levels of service.

### SERVICE IMPORTANCE VERSUS PERFORMANCE INDICE

The Service Importance versus Performance indices is used to determine if a service’s importance correlates with the perceived performance. Service areas where the average importance rating exceeds the average performance rating by 20 points is indicative of a mismatch between expectations and service levels, equal to one point on the Likert<sup>7</sup> scale.

The average net differential of one, and of less than 20 for all service areas in **Figure 7**, indicates that there is a close match between customer performance and the importance of Hamilton Municipal Cemeteries services. Customers feel that services are important and that Hamilton Municipal Cemeteries' performance is Good. It should be noted that while the average opt-out rate for the survey question about service importance was 35 percent, the average opt-out rate for the performance question was 70 percent resulting in lower confidence in perceived performance data. It is possible that while customers feel these are important services, they have not experienced the services to comment on performance.

<sup>5</sup> For these indices, a value close to 0 is considered a match, and a value exceeding 20 points indicates a mismatch between customer expectations, and perception or service levels.

<sup>6</sup> A positive net promoter score indicates customers would recommend the service to others, a negative score indicates they would not, and a value close to 0 indicates a neutral feeling about the service.

<sup>7</sup> A Likert scale is a rating scale used to measure opinions, attitudes, or behaviours. It consists of a series of five answer statements which are consistently written the same way (e.g., Very Good to Very Poor, Very Satisfied to Very Unsatisfied).

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It is notable that the largest differential was found for the service area of historical family searches and walking tours. Though the differential is less than 20 indicating a close match, customers feel that while there is good performance, it is a less important service area.

**Figure 7: Importance versus Performance Index Score**

Service Area	Performance (index score)	Importance (index score)	Net Differential	Opt Out %
Maintenance and management of active and inactive cemeteries	76	82	-5	38%
Sales of interment rights, cemetery services and supporting products	66	69	-3	59%
End of life planning services	69	71	-2	58%
Graveside services, burials and interment	77	76	1	58%
Historical family searches and walking tours	80	67	13	50%

## NET PROMOTER SCORE INDICES

The Net Promoter Score indices outline how likely an individual is to recommend a service to another person and measure customer loyalty. For municipal services, this score is difficult to interpret because oftentimes individuals do not have many alternatives for utilizing different services and also there may be internal biases for certain service areas, however, this score does provide valuable information for if customers would recommend using the service or whether they may seek alternatives or avoid using the service altogether.

Likert choices less than a score of four are considered 'Detractors' meaning that they would not recommend the service, while scores of five are considered 'Promoters' who would recommend the service, and scores of four are considered 'Passive' which means they do not have strong feelings about the service. Respondents who opted out by not answering or selecting 'Can't Say' were removed from the sample. Net Promoter score is calculated by subtracting (percentage of Promoters) and (percentage of Detractors). The Standard Deviation ( $\sigma$ ) is calculated in percent, the same units as the Net Promoter Score.

Based on the results in **Figure 8**, Hamilton Municipal Cemeteries has a negative net promoter score indicating that on average customers would not recommend Hamilton Municipal Cemeteries services to others. Data consistency for this question was overall Medium but approaching Low for some service areas indicating that opinions were more split. The opt-out rate for this question was 70.5 percent on average making the data confidence Medium-Low. Overall, it is difficult to make conclusions based on the limited responses.

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**Figure 8: Net Promoter Score**

Service Area	σ	NPS	Detractors	Passives	Promoter
All Service Areas	1.34	-20.21	48	17	29
Sales of interment rights, cemetery services and supporting products	1.26	-44.44	12	2	4
End of life planning services	1.30	-37.50	10	2	4
Graveside services, burials and interment	1.20	-20.00	7	4	4
Historical family searches and walking tours	1.33	-9.52	9	5	7
Maintenance and management of active and inactive cemeteries	1.47	0.00	10	4	10

## SERVICE RATES VERSUS VALUE FOR MONEY INDICE

The Service Rates versus Value for Money indices is used to determine if the rate an individual is paying for a service correlates with the perceived value for money. Service areas where rate level ratings exceed value-for-money ratings by 20 points is indicative of a mismatch between expectations and service levels, equal to one point on the Likert scale. Positive Net Differential values indicate that 'Value for Money' was greater than willingness for 'Rates'. Low index scores in 'Rates' indicate that respondents are not willing to pay increased rates for the service area. All values were calculated and then rounded to the nearest whole number.

As per **Figure 9** below, survey respondents generally perceived they were getting Average value for money across all services and thought that Hamilton Municipal Cemeteries should minimize service cuts and maintain rates across all services as well.

**Figure 9: Rates versus Value for Money Index Score**

Service Area	Value for Money (index score)	Rates (index score)	Net Differential	Opt Out %
Maintenance and management of active and inactive cemeteries	68	62	5	47%
Graveside services, burials and interment	66	60	6	57%
Sales of interment rights, cemetery services and supporting products	65	57	7	60%
End of life planning services	69	58	11	59%
Historical family searches and walking tours	71	59	12	55%

### 4.3.2 TECHNICAL LEVELS OF SERVICE

Technical levels of service are operational or technical measures of performance, which measure how the City plans to achieve the desired customer outcomes and demonstrate effective performance, compliance and management. The metrics should demonstrate how the City delivers its services in alignment with its customer values; and should be viewed as possible levers to impact and influence the Customer Levels of Service. The City will measure specific

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

lifecycle activities to demonstrate how the City is performing on delivering the desired level of service as well as to influence how customers perceive the services they receive from the assets.

Technical service measures are linked to the activities and annual budgets covering Acquisition, Operation, Maintenance, and Renewal. Asset owners and managers create, implement and control technical service levels to influence the service outcomes.<sup>8</sup>

**Table 16** shows the activities expected to be provided under the current 10 year Planned Budget allocation and the forecast activity requirements being recommended in this AM Plan.

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<sup>8</sup> IPWEA, 2015, IIMM, p 2|28



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**Table 16 : Technical Levels of Service**

LIFECYCLE ACTIVITY	LEVEL OF SERVICE	ACTIVITY MEASURE	CURRENT ACTUAL PERFORMANCE (2023)	CURRENT TARGET PERFORMANCE (2023)	PROPOSED 10-YEAR PERFORMANCE
Acquisition	Ensure appropriate capacity to meet service needs.	Land capacity of municipally owned cemeteries to meet forecast demand based on current interment rates – measured in number of years.	TBD Updated Land Needs Assessment to be completed 2024	50 years of land capacity in each community	50 years of land capacity in each community
		Inventory of available Columbaria Niches - % available.	TBD Updated Land Needs Assessment to be completed 2024	Minimum 20% available	Minimum 20% available
		<b>Budget</b>	<b>Not yet quantified</b>		
Operation	Ensure assets are kept in acceptable state and issues are resolved in a timely manner.	Number of customer complaints received.	679	554/year	554/year
		% of complaints responded to within 24 hours.	TBD	100%	100%
	Compliant with Legislation.	Number of office closures longer than 2 days.	0	0	0
	Ensure Cemeteries are kept in safe and acceptable condition.	Contracted grass cutting - number of cuts completed at cemeteries annually.	1060	1156	1156
		In-house grass cutting - number of cuts at Premier Cemeteries annually.	72	104	104
	Ensure Cemeteries assets are kept in safe and acceptable repair.	Number of cemetery inspections performed.	105	60	60
		Number of monument inspections performed.	30	18	18
		% of non-facility assets inspected and condition determined based on plan annually. (excluding Facilities and Fleet)	To be Determined (Continuous Improvement item to develop the program)	100%	100%
	<b>Budget</b>	<b>\$5.7M (2023)</b>	<b>Not yet quantified</b>		
Maintenance	Ensure Cemeteries assets are kept in safe and acceptable repair.	Number of markers raised and levelled per reporting locations annually.	534	800	800
		Number of unsafe monument foundations repaired or replaced annually.	39	5	5
		% of Pathways and Roadways in Fair or better condition	TBD	TBD	TBD
		<b>Budget</b>	<b>Not yet quantified</b>		
Renewal	Ensure timely Fleet vehicles replacement.	% of Fleet Vehicles beyond ESL.	42%	TBD – Continuous Improvement Item to develop Fleet Strategy	
		<b>Budget</b>	<b>\$482k</b>	<b>Not yet quantified</b>	
	Ensure timely replacement of Small Equipment	% of Small Equipment less than Fair Condition.	50%	TBD	
	<b>Budget</b>	<b>Not yet quantified</b>			

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## 4.3.3 PROPOSED LEVELS OF SERVICE DISCUSSION

Per the Technical Levels of Service **Table 16**, it can be concluded that Hamilton Municipal Cemeteries is often meeting technical standards with some exceptions. However, customer preferences and expectations do not always align with internal technical targets. The purpose of this section is to link the customer and technical levels of service to determine areas where different levels of service could be proposed. As previously mentioned, since the 2023 survey results have only a medium level of data confidence with lower confidence for some areas, it is difficult to make any conclusive decisions based on this initial survey. The discussion below is intended to provide context to direct Hamilton Municipal Cemeteries to areas for further investigation based on these initial results before proposing any new levels of service.

### CONDITION / QUALITY

Survey respondents rated the overall service performance as Good while providing good value for money. Customers have also identified that they would prefer current rates and service levels be maintained.

Cemeteries should consider that the survey indicates customers are not identifying a need for changes related to the condition or quality of their services and any proposed changes would be done at their own discretion in terms of operational needs or based on data from other sources.

### FUNCTION

Survey respondents rated the overall service performance as Good while providing good value for money. Customers have also identified that they would prefer current rates and service levels be maintained.

Hamilton Municipal Cemeteries should consider the survey indicates that customers are not identifying a need for changes related to condition or quality of their services and any proposed changes would be done at their own discretion in terms of operational needs or based on data from other sources. Staff have noted that they frequently receive requests from customers that there is a desire for new and expanded service offerings. Hamilton Municipal Cemeteries has recently opened a Natural Burial area including a scattering garden in response to some of these customer requests. Given the small number of responses to the survey and low data confidence, additional data is required to make conclusions. Additional consultation should be performed to understand the desire for an increased level of service. At this time with the data available, it appears that function should be maintained requiring routine maintenance of assets and renewals in the appropriate timeframes to prevent degradation of assets. Acquisitions should be driven by growth to maintain current levels of service.

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## CAPACITY

Survey respondents rated the overall service performance as Good while providing good value for money. Customers have also identified that they would prefer current rates and service levels be maintained.

Hamilton Municipal Cemeteries should consider that customers are satisfied with the capacity of cemeteries' services and should maintain focus on maintaining a level of service by increasing services and assets to manage population growth in line with Cemeteries Business Plan Strategy and Land Needs Assessment, and future updates to the assessment. As the Hamilton Municipal Cemeteries portfolio grows, staffing and resources should be increased proportionally to maintain service capacity.

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## 5. FUTURE DEMAND

Demand is defined as the desire customers have for assets or services and that they are willing to pay for. These desires are for either new assets/services or current assets.

The ability for the City to be able to predict future demand for services enables the City to plan ahead and identify the best way of meeting the current demand while being responsive to inevitable changes in demand. Demand will inevitably change over time and will impact the needs and desires of the community in terms of the quantity of services and types of service required.

### 5.1 DEMAND DRIVERS

For the Hamilton Municipal Cemeteries service area, the key drivers are population growth, aging population and changing customer preferences and expectations.

### 5.2 DEMAND FORECASTS

The present position and projections for demand drivers that may impact future service delivery and use of assets have been identified and documented in **Table 17**. Growth projections have been shown on Page 45 in the AM Plan Overview document.

Where costs are known, these additional demands as well as anticipated operations and maintenance costs have been encompassed in the Lifecycle Models in **Section 8**.

### 5.3 DEMAND IMPACT AND DEMAND MANAGEMENT PLAN

The impact of demand drivers that may affect future service delivery and use of assets are shown in **Table 17**. Demand for new services will be managed through a combination of managing existing assets, upgrading of existing assets and providing new assets to meet demand and demand management. Demand management practices can include non-asset solutions, insuring against risks, and managing failures.

Opportunities identified to date for demand management are shown in **Table 17**. Climate change adaptation demands are included in **Table 22**.

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

**Table 17: Demand Management Plan**

DEMAND DRIVER	CURRENT POSITION	PROJECTION	IMPACT ON SERVICES	DEMAND MANAGEMENT PLAN
<b>Population Growth and Development</b>	570,000 (2021)	820,000 (2051)	Population growth will increase demand for cemeteries services and land needs.	An update to the Cemeteries Land Needs Study 2014 is being undertaken in 2024 and will direct additional needs for land and columbaria.
<b>Aging Population</b>	8.75 Deaths per 100,000 population (2011 Hamilton) <sup>9</sup>	9.09 Deaths per 100,000 population (2037 Hamilton) <sup>10</sup>	Over the next 25 years, the death rate is expected to increase to 9.09 per 100,000 people. Dundas, Glanbrook and Hamilton have the highest proportion of seniors.	An update to the Cemeteries Land Needs Study 2014 is being undertaken in 2024 and will direct additional needs for land and columbaria.
<b>Changing Consumer Preferences</b>	From 2006 to 2012, cremation outpaced in-ground (casket) burial in Hamilton, increasing from 53% to 63% of all deaths. <sup>11</sup>	Projected to continue to increase.	Increased demand for cremation services and products including columbaria, niches, and scattering gardens.	An update to the Cemeteries Land Needs Study 2014 is being undertaken in 2024 and will direct additional needs for land and columbaria.
<b>Regulatory Demand – Assumption of Additional Cemeteries</b>	70 Municipal Cemeteries	Projected to increase	Increased operations and maintenance need to care for cemeteries required to be assumed by the municipality based on legislation.	Review assumption procedures and develop necessary SOPs surrounding inventory of assumed assets and development of lifecycle costs.

<sup>9</sup> (Lees+Associates Cemetery Planners, 2014)

<sup>10</sup> (Lees+Associates Cemetery Planners, 2014)

<sup>11</sup> (Lees+Associates Cemetery Planners, 2014)

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<p><b>Increased Market Capture</b></p>	<p>From 2008-2012 the City's market capture was 27%.<sup>12</sup></p>	<p>Hamilton Municipal Cemeteries has rebranded and has a marketing plan in place which is being actioned over the next 5 years. Market capture is projected to increase.</p>	<p>Increased demand for sales and burials. Requests for more variety of options for burials and overall increase in revenue.</p>	<p>Plan for land management and start to build out product offerings. Focus funds on marketing opportunities and ensure staff are well trained and represent the brand.</p>
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## 5.4 ASSET PROGRAMS TO MEET DEMAND

The new assets required to meet demand may be acquired, donated or constructed. For Hamilton Municipal Cemeteries typically assets are acquired or constructed.

Hamilton Municipal Cemeteries acquires an average of 2 new columbaria per year at a cost of approximately \$125 thousand or \$625 thousand in the next five years. An updated Land Needs Study will be undertaken in 2024. This study may identify additional land required for Hamilton Municipal Cemeteries to meet the needs of customers, as well as additional assets required including columbaria. These costs should be quantified in future iterations of the plan with consideration for the full lifecycle of the assets.

Given that Hamilton Municipal Cemeteries assumes the management of cemeteries as mandated, there likely will be acquisitions that are difficult to plan for. Acquiring these new assets will commit Hamilton Municipal Cemeteries to ongoing operations, maintenance and renewal costs for the amount of time that the service is required, potentially in perpetuity. These future costs have not been incorporated in the Lifecycle Models in **Section 8**, but should be quantified wherever possible in future iterations of the AM Plan for consideration in developing higher confidence forecasts of future operations, maintenance and renewal costs for inclusion in the long-term financial plan.

<sup>12</sup> (Lees+Associates Cemetery Planners, 2014)

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## 6. RISK MANAGEMENT

The purpose of infrastructure risk management is to document the findings and recommendations resulting from the periodic identification, assessment and treatment of risks associated with providing services from infrastructure, using the fundamentals of International Standard ISO 31000:2018 Risk management – Principles and guidelines.

Risk Management is defined in ISO 31000:2018 as: ‘coordinated activities to direct and control with regard to risk’<sup>13</sup>.

The City is developing and implementing a formalized risk assessment process to identify risks associated with service delivery and to implement proactive strategies to mitigate risk to tolerable levels. The risk assessment process identifies credible risks associated with service delivery and will identify risks that will result in loss or reduction in service, personal injury, environmental impacts, a ‘financial shock’, reputational impacts, or other consequences.

The risk assessment process identifies credible risks, the likelihood of those risks occurring, and the consequences should the event occur. The City utilizes two risk assessment methods to determine risk along with subject matter expert opinion to inform the prioritization. Hamilton is further developing its risk assessment maturity with the inclusion of a risk rating, evaluation of the risks and development of a risk treatment plan for those risks that are deemed to be non-acceptable in the next iteration of the plan.

### 6.1 CRITICAL ASSETS

Critical assets are defined as those which have a high consequence of failure causing significant loss or reduction of service. No critical assets have been identified for the cemeteries service area.

By identifying critical assets and failure modes an organization can ensure that investigative activities, condition inspection programs, maintenance and capital expenditure plans are targeted at critical assets.

### 6.2 RISK ASSESSMENT

The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, development of a risk rating, evaluation of the risk and development of a risk treatment plan for non-acceptable risks.

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<sup>13</sup> ISO 31000:2009, p 2

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An assessment of risks associated with service delivery will identify risks that will result in loss or reduction in service, personal injury, environmental impacts, a 'financial shock', reputational impacts, or other consequences.

Critical risks are those assessed with 'Very High' (requiring immediate corrective action) and 'High' (requiring corrective action) risk ratings identified in the Infrastructure Risk Management Plan. The residual risk and treatment costs of implementing the selected treatment plan is shown in **Table 18**. It is essential that these critical risks and costs are reported to management. Additional risks will be developed in future iterations of the plan and is identified in **Table 29** in the Continuous Improvement Section of the plan.



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**Table 18: Risks and Treatment Plans**

SERVICE OR ASSET AT RISK	WHAT COULD HAPPEN	RISK RATING	RISK TREATMENT PLAN	RESIDUAL RISK	TREATMENT COSTS
<b>Non-Municipal Cemeteries</b>	Owners/operators of cemeteries within the municipal boundary can relinquish ownership to the City. The City will be required to maintain the cemeteries in perpetuity which will require additional funding for operations, maintenance and renewal activities.	High	The City does not have access to any data to monitor. The Bereavement Authority of Ontario (BAO) audits cemeteries and provides some information prior to likely transfers. Cemeteries would require additional funding.	High	Unable to treat risk due to unknowns and lack of control over the process.
<b>Cemetery Monument Foundations</b>	Excessive deterioration of foundations can cause failure of the monument which can lead to property damage and injury.	High	Document and complete regular visual inspections performed at a regular frequency. Target to replace 5 unsafe foundations per year. Allocate additional funding for the renewal and maintenance of foundations.	Medium	TBD
<b>Large Equipment</b>	Higher level of breakdowns due to delayed replacements. Possible injuries to staff. Increased reactive maintenance costs and lower levels of service if equipment is being repaired frequently.	High	Replace End of Life Vehicles / Equipment to minimize breakdowns.	Medium	\$482,000 in 2024 to renew 13 vehicles beyond ESL.

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## 6.3 INFRASTRUCTURE RESILIENCE APPROACH

The resilience of our critical infrastructure is vital to the ongoing provision of services to customers. To adapt to changing conditions the City needs to understand its capacity to ‘withstand a given level of stress or demand’, and to respond to possible disruptions to ensure continuity of service. We do not currently measure our resilience in service delivery and this will be included in the next iteration of the AM Plan.

Resilience covers the capacity of the City to withstand any service disruptions, act appropriately and effectively in a crisis, absorb shocks and disturbances as well as adapting to ever-changing conditions. Resilience is built on aspects such as response and recovery planning, financial capacity, climate change risk, assessment and crisis leadership.

## 6.4 SERVICE AND RISK TRADE-OFFS

The decisions made in AM Plans are based on the objective to achieve the optimum benefits from the available resources.

The following **Table 19** outlines what activities Hamilton Municipal Cemeteries cannot afford to do over the next 10 years with their existing budget and provides the associated service and risk tradeoffs.

**Table 19: Service and Risk Tradeoffs**

<b>WHAT WE CAN NOT DO</b> (What can we not afford over the next 10 years?)	<b>SERVICE TRADE-OFF</b> (How will not completing this affect our service?)	<b>RISK TRADE-OFF</b> (What risk consequences are we undertaking?)
<b>Renew existing Cemetery Infrastructure assets as quickly as needed</b>	Assets continue to deteriorate.	The reputational risk from the condition of cemeteries.  Financial risk if asset deterioration leads to injury.
<b>Develop new cemeteries</b>	Capacity in existing cemeteries will be consumed and not replaced.	Reputational risk and loss of market share

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

## 7. CLIMATE CHANGE AND MITIGATION

Cities have a vital role to play in reducing the emission of greenhouse gases (mitigation), as well as preparing assets for the accelerating changes we've already begun to experience (adaptation). At a minimum the City must consider how to manage our existing assets given potential climate change impacts for our region.

Changes to Hamilton's climate will impact City assets in the following ways:

- Affect the asset lifecycle;
- Affect the levels of service that can be provided and the cost to maintain;
- Increase or change the demand on some of our systems; and
- Increase or change the risks involved in delivering service.

To quantify the above asset/service impacts due to climate change in the Asset Management Plan, climate change is considered as both a future demand and a risk for both mitigation and adaptation efforts. These demands and risks should be quantified and incorporated into the lifecycle models as well as levels of service targets.

If climate change mitigation/adaptation projects have already been budgeted, these costs have been incorporated into the lifecycle models. However, many asset owners have not yet quantified the effects of the proposed demand management and risk adaptation plans described in this section, and so associated levels of service and costs will be addressed in future revisions of the plan. This has been identified as a Continuous Improvement item in **Table 29**.

### 7.1 CLIMATE CHANGE MITIGATION

**Climate Mitigation** refers to human intervention to reduce GHG emissions or enhance GHG removals (e.g. building transportation infrastructure that can support cycling and public transit and reduces need for car travel). The City of Hamilton's Community Energy + Emissions Plan<sup>14</sup> (CEEP) includes five Low-carbon Transformations necessary to achieve the City's target of net-zero GHG emissions by 2050:

- Innovating our industry;
- Transforming our buildings;
- Changing how we move;
- Revolutionizing renewables; and
- Growing Green.

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<sup>14</sup> Newbold, Skidmore, Chessman, Imhoff, & McDowell, 2022

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## Mitigation Demand Analysis

These transformations were incorporated into the climate mitigation demand analysis for this service area by:

- Identifying the City’s modelled targets for the low carbon transformations that applied to the service/asset;
- Discussing the impact the targets would have on the service/asset; and
- Proposing a preliminary demand management plan for how this modelled target will be achieved by 2050 as shown in **Table 20** below.

As previously mentioned, due to the high level of uncertainty with the demand management plans, the cost of the demand impacts below have not been included in the lifecycle models or levels of service at this time. The demand management plans discussed in this section should be explored by asset owners in more detail following the AM Plan, and new projects should incorporate GHG emissions reduction methods, and changes which will be incorporated into future iterations of the AM Plan. This has been identified as a continuous improvement item in **Table 29**.

Moving forward, the Climate Lens tool discussed in the AM Plan Overview will assess projects based on these targets and will assist with the prioritization of climate mitigation projects.

**Table 20: Climate Change Mitigation Transformation**

CLIMATE CHANGE MITIGATION TRANSFORMATION	MODELLED TARGET	IMPACT TO SERVICE OR ASSET	DEMAND MANAGEMENT PLAN
<b>Changing How We Move</b>	100% of new municipal small and light-duty vehicles are electric by 2040. 100% of new municipal heavy-duty vehicles switch to clean hydrogen by 2040.	Electric vehicle (EV) chargers will need to be installed. Initial upfront capital costs for electric vehicles. Removal of fuel infrastructure.	Coordination with Fleet Services on Green Fleet Strategy. Coordination with CFEM division.
<b>Transforming Our Buildings</b>	By 2050, all new municipal buildings achieve net-zero emissions.	Net-zero buildings may have higher upfront costs to construct but lower operational expenses.	Coordination with CFEM division to achieve net-zero emission for new buildings.

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

CLIMATE CHANGE MITIGATION TRANSFORMATION	MODELLED TARGET	IMPACT TO SERVICE OR ASSET	DEMAND MANAGEMENT PLAN
<b>Transforming Our Buildings</b>	By 2050, all municipal buildings will be retrofitted to achieve 50% energy efficiency relative to 2016.	The initial upfront cost of retrofit potentially lowers operational expenses.	Coordinate with the CFEM division to identify feasibility.
<b>Transforming Our Buildings</b>	Post-retrofits, switch buildings to heat pumps for space and water heating by 2050.	The initial upfront cost of switching potentially lowers operational expenses.	Coordinate with the CFEM division to identify feasibility.
<b>Revolutionizing Renewables</b>	By 2050, 50% of municipal buildings will add rooftop solar PV, covering 30% of the building's electrical load.	Initial upfront cost, potential energy cost savings.	Coordinate with the CFEM division to identify feasibility.
<b>Growing Green</b>	Planting 50,000 trees a year through to 2050	Considerations made for tree planting projects and locations in cemeteries.	Continue identifying tree planting opportunities.

## MITIGATION RISK ANALYSIS

Additionally, since the risk of not completing climate change mitigation projects is that the City continues to contribute to climate change in varying degrees which were modelled in the Climate Science Report for the City of Hamilton completed by ICLEI Canada, a risk analysis has not been completed in this AM Plan for not completing climate mitigation projects (ICLEI Canada, 2021).

