2025 Asset Management Plan

Parking

City of Brantford, Ontario

Prepared by: Infrastructure Planning Asset Management, Public Works

Corporation of the City of Brantford, June 2025

RECORD SHEET

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Asset Management Document Set	Asset Group	First Issuance	Current Issuance
Strategic Asset Management Policy	All	May 2019	May 2019
Asset Management Plan Overview	Core & Non-Core Assets	June 2024	June 2025
Asset Management Plan, Core Assets	Environmental Services Transportation	June 2021	June 2025
Asset Management Plan, Non-Core Assets	Parking	June 2024	This Document
Asset Management Plan	Airport Cemetery Clerks Services Economic Development & Tourism Facilities Fire Fleet & Transit Forestry & Horticulture Golf Housing Human Resources IT Services Library Parks & Recreation Police Solid Waste	June 2024	June 2025
Asset Management Plan, Non-Core Assets	JNH	TBD	TBD

ASSET MANAGEMENT PLAN PARKING SERVICES

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PARKING SERVICES INTRODUCTION

Per O. Reg. 588/17 all municipal infrastructure assets which fall outside of the core asset categories (water, wastewater and stormwater) and their respective subcategories, shall be non-core or “other” infrastructure assets. These assets shall have qualitative descriptions and technical metrics established by the municipality.

Table 1 below outlines which Asset Types are included under each Asset Class and will be reported on in this AMP. In addition, it is important to note that the AMP only includes assets owned by the City or Local Boards and does not include assets that are owned privately or by other organizations.

Table 1: Asset Type Breakdown

	Asset Class
	Parking Services
Asset Type:	Parking Lot Assets
	Parking Machinery, Hardware and Software Assets

1. PARKING SERVICES

1.1. INTRODUCTION

The City of Brantford owns and maintains several assets under the Parking Services asset class. The purpose of this section is to present specific information about the Parking Services asset class to answer the questions posed in **Section 2** of the **Asset Management Plan (AMP) Overview Document**, and includes the following:

- Parking Services Assets' Data Inventory and Condition Approach;
- Summary of Parking Services Assets;
- Lifecycle Activities and Cost of Parking Services Assets;
- Current and Proposed Parking Services Assets' Levels of Service;
- Current and Proposed Parking Services Assets' Performance; and
- Conclusion.

1.2. PARKING SERVICES ASSETS' DATA INVENTORY AND CONDITION APPROACH

Information related to the City's data collection methodologies as well as data confidence level definitions are defined in the **Asset Management Plan Overview Document**.

The City of Brantford has two (2) different approaches to establishing the inventory and condition for Parking assets due to regulatory requirements, available resources, technologies, and budget restrictions:

- Outsourced condition assessments to consultants; and
- Estimated condition based on asset specific information.

A list of all condition assessments for all core assets can be found in **Table 7** in the **Asset Management Plan Overview Document**.

The origin of the Parking Services asset data for inventory, replacement cost, and condition, as well as data confidence in each are provided in **Table 2** below.

Table 2: Parking Services Assets' Data Origin and Confidence Level

	Inventory			Replacement Cost			Condition			Levels of Service		
Asset Type	**Inventory (incl. Quantity and Age) From**	**Data Confidence Level**	**Data Confidence Description**	**Replacement Cost From**	**Data Confidence Level**	**Data Confidence Description**	**Condition From**	**Data Confidence Level**	**Data Confidence Description**	**Condition From**	**Data Confidence Level**	**Data Confidence Description**
Parking Lot Assets	Tracked via City Inventory	High	Formal inventory with few unknowns	2023 Parking Lot Condition Assessment, and 2023 capital projects	Medium	Estimate based on condition assessment and capital construction unit rates for road reconstruction projects	2023 Parking Lot Condition Assessment, and City staff knowledge	High	Formal condition assessment with few unknowns and informal assessment based on staff knowledge	2024 Customer Levels of Service Survey	Low	Level of Service based public surveys. Confidence is low due to the low response rate.
Parking Machinery, Hardware and Software Assets	Tracked via City Inventory	Medium	Informal inventory	City staff estimate	Medium	Informal assessment based on staff knowledge	Determined based on age	Medium	Informal assessment based on assumptions from age of assets	2024 Customer Levels of Service Survey	Low	Level of Service based public surveys. Confidence is low due to the low response rate.

The Parking Services assets include municipal parking lots, parking lot ticket machines, gate systems and other hardware/software utilized to conduct parking enforcement. The Market Street Parkade and other parking lots associated with City assets such as Facilities, Airport, Solid Waste, Fire, Police, Parks, etc., are captured under their respective AMPs.

Per **Table 2** above, Parking Services assets' inventory and condition data are typically at a Medium to High confidence level, with an overall average confidence level of Medium.

Inventory data is at a Medium to High confidence level due to inventories maintained by City staff. Replacement costs are at a Medium confidence level, as these values are estimated based on formal condition assessment completed in 2023, staff knowledge, and other capital construction project costs. Condition data is estimated at a Medium to High confidence level, as the condition of these assets is estimated either based on formal condition assessment and staff knowledge, or by age and service life assumptions by City staff.

Level of Service data is at a Low confidence as it is based on the 2024 Customer Levels of Service Survey which had a low response rate from the public.

1.2.1. SERVICE LIFE

Where condition assessments have not been completed, the condition has been estimated based on the estimated service life of the asset shown below in **Table 3**. The average overall estimated service life for assets can be found in **Table 5**.

Table 3: Parking Services Assets' Estimated Service Life

Asset	Estimated Service Life
Parking Lot Assets	30 years
Parking Machinery, Hardware and Software Assets	7 years

1.2.2. CONDITION SCORING

For the purpose of this report and standardizing condition scores across all assets in the Asset Management Plan, the Condition Rating is defined by three (3) Condition Scores as outlined in the table below. For assets with formal consultant condition assessments, the conditions have been modified to fit into this model.

