



Proposed Levels of Service and 10-Year Plan

The Municipality of South Dundas

Overview

The proposed levels of service and 10-year capital plan provide data-driven guidance to the Municipality of South Dundas on managing its core and non-core municipal infrastructure capital asset portfolio. This plan has been developed in accordance with Ontario Regulation 588/17 and addresses key reporting requirements, including proposed levels of service, lifecycle strategies, and financial targets for the following decade.

This report explores level of service options for the Municipality of South Dundas. The document presents a thorough assessment of current service standards alongside proposed level of service alternatives. It articulates implementation strategies through which the municipality can achieve these proposed service levels and explores lifecycle strategy options. Additional observations and recommendations are also included. The report focuses on community and technical level of service metrics that will serve as benchmarks for tracking municipal progress over the next decade. The report also contains a financial strategy component outlining funding projections designed to guide capital planning for the upcoming 10-year period.

Planning for forecasted population growth will require the expansion of existing infrastructure and services. As growth-related assets are constructed or acquired, they should be integrated into the municipality's AMP. New residential developments, including the Merkle Oak and Dutch Meadows subdivisions currently under construction, have been incorporated into this plan.

Level of Service Framework

A level of service (LOS) is a measure of what the municipality is providing to the community and the nature and quality of that service. Within each asset category in this report, metrics that measure both technical and community LOS have been established and measured as data is available. These measures include a combination of those that have been outlined in O. Reg. 588/17, in addition to performance measures identified by the municipality.

Community LOS

Community LOS are a simple, plain language description or measure of the service that the community receives. For core asset categories (roads, bridges and culverts, water, wastewater, stormwater), the Province, through O. Reg. 588/17, has provided qualitative description frameworks that are required to be included in an AMP. For non-core asset categories, the municipality has determined the qualitative descriptions that will be used to determine the Community LOS provided.

Technical LOS

Technical LOS are a measure of key technical attributes of the service being provided to the community. These include mostly quantitative measures and tend to reflect the impact of the municipality's asset management strategies on the physical condition of assets or the quality/capacity of the services they provide. For core asset categories (roads, bridges and culverts, water, wastewater, stormwater) the Province, through O. Reg. 588/17, has provided technical metrics that are required to be included in an AMP. For non-core asset categories, the municipality has selected the technical metrics.

Road Network

Community Levels of Service

The following table outlines the qualitative descriptions that determine the community levels of service provided by the municipality's road network.

	LOS Statement	Community LOS
Scope	Description, which may include maps, of the road network in the municipality and its level of connectivity.	The municipality maintains a road network comprising approximately 330 kilometers of asphalt and surface treated roads. Additionally, the municipality maintains approximately 50 kilometers of gravel roads.
Quality	Description or images that illustrate the different levels of road class pavement condition.	<p>The municipality completed a Road Needs Study in 2019 in coordination with McIntosh Perry. Every road section received a condition rating and detailed comments on the road's deficiencies and recommended repairs were provided. The condition rating is derived from a mix of other point ratings that considers alignment, surface condition, surface width, level of service, structural adequacy, drainage, and maintenance demands.</p> <p>The 2019 road needs study used a scale of 0-10, where "Very Poor" represents a condition rating equal or less than 2, "Poor" is a condition rating of 3-4, "Fair" is a condition rating of 5-6, "Good" is a condition rating of 7-8 and "Excellent" is a condition rating greater than 8.</p>

Technical Levels of Service

The following table outlines the quantitative descriptions that determine the technical levels of service provided by the municipality's road network.

	Technical LOS Metric	Current LOS	Proposed LOS
Scope	Lane-km of arterial roads (MMS class 1 and 2) per land area (km/km ²):	0 km/km ²	0 km/km ²
	Lane-km of collector roads (MMS class 1 and 2) per land area (km/km ²):	0 km/km ²	0 km/km ²
	Lane-km of local roads (MMS class 1 and 2) per land area (km/km ²):	0.63 km/km ²	0.64 km/km ²
	Kilometers of asphalt (HCB) roads:	208	333
	Kilometers of surface treated (LCB) roads:	121	0
	Kilometers of municipal sidewalks:	32 km	27 km
Quality	For paved roads in the municipality, the average pavement condition index value:	58.7	60 (Fair) or higher
	For unpaved roads in the municipality, the average surface condition (e.g. excellent, good, fair or poor):	Poor	Poor or better
	Number of years since the last road needs study:	6 years	2 years

Level of Service Options

1. Kilometers of municipal sidewalks: 32 km

Option #1: Reduce to 27 km (Proposed)

Option #2: Maintain 32 km (Current)

For roadways with sidewalks on both sides, staff recommends replacing the sidewalks on only one side upon reaching the end of their service life. This recommendation would only affect non-winter-maintained sidewalks and decrease the municipal sidewalk inventory by approximately 5,120 meters. This recommendation would decrease

the replacement costs for sidewalks by approximately \$850,000 and reduce the annual requirement by nearly \$21,000 resulting in cost savings while maintaining pedestrian accessibility.

2. Number of years since the last road needs study: 6 years

Option #1: Complete every 2 years (Proposed)

Option #2: Complete every 5 years

Option #3: No timeline for Roads Needs Studies (Current)

Staff recommends implementing biennial road needs studies to align with the existing OSIM bridge inspection reports currently completed in odd-numbered years. The municipality has no established schedule for these essential evaluations, with the most recent assessment completed by Macintosh Perry in 2019.

More frequent inspections would provide the municipality with current and accurate condition data, enabling quicker identification of maintenance and rehabilitation opportunities that can extend road longevity. The financial impact of implementing this recommendation is expected to be minimal, as they can be completed in collaboration with the county.

3. For paved roads in the municipality, the average pavement condition index value: 58.7

Option #1: Maintain 50 (Fair) or higher (Current)

Option #2: Maintain 60 (Fair) or higher (Proposed)

Option #3: Maintain 70 (Good) or higher

Staff recommends targeting an average Pavement Condition Index (PCI) rating of 60 or better for paved municipal roads. The municipality's current roads program has proven adequate in maintaining road condition ratings above 50. Increasing asset management funding for municipal roads would allow for more frequent maintenance, rehabilitation, and replacement events, ultimately preventing accelerated deterioration of infrastructure. By

increasing the frequency of roads needs studies, the municipality can more quickly identify and address repair and maintenance needs. With this proactive approach, we can expect to see condition ratings improve to 60 or better over the next 10 years.

Notes and Recommendations

1. Lane-km of local roads (MMS class 1 and 2) per land area (km/km²):
0.63 km/km²

The number of lane-km is expected to increase to 0.64 km/km² with the additions of Dutch Meadows and Merkley Oaks subdivisions.

Bridges and Culverts

Community Levels of Service

The following table outlines the qualitative descriptions that determine the community levels of service provided by the municipality's bridges and culverts.