## CURRENT MITIGATION PROJECTS

Mitigation projects Hamilton Municipal Cemeteries is currently pursuing are outlined below in **Table 21**. These projects may already be included in the budget and may be quantified in the lifecycle models.

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**Table 21: Asset Climate Mitigation Projects**

PROJECT	CLIMATE CHANGE MITIGATION TRANSFORMATION	PROJECT DESCRIPTION	CLIMATE CHANGE IMPACT
<b>Electric Equipment Pilot</b>	Revolutionizing Renewables	Currently piloting electric equipment for cemetery maintenance activities.	Reduced emissions associated with maintenance equipment.
<b>Mowing Reductions</b>	Growing Green	Reduced mowing and targeted no-mow areas to increase naturalization.	Reduced emissions from equipment. Increased capture of CO <sup>2</sup> .
<b>Natural Burial Areas</b>	Growing Green	Opened a natural burial area at Mount Hamilton Cemetery. The area is planted with gardens and allows remains to return to the earth organically as part of a natural ecosystem.	Reduced emissions, increased capture of CO <sup>2</sup> .
<b>Canopy Coverage</b>	Growing Green	Tree planting in Cemeteries	Increased capture of CO <sup>2</sup> .
<b>Re-Naturalization</b>	Growing Green	Identifying areas for re-naturalization	Increased capture of CO <sup>2</sup>

## CLIMATE MITIGATION DISCUSSION

At this time, the Cemeteries have already made progress toward some of the modelled target transformations in the areas of Revolutionizing Renewables and Growing Green.

### Revolutionizing Renewables

The Cemeteries Section has also begun piloting electric small equipment (trimmers, chain saws etc.) to investigate the products available and their ability to meet the Cemetery's operational needs. While reducing emissions, there may be challenges with meeting operational needs with electric equipment due to the high volume of use per day for this equipment and available batteries. The equipment may require multiple batteries to be changed throughout the day or require a method of recharging (solar and batteries on board vehicles, etc.) and staff downtime to wait for recharging midday.

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## Growing Green

Cemeteries contain significant green space including trees, gardens, and naturalized areas. Opportunities to enhance these areas for additional environmental benefit are considered when opportunities arise including tree planting projects, additional gardens, and re-naturalization of areas. Mowed areas have been reviewed and targeted areas were identified to either reduce or eliminate mowing to allow more vegetation growth and CO<sup>2</sup> capture as well as reducing emissions from mowing equipment.

In 2023, the Cemeteries Section opened its first natural burial area at Mount Hamilton Cemetery. The section provides the options of burial interment, cremation interment and a designated scattering garden. The area is planted with gardens of native species and wildflowers increasing the capture of CO<sup>2</sup> while supporting local biodiversity. Traditional burial uses concrete or steel vaults, and a headstone for each burial, the production of which produce significant carbon emissions. The only materials involved in natural burial is a biodegradable casket and a single commemorative rock to memorialize all interments in the section. The land requirements are smaller than traditional burial areas and the area is not mowed significantly reducing the carbon emissions produced by maintenance equipment.

## 7.2 CLIMATE CHANGE ADAPTATION

**Climate Adaptation** refers to the process of adjusting to actual or expected climate and its effects (e.g. building facilities that can handle new climate loads).

The impacts of climate change may have a significant impact on the assets we manage and the services they provide. Climate change impacts on assets will vary depending on the location and the type of services provided, as will the way in which those impacts are responded to and managed.<sup>15</sup>

In 2021, the City of Hamilton completed a Vulnerability and Risk Assessment Report<sup>16</sup> guided by ICLEI's Building Adaptive and Resilient Communities (BARC) Framework as part of the Climate Change Impact Adaptation Plan (CCIAP) (ICLEI, 2021). The BARC Framework identified thirteen high-impact areas.

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<sup>15</sup> IPWEA Practice Note 12.1 Climate Change Impacts on the Useful Life of Infrastructure

<sup>16</sup> City of Hamilton & Local Governments for Sustainability Canada, 2021

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

## Adaptation Demand Analysis

**Table 22: Managing the Demand of Climate Change on Assets and Services**

ADAPTATION IMPACT STATEMENT	BASELINE (1976-2005) <sup>17</sup>	AVERAGE PROJECTED CHANGE 2021-2050 <sup>11</sup> (ASSUMING RCP4.5 SCENARIO) <sup>18</sup>	POTENTIAL IMPACT ON ASSETS AND SERVICES	DEMAND MANAGEMENT PLAN
Changes in the frequency of extreme rainfall events will result in increased instances of flooding on private and public properties.	6.7 total heavy precipitation days (20 mm)	7.7 total heavy precipitation days (20 mm)	<ul style="list-style-type: none"> <li>Flooding in cemeteries impacting assets and facilities.</li> <li>Following events, debris cleanup requirements, drainage issues, and high soil saturation impacting the ability to perform burials. Additional shoring devices and pumping are required. The process is more time-consuming and the risk to staff is increased.</li> <li>Erosion and destabilization of slopes, exacerbated by increased invasive species destroying understory vegetation.</li> <li>Following flood events, shorter periods of acceptable weather for remediation projects, including difficulty scheduling, and waiting longer to repair for ground conditions to dry.</li> <li>High soil saturation causing instability of monument foundations and columbaria.</li> </ul>	<ul style="list-style-type: none"> <li>Identify flood-prone areas, and locations of drainage/stormwater issues and follow City's stormwater design standards.</li> <li>Increased Low Impact Development (LID) features incorporated for management of stormwater.</li> <li>Improvements to slope stabilization including invasive species management and planting of native stabilizing species.</li> <li>Education of council and the public about practices and impacts to burials.</li> <li>Adding foam stabilization below monument foundations to address instability.</li> </ul>
Increased intensity of rainfall leading to increasing runoff into rivers and lakes, and washing of sediment, nutrients, pollutants, and other materials.	25.8 heavy precipitation days (10 mm)	27.6 heavy precipitation days (10 mm)		
Changes in precipitation resulting in erosion of natural systems (i.e., water banks, escarpment erosion) leading to washouts of bridges and roadways.	844 mm average annual total precipitation	886 mm average annual total precipitation		
Increased instances of heat-related issues due to extreme heat.	16.1 average days where the temperature is 30 degrees Celsius or more	34.4 average days where the temperature is 30 degrees Celsius or more	<ul style="list-style-type: none"> <li>Staff will require longer cooling breaks on hot days potentially delaying schedules.</li> <li>Negative impacts to natural vegetation.</li> <li>Impacts to mowing cycles due to cycles of drought and high rainfall.</li> <li>Faster growing vegetation requiring more maintenance.</li> </ul>	<ul style="list-style-type: none"> <li>Increase tree cover in cemeteries.</li> <li>Make consideration in the design of gardens and plantings for types of vegetation resistant to drought.</li> <li>Consider possible changes to mowing cycles.</li> <li>Continue to make irrigation schedule decisions based on conditions rather than a set schedule including education of staff.</li> </ul>
Increased temperatures and changes in precipitation increasing incidences of infectious diseases and vector-borne diseases as a result of longer transmission periods or changes in geographic distribution of disease vectors.	52.2 number of ice days (temperature below 0 degrees Celsius)	35.7 number of ice days (temperature below 0 degrees Celsius) extending the breeding season of mosquitos/ticks.	<ul style="list-style-type: none"> <li>Increased risk of staff exposure to vector-borne diseases.</li> </ul>	<ul style="list-style-type: none"> <li>Continue with invasive management programs (poison ivy, phragmites) and education programs.</li> <li>Continue tick and mosquito education protocols for staff.</li> </ul>
Increased intensity and frequency of ice storms leading to increased hazardous roads, pathways and sidewalk conditions.	187 mm average total winter precipitation	204 mm average total winter precipitation	<ul style="list-style-type: none"> <li>Increased winter maintenance for pathways, parking lots and access roads.</li> <li>Accelerated deterioration of infrastructure including freeze-thaw impacts on pathways, roads, and monument foundations.</li> </ul>	<ul style="list-style-type: none"> <li>Stay up to date on the best materials for freeze-thaw resistance and best maintenance practices.</li> <li>Maintain accurate signage to identify pathways that are maintained in winter and pathways that may be hazardous.</li> <li>Continue to meet winter path and road maintenance standards and evaluate standards at regular intervals.</li> </ul>

<sup>17</sup> ICLEI Canada, 2022

<sup>18</sup> RCP4.5 Scenario: Moderate projected Green House Gas concentrations, resulting from substantial climate change mitigation measures. It represents an increase of 4.5 W/m<sup>2</sup> in radiative forcing to the climate system. RCP 4.5 is associated with 580-720ppm of CO<sub>2</sub> and would more than likely lead to 3°C of warming by the end of the 21st century.



# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

## ADAPTATION RISK ANALYSIS

Additionally, the City should consider the risks for the asset or service as a result of climate change and consider ways to adapt to reduce the risk. Adaptation can have the following benefits:

- Assets will withstand the impacts of climate change;
- Services can be sustained; and,
- Assets that can endure may potentially lower the lifecycle cost and reduce their carbon footprint.

Similarly, to the exercise above and using the risk process in **Section 6**, asset owners:

- Reviewed the likelihood scores in the Vulnerability and Risk Assessment Report for the adaptation impact occurring;
- Identified the consequence to the asset/service if the event did happen to develop a risk rating; and,
- If the risk was identified as high, the asset owner produced a preliminary risk adaptation plan shown below in **Table 23**.

It is important to note that due to the high level of uncertainty with the climate change risk adaptation plans, the cost of mitigating the risks below has not been included in the lifecycle and financial models at this time. The adaptation plans discussed in this section should be explored by asset owners in more detail following the AM Plan, and new projects should consider these risks during the planning and design processes. Future changes will be incorporated into future iterations of the AM Plan. Moving forward, the Climate Lens tool will assess projects based on these targets and will assist with the prioritization of climate adaptation projects. This has been identified as a continuous improvement item in **Table 29**.

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

**Table 23: Adapting to Climate Change**

ADAPTATION IMPACT STATEMENT	SERVICE OR ASSET AT RISK DUE TO IMPACT	WHAT COULD HAPPEN	RISK RATING	RISK ADAPTATION PLAN
Changes in the frequency of extreme rainfall events will result in increased instances of flooding on private and public properties.	<b>All Assets</b>	Deterioration of assets due to an increase in extreme weather events and changing climate including freeze-thaw cycles, extreme heat, and flooding.  Increased inspection and maintenance requirements and reduced service lives accelerating program needs.	High	Develop Overall Asset Management Strategy (Asset Inventory, standardized inspection criteria, standardized condition rating and prioritization) Maintenance Strategy.  Monitor changes to maintenance and renewal needs.  Investigate resilient materials in renewal designs.

## CURRENT ADAPTATION PROJECTS

Adaptation projects Hamilton Municipal Cemeteries is currently pursuing are outlined below in **Table 24**. These projects may already be included in the budget and may be quantified in the lifecycle models.

**Table 24: Asset Climate Mitigation Projects**

PROJECT	PROJECT DESCRIPTION
<b>Changes to Irrigation Practices</b>	Changed from scheduled use of irrigation systems to informed decision-making. Irrigation is based on real conditions.
<b>Changes to Monument Foundation Stabilization Practices</b>	Identifying monuments with unstable foundations and using foam stabilizers to address instability.

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

## CLIMATE ADAPTATION DISCUSSION

The outdoor nature of cemeteries as well as their locations within and close to bodies of water, slopes and other hazard lands will make them vulnerable to many of the impacts of climate change. A robust asset management strategy including a thorough asset inventory, standardized inspection and condition ratings, and standardized maintenance procedures will be instrumental in monitoring impacts on assets and subsequently planning for and prioritizing maintenance and renewal needs. Climate change will impact Hamilton Municipal Cemeteries assets as well as operations as staff manage operations through storms, increased rainfall, increased summer heat and drought.

Progress is being made toward climate adaptation including addressing monument foundation stability issues that have been worsened by increasingly wet weather and saturated ground conditions. Monuments are being inspected for stability issues and unstable foundations are being repaired by using stabilizing foam beneath the foundations. Changes to irrigation practices have also been implemented where the real moisture condition of irrigated areas is considered when timing the use of irrigation systems.

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

## 8. LIFECYCLE MANAGEMENT PLAN

The lifecycle management plan details how the City plans to manage these assets at the agreed levels of service and at the accepted lifecycle costs while excluding inflationary values. The costs included in the lifecycle management plan include costs from both the Capital and Operating budgets. Asset management focuses on how taxpayer or ratepayer dollars are invested by lifecycle activities and not by budget allocation. Since both budgets contain various lifecycle activities, they have been consolidated together and separated by lifecycle activity in this section.

As a result of this new process, there may be some areas where the budget was not able to be broken down perfectly by lifecycle activity. Future AM Plans will focus on improving the understanding of Whole-Life-Costs and funding options. However, at this time the plan is limited to those aspects. Expenditure on new assets and services will be accommodated in the long-term financial plan but only to the extent that there is available funding.

### 8.1 ACQUISITION PLAN

Acquisition reflects new assets that did not previously exist or works which will upgrade or improve an existing asset beyond its current capacity. They may result from growth, demand, legal obligations or social or environmental needs. Assets are frequently either donated through development agreements to the City or through the construction of new assets which are mostly related to population growth. For the cemetery service area, asset donations are driven by legislated obligations as described below. Purchased and constructed assets are driven by demand from an aging and growing population. Land needs for cemetery services are significant and continually grow due to the nature of the service. Even with a stagnant population land, columbaria and supporting assets would still need to be regularly acquired as once an interment is performed the land or columbarium is allocated for that single use and maintained in perpetuity. This land never returns to the system. Additional land will always be required for future interments.

## CURRENT PROJECT DRIVERS – 10-YEAR PLANNING HORIZON

The City prioritizes capital projects based on various drivers to help determine ranking for project priorities and investment decisions. As part of future AM Plans, the City will be continuing to develop its understanding of how projects are prioritized and ensure that multiple factors are being considered to drive investment decisions in the next iteration of the AM Plan. These drivers will include legal compliance, risk mitigation, O&M impacts, growth impacts, health, and safety, reputation, and others. These drivers should be reviewed during each iteration of the AM Plan to ensure they are appropriate and effective in informing decision-making.

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

## DONATED ACQUISITIONS

The City has a legislated responsibility to assume responsibility for any burial site that is not being maintained or is abandoned. When these properties are identified, the BAO will direct the City of Hamilton to assume this responsibility for the land including all assets. These properties are often historical and may or may not have a Care and Maintenance Fund to provide for their perpetual care and the assets may be in various states of age and condition.

The acquisition of these properties is difficult to predict as the information is managed by BAO and the City is not often given significant notice before a property is directed to be assumed. Once assumed the City is responsible for managing these areas in perpetuity requiring lifelong operations, maintenance and renewal activities. As there is currently no certainty on future acquisitions through this mechanism, no donated acquisitions have been included in this iteration of the AM Plan. A Continuous Improvement item has been added to **Table 29** to develop a guide for the assumption of cemeteries including procedures following City standards.

The City is reviewing its donated asset assumption process to ensure that it proactively understands what assets are being donated annually to ensure they are appropriately planned for. This will allow multiple departments across the City to plan for the assets properly such as:

- AM to forecast the long-term needs and obligations of the assets;
- Operations and maintenance can include the assets in their planned activities (inspections, legislative compliance activities); and,
- Finance can ensure that assets are properly captured and recognized appropriately (Audited Financial Statements, TCA process, Provincial reporting such as the FIR).

The City will need to ensure the required data is updated frequently and to a single source to ensure that all the departments have access to the data they require in a timely manner.

Once the assets are assumed, Cemeteries then becomes the steward of these assets and is responsible for all ongoing costs for the asset's operation, continued maintenance, inevitable disposal and their likely renewal.

## CONSTRUCTED OR PURCHASED ACQUISITIONS

Over the next 10-year planning period from 2024 to 2033, the City will acquire approximately \$1.25M of constructed assets composed of \$125 thousand per year of new columbaria as shown in **Figure 10**.

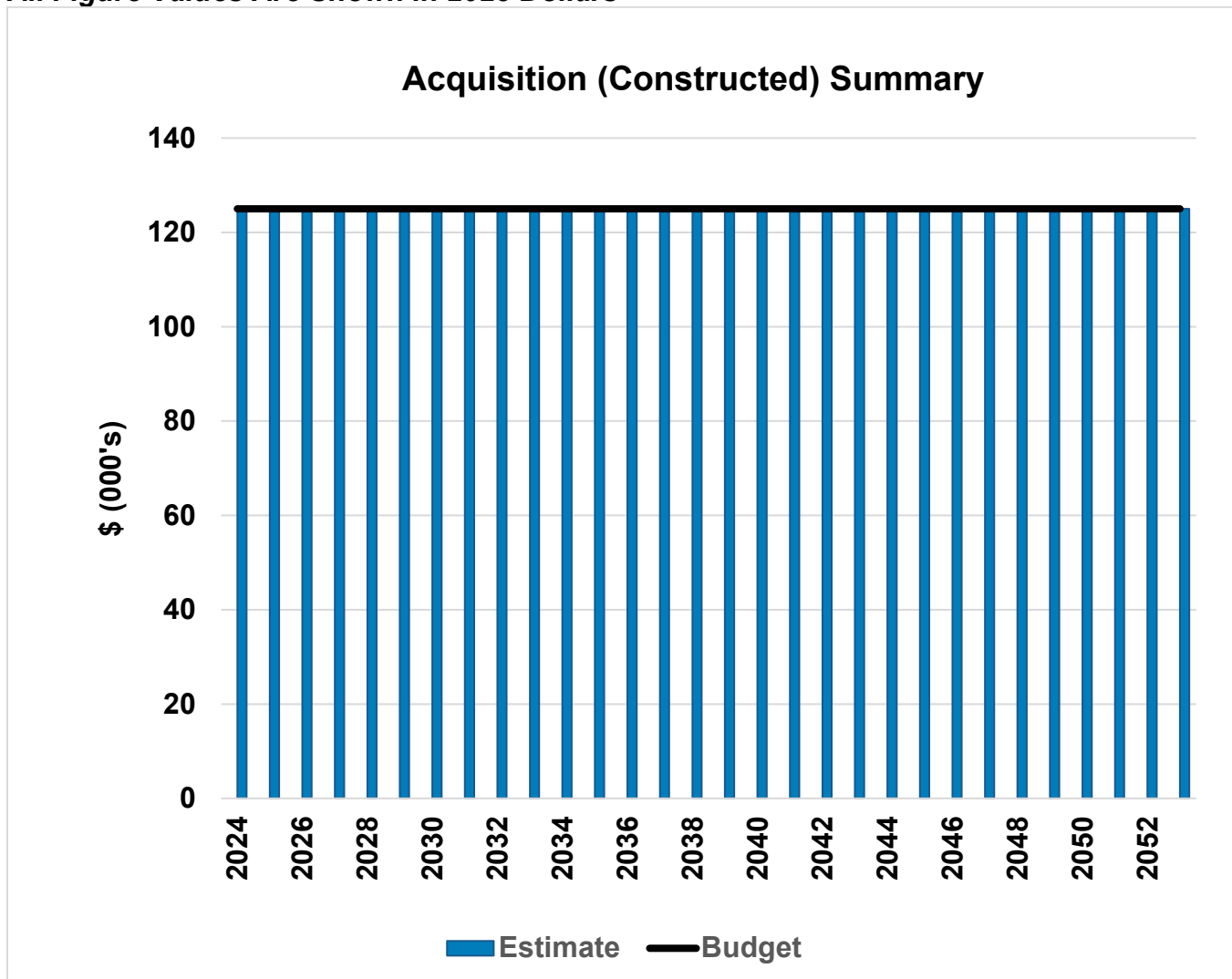
The City has **sufficient** budget for its planned constructed acquisitions at this time however this does not address future assets that may need to be purchased or constructed to ensure service levels are maintained over the long term. With the completion of the updated Land Needs Assessment, additional plans to acquire land for new cemeteries, columbaria, and supporting assets may be identified and will be incorporated into the next iteration of the AM Plan.

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

A number of fleet assets currently being relied upon are extended use vehicles. A Continuous Improvement Item has been added to **Table 29** to review the use of extended use vehicles and develop a fleet strategy. It is possible it will be identified that new vehicle acquisitions are required to meet service delivery needs.

With competing needs for resources across the entire city there will be a need to investigate trade-offs and design options to further optimize asset decisions and ensure intergenerational equity can be achieved. Hamilton will continue to monitor its constructed assets annually and update the AM Plan when new information becomes available.

**Figure 10: Acquisition (Constructed) Summary**  
All Figure Values Are Shown in 2023 Dollars

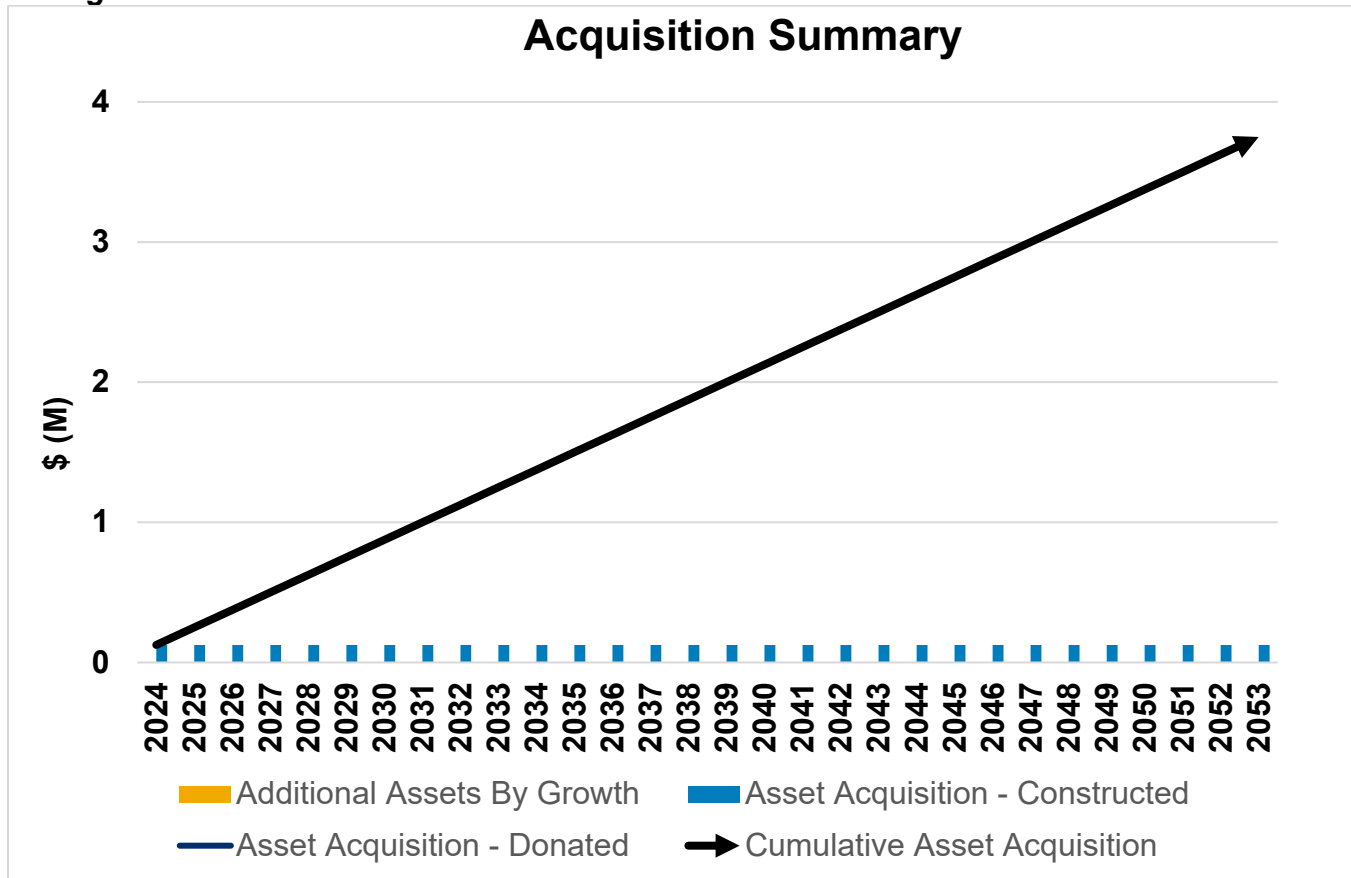


# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

## ACQUISITIONS SUMMARY

Forecast acquisition asset costs are summarized in **Figure 11** and show the cumulative effect of asset assumptions over the next 10-year planning period.

**Figure 11: Acquisition Summary**  
All Figure Values Are Shown in 2023 Dollars



When Hamilton commits to constructing or purchasing new assets, the municipality must be prepared to fund future operations, maintenance, and renewal costs. Hamilton must also account for future depreciation when reviewing long-term sustainability. When reviewing the long-term impacts of asset acquisition, it is useful to consider the cumulative value of the acquired assets being taken on by Hamilton. The cumulative value of all acquisition work, including assets that are constructed and contributed is shown in **Figure 11** above. Hamilton will need to address how to best fund these ongoing costs as well as the costs to construct the assets while seeking the highest level of service possible.

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

## 8.2 OPERATIONS AND MAINTENANCE PLAN

Operations include all regular activities to provide services. Daily, weekly, seasonal and annual activities are undertaken by staff to ensure the assets perform within acceptable parameters and to monitor the condition of the assets for safety and regulatory reasons. Examples of typical operational activities include operating assets, utility costs, inspections, and the necessary staffing resources to perform these activities.