Table 4: Condition Score Description

Condition Score	Condition Rating	Description
1 - 1.4	Good	Assets are in working order, have no or minor deficiencies. Where condition data is not available, this category applies to assets which are within the first 40% of their estimated service life.
1.5 - 2.4	Fair	Assets show general signs of deterioration, some elements may have significant deficiencies, and asset will likely require repairs in the next 10 years. Where condition data is not available, this category applies to assets which are within 41% - 80% of their estimated service life.
2.5 - 3	Poor	Asset is below standard showing signs of significant deterioration, is in danger of imminent failure, and will require repair, replacement or removal within the next year. Where condition data is not available, this category applies to assets which have exceeded 80% of their estimated service life.

1.3. SUMMARY OF PARKING SERVICES ASSETS

The summary of assets for the Parking Services Asset Class can be found below. The summary of assets includes: Quantity, Replacement Cost, Average Age, and Average Condition Score for each asset type in accordance with O. Reg. 588/17.

1.3.1. TOTAL SUMMARY OF ASSETS

A table summarizing all Parking Services assets is included in **Table 5** below. Detailed information about each asset is included in individual sections. Calculations of averages have been weighted by the overall replacement value of assets. This means that assets of higher estimated replacement value will have a stronger influence on the average then if the average was calculated based on the number of assets.

The total replacement cost for all Parking Services assets is approximately $1.9M and they are a weighted average of 5 years old which is 22% of the overall average estimated service life of 23 years. Overall, Parking Services assets are in Good condition with a weighted average condition score of 1.2.

For **Table 5** an * on a column title indicates average value weighted by replacement value.

Table 5: Total Summary of Parking Services Assets

Asset	Quantity	Unit	Replacement Cost	Weighted Average Age (years)*	Weighted Average Estimated Service Life (years)*	% of Estimated Service Life Expended*	Weighted Average Condition Score*	Weighted Average Condition Description*
Parking Services Total			**$1.9M**	**5**	**23**	**22%**	**1.2**	**GOOD**
Parking Lot Assets	2	ea	$1.3M	6	30	20%	1.2	GOOD
Parking Machinery, Hardware and Software Assets	6	ea	$620.0K	2	7	29%	1.2	GOOD

*Denotes Weighted Average

1.3.2. PARKING LOT ASSETS

The parking lots identified in the Parking Services asset class include municipal parking lots #3 and #4. Municipal parking lot #3 is located at 52 Darling Street, at the northeast corner of Darling Street and Queen Street. Municipal parking lot #4 is located at 41 Dalhousie Street, at the southeast corner of Dalhousie Street and King Street. The Market Street Parkade and other parking lots associated with City assets such as Facilities, Airport, Solid Waste, Fire, Police, Parks, etc., are captured under their respective AMPs.

The analysis of these assets included the condition of concrete curb and sidewalk, asphalt pavements, street lighting, storm sewer infrastructure, etc.

As seen in **Figure 1** below, the Parking Lot assets have a total replacement cost of $1.3M, and the assets are typically in Good condition, with an average condition score of 1.2. The condition is based on findings from a condition assessment of the assets completed in 2023. The average age for the City’s Parking Lot assets is 6 years which is 20% of their weighted average estimated service life of 30 years.

NO OF ASSETS	REPLACEMENT COST	AVERAGE AGE	AVERAGE ESTIMATED SERVICE LIFE	AVERAGE CONDITION SCORE	AVERAGE CONDITION DESCRIPTION
2	1.3M	6	30	1.2	Good

ASSETS BY CONDITION AND QUANTITY

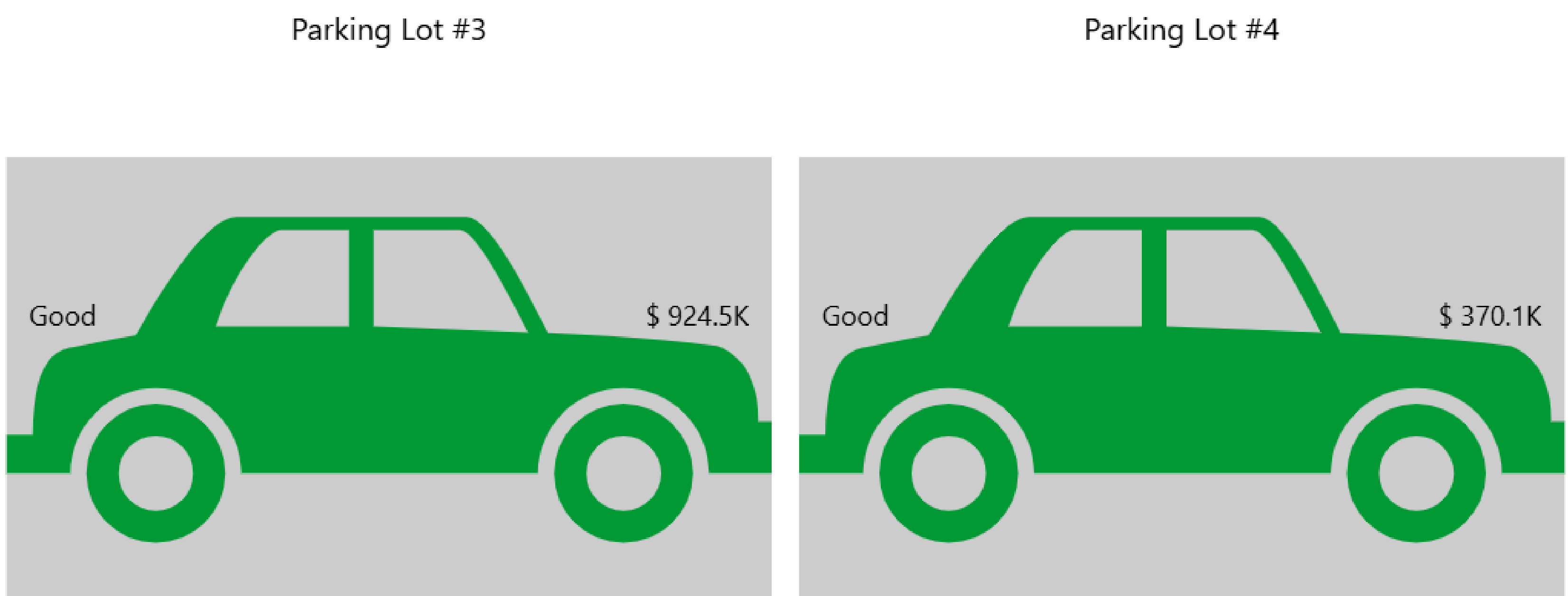

Figure 1: Parking Lot Asset Summary by Condition and Quantity

1.3.3. PARKING MACHINERY, HARDWARE AND SOFTWARE ASSETS

The Parking Machinery, Hardware and Software assets include other various assets operated and maintained by Parking Services, including ticket machines in municipal parking lots, gate systems at the Market Street Parkade, and other hardware/software utilized to conduct parking enforcement.