	LOS Statement	Community LOS
Scope	Description of the traffic that is supported by municipal bridges (e.g., heavy transport vehicles, motor vehicles, emergency vehicles, pedestrians, cyclists).	A small percentage of the municipality's structures have loading or dimensional restrictions meaning that most types of vehicles, including heavy transport, motor vehicles, emergency vehicles and cyclists can cross them with minimal restrictions.
Quality	<ol style="list-style-type: none">1. Description or images of the condition of bridges and how this would affect use of the bridges.2. Description or images of the condition of culverts and how this would affect use of the culverts.	<p>Municipalities are required to complete biennial inspections of all bridges and structural culverts greater than or equal to 3 metres in span according to the Ontario Structure Inspection Manual. Each structure is inspected by a licensed engineer and any maintenance, rehabilitation, or replacement requirements are provided to the municipality.</p> <p>When bridges or structural culverts need to be closed or replaced, it can have a significant impact on the efficiency of the transportation network and detours may be required. The OSIM inspection program helps the municipality to implement lifecycle strategies that minimize the impacts of these potential service disruptions.</p>

Technical Levels of Service

The following table outlines the quantitative descriptions that determine the technical levels of service provided by the municipality's bridges and culverts.

	Technical LOS Metric	Current LOS	Proposed LOS
Scope	Percentage of bridges in the municipality with loading or dimensional restrictions:	14%	15% or lower
	Number of municipal bridges:	12	11
	Number of municipal major culverts:	21	21
Quality	Average bridge condition index (BCI) value for bridges in the municipality:	68	60 (Fair) or higher
	Average bridge condition index (BCI) value for culverts in the municipality:	68	60 (Fair) or higher

Level of Service Options

1. Percentage of bridges in the municipality with loading or dimensional restrictions: 14%

Option #1: Maintain 15% or lower (Current/Proposed)

Option #2: Maintain 30% or lower

Staff recommends maintaining the percentage of bridges that have loading or dimensional restrictions at 15% or lower. Nash Creek Bridge (Colquhoun Road) and South Branch Road Bridge are the only municipal bridges that currently have loading and dimensional restrictions. By replacing Nash Creek Bridge (estimated \$3 million) and replacing or removing South Branch Road Bridge (estimated \$2 million) at the end of their service lives, the percentage of bridges and culverts with these restrictions can be expected to decrease. There is a risk that other bridges may require loading or dimensional restrictions in the next OSIM inspections report. Having a high percentage of municipal bridges with loading or dimensional

restrictions poses several risks. Exceeding these limitations can result in permanent structural damage, potential bridge collapse, and serious safety hazards. Additionally, bridge restrictions force some drivers to use alternative routes, resulting in increased travel times and reduced transportation efficiency.

2. Number of municipal bridges: 12

Option #1: Reduce the number of bridges to 11 (Proposed)

Option #2: Maintain 12 bridges (Current)

Staff recommends reducing the number of municipal bridges from 12 to 11 by decommissioning the South Branch Road Bridge at the end of its service life, anticipated in 2031, rather than replacing. The limited residential presence along South Branch Road results in minimal usage of the bridge. Analysis indicates that alternative routes via Carman Road and Gilmour Road provide more efficient travel times than crossing the bridge. The decommissioning of the South Branch Road bridge presents a more affordable option for taxpayers, as it would only require funding for the decommissioning process rather than the nearly \$2 million needed for replacement within the next six years. Decommissioning South Branch Road Bridge would reduce the annual requirement for bridge and culverts by an estimated \$27,000. These substantial savings could be redirected toward higher priority assets within the municipality. Although this approach would reduce transportation efficiency for residents living along this section of road, it offers a significant opportunity for cost savings that warrants consideration.

Notes and Recommendations

1. The Bridge Condition Index (BCI) is a standardized numerical rating (0-100) that represents a bridge's current overall structural health. It is calculated by evaluating and weighting the condition of individual bridge components like decks, piers, and abutments; a higher BCI indicates better condition. While not a direct safety measure, it complements safety assessments to inform decisions about whether

bridges need routine maintenance, minor repairs, major rehabilitation, or replacement. This rating should not be interpreted as a measurement of the bridge's expected remaining service life. Staff recommends maintaining an average bridge condition index (BCI) value of 60 (Fair) or higher for municipal bridges and major culverts.

Buildings and Facilities

Community Levels of Service

The following table outlines the qualitative descriptions that determine the community levels of service provided by the municipality's buildings and facilities.

	LOS Statement	Community LOS
Scope	Description or images of the types of facilities that the municipality operates and the services that they help to provide to the community.	The provision of services to the community requires the municipality to own a diverse inventory of buildings and facilities. This asset management plan identifies facilities that provide administration, fire protection, recreation and transportation services to the community.
Quality	Description of the inspection processes, maintenance protocols, and frequency of assessments that ensure facilities remain in optimal operating condition to deliver reliable services to the community.	<p>The current Asset Management Plan relies on age-based condition assessments for municipal facilities. South Dundas' facilities are experiencing significant condition challenges across all categories.</p> <p>This report identifies a widespread infrastructure deficit across the municipal facility portfolio, with critical service buildings like fire stations showing the most urgent need for intervention due to their low condition ratings and higher level of service requirements.</p> <p>While staff conduct informal inspections on at least a regular basis, implementation of a formalized inspection process is recommended to ensure accuracy in condition assessments and repair prioritization.</p>

Technical Levels of Service

The following table outlines the quantitative descriptions that determine the technical levels of service provided by the municipality's buildings and facilities.

	Technical LOS Metric	Current LOS	Proposed LOS
Scope	Number of public works garages:	2	1 Centralized Facility
	Number of parks, recreation, and facilities garages:	1	0
	Number of salt sheds:	2	1
	Number of coverall structures:	3	1
	Number of public works sheds:	1	1
	Number of municipal fire halls:	3	3
	Number of commercial office spaces:	5	4
	Number of municipal recreation halls:	5	3
	Number of municipal arenas:	1	1
Quality	Weighted age-based condition of municipal facilities:	30 (Poor)	40 (Fair) or better
	Weighted percentage of municipal facilities in poor or worse condition:	70%	50% or less
Safety	Percentage of three municipal fire halls with significant health and safety concerns and/or infrastructure deficiencies:	100%	0%

Level of Service Options

1. Number of municipal garages: 3 (2 public works, 1 recreation)

Option #1: One centralized facility (Proposed)

Option #2: Maintain 3 garages (Current)

As the existing municipal facilities approach the end of their useful lives, staff recommends replacing multiple municipal garages with a single centralized facility. This option includes combining existing salt

sheds and coverall structures into one larger structure of each type. While the replacement costs are projected to be comparable to replacing as separate facilities, the benefits of centralization would include improved coordination between departments and more efficient allocation of equipment.

