The Town of Aurora

Asset Management & Investment Plan

Securing Sustainability of our Infrastructure

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EXECUTIVE SUMMARY

In response to the Ministry of Infrastructure's release of a ten–year infrastructure plan, "Building Together", which focuses on building a more standardized and consistent approach to municipal asset management planning, the Town of Aurora (the "Town" or "Aurora") has taken a pro-active approach in preparing a detailed Asset Management Plan, "AMP", in support of its requests for provincial and federal capital funding. As the Town's municipal assets continue to age, it becomes increasingly important to go through a formal process determining how a group of assets is to be managed over a period of time to help ensure safety standards, regulations and expected levels of service continue to be met given the Town's financing capabilities.

The AMP is a strategic document stating the characteristics and condition of infrastructure assets, levels of service expected from them, planned actions to ensure the assets are providing the expected level of service and financing strategies to implement the planned actions. The overall intent of the AMP is to help the Town ensure investments are made at the right time, future repair and rehabilitation costs are minimized, and municipal assets are being appropriately maintained.

INTRODUCTION

Public Infrastructure is central to our prosperity and our quality of life. The Province of Ontario released in June 2011, "Building Together", a long-term infrastructure plan for Ontario that responds to the far-reaching trends that will affect Ontario's infrastructure needs including a more global and service-oriented economy, a larger, older and more urbanized population and the effects of a changing climate. The plan sets out a strategic framework that will guide future investments in ways that support economic growth, are fiscally responsible and respond to changing needs. A key element to this framework is ensuring good stewardship through proper asset management. Despite significant investments by all levels of government, more needs to be done to address current and emerging municipal infrastructure needs. The Province of Ontario will work together with local municipalities and the federal government to establish a municipal infrastructure strategy.

The Town of Aurora, like all other municipalities throughout Ontario and Canada, deliver many of the services that are critical to its residents, and these services rely on well-planned, well-built and well-maintained infrastructure. The Town's Asset Management Plan will address the challenges of current and and future infrastructure needs and guide financial and investment decisions.

Town of Aurora Asset Management Plan ("AMP") sets out the organization's approach to reviewing and managing its active capital assets, to ensure continued and sustainable operations, operating and service capability of each asset, and the necessary financial plan to ensure that the required investments can be made when expected.

Aurora's Asset Management Plan is an outcome of the Town's stewardship responsibilities: how we plan to look after what we have. However, the Town has also incorporated future growth and future asset investments into the plan to document what new assets we plan to invest in as the community grows, and how we plan to finance those investments. The growth side of the plan also becomes an input into the existing asset replacement side of the plan, as the new assets begin to require replacement, sometimes within the same 10-year period, such as for new fleet vehicle additions.

The primary objective of an AMP is to maximize benefits, control risks, and provide a satisfactory level of service to the community in a sustainable manner. Infrastructure management ensures that the Town is capable of providing the desired level of service to support attaining our ultimate goals.

TOWN OF AURORA INFRASTRUCTURE ASSETS

The Town is responsible for the following asset classes: water and wastewater, stormwater management, roads, facilities, fleet, machinery and equipment including information technology & telecom equipment, land, parkland and land improvements. Infrastructure and Environmental Services ("IES") is responsible for the largest group of Town's asset classes which include water and wastewater, stormwater management, roads, facilities, fleet and machinery while Parks and Recreation Services is responsible for land, parkland, land improvements and fitness equipment. Corporate Financial Services is responsible for the management of all information technology and telecommunications equipment. These infrastructure assets present particular challenges where financing can be large and timing for renewal can cause significant peaks and troughs in required expenditures.

DEVELOPMENT OF AN ASSET MANAGEMENT PLAN

The Town hired an external third party to assist in its preparation of its AMP. Town staff worked extensively on the plan. The following departments were involved in the development of this AMP:

1. Infrastructure and Environmental Services
    - Engineering Division
    - Operations Division
    - Facilities and Fleet Division
2. Parks and Recreation Services
    - Parks Division
3. Corporate and Financial Services
    - Financial Planning Division
    - Information Technology Division

The AMP covers a ten year time horizon and references the following resources:

- Ten Year Capital Investment Plan 2016 – 2025 with 2015 Capital Budget
- Road Needs Study completed in October 2010 which is to be updated in 2015 (The Roads Need Study is typically updated every 5 years)
- 2015-2024 Repair and Maintenance Budget
- The Corporation of the Town of Aurora PSAB 3150 Compliance Report
- The Corporation of theTown of Aurora Audited Financial Statements (payment certificates)
- 18-Year IES Vehicle and Equipment Replacement Schedule – 2010 - 2028
- Town of Aurora Pavement Management System, October 2010
- IES Operations Vehicle Replacement Schedule
- Town of Aurora Tangible Capital Asset Policies
- The Economic Value of Natural Capital Assets Report – June 2013

BENEFITS ASSOCIATED WITH AN ASSET MANAGEMENT PLAN

Specific benefits associated with an AMP include:

- Better decision making regarding resource allocation;
- More effective communications with ratepayers, elected officials, financial rating organizations and regulatory agencies;
- Providing consistent levels of service to the public;
- Better risk management practices to the municipality;
- More effective financial planning;
- Reduced lifecycle costs;
- More efficient data management;
- Facilitates the establishment and subsequent implementation of policy objectives and the related measurement of performance;
- Avoids potential problems and crises; and
- Results in positive institutional change.

ASSET MANAGEMENT PLAN'S IMPACT ON PLANNING AND FINANCIAL BUDGETING

Planning and financial budgeting for previous periods have been constructed using the same input factors used in development of the AMP. Conversely, the AMP lays out data in a more concise document and takes into account the financial impact. Ultimately, the AMP will assist in formulating long-term planning.

The AMP has a significant impact on the planning and financial budgeting process, which are dependent on each other. The AMP identifies the timing for asset renewal, asset maintenance, asset replacement, additions and/or disposals and the associated costs. This directly ties into the planning and financial budgeting by providing the knowledge of the timing and magnitude of future investments required to operate, maintain, renew and acquire assets.

While the AMP clearly outlines the timing and costs to maintain infrastructure assets at a certain level and condition, the capital and operating budgets ensure the acquisition and management of assets is linked to council goals and strategies, community service expectations growth and demand projects, asset life-cycle management, and operating and maintenance programs. In addition, the AMP will outline any funding shortfalls or additional funds required to be raised to maintain assets at desirable conditions.