Per **Figure 2** below, the Parking Machinery, Hardware and Software assets have a total replacement cost of $620,000 and the assets are typically in Good condition, with an average condition score of 1.2. The condition of Parking Machinery, Hardware and Software assets is based on informal estimates of lifecycle and condition by City staff. The average age for the City's Parking Machinery, Hardware and Software assets is 2 years which is 29% of their weighted average estimated service life of 7 years.

NO OF ASSETS	REPLACEMENT COST	AVERAGE AGE	AVERAGE ESTIMATED SERVICE LIFE	AVERAGE CONDITION SCORE	AVERAGE CONDITION DESCRIPTION
6	620K	2	7	1.2	Good

ASSETS BY CONDITION AND QUANTITY

Market Centre Parkade Gate System | Parking Enforcement Hardware/Software | Parking Machines

Figure 2: Parking Lot Machinery, Hardware and Software Asset Summary by Condition and Quantity

1.4. LIFECYCLE OF PARKING SERVICES ASSETS

The lifecycle of Parking Services assets is described under four (4) categories which are described in this section:

- Key Lifecycle Stages of Parking Services Assets;
- Lifecycle Activities;
- Risks of Lifecycle Activities; and
- 10 Year Lifecycle Costs of Parking Services Assets.

1.4.1. KEY LIFECYCLE STAGES OF PARKING SERVICES ASSETS

The lifecycle of an asset refers to the following stages: Planning, Creation/Acquisition, Operations and Maintenance, Renewal/Disposal which are defined in the Main Body of the report. For Parking Services assets specifically, our general process is as follows:

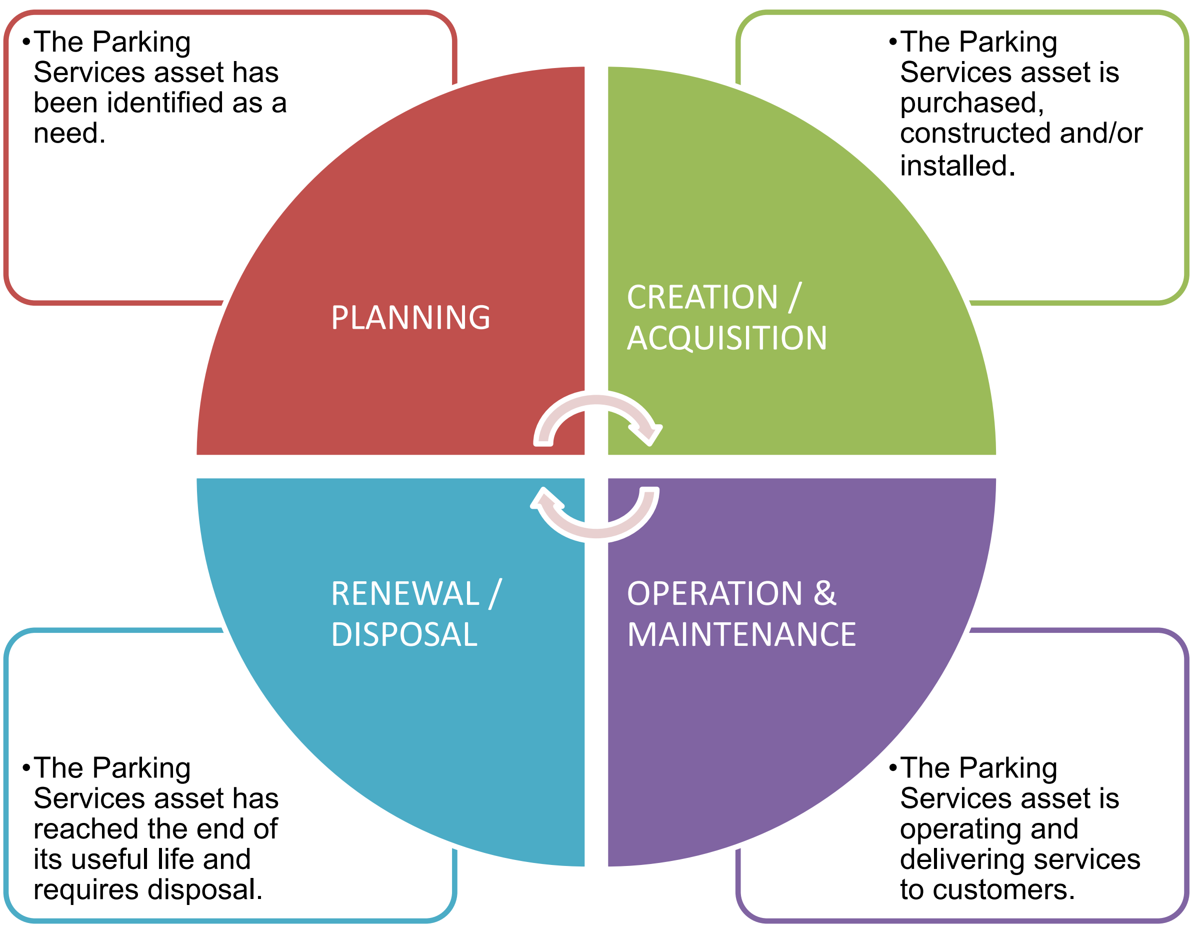

Figure 3: Lifecycle Stages of Parking Services Assets

1. **Planning** – The need to acquire the Parking asset has been identified per the City's regular business activities and coordinated with other departments, as required.
2. **Creation / Acquisition / Replacement** – The Parking asset is purchased, constructed and/or installed as per any applicable standards and guidelines.
3. **Operation and Maintenance** – The Parking asset is in use and assists in delivering a service to internal and external customers.
4. **Renewal / Disposal** – The Parking asset has reached the end of its useful life, is in poor condition, and/or is underperforming, and requires disposal. The disposal considers the effect on customers such as level of service disruptions.