Some of the major operational investments over the next 10 years include:

- **\$4.3 Million** allocated for employee-related costs in 2024 (i.e., salaries, wages, benefits etc.);

Maintenance should be viewed as the ongoing management of deterioration. The purpose of planned maintenance is to ensure that the correct interventions are applied to assets in a proactive manner and to ensure it reach its intended useful life. Maintenance does not significantly extend the useful life of the asset but allows assets to reach their intended useful life by returning the assets to a desired condition. Examples of typical maintenance activities include equipment repairs and component replacements along with appropriate staffing and material resources required to perform these activities.

Proactively planning maintenance significantly reduces the occurrence of reactive maintenance which is always linked to a higher risk to human safety and higher financial costs. The City needs to plan and properly fund its maintenance to ensure Hamilton Municipal Cemeteries assets are reliable and can achieve the desired level of service.

Major maintenance projects the City plans to complete over the next 10 years include:

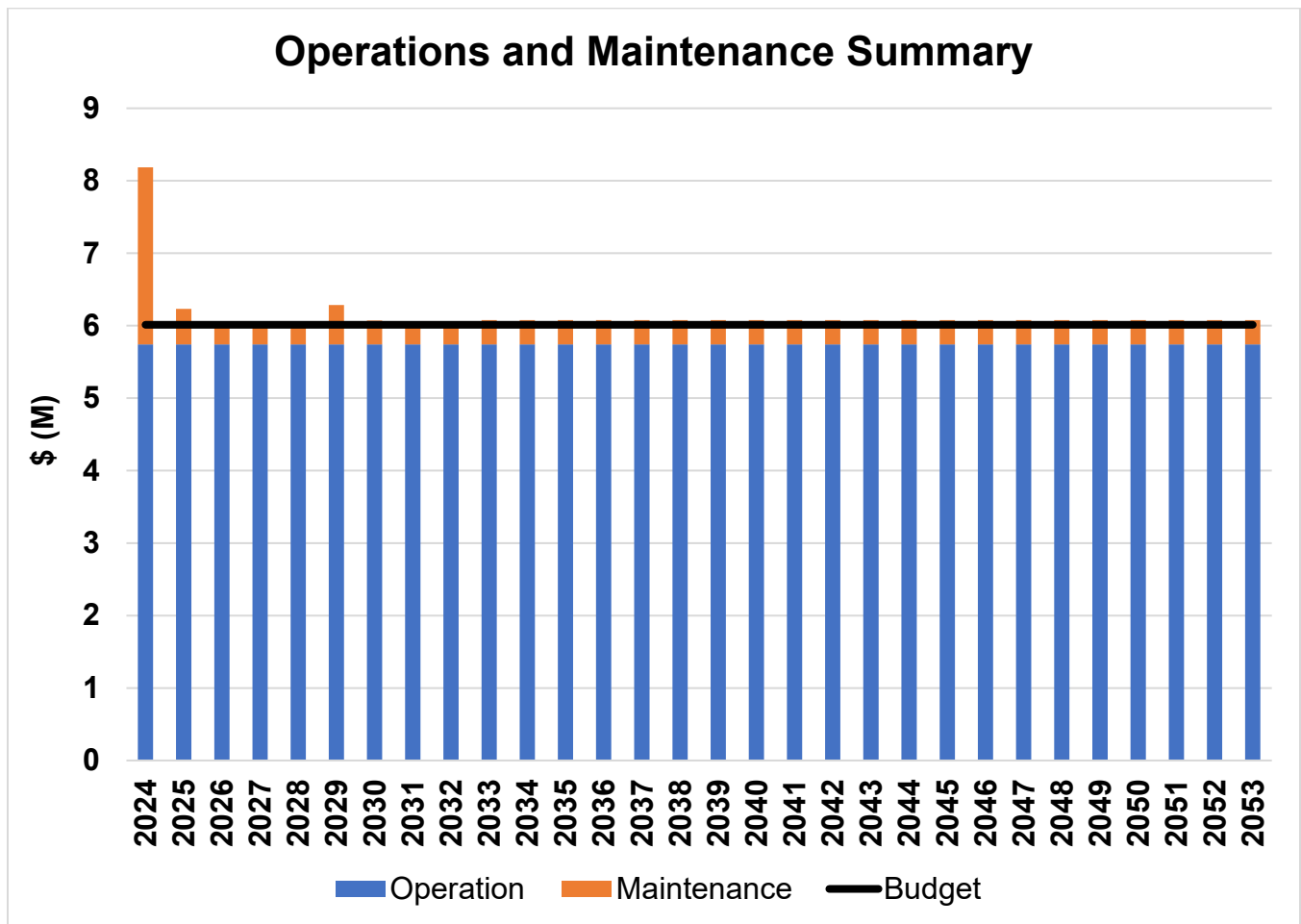
- **\$170 thousand** annually for building repairs.

Forecast operations and maintenance costs vary in relation to the total value of the asset registry. When additional assets are acquired, future operations and maintenance costs are forecast to increase. When assets are disposed of the forecast operation and maintenance costs are reduced.



# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

**Figure 12: Operations and Maintenance Summary**  
All Figure Values Are Shown in 2023 Dollars



The funding for operations is generally sufficient; however, as additional cemeteries are acquired through assumption or construction, operations needs will increase. It will be important for the City to continue increasing operational funding as the cemeteries portfolio grows to maintain the current level of service.

The funding for maintenance is currently insufficient leading to a substantial backlog in facilities maintenance. The maintenance spike in 2024 is considered a maintenance backlog because it includes deferred maintenance due to budget constraints over time. This backlog should be investigated following the completion of this Asset Management Plan to ensure critical components have been prioritized in the Corporate Facilities and Energy Management and the Cemeteries budget forecasts. There are currently over \$2M of maintenance needs in the backlog accounting for nearly 80% of all identified facilities maintenance needs. On top of the identified maintenance needs, staff have identified deficiencies with building amenities not meeting needs and servicing challenges that would require buildings enhancements.

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

The maintenance forecast for facilities assets is based on the 10-year facility needs. The building at Eastlawn Cemetery is due for renewal and the building at Mount Hamilton Cemetery is due for renewal in 2028 based on ESL of 50 years and FCI indicates that both buildings are in poor condition. Facilities needs for these buildings have not been included as it was assumed they would be renewed rather than continued maintenance. An average of the 10-year needs, excluding backlog, has been used to estimate facilities maintenance needs beyond the 10-year horizon. Facilities maintenance amounts beyond the existing budget are assumed to be unfunded

At this time the asset inventory is incomplete and optimal maintenance activities for many assets are not well defined. Maintenance needs for many assets in this plan are not well quantified. Continuous Improvement items have been added to **Table 29** to develop standardized condition assessments as well as document operations and maintenance standards for all Cemeteries assets. As the required activities and needs become better quantified it is anticipated that the funding gap for maintenance will increase.

## 8.3 RENEWAL PLAN

Renewal is major works which does not increase the asset's design capacity but restores, rehabilitates, replaces, or renews an existing asset to its original service potential. Works over and above restoring an asset to its original service potential are considered to be an acquisition resulting in additional future operations and maintenance costs

Asset renewals are typically undertaken to either ensure the assets' reliability or quality will meet the service requirements set out by the City. Renewal projects are often triggered by service quality failure and can often be prioritized by those that have the highest consequence of failure, have high usage, have high operational and maintenance costs and other deciding factors.

The typical useful lives of assets used to develop projected asset renewal forecasts are shown in **Table 25** and are based on the estimated design life for this iteration. Future iterations of the plan will focus on the Lifecycle approach to ESL which can vary greatly from design life. Asset useful lives were last reviewed in 2022 however, they will be reviewed annually until their accuracy reflects the City's current practices.

**Table 25: Useful Lives of Assets**

ASSET SUBCATEGORY	ESTIMATED SERVICE LIFE (YEARS)
Water Taps and Irrigation	25
Laneways	40
Iron Fencing	50
Retaining Walls	30
Facilities	50*

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

ASSET SUBCATEGORY	ESTIMATED SERVICE LIFE (YEARS)
Columbaria	Indefinite, perpetual maintenance
Mausoleum	Indefinite, perpetual maintenance
IT Equipment	4-5
Trucks and Passenger Vehicles	8-10
Utility and Turf Maintenance Vehicles	8-15
Small Equipment	10
Sales Equipment	5
Interment Equipment	10

\*Several facilities are historical in nature and it was assumed that maintenance would continue in perpetuity rather than renewal.

## RENEWAL RANKING CRITERIA

Asset renewal is typically undertaken to either:

- Ensure the reliability of the existing infrastructure to deliver the service it was constructed to facilitate (e.g., Facilities can process required volumes); or
- To ensure the infrastructure is of sufficient quality to meet the service requirements (e.g., Vehicles are reliable).<sup>19</sup>

Future methodologies may be developed to optimize and prioritize renewals by identifying assets or asset groups that:

- Have a high consequence of failure;
- Have high use and subsequent impact on users would be significant;
- Have higher than expected operational or maintenance costs; and,
- Have potential to reduce life cycle costs by replacement with a modern equivalent asset that would provide the equivalent service.<sup>20</sup>

<sup>19</sup> IPWEA, 2015, IIMM, Sec 3.4.4, p 3|91.

<sup>20</sup> Based on IPWEA, 2015, IIMM, Sec 3.4.5, p 3|97.

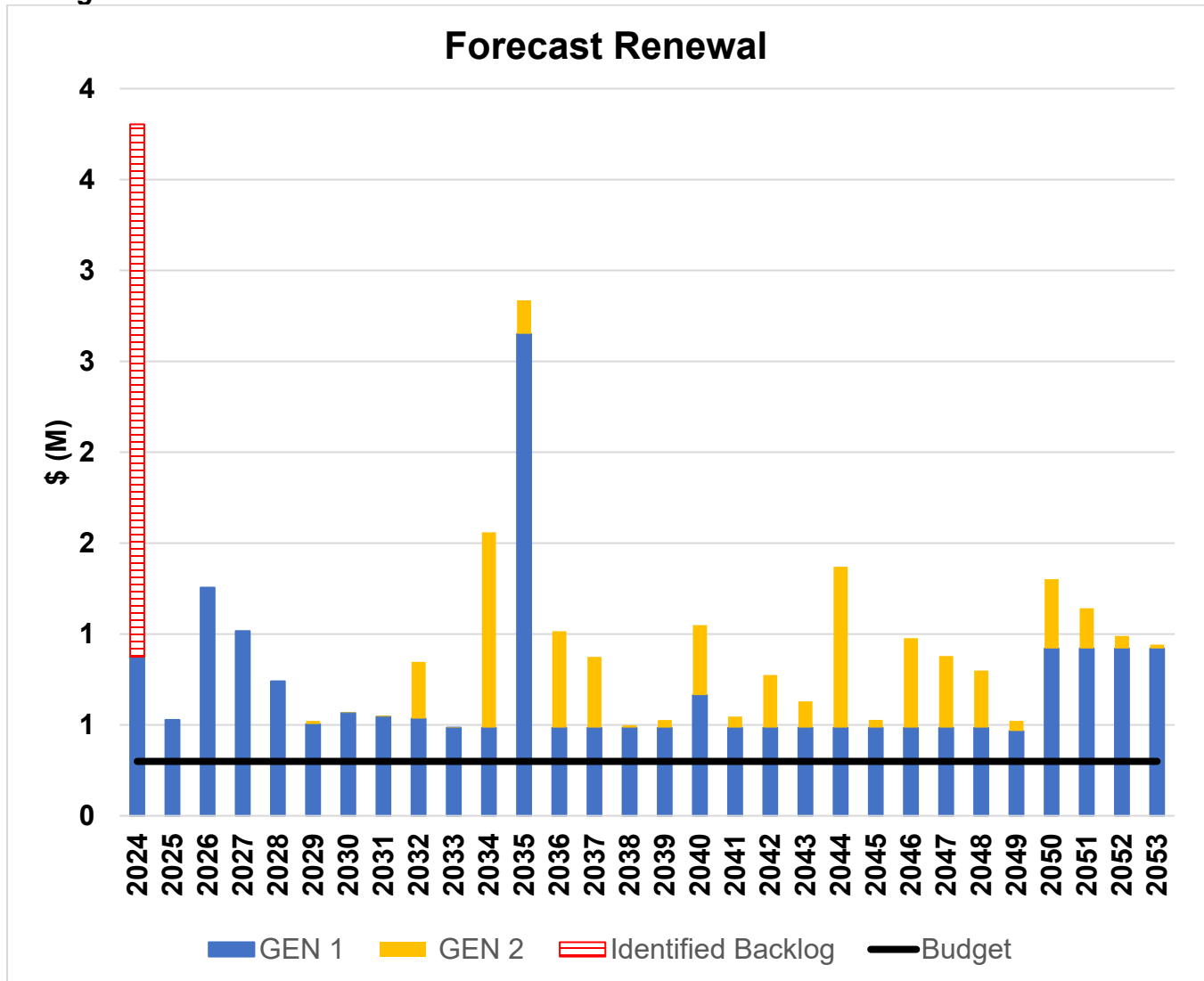
# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

## SUMMARY OF FUTURE RENEWAL COST

Forecast renewal costs are projected to increase over time if the asset stock increases. The forecast costs associated with renewals are shown relative to the proposed renewal budget in **Figure 13**.

In the **Figure 13** below, Generation 1 (Gen 1) costs refer to renewals that occur for the first time in the model based on the estimated service life and Generation 2+ (Gen 2+) costs refer to renewals that have occurred twice or more based on the estimated service life.

**Figure 13: Forecast Renewal Cost**  
All Figure Values Are Shown in 2023 Dollars



The significant amount highlighted as unfunded in 2024 represents the cumulative backlog of deferred work needed to be completed that has been either identified through its current condition or age.

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

Major backlog items include:

- \$1.2 Million for Eastlawn Cemetery Building
- \$0.95 Million for poor condition Laneways
- \$0.48 Million for Fleet Equipment
- \$0.22 Million for Small Equipment

The model assumes that assets in the backlog will be renewed in 2024 and predicts their 2+ generations of renewal needs based on ESL. This drives renewal spikes for fleet and small equipment renewals approximately every 10 years. Other significant spikes in renewal are generally driven by high-value facilities renewals. The spike in 2035 is for renewal of buildings at Woodland Cemetery (\$1.8M) and Mountview Gardens Cemetery (\$0.38M), both built in 1985, assuming a 50-year service life.

There is no age or condition data for a number of assets. These assets have generally not been included in the backlog and an even distribution of renewals has been assumed across the asset's ESL. There are also a number of assets in the Cemeteries Infrastructure category for which no inventory or replacement value was available indicating that renewal needs are likely much higher than what is currently modelled. These assets should be inventoried for inclusion for the next iteration of the AM Plan.

Currently, there is insufficient funding to accomplish all the renewals that are forecast over the next ten years. Based on the number of funded replacements each year described above, this percentage is expected to continue to grow as assets deteriorate faster than they can be renewed and exceed their estimated service life.

Properly funded and timely renewals ensure the assets perform as expected. Deferring renewals creates risks of higher financial costs, decreased availability, and decreased satisfaction with asset performance. It is recommended to continue to analyze asset renewals based on criticality and availability of funds in future AM Plans.

## 8.4 DISPOSAL PLAN

Disposal includes any activity associated with the disposal of a decommissioned asset including sale, possible closure of service, decommissioning, disposal of asset materials, or relocation. Disposals will occur when an asset reaches the end of its useful life. The end of its useful life can be determined by factors such as excessive operation and maintenance costs, regulatory changes, obsolescence, or demand for the asset has fallen.

Assets identified for possible decommissioning and disposal are shown in **Table 26**. A summary of the disposal costs and estimated reductions in annual operations and maintenance of disposal of the assets are also outlined in **Table 26**. Any costs or revenue gained from asset disposals is included in future iterations of the plan and the long-term financial plan.

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

**Table 26: Assets Identified for Disposal**

ASSET	REASON FOR DISPOSAL	TIMING	DISPOSAL COSTS	OPERATIONS & MAINTENANCE ANNUAL SAVINGS
Non-decorative perimeter fencing	Disposed of at end of life as determined to not be required	Various	TBD	Not quantified at this time.

Standard perimeter fencing is typically not renewed at the end of life. Public access to cemeteries properties is permitted and the fencing has been determined to not be required for health and safety. As such the fencing is currently being left in place until end-of-life deterioration is observed. Operations and maintenance costs related to fencing inspection and repairs are largely eliminated with this approach. The fencing is then removed and will not be renewed, saving future renewal costs. Decorative iron and stone fencing continue to be renewed and maintained.

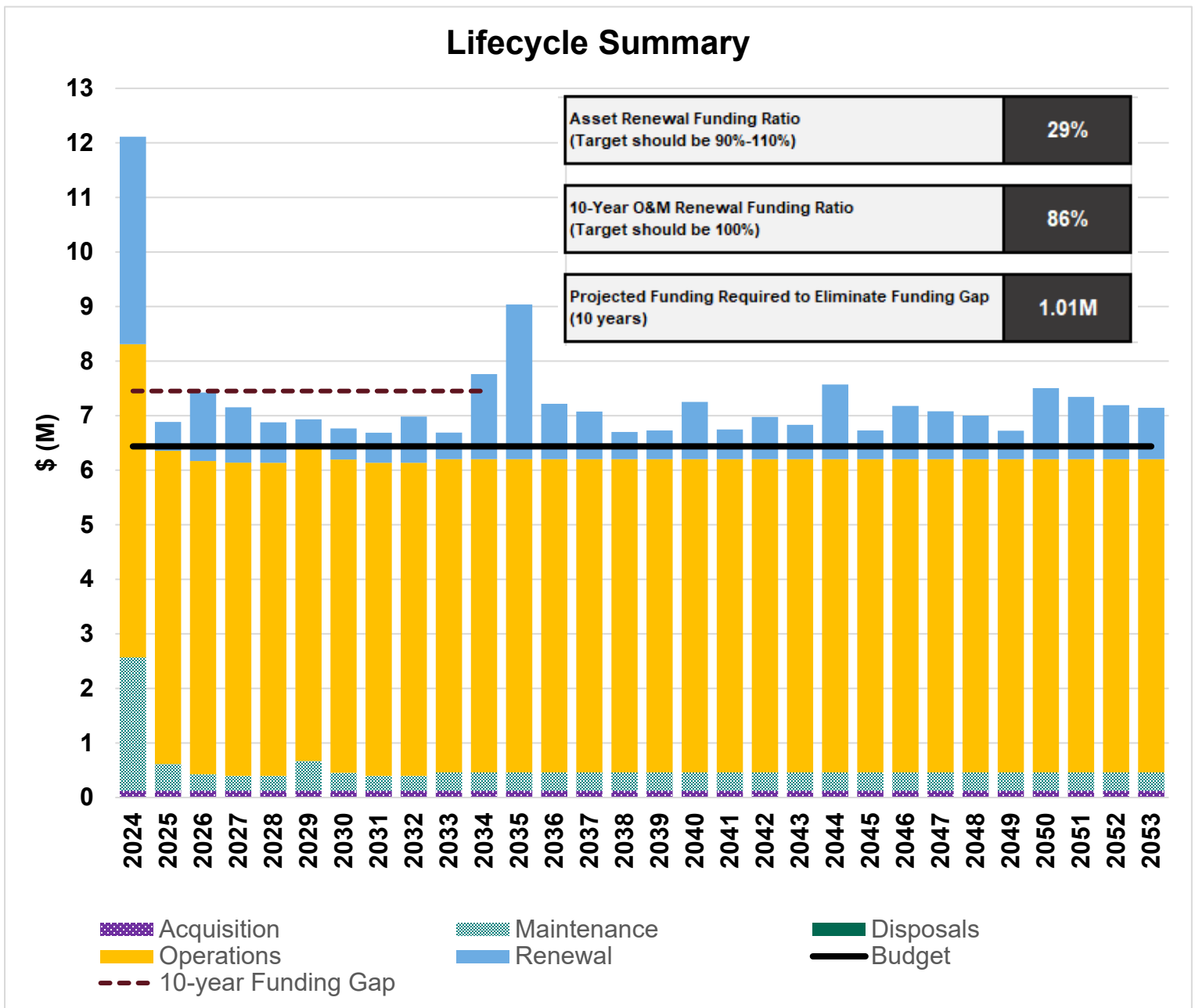
## 8.5 LIFECYCLE COST SUMMARY

The financial projections from this asset plan are shown in **Figure 14**. These projections include forecast costs for acquisition, operation, maintenance, renewal, and disposal. These forecast costs are shown relative to the proposed budget.

The bars in the graphs represent the forecast costs needed to minimize the life cycle costs associated with the service provision. The proposed budget line indicates the estimate of available funding. The gap between the forecast work and the proposed budget is the basis of the discussion on achieving a balance between costs, levels of service and risk to achieve the best value outcome.

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

**Figure 14: Lifecycle Summary**  
All Figure Values Are Shown in 2023 Dollars



There is currently insufficient funding over the 10-year period to address lifecycle needs which will result in an eventual reduction in level of service if not addressed. The underfunded activities are primarily maintenance and renewal.

## HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

Operations budgets are currently sufficient; however, the acquisition of additional cemeteries and of new and expanded assets will commit the City to additional operations costs throughout the lifecycle of the assets. The City will need to continue increasing operating budgets to support these assets.

Maintenance funding for facilities is currently insufficient leading to a significant backlog of deferred maintenance. The asset inventory and maintenance needs are currently incomplete. As the City continues to develop condition profiles, identify necessary works, and implement an idealized maintenance strategy, identified maintenance needs will likely increase and if unfunded may impact the delivery of service.

The largest contributor to the funding gap is unfunded renewals and the renewal backlog in particular. The backlog is expected to continue to grow as assets deteriorate faster than they can be renewed and exceed their estimated service life. As additional assets are acquired, future renewal needs will continue to increase. Deferring renewals (assets identified for renewal and not funded) creates risks of higher financial costs, decreased availability, and decreased satisfaction with asset performance potentially leading to increased usage and decreased service life of newer assets.

Due to the lack of data confidence in the current levels of service information, Hamilton Municipal Cemeteries will need to collect more data before proposing any new levels of service. It has been assumed in the interim that the current levels of service will be the proposed levels of service continuing forward past 2025 in accordance with O. Reg 588/17.

The City will continue to improve its lifecycle data, and this will allow for informed choices as to how best to mitigate impacts and how to address the funding gap itself. This gap in funding future plans will be refined over the next three years to improve the confidence and accuracy of the forecasts.



# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

## 9. FINANCIAL SUMMARY

This section contains the financial requirements resulting from the information presented in the previous sections of this AM Plan. Effective asset and financial management will enable the City to ensure Hamilton Municipal Cemeteries provides the appropriate level of service for the City to achieve its goals and objectives. Reporting to stakeholders on service and financial performance ensures the City is transparently fulfilling its stewardship accountabilities.

Long-term financial planning (LTFP) is critical for the City to ensure that network lifecycle activities such as renewals, operations, maintenance, and acquisitions can happen at the optimal time. The City is under increasing pressure to meet the wants and needs of its customers while keeping costs at an affordable level and maintaining its financial sustainability.

Without funding asset activities properly, the City will have difficult choices to make in the future which will include options such as higher costs reactive maintenance and operational costs, reduction of service and potential reputational damage.

Aligning the LTFP with the AM Plan is critical to ensure all of the network's needs will be met while the City is finalizing a clear financial strategy with measurable financial targets. The financial projections will be improved as the discussion on desired levels of service and asset performance matures.

There are two key indicators of sustainable service delivery that are considered within the AM Plan for this service area. The two indicators are the:

- Asset renewal funding ratio (proposed renewal budget for the next 10 years / forecast renewal costs for next 10 years); and,
- Medium-term forecast costs/proposed budget (over 10 years of the planning period).

### ASSET RENEWAL FUNDING RATIO

Asset Renewal Funding Ratio<sup>21</sup> **29%**

The Asset Renewal Funding Ratio (ARFR) is used to determine if the City is accommodating asset renewals in an **optimal** and **cost-effective** manner from a timing perspective and relative to financial constraints, the risk the City is prepared to accept and targeted service levels it wishes to maintain. The target renewal funding ratio should be ideally between **90% - 110%** over the entire planning period. A low indicator result generally indicates that service levels are achievable, however, the expenditures are below this level in some service areas predominantly due to underinvestment, including a lack of permanent infrastructure funding from senior levels of government, as well as large spikes of growth throughout the years.

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<sup>21</sup> AIFMM, 2015, Version 1.0, Financial Sustainability Indicator 3, Sec 2.6, p 9.

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

If assets are not renewed at the appropriate timing, it will inevitably require difficult trade-off choices that could include:

- A reduction of the level of service and availability of assets;
- Increased complaints and reduced customer satisfaction;
- Increased reactive maintenance and renewal costs; and,
- Damage to the City's reputation and risk of fines or legal costs

The lack of renewal resources will be addressed in future AM Plans while aligning the plan to the LTFP. This will allow staff to develop options and long-term strategies to address the renewal rate. The City will review its renewal allocations once the entire inventory has been confirmed and amalgamated.

## MEDIUM-TERM – 10 YEAR FINANCIAL PLANNING PERIOD

### 10-Year Operations, Maintenance and Renewal Financial Ratio 86%

Although this AM Plan includes forecast projections to 30-years, the higher confidence numbers are typically within the first 10 years of the lifecycle forecast. The 10-year Operations, Maintenance and Renewal Financial Ratio compares the Planned Budget with the Lifecycle Forecast for the optimal operation, maintenance, and renewal of assets to provide an agreed level of service over the next 10-year period. Similarly, to the ARF, the optimal ratio is also between **90-110%**. A low ratio would indicate that assets are not being funded at the rate that would meet the organization's risk and service level commitments.