IMPLEMENTATION AND EVALUATION OF ASSET MANAGEMENT PLAN

The original AMP has been reviewed by staff and is due to be reviewed and approved by Council in the fall, 2015. On an on-going basis the AMP will be updated to reflect any new information such as changes in established budgets, changes in the expected useful life of a given asset category, changes in established service levels, and new engineering studies are completed, etc. The AMP will also be updated to reflect any changes in the financial picture, such as tax levy changes, debt funding increases or decreases, etc. on an annual basis. The desire is to make the AMP a rolling 10 year document by adding on annually an updated 'year 10', replacing the then historical first year of the prevous year's plan. The timing for asset renewal, asset maintenance, asset replacement, additions and/or disposals will be re-visited by Council and Staff once every four years (Council term). The orignal ten year period covered by the Town's AMP commences on January 1, 2015 and concludes on December 31, 2025.

IMPLEMENTATION SCHEDULE

Staff are committed to maintaining a continuous rolling 10 year Asset Management Plan. The plan will be used to consolidate all of the input data currently being used, along with the addition of the financing component.

Goals/ Actions	Description	Planned Implementation Date	Current Status	Expected Implementation Date
Completion of first draft of Town AMP	Town staff to draft the corporation's first version of its AMP.	April 30, 2014	Complete	April 30, 2014
Peer assessment of draft AMP by 3rd Party	3rd party to complete assessment of draft AMP and provide feedback for improving it	June 30, 2014	Complete	June 30, 2014
Presentation of draft AMP to Budget Committee for its review and feedback	Town staff to complete as close as possible to final draft of the Corporation's AMP for senior management and council review and feedback	November 30, 2014	Complete	November 30, 2014
Obtain senior management approval of the final draft inaugural AMP	AMP will be presented to senior management for its final review and approval	September 17, 2015	On-going	September 17, 2015
Presentation of final draft inaugural AMP to Budget Committee for referral to Council for formal approval	Town Staff to present final draft inaugural AMP to Budget Committee for review and referral to council	September 28, 2015		September 28, 2015
Obtain Council approval of town inaugural AMP	Inaugural AMP will be presented to council for its review and approval	December 8, 2015		December 8, 2015
Update of AMPs ten year capital investment plan	On an on-going basis the AMPs accompanying ten year capital asset investment plan will be reviewed and updated	Ongoing; each year		
Update of AMP core logic	Once every four years (council term) the AMPs core logic will be reviewed and updated	Ongoing, every four years		

ASSET SCOPE

As stated above, IES, Parks and Recreation and Corporate Financial Services are responsible for the following asset classes:

Functional Area	Asset Class
Water and Wastewater	• Water mains • Water pumping stations • Wastewater mains • Wastewater pumping stations • All valves and appurtenances
Stormwater Management	• Stormwater pipes and catchbasins • Stormwater outlets • Stormponds • Oil/grit separators
Roads	• Municipal roads and curbs • Sidewalks • Street lights
Solid Waste Management	• No physical assets
Facilities	• Administration building • Recreation facilities • Library • Fire Halls • Misc properties
Fleet	• Facilities operations • Parks operations • By-Law operations • Roads operations • Water/Wastewater operations • Solid Waste operations
Machinery & Equipment	• Fire Services equipment • Information Technology Equipment • Telecom Equipment • Furniture
Land, Parkland, & Land Improvements	• Parks • Park shade structures • Parking lots • Sports fields and courts • Trails, paths and walkways • Playgrounds • Street trees and wood lots • Line fences

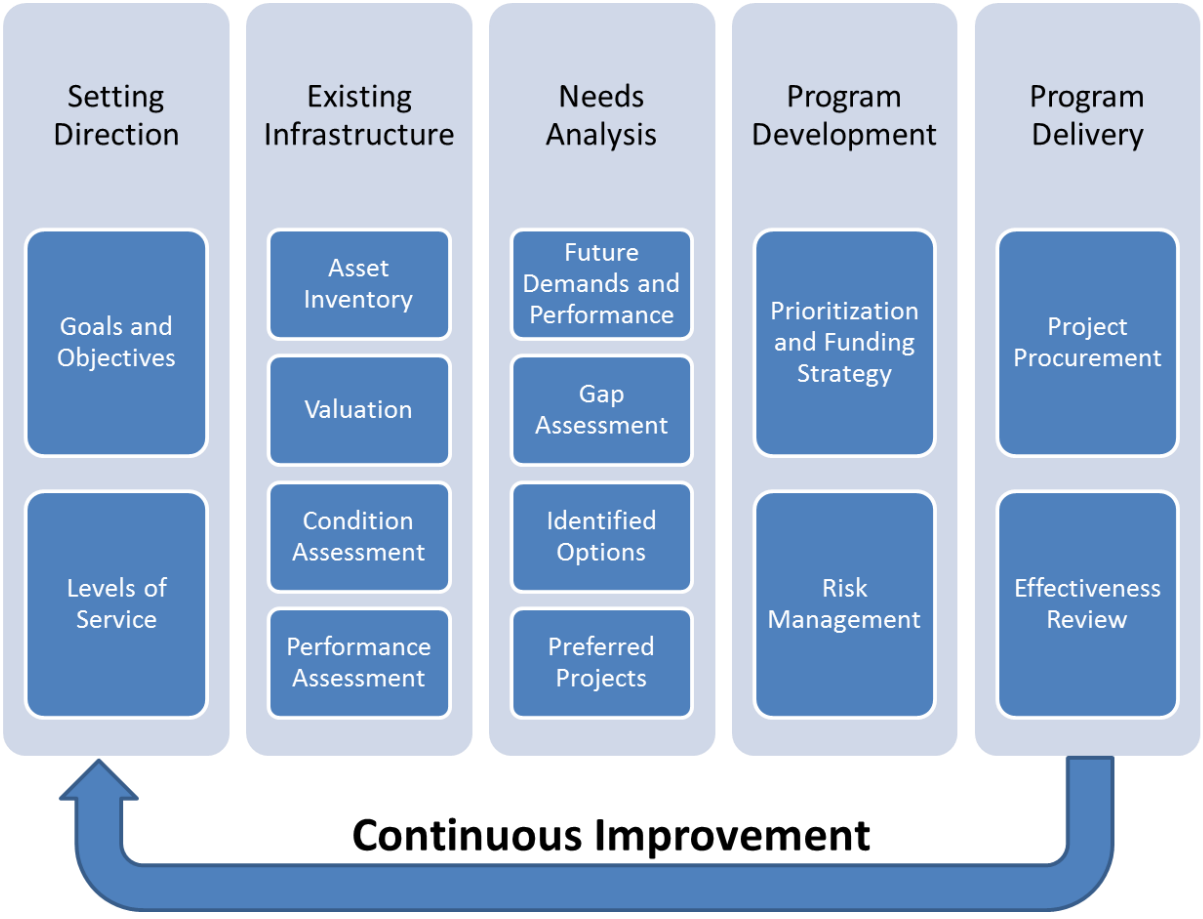
The management of these assets is governed by policies, principles and strategies outlined in this document and are based upon internationally accepted asset management practices.