1.4.2. LIFECYCLE ACTIVITIES

A list of the planned Lifecycle Activities, annual cost, and frequency for Parking assets can be found in **Table 6**Error! Not a valid bookmark self-reference. below. These activities are currently being undertaken to maintain Parking assets and therefore maintain the current levels of service. In review of the 2024 Levels of Service Survey, Parking generally meets the service expectations of Parking asset users. Therefore, these lifecycle activities will remain the same for the proposed levels of service. Further discussion regarding Parking proposed Levels of Service can be found in **Section 1.5.5 Proposed Levels of Service Discussion**. Due to data limitations at this time, the City will maintain the lifecycle activities which have been performed in the past and activities listed will be updated as improved data becomes available.

Table 6: Lifecycle Activities for Parking Services Assets

Asset Type	Lifecycle Activity	Annual Cost*	Frequency	Completed by
Parking Lot Assets	Pavement Markings	$11,000	Every three (3) years	City/Contracted Services
	Lighting/Catchbasin/Curb Repairs	$3,300	Annual	City/Contracted Services
	Snow Clearing	$20,800	Annual	Contracted Servcies
Parking Machinery, Hardware and Software Assets	Parkade Gate and Equipment Maintenance	$13,500	Annual	City/Contracted Services
	Parking Machine Maintenance	$9,000	Annual	City/Contracted Services
	Hardware/Software Maintenance and Licences	$5,000	Annual	City/Contracted Services

*2025 Annual Cost is typically based on estimates presented in the 2025 Operating Budget.

1.4.3. RISKS OF LIFECYCLE ACTIVITIES

The identified lifecycle activities in **Table 6** above are the current and proposed lifecycle activities taken on by City staff or hired contractors. Some risks associated with these activities include:

- **Traffic Accidents** - when performing maintenance in the vicinity of traffic vehicles, there is a risk of a traffic accident. This is mitigated by implementing a traffic control plan and wearing high visibility clothing during maintenance activities in the right of way or parking lots;
- **Operator Error** – When operators are operating equipment, there is a risk of an operator related accident. This risk is mitigated by ensuring all operators are trained on equipment.
- **Confined Space** - There are always risks associated with confined space, technicians are trained and standard operating procedures are followed to complete the task safely.
- **Equipment Failure -** Equipment failure can occur during maintenance activities and this is mitigated by ensuring preventative maintenance is completed at regular intervals to prevent this from occurring.
- **Utility Impact** – When digging into soil to locate a buried asset, there is a possibility of hitting a buried utility line. This is mitigated by ensuring locates are completed prior to digging.

However, if these activities were not completed, the risks would include:

- **Service Disruptions** due to premature failures that could have been mitigated with preventative maintenance;
- **Safety Hazards to Environment and People** due to undetected issues posing safety risks if inspections were not completed in a timely fashion or safety risks which were not remedied promptly, such as potholes or tripping hazards in parking lots;
- **Lost Revenue** when parking machines or equipment are out of service;
- **Increased Cost** due to reactive repairs which could have been avoided with preventative maintenance.

1.4.4. 10 YEAR LIFECYCLE COSTS OF PARKING SERVICES ASSETS

Figure 4 below outlines the 10 year lifecycle costs of Parking Services assets. This graph includes the lifecycle cost for the assets which support the Current Levels of Service (LOS) and the assets required to support the Proposed LOS.

All assets within the Parking Services asset class are in Good condition and, therefore, there are no capital costs identified for replacements within the current four (4) year capital budget cycle.

For Parking Lot assets, Municipal Parking Lot #4 is identified for capital investment in 2033 based on the 2023 Parking Lot Condition Assessment. No capital costs are identified for Municipal Parking Lot #3 in the 10 year lifecycle, as repairs and resurfacing of this parking lot were completed in 2023.

Parking Machinery, Hardware and Software assets are currently in Good condition and these assets have an estimated service life of seven (7) years; therefore, these assets are identified for replacement between 2029 and 2031 as they reach the end of their estimated service life.

Based on the information presented in **Figure 4**, the total annual average capital costs for the next 10 years needed to maintain the current LOS of these Parking Services assets are $81,000. The total annual average capital costs for the next 10 years needed to achieve the proposed LOS are $0.00. The average annual Operation and Maintenance costs to maintain the current level of service are $62,700. The average annual additional Operation and Maintenance costs to maintain the proposed level of service are $0.0.

To determine the total estimated operating costs in a given year, the proposed LOS operating costs should be added to the current LOS operating costs. Therefore it is recommended that the City invest $81,000 in Parking Services assets annually for capital work to maintain the current LOS and achieve the proposed LOS. It is recommended that $62,700 be invested annually for operating costs to maintain the current LOS and achieve the proposed LOS.