2. Number of municipal recreation halls: 5

Option #1: Reduce to 3 recreation halls (Proposed)

Option #2: Maintain 5, but reduce facility size when replacing (Matilda Hall and Riverside Hall)

Option #3: Maintain 5 recreation halls at current size (Current)

Upon reaching the end of their service lives, staff recommends replacing the five existing recreation halls with three. It is recommended that the municipality replaces the three western recreation halls (Iroquois Civic Centre, Matilda Hall, and Brinston EDP Building) with two facilities, while replacing the two eastern recreation halls (Riverside and Dunbar) with a single facility. There are 25,000 square feet of recreation halls across the municipality and limited programming overlap between facilities near one another. This suggests that the municipality's current programming service level can be maintained effectively with fewer facilities. The replacement cost of the five recreation halls would be expected to drop from approximately \$10.5 million to \$6.6 million (representing a \$3.9 million decrease) and therefore, the annual requirement for the five recreation halls would drop from approximately \$284k per year to \$182k per year (representing a \$102,000 decrease).

Option #2 involves reducing the size of two community recreation facilities at their replacement. This option proposes replacing Matilda Hall with a more compact structure comprising 75% of its current size, resulting in a replacement cost reduction from \$3 million to \$2.2 million (representing a \$742,000 decrease) and lowering annual requirement from \$72,000 to \$54,000 (representing expected annual requirement savings of \$18,000). Additionally, this option includes replacing Riverside Hall with a smaller one-story structure similar to Dunbar Hall, thereby reducing replacement costs from \$1.37 million to

\$880,000 (representing a \$490,000 decrease) and reducing annual requirement from \$25,000 to \$20,000 (representing a \$5,000 annual savings).

Notes and Recommendations

1. Percentage of three municipal fire halls with significant health and safety concerns and/or infrastructure deficiencies: 100%

Currently, all three municipal fire halls have significant health and safety concerns and/or infrastructure deficiencies. The Morrisburg Fire Hall lacks essential shower facilities necessary for proper decontamination and the facility's office spaces are positioned adjacent to apparatus exhaust without adequate exhaust removal systems. The deteriorating hose tower is difficult to use and poses a safety risk. Both the Iroquois and Williamsburg Fire Halls are too small to support fire apparatus needs. The Williamsburg fire hall also lacks a shower facility and proper exhaust removal systems. Staff recommends exploring potential renovation versus replacement strategies for all three fire halls to address safety concerns and spatial requirements.

2. Weighted age-based condition of facilities: 30 (Poor)

Currently, the weighted age-based condition of facilities in the municipality of South Dundas is 30 (Poor), and staff recommends improving to 40 (Fair) or better. Increasing asset management funding for building and facilities would enable more frequent maintenance events, ultimately improving the overall condition of municipal facilities. By implementing regular staff inspections, the municipality can more rapidly identify and address repair and maintenance needs. This proactive approach would allow for timely responses to issues discovered during inspections, therefore preventing accelerated deterioration of infrastructure.

3. Weighted percentage of facilities in poor or worse condition: 70%

Currently, 70% of municipal buildings and facilities are in poor or worse condition, and staff recommends reducing to 50% or less. Increased financial support for asset management of municipal buildings and facilities would create opportunities for more maintenance and replacement events which would gradually reduce the number of buildings and facilities in poor or worse condition. It should also be noted that condition ratings are currently determined based on the age of the asset.

4. The space formerly occupied by the Morrisburg Business Improvement Area (BIA) is now vacant. Since this space is not required for any Municipal Operations, there are no plans to replace it with another facility; this would decrease annual financial requirements by approximately \$4,600.
5. Staff recommends not replacing the Morrisburg clock tower storage structure, which would decrease annual financial requirements by approximately \$3,100.

Storm Sewer Network

Community Levels of Service

The following table outlines the qualitative descriptions that determine the community levels of service provided by the municipality's storm sewer network.

	LOS Statement	Community LOS
Scope	Description, which may include maps, of the storm sewer network in the municipality and its level of connectivity.	Most storm water systems are only designed to handle 1 to 5-year storm events. In other words, they are not designed to handle more extreme and unpredictable events and minor road flooding could occur in higher frequency events.

Technical Levels of Service

The following table outlines the quantitative descriptions that determine the technical levels of service provided by the municipality's storm sewer network.

	Technical LOS Metric	Current LOS	Proposed LOS
Scope	Percentage of properties in the municipality resilient to a 100-year storm:	No reliable data available	No reliable data available
	Percentage of the municipal stormwater management system resilient to a 5-year storm:	100%	100%
Quality	Weighted age-based condition of municipal storm network assets:	58 (Fair)	40 (Fair) or better

Level of Service Options

1. Percentage of properties in the municipality resilient to a 100-year storm: No reliable data available

Option #1: Maintain current storm network (Current/Proposed)

Option #2: Improve municipal storm network so that 100% of properties are resilient to a 100-year storm

Staff recommends the preservation of the municipality's current storm sewer network. Current assessments confirm the network's capacity to manage precipitation events classified as 5-year storms; however, comprehensive data regarding the municipality's resilience to 100-year storm events remains unavailable. If Option #2 is proposed, a comprehensive evaluation of the current storm sewer system and identification of necessary improvements to achieve enhanced precipitation management capabilities would be required.

Machinery and Equipment

Community Levels of Service

The following table outlines the qualitative descriptions that determine the community levels of service provided by the municipality's machinery and equipment.

	LOS Statement	Community LOS
Scope	Description or images of the types of equipment that the municipality operates and the services that they help to provide to the community.	The provision of services to the community requires the municipality to own a diverse inventory of machinery and equipment. This asset management plan identifies individual pieces of machinery and equipment that provide corporate, fire protection, recreation and transportation services to the community.

Technical Levels of Service

The following table outlines the quantitative descriptions that determine the technical levels of service provided by the municipality's machinery and equipment.

	Technical LOS Metric	Current LOS	Proposed LOS
Quality	The average assessed or age-based condition of municipal machinery and equipment:	35 (Poor)	40 (Fair) or better
	Weighted percentage of machinery and equipment currently beyond their estimated service life:	27%	20% or less

Notes and Recommendations

1. The average assessed or age-based condition of municipal machinery and equipment: 35 (Poor)

Staff recommends improving the average condition of machinery and equipment from 35 to 40 or better. Through increased investment for asset management purposes, more frequent replacement events can

occur, ultimately improving the overall condition of the municipality's machinery and equipment assets.

2. Weighted percentage of machinery and equipment currently beyond their estimated service life: 27%

Staff recommends reducing the percentage of equipment currently beyond their estimated service life from 27% to 20%. Through increased investment for asset management purposes, more frequent replacement events can occur, ultimately reducing the percentage of equipment assets beyond their estimated service life.

Land Improvements

Community Levels of Service

The following table outlines the qualitative descriptions that determine the community levels of service provided by the municipality's land improvements.

	LOS Statement	Community LOS
Scope	Description or images of the types of land improvements within the municipality and the services that they help to provide to the community.	The municipality owns a diverse inventory of land improvements that provide recreation services to the community. This asset management plan identifies several outdoor recreational facilities including beaches, waterfront, parking lots, tennis courts, baseball diamonds, outdoor rinks, and more.

Technical Levels of Service

The following table outlines the quantitative descriptions that determine the technical levels of service provided by the municipality's land improvements.