ASSET MANAGEMENT FRAMEWORK

This asset management plan is based on a three level framework focused on establishing clear linkages between asset management activities and the organization's strategic objectives. The goal of this plan is to achieve the following objectives:

- Link organizational strategic objectives with the asset management policies and objectives needed to deliver them
- Link organizational strategic objectives with the levels of service that assets should deliver
- Guide the asset management priorities and work required on the assets to achieve objectives and ensure that there is adequate financial resources available to support that work

The asset management framework adopted by the town provides for the key elements necessary to maintain a sustainable and affordable asset management plan. This framework is outlined in the following graphic.



This plan is presented under these five headings and from the overarching strategy for asset management. There are many other studies, reports, databases, programs, and procedures that are referenced in this plan and that form the bulk of the content and process for the day to day acquisition, maintenance, monitoring, testing and operation of the Town's various assets.

SETTING DIRECTION FOR ASSET MANAGEMENT

KEY LINKAGES TO THE CORPORATE STRATEGIC PLAN

The Town of Aurora Strategic Plan was updated in 2011 and provides direction to the 2031 horizon. This is a Council endorsed plan that was created through multiple stakeholder and community group efforts and represents the current vision for the Town which is stated as follows:

An innovative and sustainable community where neighbours care and businesses thrive

The plan is based on the three pillars of sustainability being Community, Economy, and Natural Environment, and identified a number of guiding principles from which the goals and objectives were developed. As a first level linkage to the Strategic Plan, this asset management plan has adopted some of the key principles that created the 2031 vision as they have a direct relationship to the assets that support the community. The principles carried through this plan include:

- Adopting a long term perspective
- Leadership in corporate management
- Leverage partnerships
- Corporate excellence and continuous improvement

This plan directly supports the following goals and objectives both identified in the strategic plan and as identified through departmental priorities:

Goal	Objective
Supporting an exceptional quality of life for all	• Improve transportation, mobility and connectivity • Invest in sustainable infrastructure • Strengthen the fabric of our community
Supporting environmental stewardship and sustainability	• Encouraging the stewardship of Aurora's natural resources • Promoting and advancing green initiatives
Fiscal Management	• Plan for long term funding reserves • Balance service needs and growth with asset condition and investment needs

TOWN OF AURORA'S ASSET MANAGEMENT POLICY

Taking leadership from the organization's Strategic Plan, the Town has developed the following asset management policy statement:

> *The assets of the Town of Aurora are critical to contributing to an exceptional quality of life for the community. The Town views sustainability and environmental stewardship as leading goals in preserving our assets for present and future generations.*
>
> *In achieving these goals, the principles of having a long term perspective, leadership in corporate management, leveraging partnerships, and continuous improvement will form the basis in developing asset management plans that balance short term costs and needs with long term sustainability and financial viability for present and future generations.*

EXPECTED LEVELS OF SERVICE

UNDERSTANDING THE USER GROUPS

Service levels are often directed by a combination of the needs of the user community, the affordability level of the service, and the capacity of the existing infrastructure. As a first step in this process, the users of the various asset classes are defined to assist in guiding service level definitions and performance targets.

Functional Area	Associated Service Providers	Community Users
Water and Wastewater	• Town Staff • Contractors • Regional Government	• Residents, businesses, industry • Fire Department • Internal departments/staff
Stormwater	• Town Staff • Contractors • Conservation Authority • Province of Ontario	• Community environmental stewards • Conservation Authority • Internal departments/staff
Roads	• Town Staff • Contractors • Regional Government	• Residents, businesses, industry • Tourists • Pedestrians/cyclists • Transit • Emergency services
Solid Waste Management	• Contractors	• Households, businesses, industry
Facilities	• Town Staff • Contractors	• Program users • Residents • Regional scale programs • Arts and culture • Community groups • Aurora Public Library • Fire Department • Internal departments/staff
Fleet	• Town Staff • Contractors	• Internal departments/staff
Machinery & Equipment	• Town Staff • Contractors	• Town facility users • Fire Department • Internal departments/staff
Parks	• Town Staff • Contractors	• Program users • Residents • Community Groups
Forestry	• Town Staff • Contractors	• Residents • Businesses

Service levels have been defined based upon the expected needs of the various community users and form a high level set of objectives that either directly support user needs or indirectly support those needs through other requirements such as legislative compliance, sustainability or economic efficiency which eventually lead to improved customer experience. The following tables identify specific service levels for each asset class, as well as the drivers that shape the service level. From this information, performance metrics and related targets are defined which form the basis upon which asset requirements for the existing community are built.

WATER SERVICES

The Town is responsible for water distribution to the end users, consumer metering, and billing. York Region is responsible for water production and bulk distribution. Water in Aurora is 25 percent ground water source and 75 percent lake based source.

Service Level	Driver	Performance Metric	Target
Maintain system pressures in target range	Industry practices, protection of system due to reverse pressure, user experience	• Reported low pressure events • Water main breaks • Fire hydrant flow testing	<10/year <5/year Each main tested at least once every 5 years
Provide safe potable water	Legislation, public health, system security	• Incidence of adverse water quality • Water chemistry • Watermain flushing	<0.01% of total sample count Within provincial standards 20% of watermains to be swabbed /year
Maximize water conservation	Sustainability, environmental protection, economic efficiency	• Water loss tracking to measure revenue, non-revenue, and lost water • Full system cost recovery • Annual consumption per household	Infrastructure Leakage Index (ILI)<1 Annual operating and long term capital fully funded through rate revenues <200m3/year /household

WASTEWATER SERVICES

The Town is responsible for wastewater collection and delivery to Regional trunk infrastructure.

Service Level	Driver	Performance Metric	Target
Availability of sewer system to transmit flows	Legislation, user expectation	• Private side backups reported per year • Mainline backups reported per year	<10/year <10/year
Minimize risk of discharge of untreated sewage to the environment	Legislation, public health, environmental protection	• sewer main breaks/spill to environment • Pumping station sewage by-pass/spill to environment • CCTV Inspections • Infrastructure integrity	Zero/year Zero Inspect min once/7yrs Zero structural failures /yr
Maximize sewer transmission capacity and system efficiency	Sustainability, environmental protection, economic efficiency	• Under review	Under review

STORMWATER SERVICES

The Town is responsible for all storm water collected from Town owned roads. This includes pipes, ponds and oil/grit separators.