The forecast operations, maintenance and renewal costs over the 10 year planning period is **\$7.3M** on average per year. Over time as improved information becomes available, it is anticipated to see this number change. The proposed (budget) operations, maintenance and renewal funding is **\$6.3M** on average per year giving a 10 year funding shortfall of **\$1.0M** per year or **\$10M** over the 10 year planning period. This indicates that **86%** of the forecast costs needed to provide the services documented in this AM Plan are accommodated in the proposed budget, which is close to the 90-110% range. Therefore, it can be concluded that Hamilton Municipal Cemeteries is close to funding their assets at an acceptable rate. Note, these calculations exclude acquired assets.

Funding an annual funding shortfall or funding 'gap' should not be addressed immediately. The overall gap in funding city-wide will require vetting, planning and resources to begin to incorporate gap management into the future budgets for all City services. This gap will need to be managed over time to reduce it in a sustainable manner and limit financial shock to customers. Options for managing the gap include;

- Financing strategies – increased funding, block funding for specific lifecycle activities, long term debt utilization;
- Adjustments to lifecycle activities – increase/decrease maintenance or operations, increase/decrease frequency of renewals, limit acquisitions or dispose of underutilized assets; and,

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

- Influence level of service expectations or demand drivers.
- Increase revenues – strategically increase rates/fees/fines to achieve cost recovery and other business objectives;

These options and others will allow Hamilton to ensure the gap is managed appropriately and ensure the level of service outcomes the customers desire.

Providing sustainable services from infrastructure requires the management of service levels, risks, forecast outlays and financing to eventually achieve a financial indicator of **90-110%** for the first years of the AM Plan and ideally over the 10-year life of the Long-Term Financial Plan.

## 9.1 FORECAST COSTS (OUTLAYS) FOR THE LONG-TERM FINANCIAL PLAN

**Table 27** shows the forecast costs (outlays) required for consideration in the 30 year long-term financial plan.

Providing services in a financially sustainable manner requires a balance between the forecast outlays required to deliver the agreed service levels with the planned budget allocations in the operational and capital budget. The City will begin developing its long-term financial plan (LTFP) to incorporate both the operational and capital budget information and help align the LTFP to the AM Plan which is critical for effective asset management planning.

A gap between the forecast outlays and the amounts allocated in the financial plan indicates further work is required on reviewing service levels in the AM Plan (including possibly revising the long-term financial plan).

The City will manage the ‘gap’ by continuing to develop this AM Plan to provide guidance on future service levels and resources required to provide these services in consultation with the community. Options to manage the gap include reduction and closure of low use assets, increased funding allocations, reduce the expected level of service, utilize debt-based funding over the long term, adjustments to lifecycle activities, improved renewals and multiple other options or combinations of options.

**Table 27: Forecast Costs (Outlays) For the Long-Term Financial Plan Forecast  
Costs Are Shown In 2023 Dollar Values**

YEAR	ACQUISITION	OPERATION	MAINTENANCE	RENEWAL	DISPOSAL
2024	\$125,000	\$5,742,244	\$2,442,166	\$3,803,986	\$0
2025	\$125,000	\$5,742,244	\$489,294	\$527,499	\$0
2026	\$125,000	\$5,742,244	\$301,011	\$1,255,232	\$0
2027	\$125,000	\$5,742,244	\$270,692	\$1,015,773	\$0

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

YEAR	ACQUISITION	OPERATION	MAINTENANCE	RENEWAL	DISPOSAL
2028	\$125,000	\$5,742,244	\$270,306	\$740,185	\$0
2029	\$125,000	\$5,742,244	\$543,734	\$521,885	\$0
2030	\$125,000	\$5,742,244	\$328,105	\$569,365	\$0
2031	\$125,000	\$5,742,244	\$270,306	\$550,544	\$0
2032	\$125,000	\$5,742,244	\$270,306	\$846,853	\$0
2033	\$125,000	\$5,742,244	\$334,896	\$487,207	\$0
2034	\$125,000	\$5,742,244	\$334,896	\$1,559,373	\$0
2035	\$125,000	\$5,742,244	\$334,896	\$2,835,377	\$0
2036	\$125,000	\$5,742,244	\$334,896	\$1,015,592	\$0
2037	\$125,000	\$5,742,244	\$334,896	\$873,853	\$0
2038	\$125,000	\$5,742,244	\$334,896	\$498,847	\$0
2039	\$125,000	\$5,742,244	\$334,896	\$526,805	\$0
2040	\$125,000	\$5,742,244	\$334,896	\$1,048,961	\$0
2041	\$125,000	\$5,742,244	\$334,896	\$545,624	\$0
2042	\$125,000	\$5,742,244	\$334,896	\$774,493	\$0
2043	\$125,000	\$5,742,244	\$334,896	\$629,127	\$0
2044	\$125,000	\$5,742,244	\$334,896	\$1,369,733	\$0
2045	\$125,000	\$5,742,244	\$334,896	\$527,499	\$0
2046	\$125,000	\$5,742,244	\$334,896	\$977,232	\$0
2047	\$125,000	\$5,742,244	\$334,896	\$878,773	\$0
2048	\$125,000	\$5,742,244	\$334,896	\$799,207	\$0
2049	\$125,000	\$5,742,244	\$334,896	\$521,885	\$0
2050	\$125,000	\$5,742,244	\$334,896	\$1,301,672	\$0
2051	\$125,000	\$5,742,244	\$334,896	\$1,141,851	\$0

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

YEAR	ACQUISITION	OPERATION	MAINTENANCE	RENEWAL	DISPOSAL
2052	\$125,000	\$5,742,244	\$334,896	\$989,160	\$0
2053	\$125,000	\$5,742,244	\$334,896	\$941,514	\$0

## 9.2 FUNDING STRATEGY

The proposed funding for assets is outlined in the City’s operational budget and 10-year capital budget.

These operational and capital budgets determine how funding will be provided, whereas the AM Plan typically communicates how and when this will be spent, along with the service and risk consequences. Future iterations of the AM plan will provide service delivery options and alternatives to optimize limited financial resources.

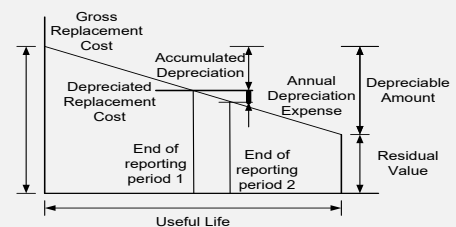
## 9.3 VALUATION FORECASTS

Asset values are forecast to increase as additional assets are added into service. As projections improve and can be validated with market pricing, the net valuations will likely increase significantly despite some assets being programmed for disposal that will be removed from the register over the 30-year planning horizon.

Additional assets will add to the operations and maintenance needs in the longer term. Additional assets will also require additional costs due to future renewals. Any additional assets will also add to future depreciation forecasts. Any disposals of assets would decrease the operations and maintenance needs in the longer term and remove the high costs of renewal obligations. At this time, it is not possible to separate the disposal costs from the renewal or maintenance costs, however, this will be improved for the next iteration of the plan.

## 9.4 ASSET VALUATION

<b>Replacement Cost (Current/Gross)</b>	<b>\$29,472,472</b>
<b>Depreciable Amount</b>	<b>\$29,472,472</b>
<b>Depreciated Replacement Cost<sup>22</sup></b>	<b>\$11,284,984</b>
<b>Depreciation</b>	<b>\$ 880,116</b>



<sup>22</sup> Also reported as Written Down Value, Carrying or Net Book Value.

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

The current replacement cost is the most common valuation approach for specialized infrastructure assets. The methodology includes establishing a comprehensive asset registry, assessing replacement costs (based on market pricing for the modern equivalent assets) and useful lives, determining the appropriate depreciation method, testing for impairments, and determining remaining useful life. As previously mentioned, Public Trees were not included in the depreciation as enhanced natural assets do not depreciate.

As the City matures its asset data, it is highly likely that these valuations will fluctuate significantly over the next three years, and they should increase over time based on improved market equivalent costs as well as anticipated cost changes due to climate change mitigation and adaptation strategies.

## 9.5 KEY ASSUMPTIONS MADE IN FINANCIAL FORECASTS

In compiling this AM Plan, it was necessary to make some assumptions. This section details the key assumptions made in the development of this AM plan and should provide readers with an understanding of the level of confidence in the data behind the financial forecasts.

Key assumptions made in this AM Plan are:

- Operational forecasts are based on current budget allocations and are the basis for the projections for the 30-year horizon and do not address other operational needs not yet identified;
- Maintenance forecasts are based on current budget allocations and do not identify asset needs at this time. It is solely based on planned activities; and,
- Replacement costs were based on historical costing. They were also made without determining what the asset would be replaced with in the future.

It should be noted that the Office of the City Auditor presented a Hamilton Municipal Cemeteries Trust Funds Audit in January 2023 to ensure the effective administration of Hamilton Cemeteries Trust and compliance with regulatory requirements. The Auditor made 17 recommendations that have all been agreed to by management with plans and timelines to address all recommendations. One of these recommendations includes correcting revenue recognition and financial reporting issues.

## 9.6 FORECAST RELIABILITY AND CONFIDENCE

The forecast costs, proposed budgets, and valuation projections in this AM Plan are based on the best available data. For effective asset and financial management, it is critical that the information is current and accurate. Data confidence is defined in the [AM Plan Overview](#).

The estimated confidence level for and reliability of data used in this AM Plan is considered to be a Low confidence level.

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

**Table 28: Data Confidence Assessment for Data Used in AM Plan**

DATA	CONFIDENCE ASSESSMENT	COMMENT
<b>Demand Drivers</b>	Low	Demand drivers were developed using subject matter opinion and the Land Needs Assessment and Business Plan that was developed in 2014. This document will be updated in 2024 providing a higher level of confidence.
<b>Growth Projections</b>	Medium	Based on Greater Golden Horseshoe Growth Forecasts as outlined in the Asset Management Overview Plan.
<b>Acquisition Forecast</b>	Low	Land Needs Assessment and Business Plan document will be updated in 2024 providing a higher level of confidence.  Additional acquisitions due to legislated responsibilities have not been identified but are likely to occur within the planning period.
<b>Operation Forecast</b>	Low	Currently budget-based and requires future improvement to ensure allocation is accurate and all operational needs accounted for. Additional operational costs for future acquired assets are not accounted for and the operational needs for acquired assets are under-reported in this AM Plan.
<b>Maintenance Forecast</b>	Low	Currently budget-based for most assets and requires future improvement to ensure allocation is accurate and all maintenance needs accounted for. BCA forecast is available until 2032, and maintenance needs are projected beyond 2032. BCA numbers have low confidence.  Additionally, maintenance needs for acquired assets are not included in the budget needs, leading to underreporting of the additional maintenance needs.

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

DATA	CONFIDENCE ASSESSMENT	COMMENT
<b>Renewal Forecast - Asset Value</b>	Low	<p>Market pricing was used for renewal replacement costs for facilities, vehicles, small equipment, and IT equipment which have generally a medium confidence.</p> <p>No data is available for a number of assets in the Cemeteries Infrastructure category reducing the overall confidence.</p>
<b>Renewal Forecast - Asset Useful Life</b>	Low	<p>There is a high confidence in age data for facilities, fleet, and IT assets.</p> <p>Age data was not available for most other assets. Useful lives were based on subject matter expertise.</p>
<b>Renewal Forecast - Condition Modelling</b>	Low	<p>Condition data was available for laneways, fencing, and columbaria based on staff visual inspection with a generally medium confidence.</p> <p>The condition of vehicles, small equipment, and IT assets was based on age and estimated service life with a generally low confidence level.</p> <p>There are a number of assets with no condition data available reducing the overall confidence.</p>
<b>Disposal forecast</b>	Low	<p>Current disposal information is rolled into renewal. Continuous improvements are required to ensure accurate data is available.</p>



# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

## 10. PLAN IMPROVEMENT AND MONITORING

### 10.1 STATUS OF ASSET MANAGEMENT PRACTICES<sup>23</sup>

#### ACCOUNTING AND FINANCIAL DATA SOURCES

This AM Plan utilizes accounting and financial data. The sources of the data are:

- 2023 Approved Operating Budget;
- 2024-2025 Multi-Year Operating Forecast;
- 2023 Approved Capital Budget;
- 2023 Hamilton Municipal Cemeteries Trust Funds Audit
- 2024-2032 Multi-Year Capital Forecast;
- Building Condition Assessment Reports;
- Asset Management Data Collection Templates;
- Audited Financial Statements and Government Reporting (FIR, TCA etc.);
- Financial Exports from internal financial systems; and,
- Historical cost and estimates of budget allocation based on SME experience.

#### ASSET MANAGEMENT DATA SOURCES

This AM Plan also utilizes asset management data. The sources of the data are:

- Data extracts from various city applications and management software;
- Asset Management Data Collection Templates;
- Tender documents, subdivision agreements and projected growth forecasts as well as internal reports;
- Condition assessments;
- Subject matter Expert Opinion and Anecdotal Information; and,
- Reports from the mandatory inspections, operational and maintenance activities internal reports.

### 10.2 IMPROVEMENT PLAN

It is important that the City recognize areas of the AM Plan and planning processes that require future improvements to ensure both effective asset management and informed decision-making. The tasks listed below are essential to improving the AM Plan and the City's ability to make evidence-based and informed decisions. These improvements span from improved lifecycle activities, improved financial planning and to plans to physically improve the assets.

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<sup>23</sup> ISO 55000 Refers to this as the Asset Management System

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

The Improvement Plan **Table 29** below highlights proposed improvement items that will require further discussion and analysis to determine feasibility, resource requirements and alignment to current work plans. Future iterations of this AM Plan will provide updates on these improvement plans.

**Table 29: Improvement Plan**

#	TASK	RESPONSIBILITY	RESOURCES REQUIRED	TIMELINE
1	<p>Develop a complete asset registry for all cemeteries assets including inventory and condition assessment program.</p> <p>Inventory all assets, include key database fields and follow the newly developed City Data Standard.</p> <p>Develop condition inspection protocol based on a five-point scale, create inspection templates and implement a routine inspection program.</p> <p>Develop associated Standard Operating Procedures. Investigate digital solutions including integration with EAM to streamline the program and analyse data collected.</p>	Cemeteries with CAM assistance for framework and methodology	Possible PM/Coordinator	<p>Investigate needs: Q4-2024</p> <p>EAM implementation 2024</p>
2	<p>Develop documentation of operations and maintenance standards for Cemeteries assets. Align with corporate and departmental SOPs, develop additional SOPs where necessary.</p>	Cemeteries with CAM assistance for framework	PM/Coordinator	Investigate needs: Q4-2024
3	<p>Develop fleet strategy – identify purpose of extended use vehicles, replacement needs, additional fleet needs to fill gaps or meet future demand</p>	Cemeteries	Internal Resources	Q2-2025
4	<p>Document responsibilities for private commemorative assets. Update and document agreements – historical monuments etc.</p>	Cemeteries	Internal Resources	Ongoing

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

#	TASK	RESPONSIBILITY	RESOURCES REQUIRED	TIMELINE
5	Develop guide for assumption of cemeteries and development of new cemeteries. Including assumption procedures and develop necessary SOPs surrounding inventory of assumed and constructed assets and development of lifecycle costs.	Cemeteries	Internal Resources	Investigate needs: Q4-2024
6	Review facilities data including building condition assessments and 10-yr needs. Review estimated service lives and renewal needs.	Cemeteries with Facilities input	Staff time	Q2-2025

### 10.3 MONITORING AND REVIEW PROCEDURES

This AM Plan will be reviewed during the annual budget planning process and revised to show any material changes in service levels, risks, forecast costs and proposed budgets as a result of budget decisions.

The AM Plan will be reviewed and updated on a regular basis to ensure it represents the current service level, asset values, forecast operations, maintenance, renewals, acquisition and asset disposal costs and planned budgets. These forecast costs and proposed budget will be incorporated into the Long-Term Financial Plan once completed.

### 10.4 PERFORMANCE MEASURES

The effectiveness of this AM Plan can be measured in the following ways:

- The degree to which the required forecast costs identified in this AM Plan are incorporated into the long-term financial plan;
- The degree to which the one-to-ten-year detailed works programs, budgets, business plans and corporate structures consider the ‘global’ works program trends provided by the AM Plan;
- The degree to which the existing and projected service levels and service consequences, risks and residual risks are incorporated into the Strategic Planning documents and associated plans; and,
- The Asset Renewal Funding Ratio achieving the Organizational target (this target is often 90 – 110%).

# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

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# HAMILTON MUNICIPAL CEMETERIES 2024 ASSET MANAGEMENT PLAN

## APPENDIX "A" – SURVEY ANALYSIS



Hamilton

Corporate Asset Management

Parks and Cemeteries

Survey Period: November 8th - December 13, 2023

May 2024

70

Respondents

115

Survey Questions

10

Demographic Questions

7376

Survey Responses

658

Demographic Responses

Age	% Pop. by Age	% of Respondents	Respondents
65+	19.5%	20.0%	14
35 to 64	41.7%	52.9%	37
18 to 34	22.1%	22.9%	16

Region	% Pop. by Region	Population	% of Respondents	Respondents
Lower	45.6%	432,375	52.9%	37
Upper	37.3%	353,485	22.9%	16
Rural	17.1%	161,840	7.1%	5

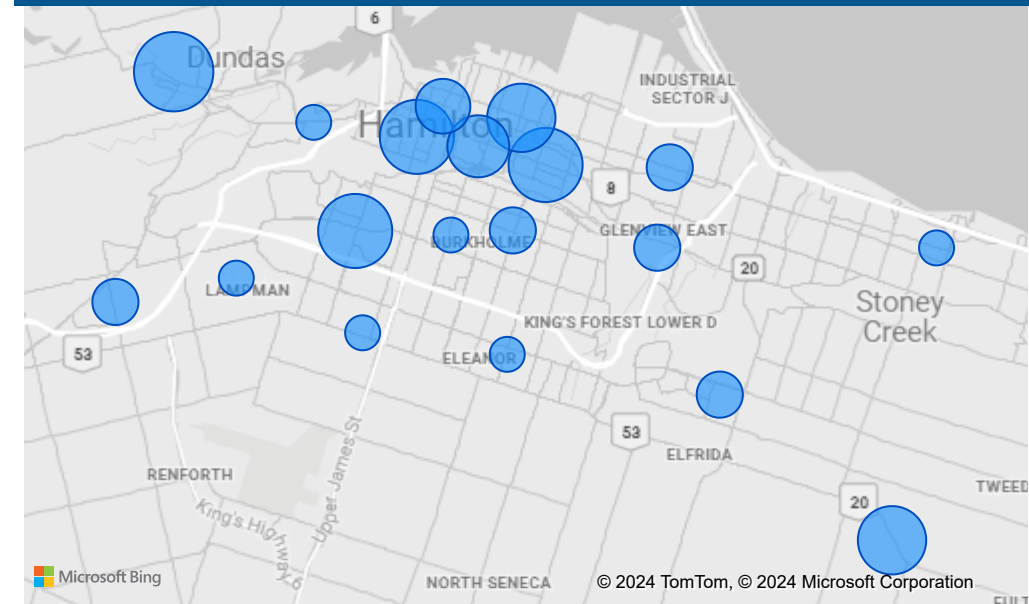
Outdoor Space	% of Respondents	Responses
Private Yard/Greenspace	75.7%	53
Private Balcony/Deck	21.4%	15
Shared Yard/Greenspace	14.3%	10
Other	5.7%	4

Living Situation	% of Respondents	Responses
Live in Hamilton	94.3%	66
Work in Hamilton	57.1%	40
Retired in Hamilton	15.7%	11
Other	10.0%	9

Identity	% of Respondents	Responses
Do not identify with any of the groups	55.7%	39
Marginalized	22.9%	23
Prefer not to answer	20.0%	14

These tables may not sum to 100% because the survey allowed respondents to choose multiple options or opt out of the question

Respondent Density Map



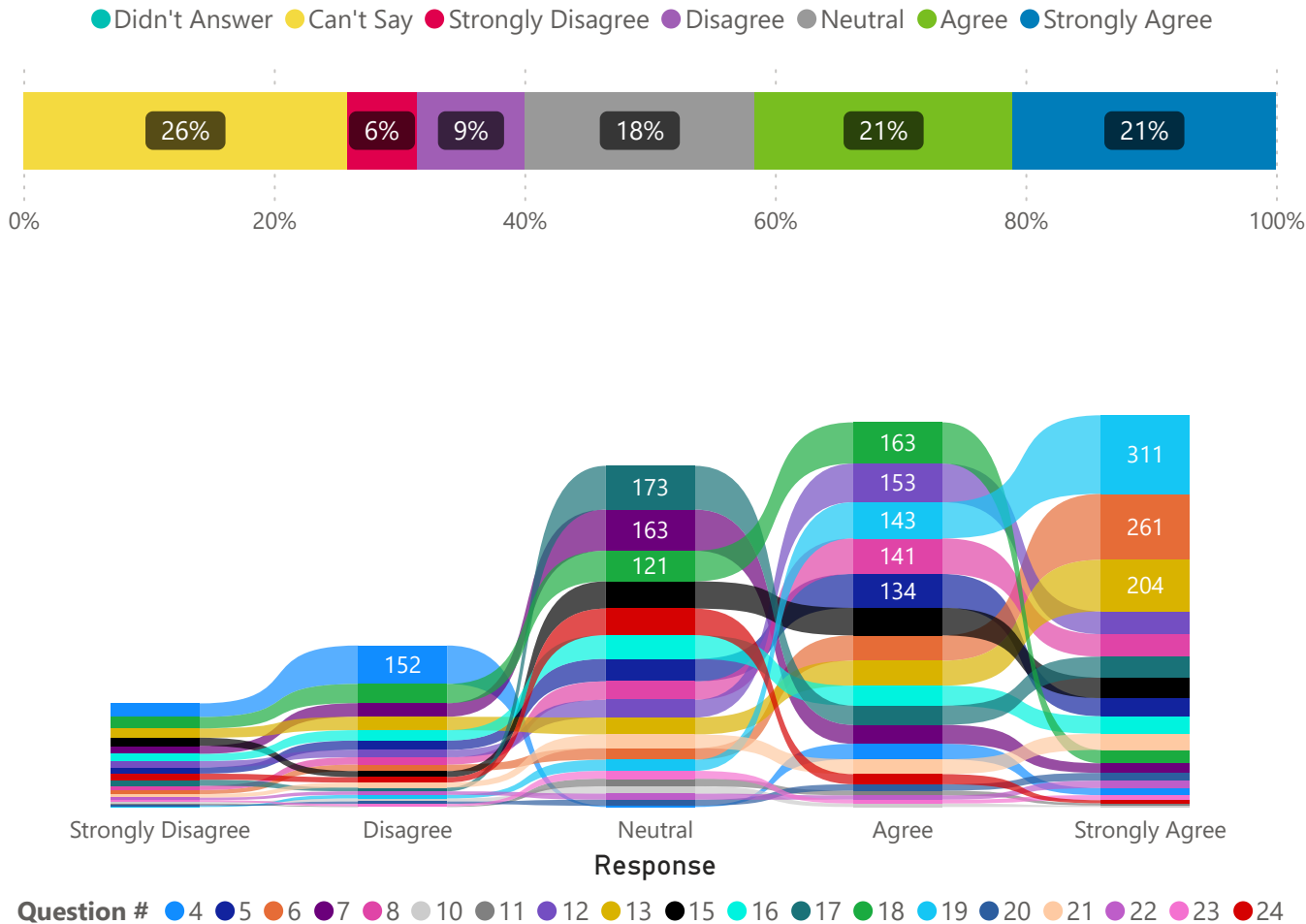
Respondents By Day



Total Responses  
**5471**

Respondents  
**70**

# Summary of Survey Results



Questions	σ	Avg.	Opt Out	Opt Out %
<b>All Questions</b>	<b>1.22</b>	<b>3.58</b>	<b>1908</b>	<b>25.9%</b>
Q19 Hamilton Parks ideal condition	0.82	4.44	12	2.3%
Q6 Importance of Parks services	1.08	4.26	26	5.5%
Q13 Importance of potential Parks services	1.32	3.83	12	2.5%
Q20 Performance of Cemetery services	1.15	3.73	225	70.5%
Q8 Comfort accessing Parks sites and services	1.08	3.73	113	24.5%
Q12 Ability to access services	1.13	3.69	101	21.6%
Q21 Importance of Cemetery services	1.19	3.66	114	35.1%
Q5 Overall performance of Parks services	1.13	3.54	105	22.7%
Q15 Recommend Parks services	1.18	3.52	119	25.2%
Q17 Tax rate increases	1.08	3.48	75	16.8%
Q22 Recommend Cemetery services	1.34	3.44	225	70.5%
Q23 Cemeteries value for money	1.21	3.39	237	74.3%
Q16 Hamilton Parks value for money	1.22	3.39	133	30.0%
Q11 500-metre proximity	1.02	3.36	3	4.3%
Q18 Hamilton parks current condition	1.15	3.22	78	14.6%
Q7 Parks sites and services meeting needs	1.06	3.09	101	21.8%
Q10 800-metre proximity	1.07	3.00	1	1.4%
Q24 Service level cuts	1.01	2.98	123	37.8%
Q4 Sites and services in the last 24 months	1.26	2.52	105	25.9%



Respondents who did not answer or selected 'Can't Say' are included in opt out.