	Technical LOS Metric	Current LOS	Proposed LOS
Scope	Number of square meters of asphalt municipal parking lots:	68,704 sq m	65,179 sq m
	Number of square meters of gravel municipal parking lots:	12,760 sq m	12,420 sq m
	Number of municipal beaches:	2	2
	Number of ball diamonds with lighting:	5	5
	Number of ball diamonds without lighting:	2	2
	Number of tee ball diamonds:	2	2
	Number of tennis courts:	2	2
	Number of outdoor rinks:	3	3
	Number of dog parks:	1	1

Quality	The average age-based condition of municipal parking lots:	19 (Very Poor)	20 (Poor) or better
	The average age-based condition of beach and waterfront assets:	32 (Poor)	20 (Poor) or better
	The average age-based condition of municipal sports fields:	24 (Poor)	20 (Poor) or better

Level of Service Options

1. Square meters of combined municipal parking lots: 81.5k

Option #1: Reduce to 77.6k sq m (Proposed)

Option #2: Reduce to 79.4k sq m

Option #3: Maintain 81.5k sq m of parking lots (Current)

The proposed level of service options provided in this section are directly tied to the recreation hall level of service options provided in the buildings and facilities asset category section. Any changes to facility options would correspondingly impact their associated parking lots. Options 1 and 2 are projected to reduce the current annual parking lot requirement of approximately \$112,000 by \$11,900 and \$6,700, respectively.

Notes and Recommendations

1. The average condition of municipal land improvements:

The current average age-based condition for combined land improvements stands at 22, with parking lots at 19, beach and waterfront at 32, and sports fields at 24. Staff recommends maintaining an average age-based condition rating of 20% or higher. With increased investment in asset management, the municipality anticipates further improvements to the condition of its land improvements, exceeding the current target.

Vehicles

Community Levels of Service

The following table outlines the qualitative descriptions that determine the community levels of service provided by the municipality's vehicles.

	LOS Statement	Community LOS
Scope	Description or images of the types of vehicles that the municipality operates and the services they help to provide to the community.	The provision of services to the community requires the municipality to own a diverse inventory of vehicles. This asset management plan identifies individual vehicles that provide drainage, building, bylaw, fire protection, recreation and transportation services to the community.
Quality	Description of the inspection processes, maintenance protocols, and frequency of assessments that ensure vehicles remain in optimal operating condition to deliver reliable services to the community.	Municipal staff conduct annual vehicle inspections to assess each vehicle's remaining service life and identify necessary repairs and maintenance requirements. These condition assessments provide valuable insights that support vehicle replacement scheduling. Vehicle operators are required to complete pre-trip inspections before the use of any municipal vehicle.

Technical Levels of Service

The following table outlines the quantitative descriptions that determine the technical levels of service provided by the municipality's vehicles.

	Technical LOS Metric	Current LOS	Proposed LOS
Scope	Number of mowers:	1	1
	Number of excavators:	1	1
	Number of backhoes:	2	2
	Number of tandem trucks:	7	7
	Number of 1 ton trucks:	1	1
	Number of ¾ ton trucks (public works):	1	1

	Number of $\frac{3}{4}$ ton trucks (parks, recreation and facilities):	1	1
	Number of float trailers:	1	1
	Number of tractors:	1	1
	Number of triaxle trucks:	1	1
	Number of $\frac{1}{2}$ ton trucks (public works):	4	4
	Number of $\frac{1}{2}$ ton trucks (parks, recreation and facilities):	3	3
	Number of $\frac{1}{2}$ ton trucks (landfill):	1	1
	Number $\frac{3}{4}$ vans:	1	1
	Number of dump trailer:	1	1
	Number of small tractor:	1	1
	Number of zambonis:	1	1
	Number of graders:	1	1
	Number of compactors:	1	1
	Number of pick-up trucks (fire):	3	3
	Number of SUVs (fire):	1	1
	Number of tankers:	4	4
	Number of pumpers:	3	3
	Number of heavy rescue trucks:	1	1
	Number of mid rescue trucks:	1	1
	Number of bylaw vehicles:	1	1
	Number of building vehicles:	1	1
	Number of drainage vehicles:	1	1

Water Network

Community Levels of Service

The following table outlines the qualitative descriptions that determine the community levels of service provided by the municipality's water network.

	LOS Statement	Community LOS
Scope	1. Description, which may include maps, of the user groups or areas of the municipality that are connected to the municipal water system.	The municipality maintains a water distribution network comprising of approximately 64 kilometers of water lines that span across Morrisburg and Iroquois. The municipality has a single water treatment facility located in Morrisburg; transmission lines are used to carry treated water to Iroquois residents.
	2. Description, which may include maps, of the user groups or areas of the municipality that have fire flow.	To support emergency services, the municipality maintains nearly 250 fire hydrants throughout the water network. These hydrants are strategically located across Morrisburg and Iroquois, providing critical infrastructure for fire protection.
Quality	1. Description of boil water advisories and service interruptions.	There were zero boil water advisories and eleven water main breaks in 2024.
	2. Description of the inspection processes, maintenance protocols, and frequency of assessments that ensure water network assets remain in optimal operating condition to deliver reliable services to the community.	The municipality uses age-based condition ratings to identify potentially higher-risk water assets. For these higher-risk assets, water and wastewater department staff conduct more in-depth inspections, including CCTV camera work for high-risk water lines, to better assess condition and identify necessary maintenance.

Technical Levels of Service

The following table outlines the quantitative descriptions that determine the technical levels of service provided by the municipality's water network.

	Technical LOS Metric	Current LOS	Proposed LOS
Scope	Percentage of properties connected to the municipal water system:	37%	41%
	Percentage of properties where fire flow is available:	37%	41%
	Daily rated capacity (m ³) of treated water available to properties connected to the municipal water system:	9,495 m ³	9,495 m ³
Quality	Number of connection-days per year where a boil water advisory notice is in place compared to the total number of properties connected to the municipal water system:	0	0
	Number of connection-days per year where water is not available due to water main breaks compared to the total number of properties connected to the municipal water system:	0.00254	0.00254 or lower

Notes and Recommendations

1. Percentage of properties connected to the municipal water system and where fire flow is available: 37%

The planned residential developments of Dutch Meadows and Merkley Oaks are projected to increase the percentage of properties connected to the municipal water system to reach approximately 41% in South Dundas; additionally, the percentage of properties where fire flow is available is also expected to increase to 41%.

2. Daily rated capacity (m³) of treated water available to properties connected to the municipal water system: 9,495 m³

Current water infrastructure is adequately prepared to handle existing water needs, with the ability to accommodate future growth from the

Dutch Meadows and Merkley Oaks subdivisions. The municipality should maintain a proactive approach by continuously monitoring and evaluating water infrastructure capacity and conducting regular assessments to ensure that the existing systems can effectively manage increased residential development and potential environmental changes.

Wastewater Network

Community Levels of Service

The following table outlines the qualitative descriptions that determine the community levels of service provided by the municipality's wastewater network.