Service Level	Driver	Performance Metric	Target
Provide flood free roadways	Public safety, user expectation	• Number of road closures due to flooding • Catch basin cleaning	<10/year 100% per year
Meet storm discharge water quality and quantity objectives	Legislation, public health, environmental protection	• Maintain storm pond design capacity	Min 90% of design capacity

ROADS SERVICES

The Town is responsible for all local roads. Regional road maintenance is a regional responsibility. However, the Town is responsible for all streetlights except for those specifically positioned to illuminate regional intersections. All sidewalks and multiuse trails within the road allowance are Town owned and maintained.

Service Level	Driver	Performance Metric	Target
Traffic congestion and network usability	Public safety, user expectation, economic impacts	• Number of traffic related complaints • Intersection signal optimization • Average traffic volume compared to road capacity	<10/year 100% annually reviewed Average volume more than80% of lane capacity – Anca please confirm – more or less than
Road condition and driver experience	Legislation, user expectations, safety, asset reliability	• Update Pavement Condition Index (PCI) • Average PCI	Updated max 5 yr cycle Network avg 60

SOLID WASTE SERVICES

The Town is responsible for waste collection and delivery to Regional facilities for further processing and disposal. This service is fully contracted and the Town owns no assets related to the delivery of this service.

Service Level	Driver	Performance Metric	Target
Waste is collected prior to end of set out day	Public safety, user expectation	• Number of late/missed pickup calls	<50/year
Maximize recycle material recovery rate	Sustainability, environmental benefit, economic benefit	• Minimize over compaction of blue box material	95% of loads >2:1 compaction
Moving to zero waste	Sustainability, economics, environmental impact,	• Avg annual collection per household	<200kg/year

FACILITIES SERVICES

The facilities portfolio includes property, buildings and related property with respect to administration services, community centres, library, fire services, and other miscellaneous buildings that are available for public use or lease to third party tenants. This portfolio does not include park assets such as fields, trails, park buildings or shelters.

Service Level	Driver	Performance Metric	Target
Facilities are available to meet community and programming needs	User expectation, cultural support, health, economics	• Number of unplanned facility shut downs per year (all locations)	<10/year
Public enjoyment of pool facilities	Legislation, public health, user expectations	• Meet public health reporting requirements • Meet equipment maintenance schedules	100% compliance 100% of planned maintenance completed
Public enjoyment of ice facilities	User expectation, cultural support, health, economics	• Meet equipment maintenance schedules	100% of planned maintenance completed
General acceptability of facilities	Public, users, legislation, economics, sustainability	• Frequency of cleaning • • Cleaning effectiveness • Environmental comfort	Meet planned cleaning schedules 95% of time Minimum quarterly management inspections per facility <10 complaints/yr

FLEET SERVICES

All Town owned rolling stock is included in this portfolio.

Service Level	Driver	Performance Metric	Target
Maximize equipment up time	User expectation, sustainability, economics	• Number of unplanned maintenance events • Number of planned maintenance events • Average time per service event	<4/asset/year <7 / asset/year <3 hour
Maximize equipment capital and maintenance investment	Sustainability , cost effectiveness, economics	• Asset replacement target	As per planned asset life cycle or >10% value of maintenance cost per year

MACHINERY & EQUIPMENT

All Town owned machinery and small equipment, including information technology & telecom equipment is included in this portfolio.

Service Level	Driver	Performance Metric	Target
Maximize equipment up time	User expectation, sustainability, economics	• Number of unplanned maintenance events • Number of planned maintenance events • Average time per service event	<4/asset/year <7 / asset/year <3 hour

Maximize equipment capital and maintenance investment	Sustainability , cost effectiveness, economics	• Asset replacement target	As per planned asset life cycle or >10% value of maintenance cost per year
IT & telecom Network availability	User expectation, sustainability, economics	• Percentage of time network is available	As per planned asset life cycle

PARKS SERVICES

Service Level	Driver	Performance Metric	Target
High quality Facilities are available to meet community needs, public enjoyment, and general acceptability of facilities	User expectation, cultural support, health & safety , economics, legislation, sustainability	• Number of unplanned maintenance events • Number of planned maintenance events • Frequency of maintenance and repair • Facility inspections / effectiveness • Adherence to maintenance /repair standards	≤10/year overall parks system As per parks service level standards Meet planned maintenance and repairs 95% of the time Minimum 12 per asset /year ≤20 complaints/yr

URBAN FORESTRY SERVICES

Service Level	Driver	Performance Metric	Target
Street Trees and woodlots remain in safe condition Limiting public risk **Respond to emergency forestry issues** **Routine maintenance of street tree inventory**	User expectation, cultural support, health, economics, legislation, sustainability Managed forest Plan	• Number of unplanned maintenance events • Number of planned maintenance events • Frequency of maintenance and repair • • Effectiveness • • process work orders and customer communication in a timely fashion	≤30/year/variable due to environmental conditions As per urban forestry policy Meet planned maintenance functions 95% of the time Limit & mitigate public liability issues ≤ 24 hours after detection ≤ 3 days <10 complaints/yr

EXTERNAL TRENDS OR ISSUES

External trends that may affect the Expected Levels of Service or the Town's ability to meet them include:

- Climate change
- Changing accessibility standards
- Taxpayer concerns on service levels
- Tax levy, Federal and Provincial Government funding availability
- Growth and requirement for additional/new services