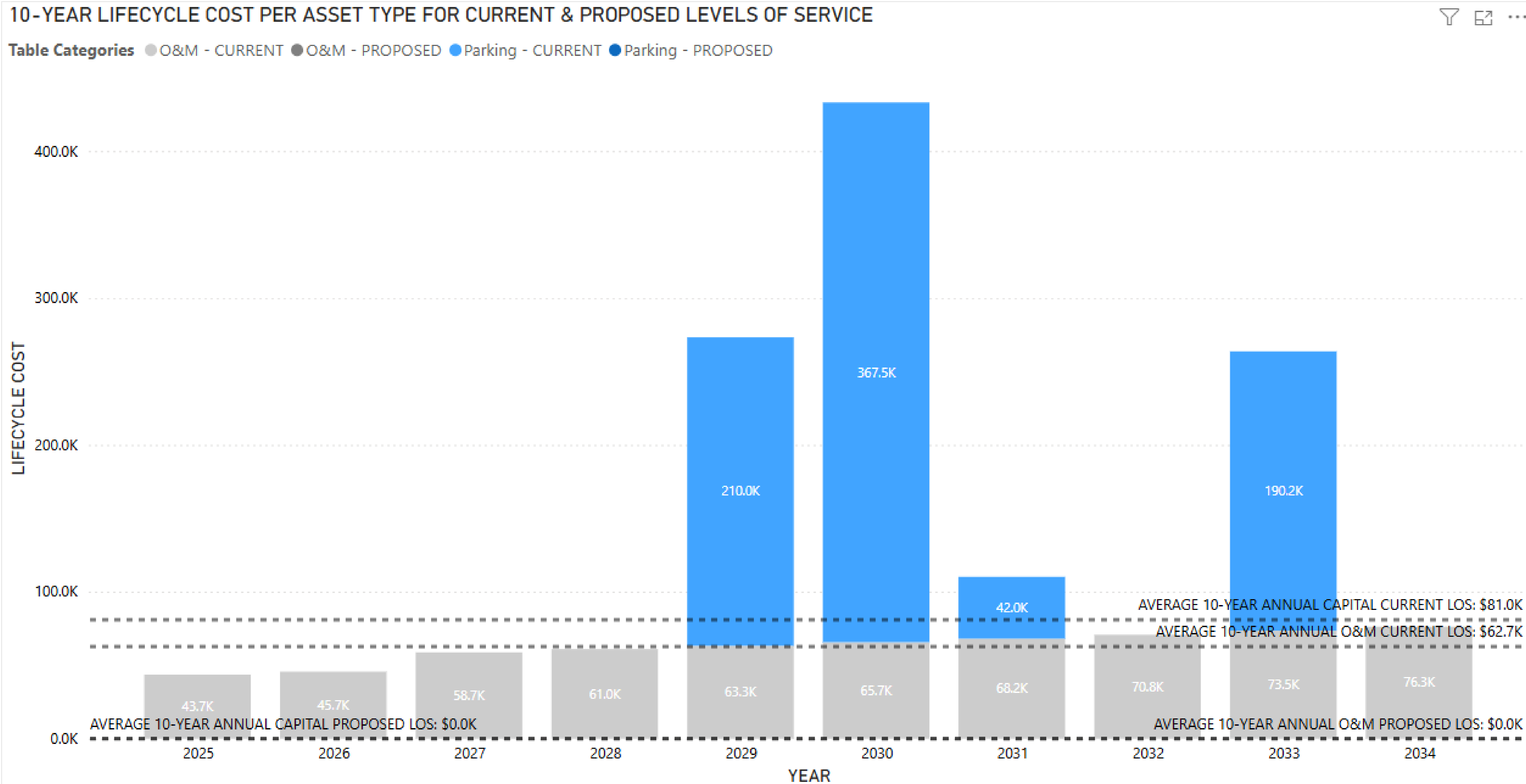

Figure 4: 10-Year Lifecycle Cost Per Parking Services Asset Type

Notes:

1. O&M costs are estimated based on the 2025 Preliminary Operating Budget and are inflated by 3.8% per year.
2. For assets where no formal capital forecast was available, the replacement year is based on the estimated remaining service life of each asset or the condition assessment of each asset, as applicable.
3. Assets with formal condition assessments which contained forecasting (i.e. Pump Stations) were included based on the estimated replacement/repair year in those assessments.

Per **Figure 5** below, the existing 10-year forecast from 2025–2034, further explained in **Section 8.3** of the **Asset Management Plan Overview Document**, indicates that the City is not currently dedicating capital funding to the replacement of Parking Services assets annually. The figure identifies an annual capital funding gap of $81,000 for these assets.

The City of Brantford has moved to a four (4) year budget cycle and departments will complete long term planning as opposed to annual planning for projects within this time period. The Prioritization Matrix explained in **Section 9** of the **Asset Management Plan Overview Document** has also been implemented which will help departments confirm priority projects. It is anticipated that the new process for the City's 2024 budget cycle will help departments prepare and request funding in advance of significant replacement costs for assets reaching the end of their useful life.