	LOS Statement	Community LOS
Scope	Description, which may include maps, of the user groups or areas of the municipality that are connected to the municipal wastewater system.	The municipality maintains a wastewater collection network comprising of approximately 45 kilometers of sanitary sewer lines. Morrisburg, Iroquois, and Williamsburg have distinct and independent wastewater collection networks. Morrisburg and Iroquois each maintain independent wastewater treatment facilities, while Williamsburg relies on a sewage lagoon for its wastewater treatment processes.
Quality	Description of how combined sewers in the municipal wastewater system are designed with overflow structures in place which allow overflow during storm events to prevent backups into homes.	The municipality does not own any combined sewers
	Description of the frequency and volume of overflows in combined sewers in the municipal wastewater system that occur in habitable areas or beaches.	The municipality does not own any combined sewers
	Description of how stormwater can get into sanitary sewers in the municipal wastewater system, causing sewage to overflow into streets or backup into homes.	Stormwater can enter sanitary sewers due to cracks in sanitary mains or through indirect connections (e.g., weeping tiles). In the case of heavy rainfall events, sanitary sewers may experience a volume of water and sewage that exceeds its design capacity. In some cases, this can cause water and/or sewage to overflow into streets or backup into homes. The disconnection of eavestroughs and weeping tiles though downspouts as an alternative can help reduce the chance of this occurring.

Technical Levels of Service

The following table outlines the quantitative descriptions that determine the technical levels of service provided by the municipality's wastewater network.

	Technical LOS Metric	Current LOS	Proposed LOS
Scope	Percentage of properties connected to the municipal wastewater system:	35%	40%
	Maximum average raw sewage flow capacity (m ³) of properties connected to Morrisburg's wastewater system:	4,608 m ³	4,608 m ³
	Maximum average raw sewage flow capacity (m ³) of properties connected to Iroquois' wastewater system:	3,300 m ³	3,300 m ³
	Maximum average raw sewage flow capacity (m ³) of properties connected to Williamsburg's wastewater system:	383 m ³	383 m ³
Quality	The number of events per year where combined sewer flow in the municipal wastewater system exceeds system capacity compared to the total number of properties connected to the municipal wastewater system:	0	0
	The number of connection-days per year due to wastewater backups compared to the total number of properties connected to the municipal wastewater system:	0	0
	The number of effluent violations per year due to wastewater discharge compared to the total number of properties connected to the municipal wastewater system:	0	0

Notes and Recommendations

- Percentage of properties connected to the municipal wastewater system: 35%
The planned residential developments of Dutch Meadows and Merkley Oaks are projected to increase the percentage of properties connected

to the municipal wastewater system to reach approximately 40% in South Dundas.

2. Maximum average raw sewage flow capacity (m^3) of properties connected to the municipal wastewater system:

Current wastewater infrastructure is adequately prepared to handle existing wastewater needs, with the ability to accommodate future growth from the Dutch Meadows and Merkleby Oaks subdivisions. The municipality should maintain a proactive approach by continuously monitoring and evaluating wastewater infrastructure capacity and conducting regular assessments to ensure that the existing systems can effectively manage increased residential development and potential environmental changes.

Lifecycle Strategy

The following table outlines the Municipality of South Dundas' lifecycle activities for all asset categories.

Asset Category	Asset Segment/ Department	Lifecycle Events
Road Network	Road Surface	Asphalt resurfacing (after 15 and 30 years), Replacement (after 45 years)
	Road Base	Replacement (after 100 years)
	Gravel Roads	Gravel Resurfacing (every 3 years), Replacement (after 50 years)
	Streetlights	Replacement (after 20 years)
	Sidewalks	Replacement (after 40 years)
	Guide Rail	Replacement (after 50 years)
Bridges and Culverts	Bridges	Replacement (after 75 years)
	Culverts	Replacement (after 50 years)
Storm Sewer Network	Storm Lines	Replacement (after 100 years)
	Catch Basin	Replacement (after 75 years)
Machinery and Equipment	Administration	Replacement (after 5-15 years)
	Fire	Replacement (after 10-25 years)
	Public Works	Replacement (after 10-15 years)
	Recreation	Replacement (after 15-25 years)
Vehicles	Building/Bylaw	Regular Maintenance, Replacement (after 6 years)
	Fire	Regular Maintenance, Replacement (after 6-30 years)

	Public Works	Regular Maintenance, Replacement (after 3-15 years)
	Recreation	Regular Maintenance, Replacement (after 6-15 years)
	Drainage	Regular Maintenance, Replacement (after 6 years)
Buildings	Administration	Regular Maintenance, Replacement (after 20-60 years)
	Fire	Regular Maintenance, Replacement (after 20-60 years)
	Public Works	Regular Maintenance, Replacement (after 20-60 years)
	Recreation	Regular Maintenance, Replacement (after 10-60 years)
Land Improvements	Beach and Waterfront	Replacement (after 25-40 years)
	Parking Lots	Replacement (after 25-40 years)
	Sports Fields	Replacement (after 25-40 years)
Water Network	Water Plant, Pumping Stations, Water Towers	Regular Maintenance, Replacement (after 60-75 years)
	Machinery and Equipment	Replacement (after 10-25 years)
	Vehicles	Regular Maintenance, Replacement (after 6-10 years)
	Water Lines	Relining/Replacement (after 100 years)
	Water Service Lines	Relining/Replacement (after 100 years)

	Water Valves	Replacement (after 50 years)
	Water Meters	Replacement (after 20 years)
	Fire Hydrants	Replacement (after 75 years)
Wastewater Network	Sewer Plant, Pumping Stations, Lagoon	Regular Maintenance, Replacement (after 60-75 years)
	Machinery and Equipment	Replacement (after 10-25 years)
	Vehicles	Regular Maintenance, Replacement (after 6-10 years)
	Sewer Lines	Relining/Replacement (after 100 years)
	Force Main	Replacement (after 100 years)
	Laterals	Relining/Replacement (after 100 years)
	Manholes	Replacement (after 75 years)

Lifecycle Strategy Options

1. Road Resurfacing

Option #1: Asphalt resurfacing for all roads (Proposed)

Option #2: Combination of asphalt treatment (212km) and double surface treatment (121km) (Current)

The Municipality of South Dundas currently maintains separate lifecycle strategies for asphalt (HCB) roads and surface treated (LCB) roads. Asphalt roads typically undergo one micro surfacing event after 15-20 years, with a total lifecycle of approximately 25 years before renewal is necessary. Surface treated roads require maintenance interventions approximately every 7 years, with an overall expected

lifecycle of around 20 years. Staff recommends implementing the following lifecycle strategy for all municipal roads.

Event	Description	Years Before Next Event
Replacement	Pulverize, Asphalt layer (2-inch depth), Shave and Pave (Semi-Rural Only)	15 Years
Event #1	Resurface (1-inch of asphalt)	15 Years
Event #2	Resurface (1-inch of asphalt)	15 Years

Staff proposes an asphalt-based lifecycle strategy for all municipal roadways (333 kilometers). This approach includes applying one-inch asphalt overlays twice during each road's lifecycle, with each application extending service life by approximately 15 years. Following these two interventions, roads would undergo pulverization and the construction of a new two-inch asphalt surface, creating a 45-year lifecycle.