CURRENT PERFORMANCE RELATIVE TO TARGET PERFORMANCE

Functional Area	Service Level	Performance Metric	Target Performance	Current Performance
Watermain	Maintain system pressures in target range	Reported low pressure events	<10 /year	average 50 calls per year
		Water main breaks	<5 /year	average 10 per year
		Fire hydrant flow testing	Each main tested at least once every 5 years	Flowing testing to start in 2017/2018
	Provide safe potable water	Incidence of adverse water quality	<0.01% of total sample count	Average 3 adverse samples out of 900 samples per year
		Water chemistry	Within provincial standards	Target met
		Watermain flushing	20% /5 years of watermains to be swabbed /year	Target met
	Maximize water conservation	Water loss tracking to measure revenue, non-revenue, and lost water	Infrastructure Leakage Index (ILI)<1	ILI = 1.42
		Full system cost recovery	Annual operating and long term capital fully funded through rate revenues	Town started water meter replacement program in 2014, 1000 meters a year
		Annual consumption per household	<200 m3/year/household	208.5 m3/year/household
Wastewater	Availability of Sewer System to transmit flows	Private side backups reported per year	<10 /year	Average 60 sewer backups a year
		Mainline backups reported per year	<10 /year	Average 1 per year or less
	Minimize risk of discharge of untreated sewage to the environment	Sewer main breaks/spill to environment	Zero /year	Average 1 per year or less
		Pumping station sewage by-pass/spill to environment	Zero	Target met
		CCTV inspections	Inspect at least once /7 years	The Town spends $150,000.00 a year on CCTV Inspections
		Infrastructure integrity	Zero structural failures /year	Based on CCTV Inspections
	Maximize sewer transmission capacity and system efficiency	Under review	Under review	N/A
Stormwater	Provide flood free roadways	Number of road closures due to flooding Catch basin cleaning	<10 /year 100% per year	0 /year 30% a year -- $50,000 a year for Catch Basin Cleaning
Roads	Traffic congestion and network usability	Number of traffic related complaints	<10 complaints/year	<5 complaints/year
		Intersection signal optimization	100% annually reviewed	Signal optimization is done only when there is a need. This can be changed to be done annually
		Update Pavement Condition Index (PCI)	Updated max 5 year cycle	Updated every 3 to 5 years
	Road condition and driver experience	Update Pavement Condition Index (PCI)	Updated max 5 year cycle	Updated every 3 to 5 years
		Average PCI	Network average 60	Network average 72 over the last 9 years

Functional Area	Service Level	Performance Metric	Target Performance	Current Performance
Solid Waste	Waste is collected prior to end of set out day	Number of late/missed pickup calls	<50 calls/year	68 calls/year -- 27 late calls, 41 missed calls
	Maximize recycle material recovery rate	Minimize over compaction of blue box material	>95% of loads have less than 2:1 compaction	93.6% of loads have less than 2.5:1 compaction
	Moving to zero waste	Average annual collection per household	< 200 kg/year	373 kg/year
Facilities	Facilities are available to meet community and programming needs	Number of unplanned facility shut downs per year (all locations)	< 10 /year	0 /year
	Public enjoyment of pool facilities	Meet public health reporting requirements	100% compliance	100% compliance
		Meet equipment maintenance schedules	100% of planned maintenance completed	100% of planned maintenance completed
	Public enjoyment of ice facilities	Meet equipment maintenance schedules	100% of planned maintenance completed	100% of planned maintenance completed
	General acceptability of facilities	Frequency of cleaning	Meet planned cleaning schedules 95% of time	Target met
		Cleaning effectiveness	Minimum quarterly management inspections per facility	Target met
		Environmental comfort	<10 complaints/year	Target met
Fleet	Maximize equipment up time	Number of unplanned maintenance events	<4 /asset/year	8/asset/year (for fleet 3 years or older)
		Number of planned maintenance events	<7 /asset/year	7/asset/year
		Average time per service event	<3 hours	4 hours
	Maximize equipment capital and maintenance investment	Asset replacement target	As per planned asset life cycle or >10% value of maintenance cost per year	N/A
Machinery & Equipment	Maximize equipment up time	Number of unplanned maintenance events	<4 /asset/year	8/asset/year (for fleet 3 years or older)
		Number of planned maintenance events	<7 /asset/year	7/asset/year
		Average time per service event	<3 hours	4 hours
	Maximize equipment capital and maintenance investment	Asset replacement target	As per planned asset life cycle or >10% value of maintenance cost per year	N/A

Functional Area	Service Level	Performance Metric	Target Performance	Current Performance
	IT & telecom Network availability	Percentage of time network is available	99.9%	Target met
Parks Services	High quality facilities are available to meet community needs, public employment and general acceptability of facilities	Number of unplanned maintenance events	≤10/year overall parks system	Target met
		Number of planned maintenance events	As per parks service level standards	Target met
		Frequency of maintenance and repair	Meet planned maintenance and repairs 95% of the time	Target met
		Facility inspections / effectiveness	Minimum 12 per asset /year	Target met
		Adherence to maintenance /repair standards	≤20 complaints/year	Target met
Urban Forestry Services	Street trees and woodlots remain in safe condition limiting public risk	Number of unplanned maintenance events	≤30 /year/variable due to environmental conditions	Target met
		Number of planned maintenance events	As per urban forestry policy	Target met
	Respond to emergency forestry issues	Frequency of maintenance and repair	Meet planned maintenance functions 95% of the time	Target met
	Routine maintenance of street tree inventory	Effectiveness	Limit &mitigate public liability issues ≤ 24 hours after detection	Target met
		Process work orders and customer communication in a timely fashion	≤ 3 days	Target met

STATE OF LOCAL INFRASTRUCTURE

Annually, as part of their operations, Departments conduct a general assessment of the condition of their assets. This general assessment is used in the development of priorities for the current year budget. More detailed and broad condition assessments are completed on a cyclical basis based on industry standards for the asset class. For the purpose of Asset Management planning, asset condition information will be updated when the broad assessments are completed for each functional area.

An overall condition assessment is provided.

Functional Area	Asset Type	Inventory / Quantity / Extent	Financial Accounting Valuation	Replacement Cost Valuation	Average Asset Age (Years)	Estimated Average Useful Life (Years)	Overall Asset Condi-tion
Watermain	Water Mains	205.4 kilometers	$50,047,728.43	$721,005,411.18	22.9	71.5	Good
	Water Valves	2152 valves	$2,490,095.07	$7,102,099.95	20.4	30.0	Poor
	Underground Enclosures	590 enclosures	$1,642,007.73	$11,182,320.77	21.1	55.0	Good
	Fire Hydrants	1378 hydrants	$3,421,275.74	$9,776,512.33	20.7	30.0	Poor
	Service Connections	13857 services	$4,792,429.19	$28,245,254.51	24.4	50.1	Fair
	Booster Stations	1 station	$350,000.01	$1,687,053.13	16.0	30.0	Fair
Wastewater	Sewers	178.7 kilometers	$38,835,029.56	$584,375,127.81	28.7	73.1	Good
	Maintenance Chambers	2601 chambers	$7,831,341.61	$54,816,568.85	28.6	55.2	Fair
	Laterals	13525 laterals	$5,546,851.05	$87,343,771.50	25.8	76.3	Good
	Equalization Tanks	1 tank	$222,924.64	$1,416,446.89	23.0	55.0	Good
	Pumping Stations	4 stations	$1,179,169.99	$7,077,049.21	14.75	30.0	Fair
Stormwater	Sewers	171.5 kilometers	$51,061,589.20	$430,976,514.80	24.2	59.0	Good
	Maintenance Chambers	2549 chambers	$8,263,386.26	$56,613,526.82	24.2	55.0	Good
	Catchbasins	4610 catchbasins	$7,002,832.81	$47,817,938.57	22.3	55.0	Good
	Laterals	10231 laterals	$4,749,466.83	$52,508,624.80	22.6	63.5	Good
	Cleanouts	12 cleanouts	$5,541.04	$87,922.36	22.0	80.0	Very Good
	Headwalls	188 headwalls	$688,251.58	$4,737,381.34	24.6	55.0	Good
	SWM Ponds	45 ponds	$8,341,714.69	N/A	19.4	N/A	N/A
	Equalization Tanks	13 tanks	$2,195,393.75	$15,047,265.99	25.7	55.0	Fair
	Bridges & Culverts	80 crossings	$8,392,869.22	$35,308,741.49	36.1	Inspected every 2 years	Fair