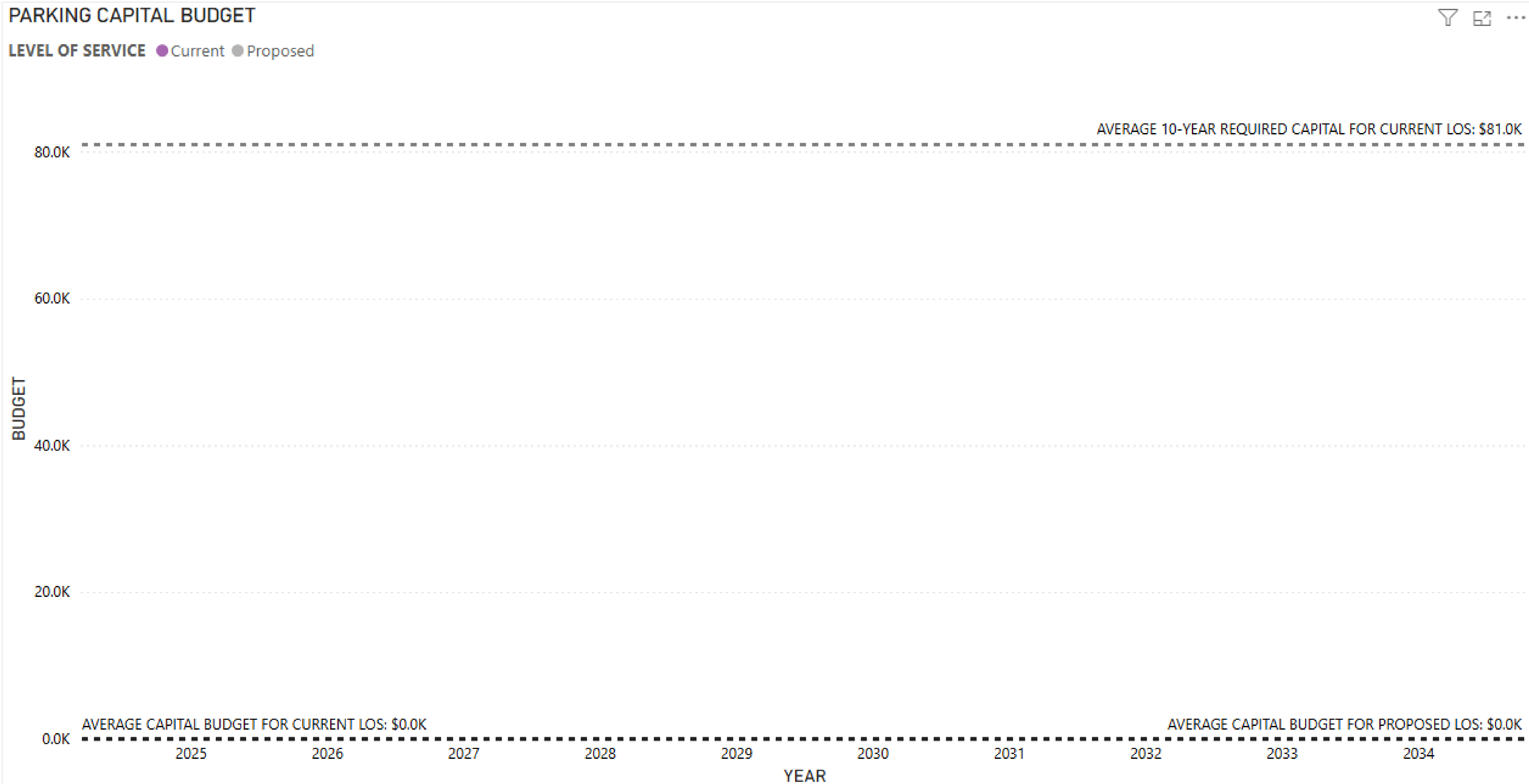

Figure 5: Existing Capital Budget Forecast from 2025–2034 for Parking Services Assets

1.5. CURRENT LEVELS OF SERVICE

1.5.1. O. REG. 588/17 CUSTOMER LEVELS OF SERVICE

O. Reg. 588/17 does not currently have defined customer levels of service for this asset class that must be reported in this plan. This section will be kept for future iterations in case O. Reg. 588/17 requires defined customer levels of service be reported.

1.5.2. O. REG. 588/17 TECHNICAL LEVELS OF SERVICE

O. Reg. 588/17 does not currently have defined technical levels of service for this asset class that must be reported in this plan. This section will be kept for future iterations in case O. Reg. 588/17 requires defined technical levels of service be reported.

1.5.3. MUNICIPALLY DEFINED CUSTOMER LEVELS OF SERVICE

The customer levels of service are defined in **Section 6.2** of the **Asset Management Plan Overview**. For Parking Services assets, the asset specific interpretation of these levels of service is defined below in **Table 7**.

Table 7: Municipally Defined Customer Levels of Service

Customer Level of Service	Definition
Accessibility	Parking Services assets should be accessible to all customers without barriers in place.
Quality	Parking Services assets should deliver their intended purpose at a certain quality.
Cost Efficiency	Parking Services assets should be operated efficiently with extra care to minimize costs.
Safety	Parking Services assets should be both safe to use and promote community safety, and customers should feel safe using these services.
Environmental Sustainability	Parking Services assets should be operating as environmentally as possible and also be promoting sustainable lifestyles.
Reliability	Parking Services assets should be available to customers and care should be taken to avoid closures or service disruptions.
Responsiveness	Parking Services assets should be maintained and repaired promptly to minimize service disruptions. Responsiveness should account for the relative risk to the public, the surrounding property, the asset itself and to the staff completing the response.

1.5.4. MUNICIPALLY DEFINED TECHNICAL LEVELS OF SERVICE

The technical levels of service for Parking Services Assets have been adopted based on the customer levels of service defined in **Table 7**. The currently available customer levels of service with the corresponding technical levels of service and KPI metrics are defined in **Table 8**.

Due to a low response rate on customer surveys conducted in 2023/2024, the confidence level in the applicability of the KPIs derived from the survey data, to the wider population, is Low. The need for additional KPIs and KPI targets has been identified and future iterations of this AMP will look for opportunities to gather and include this information.

The City recognizes that 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

Table 8: Levels of Service KPIs

				Proposed Future Performance										
Customer Level of Service	**Technical LOS**	**Units**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**LOS Option**
Accessibility	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Quality*	Percentage of Customers who rate overall performance of pay stations as Average or above.	% of Customers	90%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	Decrease
Cost Efficiency	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Safety*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Environmental Sustainability	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Reliability*	Percentage of Customers who rate overall performance of winter maintenance as Average or above.	% of Customers	67%	70%	70%	75%	75%	75%	75%	75%	75%	75%	75%	Increase
Responsiveness	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Note: Information obtained from customer surveys conducted in 2024, more details available in Overview Document. Due to a low response rate, the confidence level in the applicability of the information to the wider population is Low.

1.5.5. PROPOSED FUTURE LEVEL OF SERVICE TARGETS

For the purpose of this report and the discussion surrounding proposed future levels of service targets, there are three (3) possible options defined in **Table 9** including the risks associated with those options to the long term sustainability of the municipality.

Table 9 Technical Levels of Service KPIs

Level of Service Development Options	Description	Risk Associated with Options
Decrease Level of Service	Decreasing the level of service should result in cost savings. E.g. Snow is cleared from parking lots within 48-72 hours of snow fall	In some circumstances, decreasing the level of service may have little impact to the overall customer experience. In others, decreasing the level of service may result in a decreased level of customer satisfaction and could lead to safety concerns and possible damage to the City's reputation. Decreasing the level of service too much for an extended period of time may result in higher costs for repairs or closure of certain assets over the long-term.
Maintain Level of Service	Maintaining the level of service should maintain costs with increases anticipated to reflect inflation. Customer experience would also be anticipated to remain the same as well as the City's reputation. Costs would be anticipated to increase minimally over time due to inflation or growth factors. E.g. Snow is cleared from parking lots within 24-48 hours of snow fall	If the current levels of service match customer expectation and regulatory requirement, maintaining them would typically be the recommended approach. However if the current levels of service do not match customer expectations or regulatory requirements, then maintaining them may not be the recommended approach. Similarly, City reputation may not match with what the City would prefer. If a low level of service is maintained for too long it may lead to health and safety concerns.
Increase Level of Service	Increasing the level of service should result in enhanced customer experience and City reputation. E.g. Snow is cleared from parking lots within 12-24 hours of snow fall	Increasing service would involve increased costs. Increasing the level of service too much, for an extended period of time, may become financially unsustainable for the City

Each of the technical levels of service have been examined to see if and/or how the proposed levels of service differ from the current levels of service:

The Percentage of Customers who rate overall performance of pay stations as Average or above is currently 90% a lower amount of 80% or above will be targeted for the next ten (10) years. This decrease in the level of service target is due to the expectation that as the age of the pay stations increases the level of service they can provide will decrease. While the assets will continue to be maintained, it is expected that there will be an increased number of days where maintenance will be required. This increase in the number of maintenance days is expected to result in a lower level of overall customer satisfaction with pay station performance over time.