Total  
Responses 5471  
Respondents 70

## Survey Question Summary

Question #	Survey Question	n (Sample Size)	$\sigma$ (Consistency)	Margin of Error (Confidence Level $\pm$ )
4	In the last 24 months, which of these sites or services have you visited, and who did you go with?	43	1.26	15%
5	How do you feel Hamilton Parks have performed overall with the following services?	51	1.13	14%
6	How important to you are the Hamilton Parks sites and services listed below?	64	1.08	12%
7	Do the following Hamilton Park sites and services meet your needs?	52	1.06	14%
8	Do you feel comfortable accessing these Hamilton Parks sites and services?	50	1.08	14%
10	Does the target of having a park within 800-metre walking distance meet your needs?	68	1.07	12%
11	Would the target of having a park within a 500-metre walking distance meet your needs?	66	1.02	12%
12	How satisfied were you with your ability to access these Hamilton Parks sites and services?	52	1.13	14%
13	Please rate the following potential Hamilton Parks Services, based on their importance to you.	66	1.32	12%
15	How likely would you be to recommend the following Hamilton Parks services to others?	51	1.18	14%
16	How would you rate Hamilton Parks for providing good value for money for the following sites and services?	44	1.22	18%
17	If you had to choose, would you prefer to see tax rates increase to improve local services? Or would you prefer to see service-level cuts to minimize tax rate increases?	53	1.08	16%
18	Do you agree with the following statements? Hamilton Parks' outdoor spaces and buildings are	65	1.15	12%
19	Do you agree with the following statements? Hamilton Parks' outdoor spaces and buildings should be	65	0.82	11%
20	How do you feel Hamilton Municipal Cemeteries has performed overall in the following services?	12	1.15	10%
21	How important should the following services be as a responsibility for Hamilton Municipal Cemeteries?	42	1.19	18%
22	How likely would you be to recommend these Hamilton Municipal Cemeteries services to others?	19	1.34	10%
23	How would you rate Hamilton Municipal Cemeteries for providing good value for money in the infrastructure and services provided to your community?	16	1.21	11%
24	Would you prefer to see funding rates increase to improve local services OR would you prefer to see service level cuts to minimize rate increases?	40	1.01	18%

Question

## Sites and services in the last 24 months

4  
*In the last 24 months, which of these sites or services have you visited, and who did you go with?*

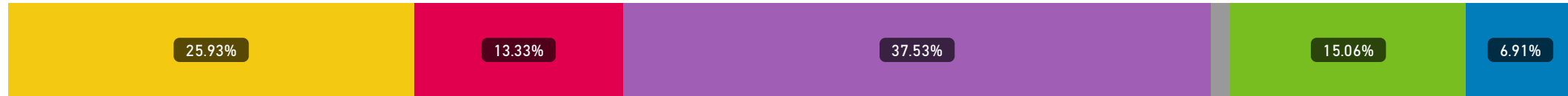
Responses

300

Respondents

68

● Can't Say ● Friends ● Family ● Co-Workers ● Visited On My Own ● Others



Service Area	Friends	Family	Co-Workers	Visited On My Own	Others
<b>Total</b>	<b>54</b>	<b>152</b>	<b>5</b>	<b>61</b>	<b>28</b>
City, Community, and Neighbourhood Parks and Parkettes, Natural Open Spaces	13	35	2	14	4
Other Park Amenities: Signage, Sport Lighting, Bleachers, Shade Structures	6	16	2	8	4
Park Maintenance: Grass-Cutting, Snow Clearing, Park Lighting, Washrooms	7	16	1	13	8
Playground Equipment	2	24		4	3
Recreational Trails and Escarpment Stairs	13	29		11	4
Sport Fields, Diamonds and Courts	10	16		5	3
Spray Pads	3	16		6	2

Service Area	Opt Out	Opt Out %
<b>Total</b>	<b>105</b>	<b>25.9%</b>
City, Community, and Neighbourhood Parks and Parkettes, Natural Open Spaces	1	1.4%
Other Park Amenities: Signage, Sport Lighting, Bleachers, Shade Structures	20	35.7%
Park Maintenance: Grass-Cutting, Snow Clearing, Park Lighting, Washrooms	14	23.7%
Playground Equipment	22	40.0%
Recreational Trails and Escarpment Stairs	4	6.6%
Sport Fields, Diamonds and Courts	18	34.6%
Spray Pads	26	49.1%

Respondents who did not answer or selected 'Can't Say' are included in opt out.

Question

5

# Overall performance of Parks services

How do you feel Hamilton Parks have performed overall with the following services?

Responses

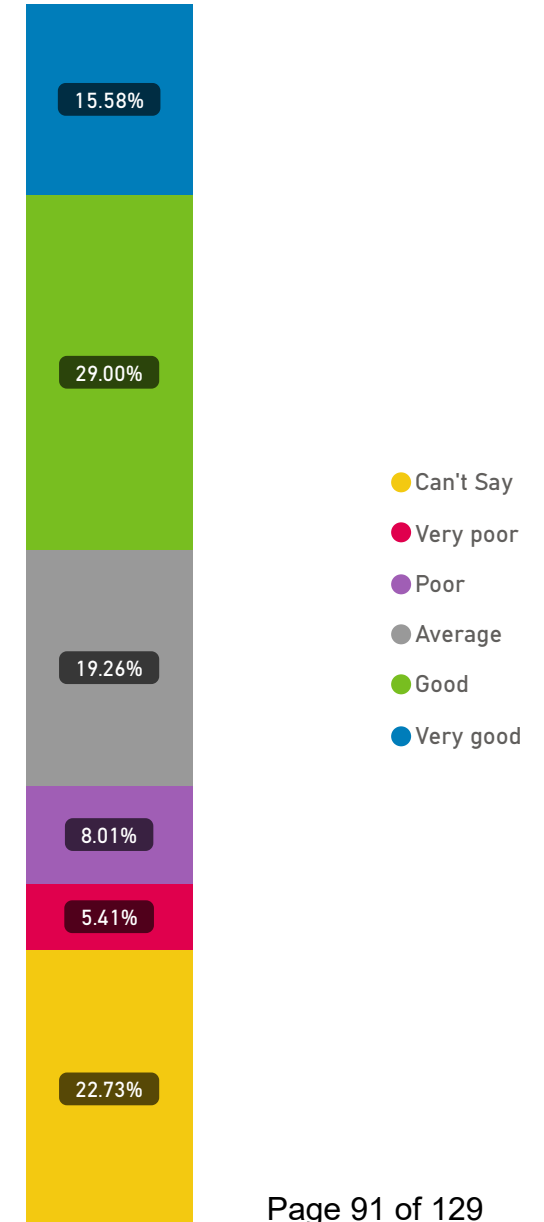
357

Respondents

70

Service Area	Very poor	Poor	Average	Good	Very good
<b>Total</b>	<b>25</b>	<b>37</b>	<b>89</b>	<b>134</b>	<b>72</b>
Spray Pads	2	3	11	12	9
Sport Fields, Diamonds and Courts	1	6	7	17	7
Recreational Trails and Escarpment Stairs	3	6	5	34	15
Playground Equipment	3	3	14	13	10
Park Maintenance: Grass-Cutting, Snow Clearing, Park Lighting, Washrooms	9	6	15	28	9
Other Park Amenities: Signage, Sport Lighting, Bleachers, Shade Structures	4	7	16	6	7
City, Community, and Neighbourhood Parks and Parkettes, Natural Open Spaces	3	6	21	24	15

Service Area	σ	Avg.	Opt Out	Opt Out %
<b>Total</b>	<b>1.13</b>	<b>3.54</b>	<b>105</b>	<b>22.7%</b>
Recreational Trails and Escarpment Stairs	1.05	3.83	5	7.4%
Spray Pads	1.10	3.62	26	41.3%
City, Community, and Neighbourhood Parks and Parkettes, Natural Open Spaces	1.05	3.61	1	1.4%
Sport Fields, Diamonds and Courts	1.04	3.61	27	41.5%
Playground Equipment	1.13	3.56	20	31.7%
Park Maintenance: Grass-Cutting, Snow Clearing, Park Lighting, Washrooms	1.21	3.33	2	2.9%
Other Park Amenities: Signage, Sport Lighting, Bleachers, Shade Structures	1.19	3.13	24	37.5%



Respondents who opted out by not answering or selecting 'Can't Say' are included in opt out.

Question

6

# Importance of Parks services

How important to you are the Hamilton Parks sites and services listed below?

Responses

449

Respondents

69

Service Area	Not at all important	Not that important	Fairly important	Important	Very important
<b>Total</b>	<b>16</b>	<b>26</b>	<b>46</b>	<b>100</b>	<b>261</b>
Spray Pads	6	9	8	13	24
Sport Fields, Diamonds and Courts	3	6	16	15	21
Recreational Trails and Escarpment Stairs		1	3	14	51
Playground Equipment	4	8	4	15	29
Park Maintenance: Grass-Cutting, Snow Clearing, Park Lighting, Washrooms			2	15	52
Other Park Amenities: Signage, Sport Lighting, Bleachers, Shade Structures	2	2	10	16	31
City, Community, and Neighbourhood Parks and Parkettes, Natural Open Spaces	1		3	12	53

Service Area	σ	Avg.	Opt Out	Opt Out %
<b>Total</b>	<b>1.08</b>	<b>4.26</b>	<b>26</b>	<b>5.5%</b>
Park Maintenance: Grass-Cutting, Snow Clearing, Park Lighting, Washrooms	0.51	4.72	1	1.4%
City, Community, and Neighbourhood Parks and Parkettes, Natural Open Spaces	0.69	4.68	1	1.4%
Recreational Trails and Escarpment Stairs	0.63	4.67	1	1.4%
Other Park Amenities: Signage, Sport Lighting, Bleachers, Shade Structures	1.03	4.18	6	9.0%
Playground Equipment	1.30	3.95	6	9.1%
Sport Fields, Diamonds and Courts	1.17	3.74	6	9.0%
Spray Pads	1.39	3.67	5	7.7%



- Can't Say
- Not at all important
- Not that important
- Fairly important
- Important
- Very important

Respondents who opted out by not answering or selecting 'Can't Say' are included in opt out.



# Differential of Importance and Performance

*Service areas where importance exceeds performance by 20 points is indicative of a mismatch between expectations and service levels, equal to one point on the Likert scale used.*

Responses

806

Respondents

57

Service Area	Performance (index score)	Importance (index score)	Net Differential	Opt Out %
Park Maintenance: Grass-Cutting, Snow Clearing, Park Lighting, Washrooms	67	94	-28	2%
City, Community, and Neighbourhood Parks and Parkettes, Natural Open Spaces	72	94	-21	1%
Other Park Amenities: Signage, Sport Lighting, Bleachers, Shade Structures	63	84	-21	23%
Recreational Trails and Escarpment Stairs	77	93	-17	4%
Playground Equipment	71	79	-8	20%
Sport Fields, Diamonds and Courts	72	75	-3	25%
Spray Pads	72	73	-1	24%

Performance

*Q5 How do you feel Hamilton Parks have performed overall with the following services?*

Importance

*Q6 How important to you are the Hamilton Parks sites and services listed below?*

The Net Differential is calculated here by taking the average Likert score for each service area and multiplied by 20, the difference between performance and importance is then calculated as our final product. Negative differential indicates a higher perceived level of importance vs performance and positive is the opposite.



# Parks sites and services meeting needs

Do the following Hamilton Park sites and services meet your needs?

Responses

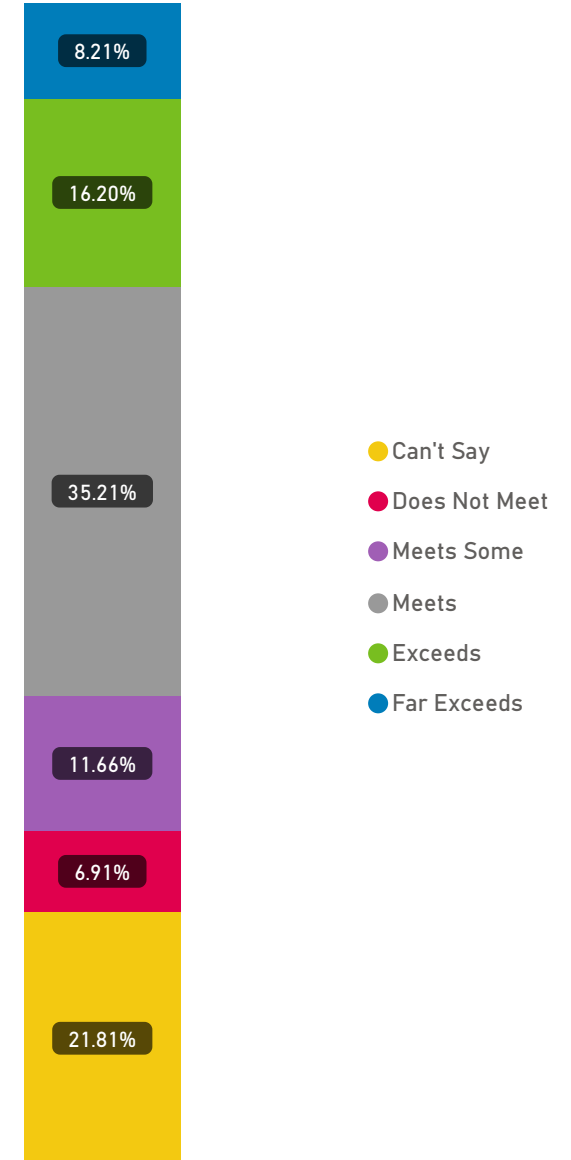
362

Respondents

68

Service Area	Does Not Meet	Meets Some	Meets	Exceeds	Far Exceeds
<b>Total</b>	<b>32</b>	<b>54</b>	<b>163</b>	<b>75</b>	<b>38</b>
Spray Pads	3	3	18	8	4
Sport Fields, Diamonds and Courts	3	4	20	9	4
Recreational Trails and Escarpment Stairs	3	7	29	17	7
Playground Equipment	4	5	13	11	5
Park Maintenance: Grass-Cutting, Snow Clearing, Park Lighting, Washrooms	9	15	27	9	7
Other Park Amenities: Signage, Sport Lighting, Bleachers, Shade Structures	3	9	25	8	5
City, Community, and Neighbourhood Parks and Parkettes, Natural Open Spaces	7	11	31	13	6

Service Area	σ	Avg.	Opt Out	Opt Out %
<b>Total</b>	<b>1.06</b>	<b>3.09</b>	<b>101</b>	<b>21.8%</b>
Recreational Trails and Escarpment Stairs	0.97	3.29	5	7.4%
Playground Equipment	1.15	3.21	26	40.6%
Spray Pads	1.02	3.19	28	43.8%
Sport Fields, Diamonds and Courts	1.00	3.18	24	37.5%
Other Park Amenities: Signage, Sport Lighting, Bleachers, Shade Structures	0.99	3.06	15	23.1%
City, Community, and Neighbourhood Parks and Parkettes, Natural Open Spaces	1.06	3.00	1	1.4%
Park Maintenance: Grass-Cutting, Snow Clearing, Park Lighting, Washrooms	1.14	2.85	2	2.9%



Respondents who did not answer or selected 'Can't Say' are included in opt out.

Question

# Comfort accessing Parks sites and services

8

*Do you feel comfortable accessing these Hamilton Parks sites and services?*

Responses

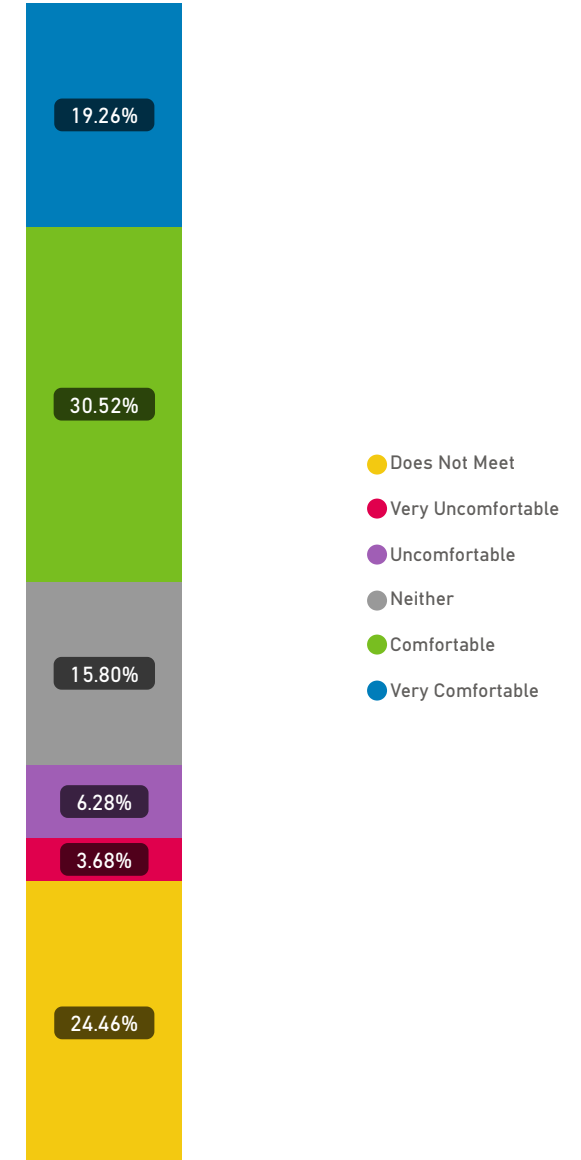
349

Respondents

68

Service Area	Does Not Meet	Very Uncomfortable	Uncomfortable	Neither	Comfortable	Very Comfortable
<b>Total</b>	<b>113</b>	<b>17</b>	<b>29</b>	<b>73</b>	<b>141</b>	<b>89</b>
City, Community, and Neighbourhood Parks and Parkettes, Natural Open Spaces	2	6	4	12	24	20
Other Park Amenities: Signage, Sport Lighting, Bleachers, Shade Structures	18	2	6	9	18	12
Park Maintenance: Grass-Cutting, Snow Clearing, Park Lighting, Washrooms	7	4	10	16	20	12
Playground Equipment	25		2	6	19	11
Recreational Trails and Escarpment Stairs	5	5	5	14	26	13
Sport Fields, Diamonds and Courts	25		1	9	19	11
Spray Pads	31		1	7	15	10

Service Area	σ	Avg.	Opt Out	Opt Out %
<b>Total</b>	<b>1.08</b>	<b>3.73</b>	<b>113</b>	<b>24.5%</b>
Spray Pads	0.80	4.03	31	48.4%
Playground Equipment	0.81	4.03	25	39.7%
Sport Fields, Diamonds and Courts	0.77	4.00	25	38.5%
City, Community, and Neighbourhood Parks and Parkettes, Natural Open Spaces	1.21	3.73	2	2.9%
Other Park Amenities: Signage, Sport Lighting, Bleachers, Shade Structures	1.11	3.68	18	27.7%
Recreational Trails and Escarpment Stairs	1.14	3.59	5	7.4%
Park Maintenance: Grass-Cutting, Snow Clearing, Park Lighting, Washrooms	1.16	3.42	7	10.1%



Respondents who did not answer or selected 'Can't Say' are included in opt out.





Question

# 800-metre proximity

10

Does the target of having a park within 800-metre walking distance meet your needs?

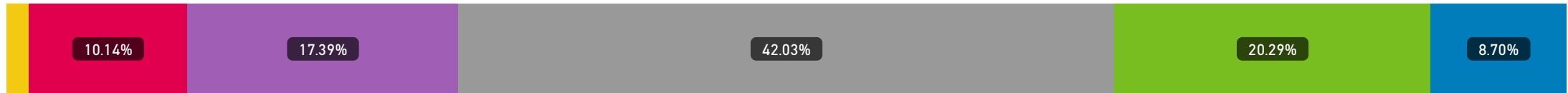
Responses

68

Respondents

68

● Can't Say ● Does Not Meet ● Meets Some ● Meets ● Exceeds ● Far Exceeds



ServiceArea	Does Not Meet	Meets Some	Meets	Exceeds	Far Exceeds
Currently, the City of Hamilton commits to providing a park within an 800-metre walking distance to all residents. 800-metres is roughly a 5 to 10-minute walk, 2-minute cycle or 1-minute drive. Does the target of having a park within 800-metre wal	7	12	29	14	6

ServiceArea	$\sigma$	Avg.	Opt Out	Opt Out %
Currently, the City of Hamilton commits to providing a park within an 800-metre walking distance to all residents. 800-metres is roughly a 5 to 10-minute walk, 2-minute cycle or 1-minute drive. Does the target of having a park within 800-metre wal	1.07	3.00	1	1.4%



Respondents who did not answer or selected 'Can't Say' are included in opt out.

Question

# 500-metre proximity

11

Would the target of having a park within a 500-metre walking distance meet your needs?

Responses

66

Respondents

66

● Did not answer ● Does Not Meet ● Meets Some ● Meets ● Exceeds ● Far Exceeds



ServiceArea	Does Not Meet	Meets Some	Meets	Exceeds	Far Exceeds
Some municipalities are shifting to a smaller radius for park provision. Would the target of having a park within a 500-metre walking distance meet your needs? 500-metres is roughly a 6-minute walk, 1-minute cycle or 1-minute drive.	5	3	30	19	9

ServiceArea	$\sigma$	Avg.	Opt Out	Opt Out %
Some municipalities are shifting to a smaller radius for park provision. Would the target of having a park within a 500-metre walking distance meet your needs? 500-metres is roughly a 6-minute walk, 1-minute cycle or 1-minute drive.	1.02	3.36	3	4.3%



Respondents who did not answer or selected 'Can't Say' are included in opt out.

# Ability to access services

12

How satisfied were you with your ability to access these Hamilton Parks sites and services?

Responses

367

Respondents

68

Service Area	Very Dissatisfied	Dissatisfied	Neither	Satisfied	Very Satisfied
<b>Total</b>	<b>25</b>	<b>29</b>	<b>70</b>	<b>153</b>	<b>90</b>
Spray Pads	2	2	10	13	11
Sport Fields, Diamonds and Courts	2	6	9	18	10
Recreational Trails and Escarpment Stairs	3	6	11	29	15
Playground Equipment	3	1	9	16	11
Park Maintenance: Grass-Cutting, Snow Clearing, Park Lighting, Washrooms	6	6	16	24	11
Other Park Amenities: Signage, Sport Lighting, Bleachers, Shade Structures	4	7	9	21	9
City, Community, and Neighbourhood Parks and Parkettes, Natural Open Spaces	5	1	6	32	23

Service Area	σ	Avg.	Opt Out	Opt Out %
<b>Total</b>	<b>1.13</b>	<b>3.69</b>	<b>101</b>	<b>21.6%</b>
City, Community, and Neighbourhood Parks and Parkettes, Natural Open Spaces	1.08	4.00	1	1.5%
Playground Equipment	1.11	3.78	26	39.4%
Spray Pads	1.09	3.76	28	42.4%
Recreational Trails and Escarpment Stairs	1.06	3.73	4	5.9%
Sport Fields, Diamonds and Courts	1.10	3.62	21	31.8%
Other Park Amenities: Signage, Sport Lighting, Bleachers, Shade Structures	1.17	3.48	16	24.2%
Park Maintenance: Grass-Cutting, Snow Clearing, Park Lighting, Washrooms	1.17	3.44	5	7.4%



- Can't Say
- Very Dissatisfied
- Dissatisfied
- Neither
- Satisfied
- Very Satisfied

Respondents who did not answer or selected 'Can't Say' are included in opt out.



Question

# Importance of potential Parks services

13

Please rate the following potential Hamilton Parks Services, based on their importance to you.

Responses

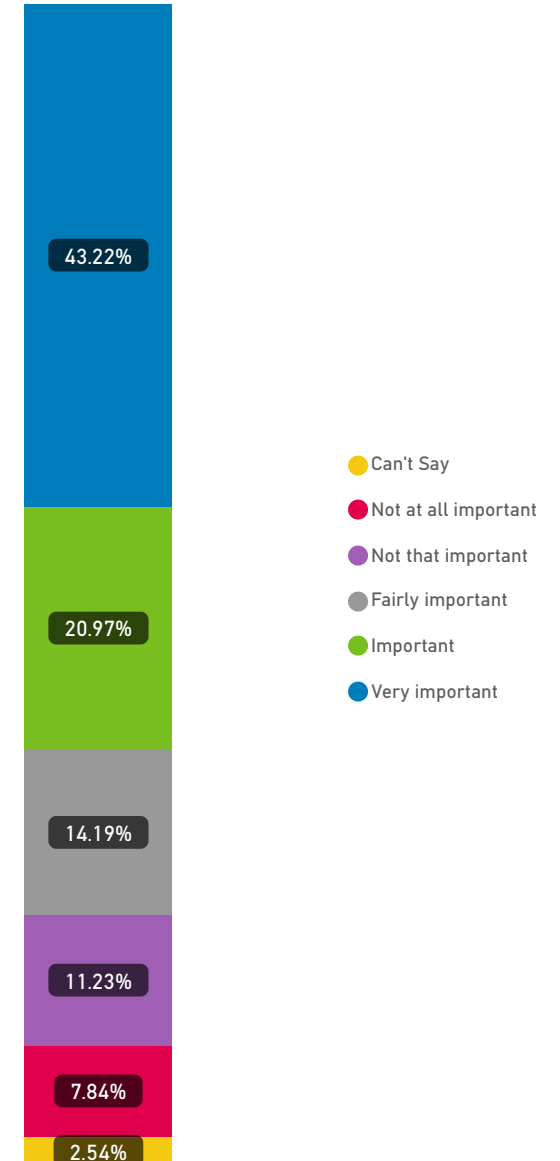
460

Respondents

68

Service Area	Not at all important	Not that important	Fairly important	Important	Very important
<b>Total</b>	<b>37</b>	<b>53</b>	<b>67</b>	<b>99</b>	<b>204</b>
Additional Parking	15	18	13	11	7
Additional Sport Lighting and Extended Playing Hours.1	5	14	14	10	17
All-Season Use: Winter Maintenance, Washrooms Open During the Winter	3	6	7	14	37
Barrier-Free Amenities: Ramps, Accessible Trails and Beach Routes	6	5	14	20	21
Improved Park Connectivity: Extended Pathways and Cycling Networks	4	4	2	14	43
Increased Pathway Lighting for Better Visibility at Night	2	2	11	14	39
Reducing Impact on Climate Change: Planting Native Plant Species or Pollinator Gardens, Solar-Powered Lighting, Water-Smart Facilities	2	4	6	16	40

Service Area	σ	Avg.	Opt Out	Opt Out %
<b>Total</b>	<b>1.32</b>	<b>3.83</b>	<b>12</b>	<b>2.5%</b>
Improved Park Connectivity: Extended Pathways and Cycling Networks	1.16	4.31		
Reducing Impact on Climate Change: Planting Native Plant Species or Pollinator Gardens, Solar-Powered Lighting, Water-Smart Facilities	1.04	4.29		
Increased Pathway Lighting for Better Visibility at Night	1.02	4.26		
All-Season Use: Winter Maintenance, Washrooms Open During the Winter	1.18	4.13		
Barrier-Free Amenities: Ramps, Accessible Trails and Beach Routes	1.25	3.68	1	1.5%
Additional Sport Lighting and Extended Playing Hours.1	1.32	3.33	7	10.4%
Additional Parking	1.30	2.64	4	5.9%



Respondents who did not answer or selected 'Can't Say' are included in opt out.