Functional Area	Asset Type	Inventory / Quantity / Extent	Financial Accounting Valuation	Replacement Cost Valuation	Average Asset Age (Years)	Estimated Average Useful Life (Years)	Overall Asset Condi-tion
Roads	Pavement & Curbs	182.5 centerline kilometers	$53,986,429.66	$183,803,710.16	20.6	35.4	Fair
	Pedestrian Paths	185.0 kilometers	$7,197,958.43	$20,414,780.96	19.6	29.6	Poor
	Road Luminaires	4409 luminaires	$8,327,076.96	$23,200,586.60	22.0	25.7	Very Poor
	Signage	6288 signs	$220,511.55	$427,041.92	21.4	Reflectivity Test Conducted Annually	Good
	Traffic Signals	13 signal intersections	$797,686.31	$1,785,250.32	20.3	Inspection conducted bi-annually (fall and spring)	Very Good
Solid Waste		contracted service	N/A	N/A	N/A	N/A	N/A
Facilities		22 facilities and buildings	$71,390,502.97	N/A	24.7	28.3	Very Poor
Fleet		Approximately 90 vehicles and related pieces	$7,993,268.22	N/A	4.6	9.8	Fair
Machinery & Equipment		Various pieces	$6,053,193.91	N/A	5.2	8.5	Poor
		IT & Telecom Equipment		N/A	4.5	7.0	Good
Land, Parkland & Land Improve-ments		● 700 acres of combined open space and parkland ● land associated with each Municipal Facility ● land maintained for environmental purposes ● 48 kilometers of off-road trails.	$20,871,284.71	N/A	10.5	28.09	Good

Age to Useful Life Ratio	Condition
85 to 100	Excellent
70 to 85	Very Good
55 to 70	Good
40 to 55	Fair
25 to 40	Poor
10 to 25	Very Poor
0 to 10	End of Life

ASSET INVENTORY AND VALUATION

Assets have been inventoried in compliance with accounting standards which provide for a statement of assets owned, a simple life cycle assessment, historic costs, and an annual depreciation value that complies with regulatory reporting requirements and provides one basis to forecast for asset replacement.

However, the accounting records are not an asset management plan and have a number of shortfalls that hinder its usefulness for sustainable asset management. These include historic cost valuation which does not account for current replacement costs, asset condition factors, or changes in materials and technology which influences asset life and performance.

The asset list developed for financial accounting does however provide an accurate foundation of what is owned and is the base information for the development and support of the overlaying asset management strategies. The following is a summary of the asset inventory.

ASSET CONDITION AND PERFORMANCE ASSESSMENT

Specific condition and performance techniques are applied to each asset class based on the nature of the asset, and the criticality and risk associated with the asset. The following table outlines the assessments applied to each asset class based on three categories of condition assessment, performance assessment, and risk assessment.

Functional Area	Condition Assessment Approach	Performance Assessment Approach	Risk Management Approach
Water System	Visual inspection via CCTV	Water quality and chlorine residual monitoring. Pressure monitoring. Water loss monitoring.	Proactive maintenance and replacement to manage risk of failure and maintain performance Routine testing to ensure water quality Material and age based evaluation
Wastewater system	Visual inspection via CCTV	Inflow/infiltration studies, smoke and dye testing Leak tracking through CCTV	Proactive maintenance and replacement to manage risk of failure and maintain performance Material and age based evaluation
Stormwater System	Visual inspection of pipes via CCTV Visual inspection of ponds and separators	Discharge water quality assessments Design capacity assessments	Proactive maintenance Technical studies to assess overall system priorities
Roads System	Routine road patrols for emerging and acute condition deficiencies. Pavement Condition Index rating system to priorities replacements.	Traffic capacity studies	Traffic capacity studies
Solid Waste	No assets in this class	Compliance with contract terms	Compliance with contract terms Public education and promotion programs
Facilities	Visual inspections	Testing and monitoring programs Energy usage tracking	Reliability centred maintenance practices Equipment age and obsolescence
Fleet	Scheduled maintenance program with condition assessment	Benchmark to expected service level from equipment	Age, repair history, type of use, public and employee safety
Machinery & Equipment	Scheduled maintenance program with condition assessment	Benchmark to expected service level from equipment	Age, repair history, down time
Parks	Planned monthly visual inspections	expected service life cycling of individual asset	Proactive maintenance and repair to maintain users safety and manage risks and maintain performance over asset life span

The following summarizes the overall asset score based on a letter grading scheme. As this rating applies to differing asset classes, consideration may be given to all or some of the rating targets based on the evaluation team's familiarity and knowledge of the assets being rated. This approach is applied to each class as a general rating, however, there will be assets within each sub-class that will rate higher or lower than the reported score. Detailed asset replacement plans are maintained as supporting documentation to these summaries and are updated on regular basis.

Score	Description
A	Asset has at least 80 percent of useful life remaining. Performance maintained to 90 percent or greater of design level. Energy efficiency within 90 percent of current market availability for similar equipment. Maintenance costs less than 5 percent of asset book value per year Asset in overall excellent condition
B	Asset has at least 75 percent of useful life remaining. Performance maintained to 80 percent or less of design level. Energy efficiency within 75 percent of current market availability for similar equipment. Maintenance costs 5-10 percent of asset book value per year Asset in overall good condition
C	Asset has at least 50 percent of useful life remaining. Performance maintained to 70 percent or less of design level. Energy efficiency within 50 percent of current market availability for similar equipment. Maintenance costs 5-10 percent of asset book value per year Asset in overall moderate condition
D	Asset has at least 25 percent of useful life remaining. Performance maintained to 50 percent or less of design level. Energy efficiency within 40 percent of current market availability for similar equipment. Maintenance costs10-20 percent of asset book value per year Asset in overall poor condition
E	Asset has reached the of end of its life. Expected useful life. Performance does not meet intended design level. Energy efficiency less than 40 percent of current market availability for similar equipment. Maintenance costs exceed 20 percent of asset book value per year Asset in overall poor to unserviceable condition

ASSET RATING SUMMARY

The following table summarizes the asset rating for each asset sub-class.