The Percentage of Customers who rate overall performance of winter maintenance as Average or above is currently 67% and is planned to be raised gradually to 75% by 2027 and then maintained for the remaining seven (7) years. This level of service will be maintained through City staff and contractors. This level of service is anticipated to fluctuate based on the severity of winter weather (E.g. total snowfall, freezing rain, snow storage capacity, etc.) the City experiences.

It is important to note that customer preferences and expectations do not always align with internal technical targets. A consideration of this section is linking the customer and technical levels of service to determine areas where different levels of service could be proposed. As previous survey results have a low level of data confidence, it is difficult to make any conclusive decisions based on this initial survey. Future iterations of the AMP will strive to improve the survey data confidence and allow for better alignment.

1.5.6. AFFORDABILITY AND ACHEIVABILITY CONFIDENCE

To determine whether the proposed levels of service are achievable and if the City can afford the proposed level of service **Table 10** has been developed to review confidence in the proposed levels of service.

Table 10 Affordability and Achievability Confidence

Customer Level of Service	Technical LOS	Achievability Confidence	Achievability Description	Affordability Confidence	Affordability Description
Accessibility	Not Applicable (N/A)	N/A	N/A	N/A	N/A
Quality	Percentage of Customers who rate overall performance of pay stations as Average or above	High	The Percentage of Customers who rate overall performance of pay stations as Average or above being decreased and then maintained at 80% or greater has a high achievability. High confidence has been selected as the pay stations are self-diagnostic and self-repairing with real-time updates. If the pay stations are unable to self-repair, a message is sent immediately to staff so that repairs can be initiated. As a result, pay stations are rarely unavailable to public and mobile payment options are always available.	High	By maintaining current levels of service and minimally increasing costs per inflation, the Percentage of Customers who rate overall performance of pay stations as Average or above being maintained at 80% or greater is affordable. High confidence has been selected as the pay stations are self-diagnostic and self-repairing which limits the costs required for staff or contractors to complete repairs.
Cost Efficiency	N/A	N/A	N/A	N/A	N/A
Safety	N/A	N/A	N/A	N/A	N/A
Environmental Sustainability	N/A	N/A	N/A	N/A	N/A
Reliability	Percentage of Customers who rate overall performance of winter maintenance as Average or above	Medium	The Percentage of Customers who rate overall performance of winter maintenance as Average or above being increased incrementally to 75% has a high achievability. Medium confidence has been selected as this achievability is tied to inclement winter weather which will fluctuate year over year. Staff believe that an average of 75% can be maintained.	Medium	The Percentage of Customers who rate overall performance of winter maintenance as Average or above has a Medium affordability confidence. Medium confidence has been selected as inclement winter weather for future years is anticipated to become more frequent and more intense with human-induced climate change, this may increase the need for winter maintenance and budgets may need to be re-evaluated throughout the next ten (10) years to accommodate these changes.
Responsiveness	N/A	N/A	N/A	N/A	N/A

It is important to note that while the proposed service level change may appear affordable when viewed in isolation of this plan specifically, when it is examined in the context of the overall budget, these levels may not be achievable and would be considered unaffordable. As service level data continues to be collected, staff will also continue to review the achievability and affordability of the levels of service proposed within the future iterations of this plan.

1.5.7. LEVEL OF SERVICE LIFECYCLE COST CONSIDERATIONS

Proper considerations should be made for the most cost effective methods that can be undertaken to achieve the lowest cost associated with a chosen level of service. Table 11 below includes the lifecycle options available and the associated risks with the chosen options.

Table 11 Lifecycle Options and Associated Risks

Lifecycle Options	Description	Risks Associated if Undertaken	Risks Associated if Not Undertaken
Planning	Consideration is made regarding the asset involving the needs of internal and/or external customers.	Planning activities may extend project timeline.	If planning activities were not undertaken there is a risk missing something that we needed
Operation & Maintenance	The asset is providing benefits to the community and operation and maintenance activities (see **Table 6**) are completed on the asset at specific time intervals to prevent premature failures of the asset.	Completing operation & maintenance activities may mean that there is limited or no access to the asset for a period of time.	If O&M activities were not undertaken the asset would have premature failures, become unsafe and would cost the City more to repair or would have to be closed/removed.
Repair	The asset or a portion of the asset is no longer functioning appropriately, and a repair is needed.	Completing repair activities may mean that there is limited or no access to the asset for a period of time.	If repair activities were not undertaken the asset would no longer function as it should and would affect service levels. The asset would eventually deteriorate and no longer function.
Replace	The asset has reached the end of its useful life and needs to be replaced to maintain service levels.	Replacing the asset may mean limited or no access to the asset during a period of time.	If replacement activities were not undertaken the asset would no longer function as it should and would affect service levels. The asset would need to be closed and eventually removed.
Remove	The asset has reached the end of its useful life or is no longer required to meet the appropriate service level and is removed.	Removing the asset may lead to a reduction in service levels.	The asset may be unsafe and could lead to health and safety concerns if not removed.
Install New/Expand	A new asset or extension to an existing asset is purchased and installed.	Installing a new asset may lead to increase costs which could lower service levels.	If a new asset is not installed this may lead to an eventual reduction in service levels.

Note: The full lifecycle stages for these assets can be found in Section 1.4.1 and the list of specific lifecycle activity options is located in Section 1.4.2 of this AMP.

Depending on the level of service being considered, the most cost effective method that should be undertaken to achieve the lowest cost associated with the specific level of service may actually be a combination of lifecycle activities. The combination selected will be based on that specific asset and the activities that are likely to give the lowest cost while maintaining the chosen service level.