This strategy would include converting existing surface treated roads to asphalt surfaces. The implementation of this lifecycle strategy is expected to reduce the annual requirement for road surfaces by approximately \$680,000.

Financial Strategy

The following table outlines the municipality's 2025 budgeted reserve contributions available for capital projects. The annual funding requirement needed to maintain proposed levels of service is also identified. Annual requirements were calculated by applying a 3% inflation rate to 2024 estimated replacement and maintenance costs.

Assets in the following table are grouped based on the reserve or reserve fund account that their capital projects are funded through. Building department vehicles have been grouped separately because their capital projects are funded through the Building Reserve. See further explanation on the following page.

Asset Category	2025 Reserve Contributions	2025 Annual Requirement	% of AR
Roads Network, Bridges and Culverts, Storm Sewer Network	\$1,302,598	\$4,883,801	27%
Buildings and Facilities, Recreation, Land Improvements	\$487,000	\$2,678,723	18%
Vehicles (Roads, Facilities, Fire, Bylaw, and Drainage)	\$750,000	\$1,287,092	58%
Vehicles (Building)	\$5,000	\$8,841	57%
Fire Equipment	\$97,000	\$144,905	67%
Administration Equipment	\$0	\$11,245	0%
Water Network	\$517,127	\$2,328,618	22%
Wastewater Network	\$400,024	\$2,225,879	18%
Total Assets	\$3,558,749	\$13,569,104	26%

Reserves and Reserve Funds

The municipality's Road Reserve provides funding for capital projects related to the municipality's road network, including road surfaces, sidewalks, streetlights, bridges, culverts, and storm sewer network assets.

The Recreation and Facility Reserve supports capital projects related to facilities across all municipal departments, with the exception of water and wastewater which are funded through user rates. This reserve is also available for recreation equipment and land improvement assets, including parking lots.

The Vehicle Replacement Reserve Fund is designated for the replacement of vehicles across Roads, Facilities, Fire, Bylaw, and Drainage departments. Building department vehicle acquisitions are funded through the Building Reserve.

Fire equipment related capital expenditures are supported through the dedicated Fire Reserve and Reserve Fund. Administrative equipment purchases are funded through the General Working Reserve.

Water infrastructure capital projects can use funding through the Water Reserve Fund, which supports all water rate-funded assets, including treatment facilities, distribution vehicles, water main infrastructure, and specialized water system equipment. Similarly, wastewater capital projects are funded through dedicated Wastewater Reserve Funds, with separate allocations maintained for the Morrisburg, Iroquois, and Williamsburg hamlet service areas.

Projected Reserve Contributions

In 2025, budgeted reserve contributions for asset management purposes averaged approximately 26% of calculated annual requirements. By 2035, the Municipality of South Dundas expects to contribute, at a minimum, 40% of the calculated annual requirements for bridges and culverts, road assets, non-recreation facilities, fire equipment, vehicles, water assets, and wastewater assets. The municipality expects to reach 25% of the calculated annual requirement for non-fire machinery and equipment and recreation facilities. The Municipality of South Dundas expects to reach 10% of the calculated annual requirement for land improvements and storm sewer

network assets. Based on these percentages, the municipality is projected to contribute \$5.1 Million to reserves in 2035.

The following table outlines the municipality's 2025 budgeted reserve contributions against the projected 2035 reserve contributions. Table values are expressed in 2025 dollars. If more than 100% of an asset's target is currently being funded, it is recommended that the municipality maintain the current reserve contribution amount over the next 10 years at a minimum. The projected General Working Reserve balance at the end of 2025 is expected to be sufficient to support administration equipment replacements.

Reserve Account	2025 Reserve Contributions	2035 Projected Reserve Contributions
Roads Network, Bridges and Culverts, Storm Sewer Network	\$1,302,598	\$1,817,551
Buildings and Facilities, Recreation, Land Improvements	\$487,000	\$746,463
Vehicles (Roads, Facilities, Fire, Bylaw, and Drainage)	\$750,000	\$750,000
Vehicles (Building)	\$5,000	\$5,000
Fire Equipment	\$97,000	\$97,000
Administration Equipment	\$0	\$0
Water Network	\$517,127	\$847,811
Wastewater Network	\$400,024	\$840,617
Total Assets	\$3,558,749	\$5,104,443

Capital Projects Requiring Funding Outside of Reserves

The 10-year capital plan has identified projects in 2026, 2028, and 2029 that, if undertaken, would result in funding shortfalls. To address these anticipated deficits, the Municipality of South Dundas must evaluate and implement appropriate financing strategies.

Available options for addressing funding gaps include debt financing arrangements, temporary borrowing from other reserves, pursuit of grant opportunities, increased annual contributions to reserves during years of projected shortfalls, deferral of project timelines, or elimination of non-essential projects from the capital plan.

Each alternative funding option carries risks that must be carefully evaluated. Debt financing creates long-term financial obligations that reduce budget flexibility and may limit future borrowing capacity, while inter-reserve borrowing risks creating liquidity constraints in other municipal service areas. Grant funding introduces uncertainty regarding project timelines and approval, with lengthy application processes that may result in project delays or cancellation. Increasing annual reserve contributions requires either tax increases or service reallocation that may burden taxpayers or compromise other municipal operations. Project deferral risks asset deterioration and higher future replacement costs while potentially compromising public safety or service reliability. Eliminating projects from the capital plan may result in emergency replacements at significantly higher costs and foregoes potential operational efficiencies or community benefits that planned infrastructure investments would provide.

10-Year Capital Plan

The Municipality of South Dundas' 10-year capital plan has been organized by the ten reserve and reserve fund accounts with direct relevance to capital infrastructure planning. It incorporates each reserve's projected opening balance for 2026, alongside anticipated annual contributions based on established 2025 contribution levels. Where applicable, the plan integrates funding from the Ontario Community Infrastructure Fund (OCIF) and the Canada Community-Building Fund (CCBF).

The capital plan recognizes resources that will become available through the completion of existing debt repayments. These funds, previously allocated to long-term debt, can be redirected toward capital project financing upon debt retirement. Based on this financial foundation, the plan identifies and prioritizes capital projects according to asset risk assessments and projected annual funding availability.

The municipality maintains full discretionary authority over project implementation and is not committed to completing all capital initiatives identified within this plan. Projects have been organized by risk priority and aligned with projected funding capacity to serve as a decision-making framework for future capital investment choices. This flexible approach allows the municipality to adapt to changing circumstances, select alternative projects, or defer initiatives based on evolving priorities and updated information. The plan functions as a strategic planning tool to inform and support future capital decisions.

This document serves as a living framework that requires regular updates to reflect evolving capital requirements and changing funding availability. The plan should be revised periodically to maintain alignment with the municipality's infrastructure needs and fiscal capacity.