Asset Class/Sub-Class	Score	Future Considerations
Water		
Water Mains	**B**	Continue with CCTV and relining program
Pumping Stations	**C**	Consider bringing maintenance in-house
Valves/chambers/PRV	**C**	Perform detailed valve performance assessment and prioritize replacements
Fire Hydrants	**B**	
Commercial Meters	**C**	
Residential Meters	**E**	Majority exceeding design life and vulnerable to failure
Wastewater		
Mains	**B**	Continue with relining and CCTV program
Manholes	**C**	Continue with inspections and relining as warranted
Laterals	**D**	Consider assumption of private side and initiate full relining program
Pumping Stations	**C**	Consider bringing maintenance in-house
Forcemains	**C**	Confirm inspection schedule for forcemains and siphons
Stormwater		
pipes	**B**	Review inspection program and update condition assessments
catchbasins	**B**	Review cleaning program and update condition assessments
manholes	**C**	Review inspection program and update condition assessments
Outfalls/headwalls	**D**	Review inspection program and update condition assessments
Ditches/culverts	**C**	Review inspection program and update condition assessments
Oil/grit separators	**C**	Review inspection program and update condition assessments
Storm ponds	**C**	Initiate recommendations from updated masterplan
Roads		
Pavement/curbs	**B**	Consider alternative condition assessment approaches to augment PCI program and potentially reduce life cycle costs
Sidewalks	**B**	
Bridges	**B**	Maintain compliance with inspection requirements
Multiuse paths	**B**	Review service levels and community needs
Street lights	**D**	Update asset condition assessment Retrofit to LED to energy savings
Solid Waste		
Fleet	**D**	In year 7 of 10 year contract. Initiate scope for retender.
Facilities		
General Site	**B**	
Parking pavement	**D**	Most at end of useful life with replacements scheduled
Building envelope	**C**	Consider third party assessment for buildings exceeding 25 yrs
Ice plant	**B**	Recent energy/equipment retrofits completed
Pool systems	**B**	Review program maintenance and upgrade schedules
HVAC	**C**	Review replacement philosophy
Mechanical	**C**	Phase 1 energy retrofit program nearing completion
Electrical	**B**	Phase 1 energy retrofit program nearing completion
Equipment	**C**	Phase 1 energy retrofit program nearing completion
Fire Protection	**C**	Review status relative to industry advancements
Security	**B**	Review status relative to industry advancements
Fleet		
Light duty vehicles	**B**	
Heavy duty vehicles	**C**	
Tractors/loaders	**C**	
Machinery & Equipment		
Small equipment	**B**	

Information Technology & Telecom Equipment	**B**	Majority of equipment with at least 50% useful life remaining. Assets are reviewed annually. As part of this process, assets with increasing repairs are candidates for early replacement.
Parks		
Playground equipment	**C**	Majority within useful life of at least 50% remaining ,major review of asset on an annual basis
Trails/Bridges	**B**	Maintain compliance with inspection requirements and annual maintenance program
Sports fields/pathway lighting	**C**	Maintain industry standards for lighting levels ,review performance and assessment of latest LED sport field lighting equipment for potential future retrofit
Outdoor sports facilities and courts	**C**	Sports facilities generally compliant with industry standards, continue to monitor and maintain and retrofit facilities in accordance with life cycling schedule
Park pavilions / shelters / washroom facilities / out buildings	**C**	Majority within useful life of at least 50% remaining ,major review of asset on an annual basis , continue to monitor assets falling below "B" rating and update replacement forecast as required
Line fences	**D**	Significant deterioration in many areas and end of useful service life particularly where fence lines exceed 30 years

ASSET MANAGEMENT STRATEGY - NEEDS ANALYSIS

FUTURE DEMANDS AND GAP ANALYSIS

Future asset demands are driven by community growth pressures, obsolescence, changes to technology, and economic changes in the broader environment. These demands are typically forecasted through various studies and planning exercises from which the demand for new infrastructure is identified. Studies are also completed for various assets in order to assess their current condition and operational/maintenance needs. All of this information is used to develop the various operational, maintenance and capital plans. The following table provides a summary of the key study & planning documents utilized by the town for this purpose.

Study / Plan	Assets Affected	Comments
Transportation Master Plan	• Road network • Sidewalks/multiuse paths • Intersections/traffic lights	Plan is updated on a 5 year cycle and identifies capacity constraints and infrastructure gaps. Growth related needs are reported in Development Charges Background Study and 10 yr capital plan
Water/wastewater hydraulic modeling	• Water system • Wastewater system	Periodic model updates identify system constrains in growth areas that are captured in DC background study and 10 yr capital plan
Stormwater Master Plan	• Stormwater system	Updated every 5 years and identified maintenance and growth related impacts to existing asset base as well as opportunities for effluent improvement based on changes to technology and regulations. Projects captured in 10 yr capital plan

Study / Plan	Assets Affected	Comments
Pavement Condition Assessment	• Road network	Pavement inspection consists off identification, classification and measurement of individual pavement distresses in accordance with the Canadian Public Works Association's Pavement Condition Index (PCI) rating standard. The PCI system uses a 0 to 100 (Failed to Excellent) scale to describe pavement condition. The current Town of Aurora Policy considers local street PCI rating of 25 and collector/arterial/highway streets with a rating of 40 to be the minimum acceptable service level. The Town's current protocol calls for the local street system to be re-inspected on a regular cycle (every 3 to 5 years).
Sidewalk condition assessment	• Sidewalks and multiuse paths	Annual inspections form basis for annual maintenance and repairs
Parks and Recreation Master Plan	• Parks and Facilities	Growth related facilities identified in plan and captured in DC background study and 10 yr capital plan, Updated on 5yr. cycle
Trails Master Plan	• Trails	Growth related facilities identified in plan and captured in DC background study and 10 yr capital plan
Official Plan	• Roads • Water/wastewater/storm • Solid waste • facilities	Growth related facilities identified in plan and captured in DC background study and 10 yr capital plan Subdivision related development results in assumption of developer constructed assets
Promenade Study	• Roads, sidewalks, lighting	Community based plan to improve downtown character in support of economic revitalization. Projects defined in study captured in DC study and 10 yr capital plan
Fleet management report	• Fleet	Updated periodically. Provides direction on life cycle targets, asset service levels and long term financial forecast including maintenance and growth. Replacement requirements captured in DC background study and 10 yr capital plan.
Winter Maintenance Management Plan	• Roads • Fleet	Updated on 5 yr cycle. Provides direction of snow management, asset impacts and maintenance requirements. Capital requirements captured in 10 yr capital plan
IT Strategic Plan	• Information Technology & Telecom Equipment	Updated on a 5 year cycle. Provides direction on technology governance, infrastructure planning, life cycle targets, asset service levels, user technology needs.
Integrated Solid Waste Master Plan	• Waste Collection	Focus on reducing waste generation and operating/capital costs of program. Minimal asset impact due to contracted services, however drives initiatives that improve overall system performance and long term collection targets