When considering the Percentage of Customers who rate overall performance of pay stations as Average or above the lowest costs for lifecycle activities undertaken would be a combination of operation and maintenance activities and repairs to the existing asset. When the asset has reached the end of its useful life, there would be a need for replacement.

When considering the Percentage of Customers who rate overall performance of winter maintenance as Average or above the lowest costs for lifecycle activities undertaken would be a combination of operation and maintenance activities and repairs to the existing asset. When the asset has reached the end of its useful life, there would be a need for replacement.

1.6. CURRENT ASSET PERFORMANCE

The current asset performance for Parking Services assets has been separated into three (3) categories for this section of the report:

- Energy Performance;
- Operating Performance; and
- Sustainability Performance

1.6.1. PARKING SERVICES CURRENT ENERGY PERFORMANCE

The City of Brantford has a Corporate Energy Management Plan (CEMP) which emphasizes energy efficiency within the City. The goals of the CEMP are to reduce energy use, energy intensity, and greenhouse gas (GHG) emissions in City Facilities. In addition, through the City’s Climate Change Action Plan and Climate Lens Tool explained in **Section 10** of the **Asset Management Plan Overview Document**, the City has been working to improve our facilities’ energy efficiency and reduce the associated carbon footprint.

Currently, the City does not have a method to track Energy Performance for the Parking Services asset class. This section will be kept for future iterations as ways to track Energy Performance for this asset class are explored.

1.6.2. PARKING SERVICES CURRENT OPERATING PERFORMANCE

Currently, the City does not have a method to track Operating Performance for the Parking Services asset class. This section will be kept for future iterations as ways to track Operating Performance for this asset class are explored.

1.6.3. PARKING SUSTAINABILITY PERFORMANCE

To determine if the City is able to provide sustainable service delivery for the Parking assets, the **Asset Sustainability Index** (ASI) is utilized. It is calculated by taking the amount the City is proposing to spend on Levels of Service (LOS) and dividing it by the amount the City is projected as needing to spend to maintain the LOS. The ASI can be calculated for the Current LOS, the Proposed LOS or the combination of the two. It can be for Capital costs, Operating & Maintenance (O&M) costs or a combination of the two.

Table 12 shows the ASI for the various scenarios and the final combined for the different asset categories. The ASI is used as a high-level assessment of whether the City is accommodating asset renewals in an optimal and cost-effective manner based on timing and relative to financial constraints. It is also an indicator of the risk the City is accepting and targeted service levels it wishes to maintain.

Table 12 Asset Sustainability Index

	Current LOS	Proposed LOS	Combined LOS
Capital Costs	0%	N/A**	0%
O&M Costs*	N/A	N/A	N/A
Combined Costs	-	-	0%

* Due to the way the O&M costs are derived at this time, the ASI for O&M costs has not been included in this iteration of the AMP. It is expected to be included in future iterations as the O&M data tracking on an asset class specific basis improves.

**N/A stands for not applicable. It indicates that there are no identified LOS needs for that asset class at this time for whichever columns it appears in.

To ease understanding the ASI is reported as a percentage:

- An ASI of 100% is considered to be the best as it indicates that expenditures match what is needed to sustain levels of service. This is more efficient as it preserves infrastructure for the lowest cost over time.
- Above 100% funding should be reviewed as it suggests that the City is spending more than necessary, which may be an inefficient distribution of resources. In some circumstances this may be appropriate on a temporary basis to reduce backlogs of overdue repairs and/or replacements.
- Below 100% indicates a funding shortfall, meaning the City is not investing enough to maintain levels of service. If not addressed, this gap can lead to declines in levels of service over time.

The Parking ASI of 0% is below the Combined LOS ASI for all assets of 61%. It is due to the fact that while there is a current LOS capital cost requirement, no budget has been allocated for parking capital projects at this time.

1.7. DISCUSSION & CONCLUSIONS

In conclusion, the City of Brantford operates and maintains Parking Services assets. These assets are in Good condition with a total estimated replacement cost of approximately $1.9M. Inventory and condition data for Parking Services are typically at a Medium to High confidence level, with an overall average confidence level of Medium.

The lifecycle stages for Parking Services assets includes: Planning, Creation, O&M, and Disposal. During the Planning stage, the City identifies the need to obtain a Parking Services asset; during the Creation stage, the Parking Services asset is purchased, constructed, and/or installed; during the O&M stage, the Parking Services asset is in use by customers; and in the Disposal stage, the Parking Services asset has reached the end of its useful life and requires disposal.

Lifecycle activities are currently completed by City staff and contractors/suppliers to maintain state of good repair. At this time, detailed tracking and costs associated with these activities are not available and are estimated based on the 2025 Operating Budget.

It is estimated based on the average annual cost in the 10 Year Lifecycle Costing that the City should be spending on average $81,000 in capital investment annually for replacement of Parking Services assets, and be spending an average of $62,700 on Operating and Maintenance on these assets. The City is not currently dedicating any capital funding to Parking Services assets. This results in a funding gap of $81,000 from the forecasted capital need for Current and Proposed LOS. The City is currently proposing to spend $62,700 annually on Operating and Maintenance which matches the forecasted need. This results in no funding gap being identified for Operating and Maintenance.

Current and Proposed Levels of Service have been identified for Parking Services assets. Currently, these levels of service and associated KPIs are based on a survey conducted in 2023/2024 with external customers who utilize Parking Services assets. Due to a low response rate on customer surveys, the confidence level in the applicability of the KPIs derived from the survey data to the wider population is Low at this time. Brantford is working to continue to develop the process to track these metrics which will assist in tracking these and any further identified KPIs for future iterations.

Considered in isolation the Proposed Levels of Service have a Medium to High Confidence for Achievability and Affordability.

Asset performance is separated into energy, operating and sustainability performance in the Parking Services AMP. Due to limited tracking for assets, the City is not able to provide information for Parking Services energy and operating performance in this iteration of the AMP. Measurements for parking services will be developed for future iterations of the AMP. For Sustainability performance, the Combined Capital Level of Service Asset Sustainability Index (ASI) is 0%. This is below the ASI for all assets of 61%. Capital budget would need to be allocated in order to improve the ASI.

The next iteration of this Parking Services AMP document, due in 2030, will be revised to include updated and new information obtained over the next five years.