# Recommend Parks services

15

*How likely would you be to recommend the following Hamilton Parks services to others?*

Responses

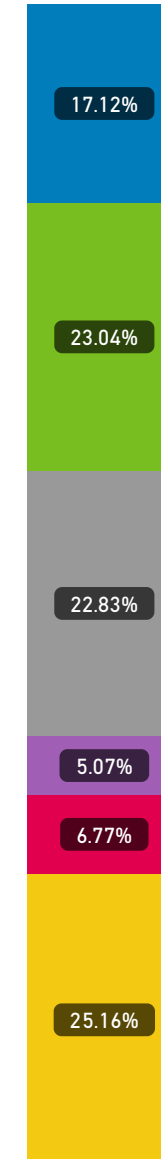
354

Respondents

66

Service Area	Definitely not	Probably not	Possibly	Probably	Definitely
<b>Total</b>	<b>32</b>	<b>24</b>	<b>108</b>	<b>109</b>	<b>81</b>
City, Community, and Neighbourhood Parks and Parkettes, Natural Open Spaces	6	2	20	20	18
Other Park Amenities: Signage, Sport Lighting, Bleachers, Shade Structures	6	6	16	12	7
Park Maintenance: Grass-Cutting, Snow Clearing, Park Lighting, Washrooms	10	3	20	15	9
Playground Equipment	3	6	10	15	9
Recreational Trails and Escarpment Stairs	2	1	14	23	21
Sport Fields, Diamonds and Courts	3	2	15	12	8
Spray Pads	2	4	13	12	9

Service Area	σ	Avg.	Opt Out	Opt Out %
<b>Total</b>	<b>1.18</b>	<b>3.52</b>	<b>119</b>	<b>25.2%</b>
Recreational Trails and Escarpment Stairs	0.97	3.98	7	10.3%
City, Community, and Neighbourhood Parks and Parkettes, Natural Open Spaces	1.18	3.64	2	2.9%
Spray Pads	1.09	3.55	27	40.3%
Sport Fields, Diamonds and Courts	1.10	3.50	27	40.3%
Playground Equipment	1.17	3.49	24	35.8%
Park Maintenance: Grass-Cutting, Snow Clearing, Park Lighting, Washrooms	1.27	3.18	11	16.2%
Other Park Amenities: Signage, Sport Lighting, Bleachers, Shade Structures	1.21	3.17	21	30.9%



- Can't Say
- Definitely not
- Probably not
- Possibly
- Probably
- Definitely

Respondents who did not answer or selected 'Can't Say' are included in opt out.

15

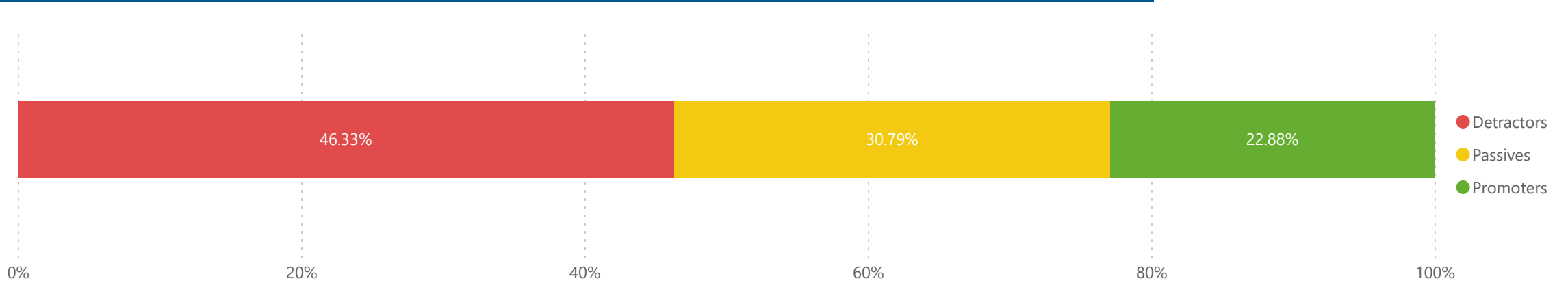
How likely would you be to recommend the following Hamilton Parks services to others?

Responses

354

Respondents

66



Service Area	σ	NPS	Detractors	Passives	Promoter
<b>All Service Areas</b>	<b>1.18</b>	<b>-23.45</b>	<b>164</b>	<b>109</b>	<b>81</b>
Recreational Trails and Escarpment Stairs	0.97	6.56	17	23	21
City, Community, and Neighbourhood Parks and Parkettes, Natural Open Spaces	1.18	-15.15	28	20	18
Playground Equipment	1.17	-23.26	19	15	9
Spray Pads	1.09	-25.00	19	12	9
Sport Fields, Diamonds and Courts	1.10	-30.00	20	12	8
Park Maintenance: Grass-Cutting, Snow Clearing, Park Lighting, Washrooms	1.27	-42.11	33	15	9
Other Park Amenities: Signage, Sport Lighting, Bleachers, Shade Structures	1.21	-44.68	28	12	7

Typically the Net Promoter Score is used to measure customer loyalty.

Likert choices less than or equal to 3 are considered 'Detractors', 4s are 'Passive' and 5s are considered 'Promoters'. Respondents who opted out by not answering or selecting 'Can't Say' were removed from the sample. Net Promoter score is calculated by subtracting (% Detractors) from (% Promoters).



# Hamilton Parks value for money

16

How would you rate Hamilton Parks for providing good value for money for the following sites and services?

Responses

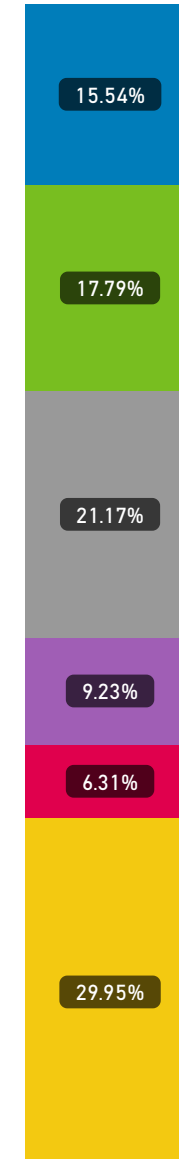
311

Respondents

57

Service Area	Very poor	Poor	Average	Good	Very good
<b>Total</b>	<b>28</b>	<b>41</b>	<b>94</b>	<b>79</b>	<b>69</b>
City, Community, and Neighbourhood Parks and Parkettes, Natural Open Spaces	4	6	16	17	14
Other Park Amenities: Signage, Sport Lighting, Bleachers, Shade Structures	5	4	16	12	6
Park Maintenance: Grass-Cutting, Snow Clearing, Park Lighting, Washrooms	6	8	16	10	9
Playground Equipment	5	5	9	9	10
Recreational Trails and Escarpment Stairs	3	6	12	16	15
Sport Fields, Diamonds and Courts	3	6	13	8	7
Spray Pads	2	6	12	7	8

Service Area	σ	Avg.	Opt Out	Opt Out %
<b>Total</b>	<b>1.22</b>	<b>3.39</b>	<b>133</b>	<b>30.0%</b>
Recreational Trails and Escarpment Stairs	1.17	3.65	12	18.8%
City, Community, and Neighbourhood Parks and Parkettes, Natural Open Spaces	1.17	3.54	7	10.9%
Spray Pads	1.17	3.37	28	44.4%
Playground Equipment	1.35	3.37	25	39.7%
Sport Fields, Diamonds and Courts	1.18	3.27	26	41.3%
Other Park Amenities: Signage, Sport Lighting, Bleachers, Shade Structures	1.16	3.23	20	31.7%
Park Maintenance: Grass-Cutting, Snow Clearing, Park Lighting, Washrooms	1.25	3.16	15	23.4%



- Can't Say
- Very poor
- Poor
- Average
- Good
- Very good

Respondents who did not answer or selected 'Can't Say' are included in opt out.



Question

# Tax rate increases

17

*If you had to choose, would you prefer to see tax rates increase to improve local services? Or would you prefer to see service-level cuts to minimize tax rate increases?*

Responses

371

Respondents

60



Service Area	Definitely Prefer Cuts to Service	Probably Prefer Cuts to Service	Minimize Rate Increase; Maintain Service	Probably Prefer Rate Increase; Improve Services	Definitely Prefer Rate Increase; Increase Services
<b>Total</b>	<b>24</b>	<b>15</b>	<b>173</b>	<b>76</b>	<b>83</b>
City, Community, and Neighbourhood Parks and Parkettes, Natural Open Spaces	2	2	22	14	20
Other Park Amenities: Signage, Sport Lighting, Bleachers, Shade Structures	4	2	33	5	11
Park Maintenance: Grass-Cutting, Snow Clearing, Park Lighting, Washrooms	2	1	28	15	11
Playground Equipment	4	2	19	10	10
Recreational Trails and Escarpment Stairs	2		24	17	17
Sport Fields, Diamonds and Courts	4	4	28	6	7
Spray Pads	6	4	19	9	7

Service Area	σ	Avg.	Opt Out	Opt Out %
<b>Total</b>	<b>1.08</b>	<b>3.48</b>	<b>75</b>	<b>16.8%</b>
City, Community, and Neighbourhood Parks and Parkettes, Natural Open Spaces	1.05	3.80	5	7.7%
Recreational Trails and Escarpment Stairs	0.97	3.78	5	7.7%
Park Maintenance: Grass-Cutting, Snow Clearing, Park Lighting, Washrooms	0.94	3.56	7	10.9%
Playground Equipment	1.15	3.44	18	28.6%
Other Park Amenities: Signage, Sport Lighting, Bleachers, Shade Structures	1.06	3.31	9	14.1%
Sport Fields, Diamonds and Courts	1.04	3.16	13	21.0%
Spray Pads	1.19	3.16	18	28.6%

Respondents who did not answer or selected 'Can't Say' are included in opt out.



# Parks Differential of Rates vs. Value for Money

*Service areas where importance exceeds performance by 20 points is indicative of a mismatch between expectations and service levels, equal to one point on the Likert scale used.*

Responses

682

Respondents

55

Service Area	Value for Money (index score)	Rates (index score)	Net Differential	Opt Out %
Park Maintenance: Grass-Cutting, Snow Clearing, Park Lighting, Washrooms	63	71	-8	17%
City, Community, and Neighbourhood Parks and Parkettes, Natural Open Spaces	71	76	-5	9%
Recreational Trails and Escarpment Stairs	73	76	-3	13%
Other Park Amenities: Signage, Sport Lighting, Bleachers, Shade Structures	65	66	-2	23%
Playground Equipment	67	69	-2	34%
Sport Fields, Diamonds and Courts	65	63	2	31%
Spray Pads	67	63	4	37%

Value for Money

*Q16 How would you rate Hamilton Parks for providing good value for money for the following sites and services?*

Rates

*Q17 If you had to choose, would you prefer to see tax rates increase to improve local services? Or would you prefer to see service-level cuts to minimize tax rate increases?*

The Net Differential is calculated by getting the average score for Rates and Value for Money. Then, the average score for Rates and Value for Money is multiplied by 20. Finally, the Rates score is subtracted from the Value for Money score. A negative differential indicates higher perceived Rates than Value for Money. A positive differential indicates a higher perceived Value for Money than Rates.



Question

# Hamilton parks current condition

18

*Do you agree with the following statements? Hamilton Parks' outdoor spaces and buildings are*

Responses

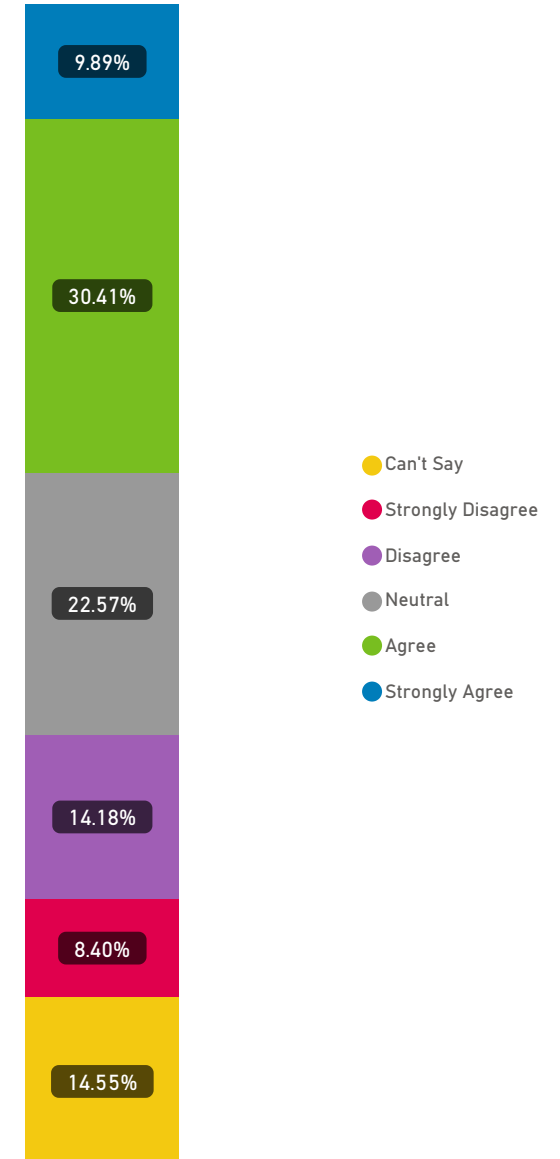
458

Respondents

67

Service Area	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<b>Total</b>	<b>45</b>	<b>76</b>	<b>121</b>	<b>163</b>	<b>53</b>
Accessible by public transportation	7	13	9	22	5
Accessible, meeting provincial minimum standards per AODA, 2005	5	8	10	11	5
Clean and in good repair	8	12	16	26	4
Comfortable with appropriate levels of lighting and noise	7	13	16	22	7
Easy to locate, with clearly marked public entrances	3	5	15	31	12
Energy efficient, helping the city meet energy targets and reduce utility usage	4	5	16	10	3
Inviting, appealing and attractive	4	7	23	22	10
Safe, equitable and inclusive spaces for all	7	13	16	19	7

Service Area	σ	Avg.	Opt Out	Opt Out %
<b>Total</b>	<b>1.15</b>	<b>3.22</b>	<b>78</b>	<b>14.6%</b>
Easy to locate, with clearly marked public entrances	1.01	3.67	1	1.5%
Inviting, appealing and attractive	1.06	3.41	1	1.5%
Comfortable with appropriate levels of lighting and noise	1.18	3.14	2	3.0%
Safe, equitable and inclusive spaces for all	1.19	3.10	5	7.5%
Clean and in good repair	1.14	3.09	1	1.5%
Accessible by public transportation	1.21	3.09	11	16.4%
Energy efficient, helping the city meet energy targets and reduce utility usage	1.06	3.08	29	43.3%
Accessible, meeting provincial minimum standards per AODA, 2005	1.23	3.08	28	41.8%



Respondents who did not answer or selected 'Can't Say' are included in opt out.



# Hamilton Parks ideal condition

19

Do you agree with the following statements? Hamilton Parks' outdoor spaces and buildings should be

Responses

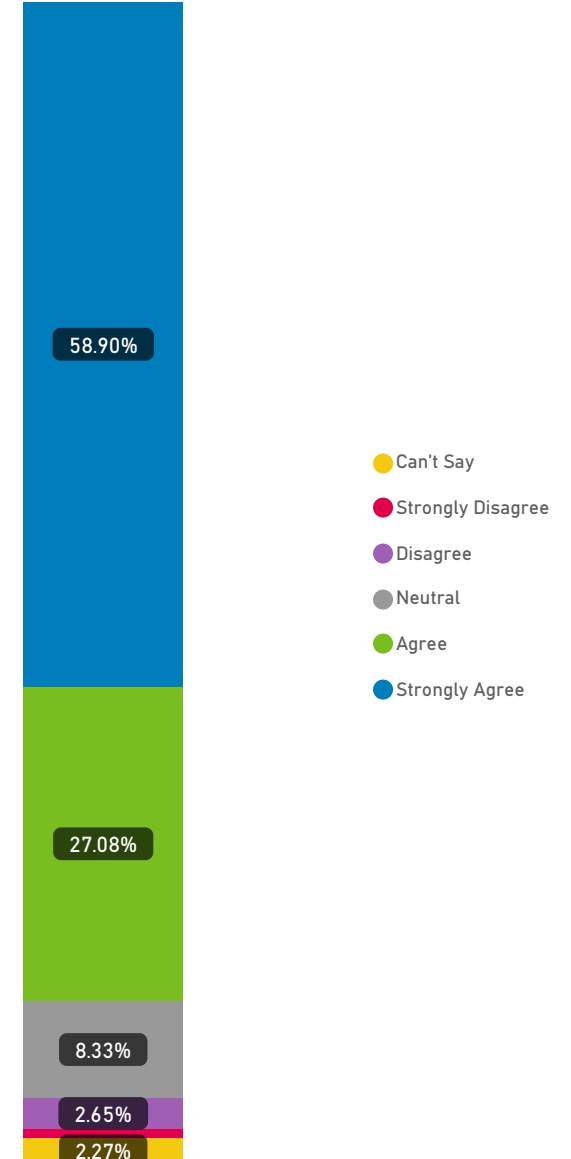
516

Respondents

66

Service Area	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<b>Total</b>	<b>4</b>	<b>14</b>	<b>44</b>	<b>143</b>	<b>311</b>
Accessible by public transportation	2	2	7	17	37
Accessible, meeting provincial minimum standards per AODA, 2005			7	14	38
Clean and in good repair		1	2	13	50
Comfortable with appropriate levels of lighting and noise		3	4	22	37
Easy to locate, with clearly marked public entrances		2	9	20	35
Energy efficient, helping the city meet energy targets and reduce utility usage	1	4	8	16	35
Inviting, appealing and attractive			2	27	36
Safe, equitable and inclusive spaces for all	1	2	5	14	43

Service Area	σ	Avg.	Opt Out	Opt Out %
<b>Total</b>	<b>0.82</b>	<b>4.44</b>	<b>12</b>	<b>2.3%</b>
Clean and in good repair	0.60	4.70		
Accessible, meeting provincial minimum standards per AODA, 2005	0.70	4.53	7	10.6%
Inviting, appealing and attractive	0.56	4.52	1	1.5%
Safe, equitable and inclusive spaces for all	0.88	4.48	1	1.5%
Comfortable with appropriate levels of lighting and noise	0.80	4.41		
Easy to locate, with clearly marked public entrances	0.82	4.33		
Accessible by public transportation	0.99	4.31	1	1.5%
Energy efficient, helping the city meet energy targets and reduce utility usage	1.00	4.25	2	3.0%



Respondents who did not answer or selected 'Can't Say' are included in opt out.

Question

# Performance of Cemetery services

*How do you feel Hamilton Municipal Cemeteries has performed overall in the following services?*

Responses

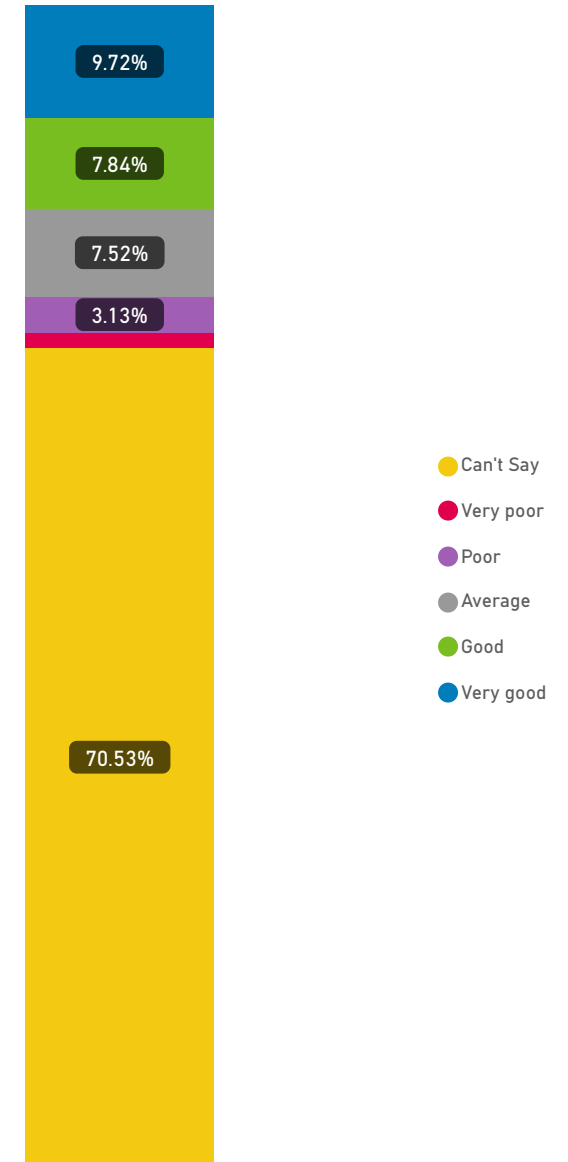
94

Respondents

35

Service Area	Very poor	Poor	Average	Good	Very good
<b>Total</b>	<b>4</b>	<b>10</b>	<b>24</b>	<b>25</b>	<b>31</b>
End of life planning services	1	2	5	2	4
Graveside services, burials and interment		1	5	3	5
Historical family searches and walking tours	1	2	3	4	10
Maintenance and management of active and inactive cemeteries	1	2	8	13	9
Sales of interment rights, cemetery services and supporting products	1	3	3	3	3

Service Area	σ	Avg.	Opt Out	Opt Out %
<b>Total</b>	<b>1.15</b>	<b>3.73</b>	<b>225</b>	<b>70.5%</b>
Historical family searches and walking tours	1.22	4.00	43	68.3%
Graveside services, burials and interment	0.99	3.86	50	78.1%
Maintenance and management of active and inactive cemeteries	1.00	3.82	31	48.4%
End of life planning services	1.24	3.43	50	78.1%
Sales of interment rights, cemetery services and supporting products	1.26	3.31	51	79.7%



Respondents who did not answer or selected 'Can't Say' are included in opt out.



Question

# Importance of Cemetery services

21

*How important should the following services be as a responsibility for Hamilton Municipal Cemeteries?*

Responses

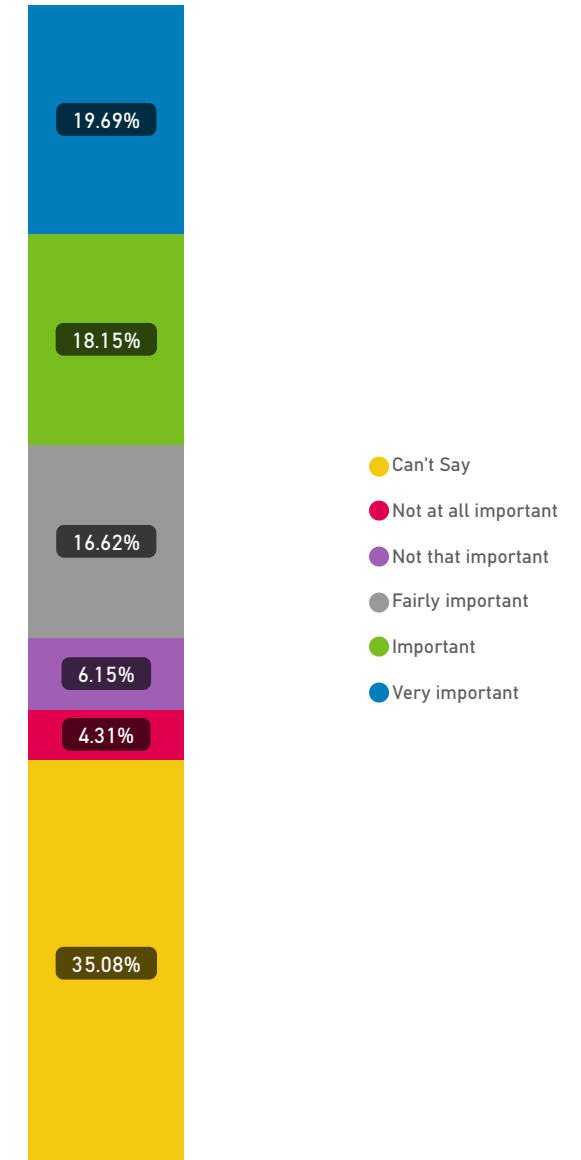
211

Respondents

48

Service Area	Not at all important	Not that important	Fairly important	Important	Very important
<b>Total</b>	<b>14</b>	<b>20</b>	<b>54</b>	<b>59</b>	<b>64</b>
End of life planning services	3	4	11	12	10
Graveside services, burials and interment	2	4	7	14	13
Historical family searches and walking tours	3	8	13	10	10
Maintenance and management of active and inactive cemeteries	2		10	15	20
Sales of interment rights, cemetery services and supporting products	4	4	13	8	11

Service Area	σ	Avg.	Opt Out	Opt Out %
<b>Total</b>	<b>1.19</b>	<b>3.66</b>	<b>114</b>	<b>35.1%</b>
Maintenance and management of active and inactive cemeteries	1.01	4.09	18	27.7%
Graveside services, burials and interment	1.14	3.80	25	38.5%
End of life planning services	1.18	3.55	25	38.5%
Sales of interment rights, cemetery services and supporting products	1.26	3.45	25	38.5%
Historical family searches and walking tours	1.21	3.36	21	32.3%



Respondents who did not answer or selected 'Can't Say' are included in opt out.