Road Reserve	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening: Reserves	\$ 920,802	\$ 1,808,878	\$ 149,994	\$ 802,267	\$ 1,124,449	\$ 963,154	\$ 1,558,010	\$ 1,387,590	\$ 1,501,251	\$ 1,104,393
CCBF	\$ 376,160	\$ 376,160	\$ 376,160	\$ 376,160	\$ 376,160	\$ 376,160	\$ 376,160	\$ 376,160	\$ 376,160	\$ 376,160
OCIF	\$ 676,324	\$ 676,324	\$ 676,324	\$ 676,324	\$ 676,324	\$ 676,324	\$ 676,324	\$ 676,324	\$ 676,324	\$ 676,324
Elimination of Long-Term Debt	\$ 3,610	\$ 7,220	\$ 10,820	\$ 122,588	\$ 122,588	\$ 177,588	\$ 177,588	\$ 218,733	\$ 218,733	\$ 218,733
Contribution to Reserves	\$ 316,077	\$ 367,573	\$ 419,068	\$ 463,763	\$ 522,059	\$ 573,554	\$ 625,049	\$ 676,545	\$ 628,040	\$ 779,535
Available Funding	\$ 2,292,974	\$ 3,236,155	\$ 1,632,366	\$ 2,441,102	\$ 2,821,579	\$ 2,766,780	\$ 3,413,131	\$ 3,335,352	\$ 3,400,508	\$ 3,155,146
Capital Projects Funded By Reserves	\$ 484,095	\$ 3,086,161	\$ 830,099	\$ 1,316,653	\$ 1,858,425	\$ 1,208,771	\$ 2,025,541	\$ 1,834,101	\$ 2,296,115	\$ 2,122,080
Closing: Reserves	\$ 1,808,878	\$ 149,994	\$ 802,267	\$ 1,124,449	\$ 963,154	\$ 1,558,010	\$ 1,387,590	\$ 1,501,251	\$ 1,104,393	\$ 1,033,066
Capital Projects Requiring Additional Funding										
Morrisburg Plaza	\$ 1,050,556	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Closing: Reserves (Including All Projects)	\$ 758,322	-\$ 900,562	-\$ 248,289	\$ 73,892	-\$ 87,402	\$ 507,453	\$ 337,034	\$ 450,694	\$ 53,837	-\$ 17,490

Recreation and Facility Reserve	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening: Reserves	\$ 493,703	\$ 822,433	\$ 715,888	\$ 917,842	\$ 605,235	\$ 977,811	\$ 1,055,958	\$ 1,106,953	\$ 1,271,893	\$ 1,264,127
Elimination of Long-Term Debt	\$ 8,716	\$ 17,431	\$ 25,993	\$ 34,863	\$ 72,976	\$ 52,294	\$ 60,951	\$ 69,725	\$ 179,477	\$ 331,566
Contribution to Reserves	\$ 512,946	\$ 518,893	\$ 564,839	\$ 290,785	\$ 616,732	\$ 642,678	\$ 668,624	\$ 694,570	\$ 320,517	\$ 746,463
Available Funding	\$ 1,015,365	\$ 1,358,757	\$ 1,306,720	\$ 1,243,490	\$ 1,294,943	\$ 1,672,783	\$ 1,785,533	\$ 1,871,248	\$ 1,771,887	\$ 2,342,156
Capital Projects Funded By Reserves	\$ 192,932	\$ 642,869	\$ 388,877	\$ 638,255	\$ 317,132	\$ 616,824	\$ 678,580	\$ 599,355	\$ 507,760	\$ 736,486
Closing: Reserves	\$ 822,433	\$ 715,888	\$ 917,842	\$ 605,235	\$ 977,811	\$ 1,055,958	\$ 1,106,953	\$ 1,271,893	\$ 1,264,127	\$ 1,605,670
Capital Projects Requiring Additional Funding										
Morrisburg Plaza	\$ 1,422,121	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Centralized Operations Lot	\$ -	\$ -	\$ -	\$ 5,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Closing: Reserves (Including All Projects)	-\$ 599,688	-\$ 706,233	-\$ 504,278	-\$ 5,816,885	-\$ 5,444,309	-\$ 5,366,162	-\$ 5,315,168	-\$ 5,150,227	-\$ 5,157,993	-\$ 4,816,451

Vehicle Replacement Reserve	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening: Reserves	\$ 137,914	\$ 211,424	\$ 279,705	\$ 538,702	\$ 474,997	\$ 975,457	\$ 914,364	\$ 829,784	\$ 939,704	\$ 1,620,241
Contribution to Reserves	\$ 750,000	\$ 750,000	\$ 750,000	\$ 1,050,000	\$ 750,000	\$ 750,000	\$ 750,000	\$ 750,000	\$ 1,250,000	\$ 750,000
Available Funding	\$ 887,914	\$ 961,424	\$ 1,029,705	\$ 1,588,702	\$ 1,224,997	\$ 1,725,457	\$ 1,664,364	\$ 1,579,784	\$ 2,189,704	\$ 2,370,241
Capital Projects Funded By Reserves	\$ 676,490	\$ 681,720	\$ 491,003	\$ 1,113,705	\$ 249,540	\$ 811,093	\$ 834,580	\$ 640,080	\$ 569,463	\$ 1,478,050
Closing: Reserves	\$ 211,424	\$ 279,705	\$ 538,702	\$ 474,997	\$ 975,457	\$ 914,364	\$ 829,784	\$ 939,704	\$ 1,620,241	\$ 892,191
Capital Projects Requiring Additional Funding										
P181 - Spartan Pumper (W#2)	\$ -	\$ -	\$ 1,236,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
T184 - International 7300 Tanker (W#8)	\$ -	\$ -	\$ 824,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Closing: Reserves (Including All Projects)	\$ 211,424	\$ 279,705	-\$ 1,521,298	-\$ 1,585,003	-\$ 1,084,543	-\$ 1,145,636	-\$ 1,230,216	-\$ 1,120,296	-\$ 439,759	-\$ 1,167,809

Fire Reserve and Reserve Fund	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening: Reserves	\$ 128,130	\$ 114,648	\$ 2,801	\$ 18,262	\$ 76,262	\$ 28,687	\$ 16,853	\$ 74,853	\$ 35,003	\$ 57,159
Contribution to Reserves	\$ 97,000	\$ 117,000	\$ 97,000	\$ 97,000	\$ 97,000	\$ 97,000	\$ 97,000	\$ 97,000	\$ 97,000	\$ 97,000
Available Funding	\$ 225,130	\$ 231,648	\$ 99,801	\$ 115,262	\$ 173,262	\$ 125,687	\$ 113,853	\$ 171,853	\$ 132,003	\$ 154,159
Capital Projects Funded By Reserves	\$ 110,482	\$ 228,847	\$ 81,539	\$ 39,000	\$ 144,575	\$ 108,834	\$ 39,000	\$ 136,850	\$ 74,844	\$ 62,278
Closing: Reserves	\$ 114,648	\$ 2,801	\$ 18,262	\$ 76,262	\$ 28,687	\$ 16,853	\$ 74,853	\$ 35,003	\$ 57,159	\$ 91,881