## Differential of Importance and Performance

*Service areas where importance exceeds performance by 20 points is indicative of a mismatch between expectations and service levels, equal to one point on the Likert scale used.*

Responses

305

Respondents

52

Service Area	Performance (index score)	Importance (index score)	Net Differential	Opt Out %
Maintenance and management of active and inactive cemeteries	76	82	-5	38%
Sales of interment rights, cemetery services and supporting products	66	69	-3	59%
End of life planning services	69	71	-2	58%
Graveside services, burials and interment	77	76	1	58%
Historical family searches and walking tours	80	67	13	50%

Performance

*Q20 How do you feel Hamilton Municipal Cemeteries has performed overall in the following services?*

Importance

*Q21 How important should the following services be as a responsibility for Hamilton Municipal Cemeteries?*

The Net Differential is calculated by getting the average score for Performance and Importance. Then, the average score for Performance and Importance is multiplied by 20. Finally, the Importance score is subtracted from the Performance score. A negative differential indicates a higher perceived importance than performance. A positive differential indicates a higher perceived performance than importance.

Question

## Recommend Cemetery services

*How likely would you be to recommend these Hamilton Municipal Cemeteries services to others?*

Responses

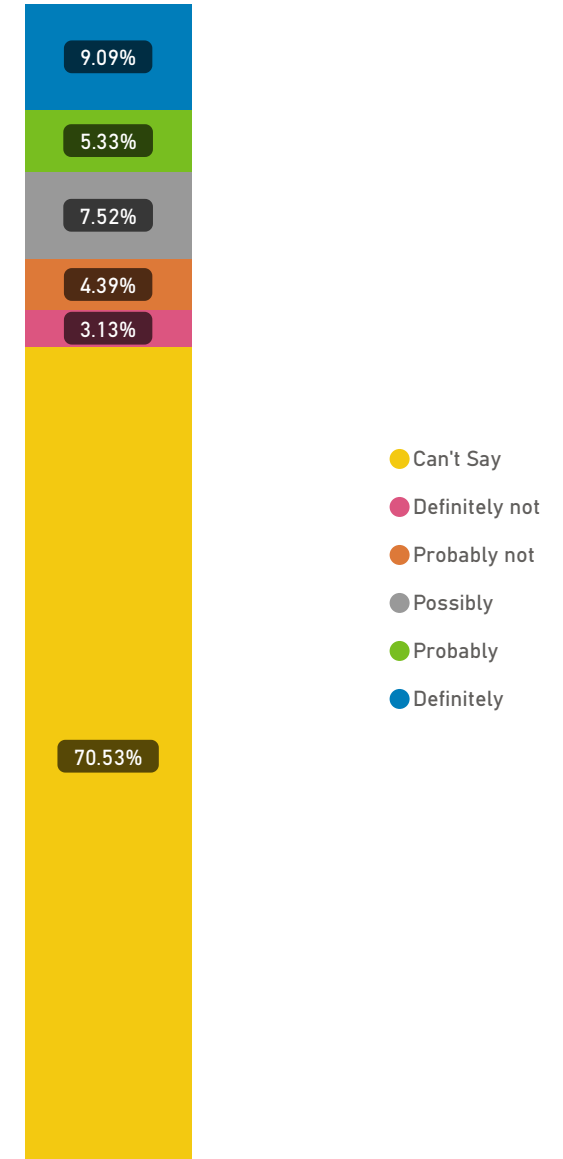
94

Respondents

26

Service Area	Definitely not	Probably not	Possibly	Probably	Definitely
<b>Total</b>	<b>10</b>	<b>14</b>	<b>24</b>	<b>17</b>	<b>29</b>
Sales of interment rights, cemetery services and supporting products	2	3	7	2	4
Maintenance and management of active and inactive cemeteries	3	4	3	4	10
Historical family searches and walking tours	2	3	4	5	7
Graveside services, burials and interment	1	2	4	4	4
End of life planning services	2	2	6	2	4

Service Area	σ	Avg.	Opt Out	Opt Out %
<b>Total</b>	<b>1.34</b>	<b>3.44</b>	<b>225</b>	<b>70.5%</b>
Maintenance and management of active and inactive cemeteries	1.47	3.58	40	62.5%
Historical family searches and walking tours	1.33	3.57	43	67.2%
Graveside services, burials and interment	1.20	3.53	48	76.2%
End of life planning services	1.30	3.25	48	75.0%
Sales of interment rights, cemetery services and supporting products	1.26	3.17	46	71.9%



Respondents who did not answer or selected 'Can't Say' are included in opt out.



Question

# Cemeteries Net Promoter Score

*How likely would you be to recommend these Hamilton Municipal Cemeteries services to others?*

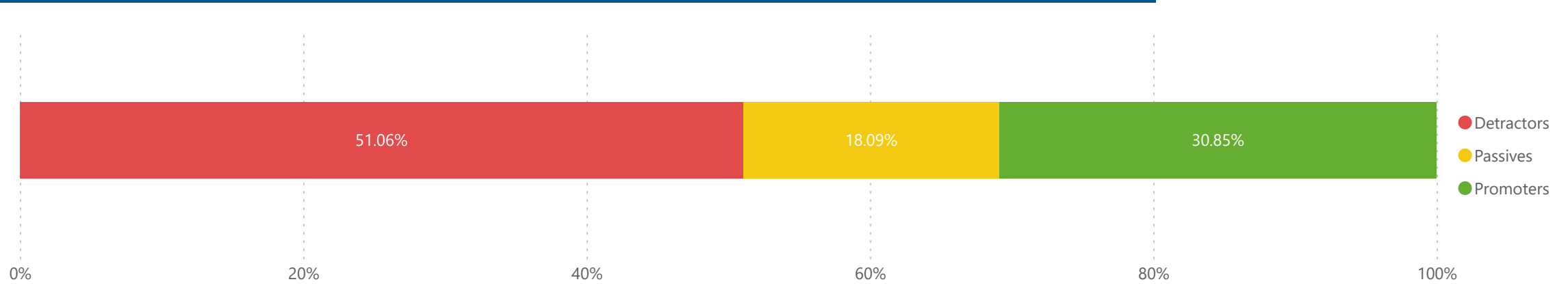
22

Responses

94

Respondents

26



Service Area	σ	NPS	Detractors	Passives	Promoter
<b>All Service Areas</b>	<b>1.34</b>	<b>-20.21</b>	<b>48</b>	<b>17</b>	<b>29</b>
Sales of interment rights, cemetery services and supporting products	1.26	-44.44	12	2	4
End of life planning services	1.30	-37.50	10	2	4
Graveside services, burials and interment	1.20	-20.00	7	4	4
Historical family searches and walking tours	1.33	-9.52	9	5	7
Maintenance and management of active and inactive cemeteries	1.47	0.00	10	4	10

Typically the Net Promoter Score is used to measure customer loyalty.

Likert choices less than or equal to 3 are considered 'Detractors', 4s are 'Passive' and 5s are considered 'Promoters'. Respondents who opted out by not answering or selecting 'Can't Say' were removed from the sample. Net Promoter score is calculated by subtracting (% Detractors) from (% Promoters).



Question

## Cemeteries value for money

23

How would you rate Hamilton Municipal Cemeteries for providing good value for money in the infrastructure and services provided to your community?

Responses

82

Respondents

24

Service Area	Very poor	Poor	Average	Good	Very good
<b>Total</b>	<b>7</b>	<b>9</b>	<b>31</b>	<b>15</b>	<b>20</b>
Sales of interment rights, cemetery services and supporting products	1	2	5	3	2
Maintenance and management of active and inactive cemeteries	3	2	8	5	6
Historical family searches and walking tours	1	1	6	4	4
Graveside services, burials and interment	1	2	8	1	4
End of life planning services	1	2	4	2	4

Service Area	σ	Avg.	Opt Out	Opt Out %
<b>Total</b>	<b>1.21</b>	<b>3.39</b>	<b>237</b>	<b>74.3%</b>
Historical family searches and walking tours	1.12	3.56	48	75.0%
End of life planning services	1.28	3.46	50	79.4%
Maintenance and management of active and inactive cemeteries	1.28	3.38	40	62.5%
Graveside services, burials and interment	1.16	3.31	48	75.0%
Sales of interment rights, cemetery services and supporting products	1.12	3.23	51	79.7%



- Can't Say
- Very poor
- Poor
- Average
- Good
- Very good



Respondents who opted out by not answering or selecting 'Can't Say' are included in opt out.

Question

## Service level cuts

24

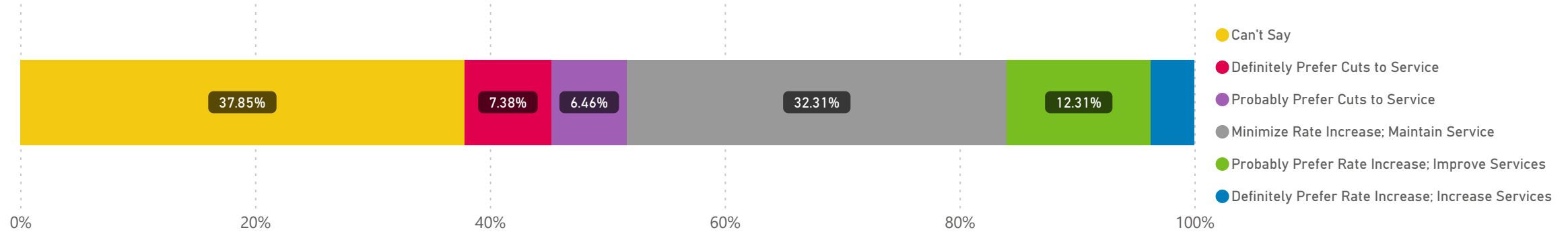
Would you prefer to see funding rates increase to improve local services OR would you prefer to see service level cuts to minimize rate increases?

Responses

202

Respondents

46



Service Area	Definitely Prefer Cuts to Service	Probably Prefer Cuts to Service	Minimize Rate Increase; Maintain Service	Probably Prefer Rate Increase; Improve Services	Definitely Prefer Rate Increase; Increase Services
<b>Total</b>	<b>24</b>	<b>21</b>	<b>105</b>	<b>40</b>	<b>12</b>
Sales of interment rights, cemetery services and supporting products	4	5	21	8	
Maintenance and management of active and inactive cemeteries	5	2	23	11	3
Historical family searches and walking tours	5	6	21	6	4
Graveside services, burials and interment	4	4	22	6	3
End of life planning services	6	4	18	9	2

Service Area	σ	Avg.	Opt Out	Opt Out %
<b>Total</b>	<b>1.01</b>	<b>2.98</b>	<b>123</b>	<b>37.8%</b>
Maintenance and management of active and inactive cemeteries	1.00	3.11	21	32.3%
Graveside services, burials and interment	0.99	3.00	26	40.0%
Historical family searches and walking tours	1.07	2.95	23	35.4%
End of life planning services	1.07	2.92	26	40.0%
Sales of interment rights, cemetery services and supporting products	0.86	2.87	27	41.5%



Respondents who opted out by not answering or selecting 'Can't Say' are included in opt out.

# Cemeteries Differential of Rates vs. Value for Money

*Service areas where importance exceeds performance by 20 points is indicative of a mismatch between expectations and service levels, equal to one point on the Likert scale used.*

Responses

284

Respondents

52

Service Area	Value for Money (index score)	Rates (index score)	Net Differential	Opt Out %
Maintenance and management of active and inactive cemeteries	68	62	5	47%
Graveside services, burials and interment	66	60	6	57%
Sales of interment rights, cemetery services and supporting products	65	57	7	60%
End of life planning services	69	58	11	59%
Historical family searches and walking tours	71	59	12	55%

Value for Money *Q23 How would you rate Hamilton Municipal Cemeteries for providing good value for money in the infrastructure and services provided to your community?*

Rates *Q24 Would you prefer to see funding rates increase to improve local services OR would you prefer to see service level cuts to minimize rate increases?*

The Net Differential is calculated by getting the average score for Rates and Value for Money. Then, the average score for Rates and Value for Money is multiplied by 20. Finally, the Rates score is subtracted from the Value for Money score. A negative differential indicates higher perceived Rates than Value for Money. A positive differential indicates a higher perceived Value for Money than Rates.



# Summary of Specific Service Areas over Several Questions

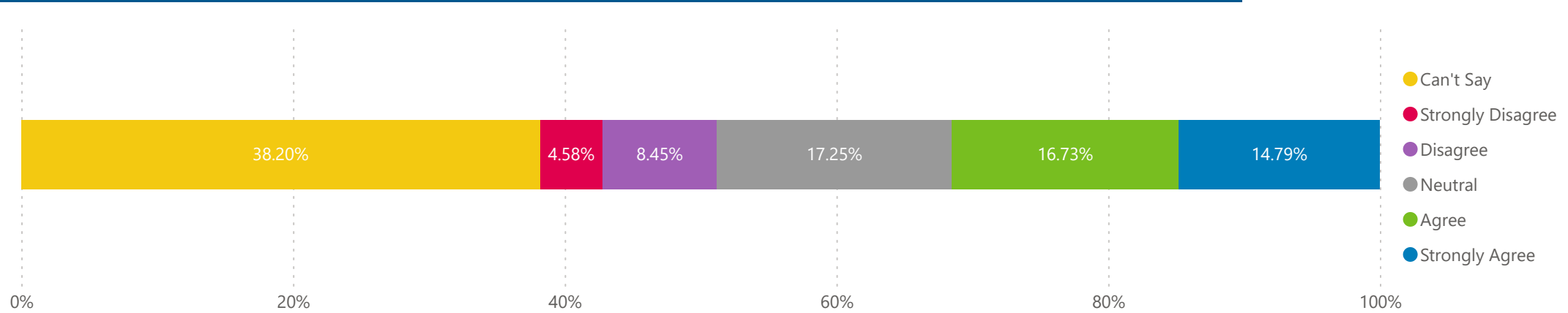
## Spray Pads

Responses

325

Respondents

64



Question	σ	Avg.	Avg. %	Opt Out	Opt Out %
<b>All Questions</b>	<b>1.20</b>	<b>3.46</b>	<b>69.29</b>	<b>217</b>	<b>38.2%</b>
Q8 Do you feel comfortable accessing these Hamilton Parks sites and services?	0.80	4.03	80.61	31	48.4%
Q12 How satisfied were you with your ability to access these Hamilton Parks sites and services?	1.09	3.76	75.26	28	42.4%
Q6 How important to you are the Hamilton Parks sites and services listed below?	1.39	3.67	73.33	5	7.7%
Q5 How do you feel Hamilton Parks have performed overall with the following services?	1.10	3.62	72.43	26	41.3%
Q15 How likely would you be to recommend the following Hamilton Parks services to others?	1.09	3.55	71.00	27	40.3%
Q16 How would you rate Hamilton Parks for providing good value for money for the following sites and services?	1.17	3.37	67.43	28	44.4%
Q7 Do the following Hamilton Park sites and services meet your needs?	1.02	3.19	63.89	28	43.8%
Q17 If you had to choose, would you prefer to see tax rates increase to improve local services? Or would you prefer to see service-level cuts to minimize tax rate increases?	1.19	3.16	63.11	18	28.6%
Q4 In the last 24 months, which of these sites or services have you visited, and who did you go with?	1.17	2.56	51.11	26	49.1%

Respondents who did not answer or selected 'Can't Say' are included in opt out.



Summary of Specific Service Areas over Several Questions

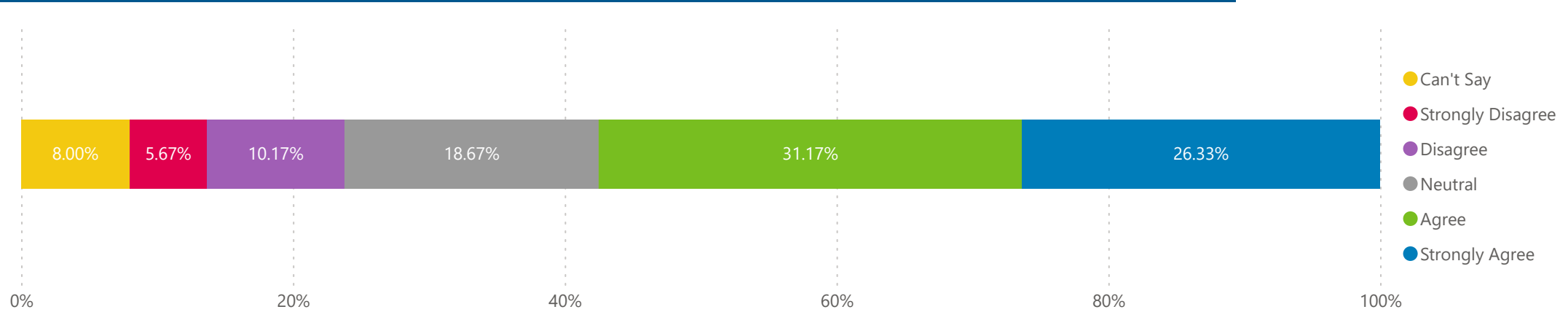
Recreational Trails and Escarpment Stairs

Responses

518

Respondents

70



Question	σ	Avg.	Avg. %	Opt Out	Opt Out %
<b>All Questions</b>	<b>1.18</b>	<b>3.68</b>	<b>73.55</b>	<b>48</b>	<b>8.0%</b>
Q6 How important to you are the Hamilton Parks sites and services listed below?	0.63	4.67	93.33	1	1.4%
Q15 How likely would you be to recommend the following Hamilton Parks services to others?	0.97	3.98	79.67	7	10.3%
Q5 How do you feel Hamilton Parks have performed overall with the following services?	1.05	3.83	76.51	5	7.4%
Q17 If you had to choose, would you prefer to see tax rates increase to improve local services? Or would you prefer to see service-level cuts to minimize tax rate increases?	0.97	3.78	75.67	5	7.7%
Q12 How satisfied were you with your ability to access these Hamilton Parks sites and services?	1.06	3.73	74.69	4	5.9%
Q16 How would you rate Hamilton Parks for providing good value for money for the following sites and services?	1.17	3.65	73.08	12	18.8%
Q8 Do you feel comfortable accessing these Hamilton Parks sites and services?	1.14	3.59	71.75	5	7.4%
Q7 Do the following Hamilton Park sites and services meet your needs?	0.97	3.29	65.71	5	7.4%
Q4 In the last 24 months, which of these sites or services have you visited, and who did you go with?	1.22	2.37	47.37	4	6.6%

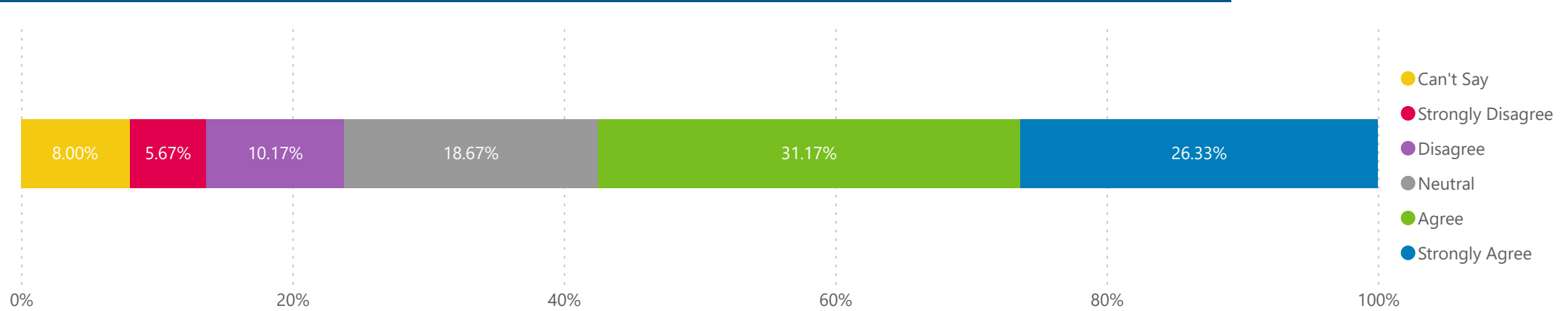
Respondents who did not answer or selected 'Can't Say' are included in opt out.



Summary of Specific Service Areas over Several Questions

Recreational Trails and Escarpment Stairs

Responses  
**518**  
Respondents  
**70**



Question	σ	Avg.	Avg. %	Opt Out	Opt Out %
<b>All Questions</b>	<b>1.18</b>	<b>3.68</b>	<b>73.55</b>	<b>48</b>	<b>8.0%</b>
Q6 How important to you are the Hamilton Parks sites and services listed below?	0.63	4.67	93.33	1	1.4%
Q15 How likely would you be to recommend the following Hamilton Parks services to others?	0.97	3.98	79.67	7	10.3%
Q5 How do you feel Hamilton Parks have performed overall with the following services?	1.05	3.83	76.51	5	7.4%
Q17 If you had to choose, would you prefer to see tax rates increase to improve local services? Or would you prefer to see service-level cuts to minimize tax rate increases?	0.97	3.78	75.67	5	7.7%
Q12 How satisfied were you with your ability to access these Hamilton Parks sites and services?	1.06	3.73	74.69	4	5.9%
Q16 How would you rate Hamilton Parks for providing good value for money for the following sites and services?	1.17	3.65	73.08	12	18.8%
Q8 Do you feel comfortable accessing these Hamilton Parks sites and services?	1.14	3.59	71.75	5	7.4%
Q7 Do the following Hamilton Park sites and services meet your needs?	0.97	3.29	65.71	5	7.4%
Q4 In the last 24 months, which of these sites or services have you visited, and who did you go with?	1.22	2.37	47.37	4	6.6%

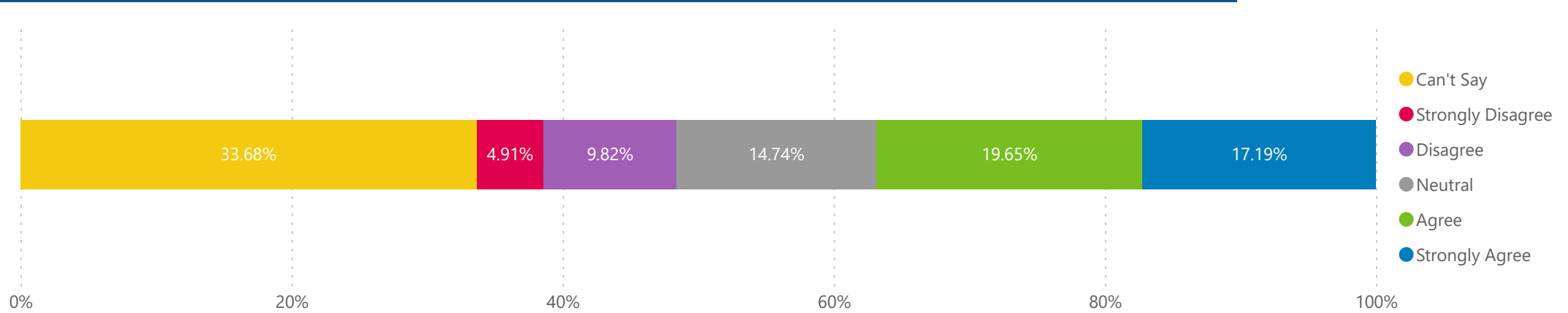
Respondents who did not answer or selected 'Can't Say' are included in opt out.



# Summary of Specific Service Areas over Several Questions

## Playground Equipment

Responses  
**350**  
Respondents  
**65**



Question	$\sigma$	Avg.	Avg. %	Opt Out	Opt Out %
<b>All Questions</b>	<b>1.23</b>	<b>3.52</b>	<b>70.37</b>	<b>192</b>	<b>33.7%</b>
Q8 Do you feel comfortable accessing these Hamilton Parks sites and services?	0.81	4.03	80.53	25	39.7%
Q6 How important to you are the Hamilton Parks sites and services listed below?	1.30	3.95	79.00	6	9.1%
Q12 How satisfied were you with your ability to access these Hamilton Parks sites and services?	1.11	3.78	75.50	26	39.4%
Q5 How do you feel Hamilton Parks have performed overall with the following services?	1.13	3.56	71.16	20	31.7%
Q15 How likely would you be to recommend the following Hamilton Parks services to others?	1.17	3.49	69.77	24	35.8%
Q17 If you had to choose, would you prefer to see tax rates increase to improve local services? Or would you prefer to see service-level cuts to minimize tax rate increases?	1.15	3.44	68.89	18	28.6%
Q16 How would you rate Hamilton Parks for providing good value for money for the following sites and services?	1.35	3.37	67.37	25	39.7%
Q7 Do the following Hamilton Park sites and services meet your needs?	1.15	3.21	64.21	26	40.6%
Q4 In the last 24 months, which of these sites or services have you visited, and who did you go with?	1.08	2.45	49.09	22	40.0%

Respondents who did not answer or selected 'Can't Say' are included in opt out.