Building Reserve	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening: Reserves	\$ 24,707	\$ 29,707	\$ 34,707	\$ 39,707	\$ 7	\$ 5,007	\$ 10,007	\$ 15,007	\$ 20,007	\$ 25,007
Contribution to Reserves	\$ 5,000	\$ 5,000	\$ 5,000	\$ 11,800	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000
Available Funding	\$ 29,707	\$ 34,707	\$ 39,707	\$ 51,507	\$ 5,007	\$ 10,007	\$ 15,007	\$ 20,007	\$ 25,007	\$ 30,007
Capital Projects Funded By Reserves	\$ -	\$ -	\$ -	\$ 51,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Closing: Reserves	\$ 29,707	\$ 34,707	\$ 39,707	\$ 7	\$ 5,007	\$ 10,007	\$ 15,007	\$ 20,007	\$ 25,007	\$ 30,007

General Working Reserve	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening: Reserves	\$ 1,820,711	\$ 1,814,177	\$ 1,814,177	\$ 1,790,648	\$ 1,737,312	\$ 1,737,312	\$ 1,737,312	\$ 1,737,312	\$ 1,737,312	\$ 1,737,312
Contribution to Reserves	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Available Funding	\$ 1,820,711	\$ 1,814,177	\$ 1,814,177	\$ 1,790,648	\$ 1,737,312	\$ 1,737,312	\$ 1,737,312	\$ 1,737,312	\$ 1,737,312	\$ 1,737,312
Capital Projects Funded By Reserves	\$ 6,534	\$ -	\$ 23,529	\$ 53,336	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Closing: Reserves	\$ 1,814,177	\$ 1,814,177	\$ 1,790,648	\$ 1,737,312	\$ 1,737,312	\$ 1,737,312	\$ 1,737,312	\$ 1,737,312	\$ 1,737,312	\$ 1,737,312

Water Capital Reserve Fund	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening: Reserves	\$ 1,106,213	\$ 745,211	\$ 1,160,193	\$ 841,730	\$ 1,202,549	\$ 1,064,008	\$ 1,224,310	\$ 1,098,796	\$ 984,388	\$ 712,776
Elimination of Long-Term Debt	\$ 9,928	\$ 19,855	\$ 253,121	\$ 360,123	\$ 360,123	\$ 360,123	\$ 360,123	\$ 360,123	\$ 360,123	\$ 360,123
Contribution to Reserves	\$ 550,195	\$ 583,264	\$ 616,332	\$ 649,401	\$ 682,469	\$ 715,538	\$ 748,606	\$ 781,674	\$ 814,743	\$ 847,811
Available Funding	\$ 1,666,336	\$ 1,348,330	\$ 2,029,645	\$ 1,851,253	\$ 2,245,141	\$ 2,139,668	\$ 2,333,038	\$ 2,240,593	\$ 2,159,254	\$ 1,920,710
Capital Projects Funded By Reserves	\$ 921,126	\$ 188,137	\$ 1,187,916	\$ 648,704	\$ 1,181,133	\$ 915,359	\$ 1,234,243	\$ 1,256,205	\$ 1,446,478	\$ 742,381
Closing: Reserves	\$ 745,211	\$ 1,160,193	\$ 841,730	\$ 1,202,549	\$ 1,064,008	\$ 1,224,310	\$ 1,098,796	\$ 984,388	\$ 712,776	\$ 1,178,328

Wastewater Morrisburg Capital Reserve Fund	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening: Reserves	\$ 598,667	\$ 399,253	\$ 685,368	\$ 986,582	\$ 1,140,316	\$ 1,184,843	\$ 1,564,371	\$ 1,532,464	\$ 1,409,113	\$ 1,300,771
Elimination of Long-Term Debt	\$ -	\$ -	\$ -	\$ 33,015	\$ 33,015	\$ 33,015	\$ 33,015	\$ 33,015	\$ 33,015	\$ 33,015
Contribution to Reserves	\$ 271,015	\$ 286,115	\$ 301,214	\$ 316,314	\$ 331,413	\$ 346,513	\$ 361,612	\$ 376,712	\$ 391,811	\$ 406,910
Available Funding	\$ 869,682	\$ 685,368	\$ 986,582	\$ 1,335,911	\$ 1,504,744	\$ 1,564,371	\$ 1,958,997	\$ 1,942,190	\$ 1,833,938	\$ 1,740,696
Capital Projects Funded By Reserves	\$ 470,429	\$ -	\$ -	\$ 195,595	\$ 319,900	\$ -	\$ 426,534	\$ 533,077	\$ 533,167	\$ 159,950
Closing: Reserves	\$ 399,253	\$ 685,368	\$ 986,582	\$ 1,140,316	\$ 1,184,843	\$ 1,564,371	\$ 1,532,464	\$ 1,409,113	\$ 1,300,771	\$ 1,580,746

Wastewater Iroquois Capital Reserve Fund	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening: Reserves	\$ 988,017	\$ 1,003,875	\$ 1,151,819	\$ 1,278,724	\$ 1,082,739	\$ 1,317,564	\$ 1,014,147	\$ 1,306,891	\$ 1,203,132	\$ 958,096
Contribution to Reserves	\$ 118,985	\$ 147,945	\$ 176,905	\$ 205,865	\$ 234,825	\$ 263,785	\$ 292,744	\$ 321,704	\$ 350,664	\$ 379,624
Available Funding	\$ 1,107,002	\$ 1,151,819	\$ 1,328,724	\$ 1,484,589	\$ 1,317,564	\$ 1,581,348	\$ 1,306,891	\$ 1,628,596	\$ 1,553,797	\$ 1,337,721
Capital Projects Funded By Reserves	\$ 103,128	\$ -	\$ 50,000	\$ 401,850	\$ -	\$ 567,201	\$ -	\$ 425,463	\$ 595,700	\$ 360,946
Closing: Reserves	\$ 1,003,875	\$ 1,151,819	\$ 1,278,724	\$ 1,082,739	\$ 1,317,564	\$ 1,014,147	\$ 1,306,891	\$ 1,203,132	\$ 958,096	\$ 976,774

Wastewater Williamsburg Capital Reserve Fund	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening: Reserves	\$ 233,189	\$ 273,882	\$ 231,902	\$ 260,057	\$ 314,140	\$ 360,223	\$ 400,916	\$ 454,999	\$ 509,082	\$ 531,311
Contribution to Reserves	\$ 54,083	\$ 54,083	\$ 54,083	\$ 54,083	\$ 54,083	\$ 54,083	\$ 54,083	\$ 54,083	\$ 54,083	\$ 54,083
Available Funding	\$ 287,272	\$ 327,965	\$ 285,985	\$ 314,140	\$ 368,223	\$ 414,306	\$ 454,999	\$ 509,082	\$ 563,165	\$ 585,394
Capital Projects Funded By Reserves	\$ 13,390	\$ 96,063	\$ 25,928	\$ -	\$ 8,000	\$ 13,390	\$ -	\$ -	\$ 31,854	\$ -
Closing: Reserves	\$ 273,882	\$ 231,902	\$ 260,057	\$ 314,140	\$ 360,223	\$ 400,916	\$ 454,999	\$ 509,082	\$ 531,311	\$ 585,394