Summary of Specific Service Areas over Several Questions

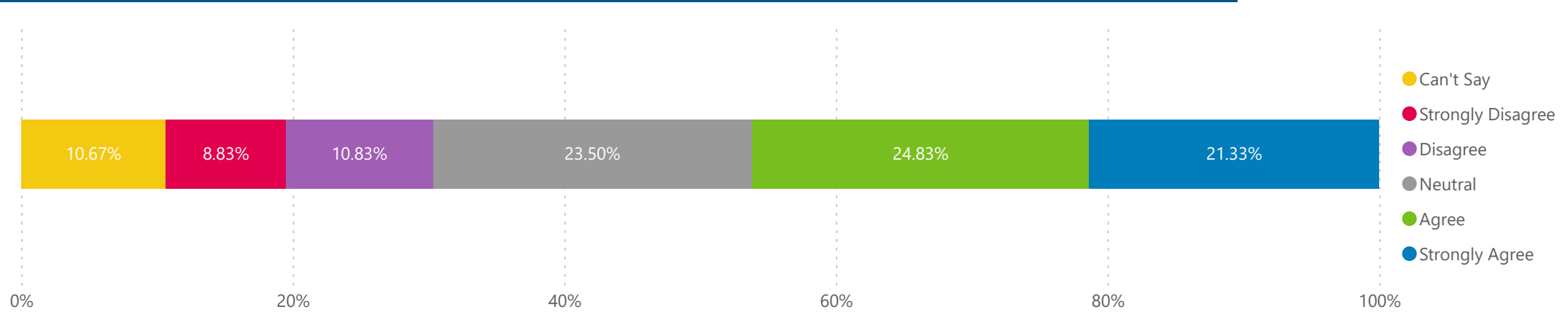
Park Maintenance: Grass-Cutting, Snow Clearing, Park Lighting, Washrooms

Responses

483

Respondents

70



Question	σ	Avg.	Avg. %	Opt Out	Opt Out %
<b>All Questions</b>	<b>1.25</b>	<b>3.44</b>	<b>68.73</b>	<b>64</b>	<b>10.7%</b>
Q6 How important to you are the Hamilton Parks sites and services listed below?	0.51	4.72	94.49	1	1.4%
Q17 If you had to choose, would you prefer to see tax rates increase to improve local services? Or would you prefer to see service-level cuts to minimize tax rate increases?	0.94	3.56	71.23	7	10.9%
Q12 How satisfied were you with your ability to access these Hamilton Parks sites and services?	1.17	3.44	68.89	5	7.4%
Q8 Do you feel comfortable accessing these Hamilton Parks sites and services?	1.16	3.42	68.39	7	10.1%
Q5 How do you feel Hamilton Parks have performed overall with the following services?	1.21	3.33	66.57	2	2.9%
Q15 How likely would you be to recommend the following Hamilton Parks services to others?	1.27	3.18	63.51	11	16.2%
Q16 How would you rate Hamilton Parks for providing good value for money for the following sites and services?	1.25	3.16	63.27	15	23.4%
Q4 In the last 24 months, which of these sites or services have you visited, and who did you go with?	1.41	2.98	59.56	14	23.7%
Q7 Do the following Hamilton Park sites and services meet your needs?	1.14	2.85	57.01	2	2.9%

Respondents who did not answer or selected 'Can't Say' are included in opt out.



Summary of Specific Service Areas over Several Questions

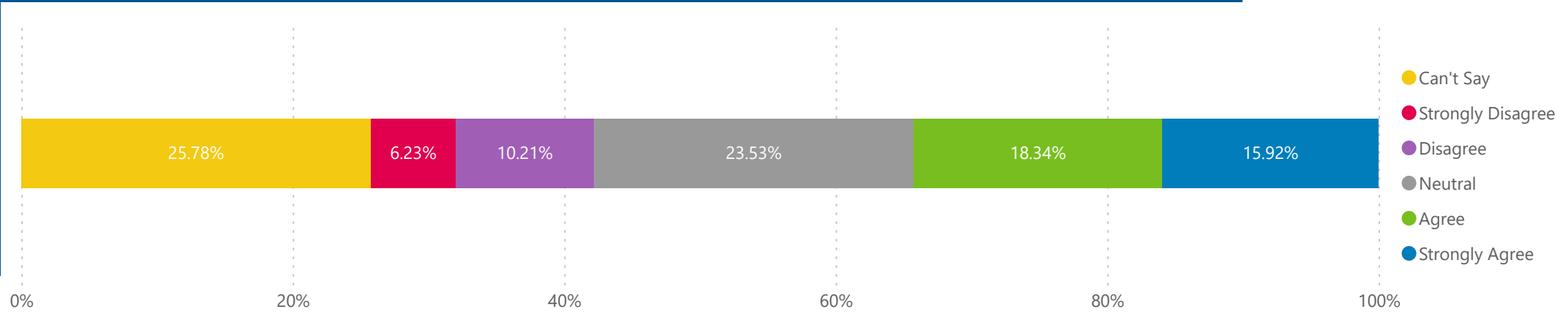
Other Park Amenities: Signage, Sport Lighting, Bleachers, Shade Structures

Responses

393

Respondents

66



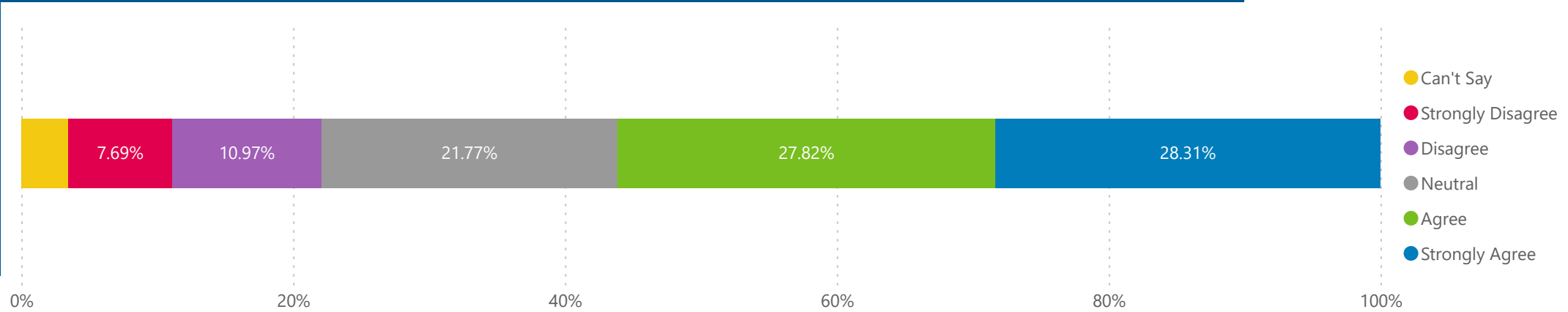
Question	$\sigma$	Avg.	Avg. %	Opt Out	Opt Out %
<b>All Questions</b>	<b>1.20</b>		<b>3.37</b>	<b>67.41</b>	<b>149</b> <b>25.8%</b>
Q6 How important to you are the Hamilton Parks sites and services listed below?	1.03		4.18	83.61	6 9.0%
Q8 Do you feel comfortable accessing these Hamilton Parks sites and services?	1.11		3.68	73.62	18 27.7%
Q12 How satisfied were you with your ability to access these Hamilton Parks sites and services?	1.17		3.48	69.60	16 24.2%
Q17 If you had to choose, would you prefer to see tax rates increase to improve local services? Or would you prefer to see service-level cuts to minimize tax rate increases?	1.06		3.31	66.18	9 14.1%
Q16 How would you rate Hamilton Parks for providing good value for money for the following sites and services?	1.16		3.23	64.65	20 31.7%
Q15 How likely would you be to recommend the following Hamilton Parks services to others?	1.21		3.17	63.40	21 30.9%
Q5 How do you feel Hamilton Parks have performed overall with the following services?	1.19		3.13	62.50	24 37.5%
Q7 Do the following Hamilton Park sites and services meet your needs?	0.99		3.06	61.20	15 23.1%
Q4 In the last 24 months, which of these sites or services have you visited, and who did you go with?	1.29		2.67	53.33	20 35.7%

Respondents who did not answer or selected 'Can't Say' are included in opt out.



## Summary of Specific Service Areas over Several Questions City, Community, and Neighbourhood Parks and Parkettes, Natural Open Spaces

Responses  
**543**  
Respondents  
**70**



Question	σ	Avg.	Avg. %	Opt Out	Opt Out %
<b>All Questions</b>	<b>1.24</b>	<b>3.60</b>	<b>72.03</b>	<b>21</b>	<b>3.4%</b>
Q6 How important to you are the Hamilton Parks sites and services listed below?	0.69	4.68	93.62	1	1.4%
Q12 How satisfied were you with your ability to access these Hamilton Parks sites and services?	1.08	4.00	80.00	1	1.5%
Q17 If you had to choose, would you prefer to see tax rates increase to improve local services? Or would you prefer to see service-level cuts to minimize tax rate increases?	1.05	3.80	76.00	5	7.7%
Q8 Do you feel comfortable accessing these Hamilton Parks sites and services?	1.21	3.73	74.55	2	2.9%
Q15 How likely would you be to recommend the following Hamilton Parks services to others?	1.18	3.64	72.73	2	2.9%
Q5 How do you feel Hamilton Parks have performed overall with the following services?	1.05	3.61	72.17	1	1.4%
Q16 How would you rate Hamilton Parks for providing good value for money for the following sites and services?	1.17	3.54	70.88	7	10.9%
Q7 Do the following Hamilton Park sites and services meet your needs?	1.06	3.00	60.00	1	1.4%
Q4 In the last 24 months, which of these sites or services have you visited, and who did you go with?	1.18	2.43	48.53	1	1.4%

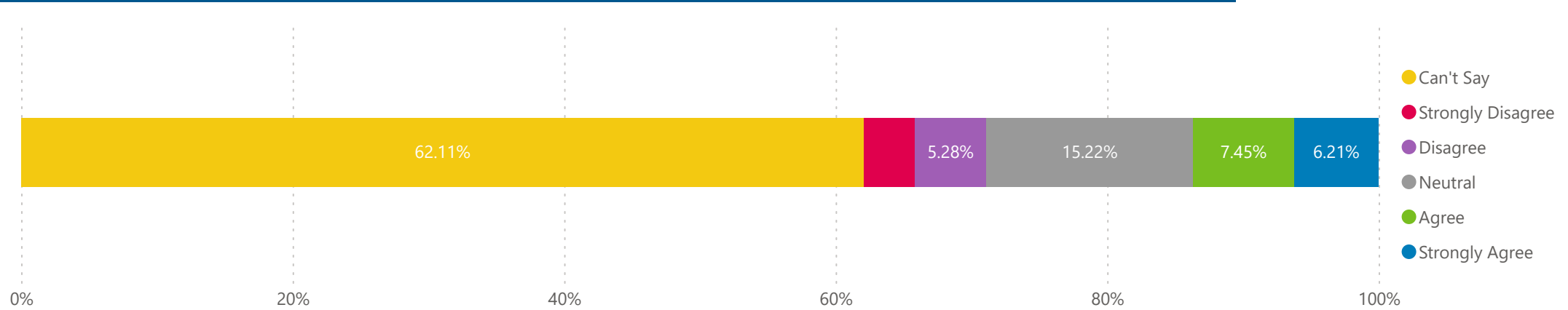
Respondents who did not answer or selected 'Can't Say' are included in opt out.



## Summary of Specific Service Areas over Several Questions

### Sales of interment rights, cemetery services and supporting products

Responses  
**110**  
Respondents  
**45**



Question	σ	Avg.	Avg. %	Opt Out	Opt Out %
<b>All Questions</b>	<b>1.16</b>	<b>3.19</b>	<b>63.77</b>	<b>200</b>	<b>62.1%</b>
Q21 How important should the following services be as a responsibility for Hamilton Municipal Cemeteries?	1.26	3.45	69.00	25	38.5%
Q20 How do you feel Hamilton Municipal Cemeteries has performed overall in the following services?	1.26	3.31	66.15	51	79.7%
Q23 How would you rate Hamilton Municipal Cemeteries for providing good value for money in the infrastructure and services provided to your community?	1.12	3.23	64.62	51	79.7%
Q22 How likely would you be to recommend these Hamilton Municipal Cemeteries services to others?	1.26	3.17	63.33	46	71.9%
Q24 Would you prefer to see funding rates increase to improve local services OR would you prefer to see service level cuts to minimize rate increases?	0.86	2.87	57.37	27	41.5%



Respondents who did not answer or selected 'Can't Say' are included in opt out.

Summary of Specific Service Areas over Several Questions

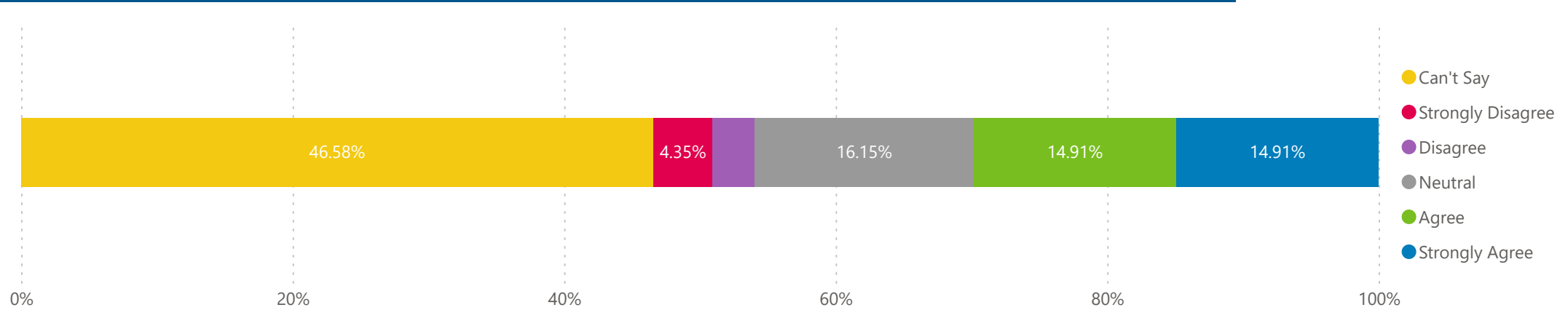
Maintenance and management of active and inactive cemeteries

Responses

158

Respondents

52



Question	σ	Avg.	Avg. %	Opt Out	Opt Out %
<b>All Questions</b>	<b>1.18</b>	<b>3.62</b>	<b>72.33</b>	<b>150</b>	<b>46.6%</b>
Q21 How important should the following services be as a responsibility for Hamilton Municipal Cemeteries?	1.01	4.09	81.70	18	27.7%
Q20 How do you feel Hamilton Municipal Cemeteries has performed overall in the following services?	1.00	3.82	76.36	31	48.4%
Q22 How likely would you be to recommend these Hamilton Municipal Cemeteries services to others?	1.47	3.58	71.67	40	62.5%
Q23 How would you rate Hamilton Municipal Cemeteries for providing good value for money in the infrastructure and services provided to your community?	1.28	3.38	67.50	40	62.5%
Q24 Would you prefer to see funding rates increase to improve local services OR would you prefer to see service level cuts to minimize rate increases?	1.00	3.11	62.27	21	32.3%

Respondents who did not answer or selected 'Can't Say' are included in opt out.



## Summary of Specific Service Areas over Several Questions

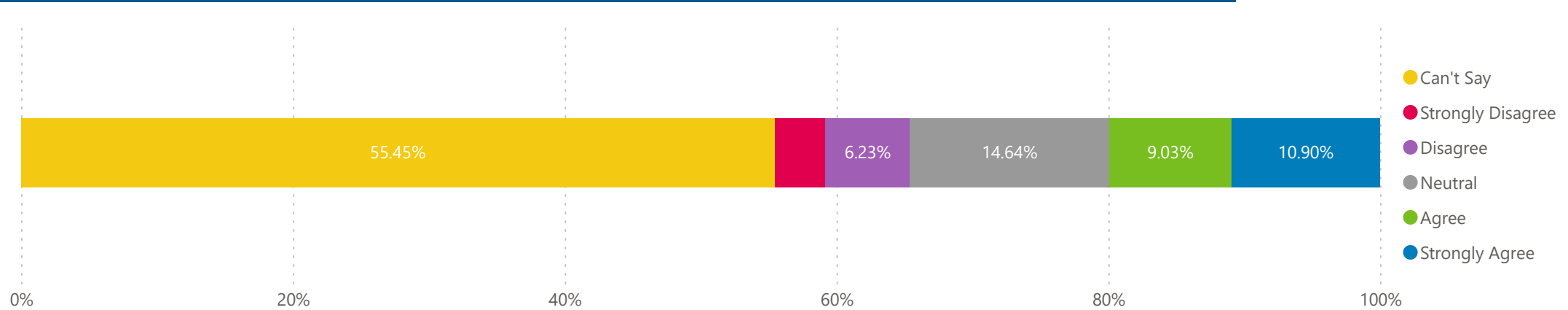
### Historical family searches and walking tours

Responses

131

Respondents

50



Question	σ	Avg.	Avg. %	Opt Out	Opt Out %
<b>All Questions</b>	<b>1.23</b>	<b>3.38</b>	<b>67.69</b>	<b>178</b>	<b>55.5%</b>
Q20 How do you feel Hamilton Municipal Cemeteries has performed overall in the following services?	1.22	4.00	80.00	43	68.3%
Q22 How likely would you be to recommend these Hamilton Municipal Cemeteries services to others?	1.33	3.57	71.43	43	67.2%
Q23 How would you rate Hamilton Municipal Cemeteries for providing good value for money in the infrastructure and services provided to your community?	1.12	3.56	71.25	48	75.0%
Q21 How important should the following services be as a responsibility for Hamilton Municipal Cemeteries?	1.21	3.36	67.27	21	32.3%
Q24 Would you prefer to see funding rates increase to improve local services OR would you prefer to see service level cuts to minimize rate increases?	1.07	2.95	59.05	23	35.4%

Respondents who did not answer or selected 'Can't Say' are included in opt out.



## Summary of Specific Service Areas over Several Questions

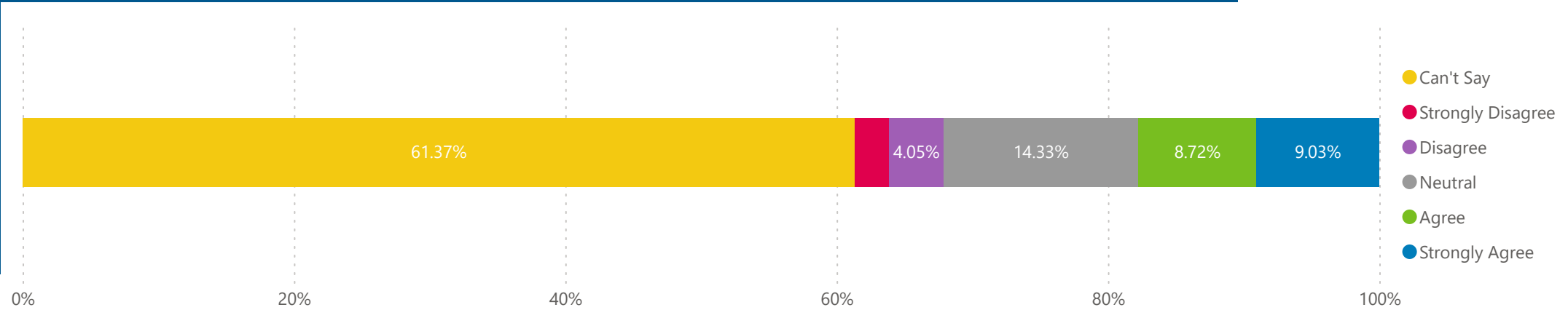
### Graveside services, burials and interment

Responses

116

Respondents

45



Question	σ	Avg.	Avg. %	Opt Out	Opt Out %
<b>All Questions</b>	<b>1.15</b>	<b>3.46</b>	<b>69.19</b>	<b>197</b>	<b>61.4%</b>
Q20 How do you feel Hamilton Municipal Cemeteries has performed overall in the following services?	0.99	3.86	77.14	50	78.1%
Q21 How important should the following services be as a responsibility for Hamilton Municipal Cemeteries?	1.14	3.80	76.00	25	38.5%
Q22 How likely would you be to recommend these Hamilton Municipal Cemeteries services to others?	1.20	3.53	70.67	48	76.2%
Q23 How would you rate Hamilton Municipal Cemeteries for providing good value for money in the infrastructure and services provided to your community?	1.16	3.31	66.25	48	75.0%
Q24 Would you prefer to see funding rates increase to improve local services OR would you prefer to see service level cuts to minimize rate increases?	0.99	3.00	60.00	26	40.0%

Respondents who did not answer or selected 'Can't Say' are included in opt out.

# Summary of Specific Service Areas over Several Questions

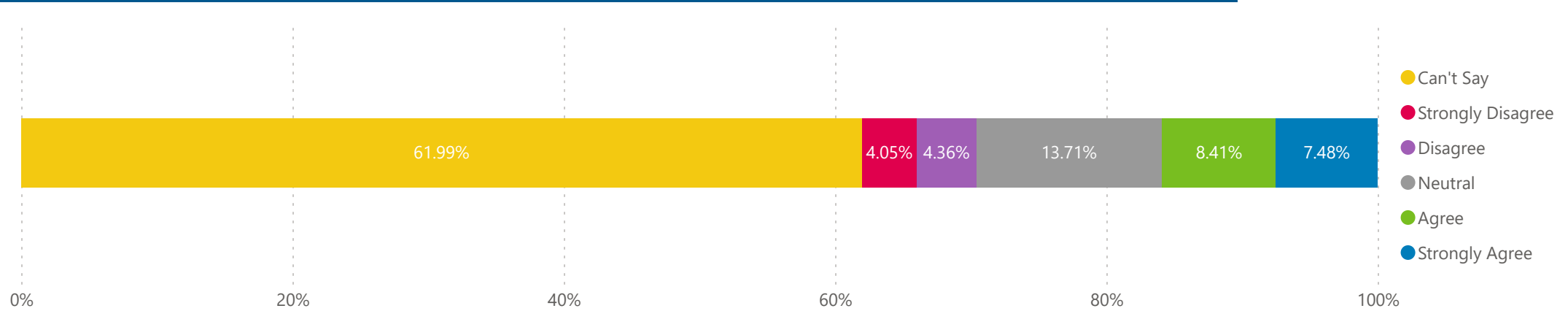
## End of life planning services

Responses

109

Respondents

45



Question	σ	Avg.	Avg. %	Opt Out	Opt Out %
<b>All Questions</b>	<b>1.21</b>	<b>3.29</b>	<b>65.74</b>	<b>199</b>	<b>62.0%</b>
Q21 How important should the following services be as a responsibility for Hamilton Municipal Cemeteries?	1.18	3.55	71.00	25	38.5%
Q23 How would you rate Hamilton Municipal Cemeteries for providing good value for money in the infrastructure and services provided to your community?	1.28	3.46	69.23	50	79.4%
Q20 How do you feel Hamilton Municipal Cemeteries has performed overall in the following services?	1.24	3.43	68.57	50	78.1%
Q22 How likely would you be to recommend these Hamilton Municipal Cemeteries services to others?	1.30	3.25	65.00	48	75.0%
Q24 Would you prefer to see funding rates increase to improve local services OR would you prefer to see service level cuts to minimize rate increases?	1.07	2.92	58.46	26	40.0%



Respondents who did not answer or selected 'Can't Say' are included in opt out.



# Data Grading Scales

Definition and Ranking of Consistency and Confidence

Grade		Data Consistency Standard Deviation ( $\sigma$ , Consistency of Responses)	Confidence Level Margin of Error (at 95% Confidence in Sample Size)
A	Very High	0 to 0.5 - results are tightly grouped with little to no variance in response	0% to 5% - Minimal to no error in results, can generally be interpreted as is
B	High	0.5 to 1.0 - results are fairly tightly grouped but with slightly more variance in response	5% to 10% - Error has become noticeable, but results are still trustworthy
C	Medium	1.0 to 1.5 - results are moderately grouped together, but most respondents are generally in agreement	10% to 20% - Error is a significant amount and will cause uncertainty in final results
D	Low	1.5 to 2.0 - results show a high variance with a fair amount of disparity in responses	20% to 30% - Error has reached a detrimental level and results are difficult to trust
E	Very Low	2.0+ - results are highly variant with little to no grouping	30%+ - Significant error in results, hard to interpret data in much of a meaningful way

$$\text{Margin of Error} = \frac{0.98}{\sqrt{n}}$$

Assigning a lower consistency value (Standard Deviation) to a higher grade doesn't imply that the data is "better" or "worse". Instead, it helps in understanding how divided or similar people are in their responses. When high consistency is observed, it indicates that most respondents agree on a question. But when the consistency is low, opinions are split, with some rating higher and others lower. The key is to understand why the split occurs which provides valuable insights into the data.

The margin of error is calculated using a standard factor of 0.98 and the sample size (n). The margin of error helps assess if the sample size of the survey is suitable. The margin of error, expressed as a percentage, indicates the range around the calculated sample average where the true population average is likely to be. A smaller margin of error suggests a more accurate estimate, while a larger one implies less precision.