OPERATIONS AND MAINTENANCE STRATEGY

The operations and maintenance strategy provides guidance for these functions resulting in the development of an annual work plan and operating/maintenance budget. The strategic objectives for O&M are:

- Provide adequate capacity to balance user service level expectations with cost for new infrastructure
- Maintain public health and safety as a priority
- Invest based on life cycle awareness of extending the useful life at the optimal cost while meeting desired service levels
- Recommend asset replacement when O&M costs exceed target thresholds for sustainable operation.

- Consider both demand side and supply side capacity management opportunities when investing O&M dollars (i.e. fixing leaks before building more pipes)
- Consider sustainability and environmental opportunities in O&M decisions where appropriate
- Consider emergency response planning requirements and alternative operating modes in response to known emergency conditions.
- Ensure adequate skills are available through training and mentorship
- Ensure systems are in place to support data management and O&M recording and reporting to assist in long term asset decision making
- Periodically review asset functionality to ensure intended purpose is met
- Focus on proactive maintenance planning and execution through use of maintenance management software
- Identify appropriate mode of operation based upon asset class (RCM, run to failure, risk based redundancy etc.)
- Define standard work flow and work procedures for improved consistency and efficiency

OVERVIEW OF RISKS ASSOCIATED WITH STRATEGY

The largest risk in generating expected service levels are financial in nature. The achievment of a desired level of service is dependent upon resource availability. Historically and currently the town has not had sufficient resources to meet service level expectations, resulting in the town regularly experiencing infrastructure deficits. Other risks relate to the town's potential required unplanned action stemming from updated engineering and other study results. In addition, because different vendors are utilized for study updates, the risk of uncomparable assessment results being received exist. The town is exploring the possibility of a long term agreement so that there is more consistency in the studies with the same vendor providing the updates.

OPTION ANALYSIS

The options for expected level of service must be compared based on:

1. **Lifecycle cost** - total cost of constructing, maintaining, renewing, and operating an infrastructure asset throughout its service life;
2. **Future costs** - must be discounted and inflation must be incorporated;
3. **All other relevant direct/indirect costs and benefits associated with each option** - i.e. municipal wellbeing and health, amenity value, value of culturally or historically significant sites, municipal image.

The expected levels of service are captured in the Appendix. Based upon the projected levels of growth for the Town, the town does not foresee significant changes in service levels and as a result, a more comprehensive option analysis was not required. These expected service levels have been incorporated in the current financial forecast.

FINANCING STRATEGY - PROGRAM DEVELOPMENT

OPERATIONS PLAN AND FINANCIAL STRATEGY

The primary objective in regards to the town's operations plan is to develop an operations & maintenance (O&M) program that meets the short to intermediate needs of the town's existing assets while maintaining a relatively stable annual cost profile. This objective's goal is to allow for the effective maintenance of the town's assets while minimizing the disruptive impact of wide swings in annual operating budget requirements. Achieving stability in this annual cost profile helps to minimize the impact to the tax rate from costs of this nature in any given year. The current approach to developing the operations plan is as follows:

- Assess the O&M needs for each of the asset classes
- Establish a funding target that balances level of service requirements with asset condition/serviceability
- Monitor annual effectiveness of O&M program to meet set criteria
- Forecast budget adjustments in out years as needed to maintain service level/O&M program balance
- Identify anomalous expenditure requirements for inclusion in the 10 year capital plan

CAPITAL PLAN AND FINANCIAL STRATEGY

The Town's capital plan is forecast over a 10 year time horizon and is reported through a corporate financial planning report referred to as the 10 Year Capital Investment Plan. The capital planning process is as follows:

- Review all master plans and other studies to verify inclusion of out year projects
- Review forecasted construction year based on asset life, condition, growth pressures, maintenance record, coordination the related assets, risk considerations, and corporate priorities
- Make necessary annual priority adjustments
- Verify in year projects through condition and performance review and defer projects that can be extended without long term impact to asset value and produce an economic benefit by deferral
- Review forecast cost estimates
- Assign appropriate funding sources
- Review overall cash flow impact and adjust program to smooth our annual spending
- Review impact to various reserve funds and further adjust program to accommodate reserve restrictions or recommend increased reserve contributions to future years
- Recommend overall 10 year forecast and in year capital projects for Council approval and funding

RISK MANAGEMENT

Risk management is currently applied in an informal manner except for water supply which is evaluated as per Drinking Water Quality Management System requirements. Future plans include the development of a risk based prioritization plan for the town's various asset classes and a progression toward risk registries for each asset sub-class. This will ensure that known risks are recognized and appropriate risk management techniques employed as necessary to both protect public health and safety and mitigation of risks in accordance with corporate tolerance.

EXPENDITURE ANALYSIS

	Year	Non-Infrastructure Solutions	Maintenance Activities	Renewal/Rehabilitation Activities	Replacement Activities	Disposal Activities	Expansion Activities	Total Amount
Approved Budget	2013	235,000	4,762,400	6,014,560	988,100	470,240	19,485,900	**31,956,200**
	2014	435,000	4,935,400	6,687,871	977,490	463,739	4,138,600	**17,638,100**
	2015	830,000	5,481,000	4,010,080	8,499,135	1,255,765	3,890,200	**23,966,180**
Expenditure Forecasts	2016	350,000	5,667,100	2,664,100	5,659,390	525,785	5,591,700	**20,458,075**
	2017	450,000	6,014,400	3,212,560	12,178,121	1,593,295	26,991,000	**50,439,376**
	2018	447,000	6,230,500	2,336,000	5,464,029	458,162	8,588,000	**23,523,691**
	2019	280,000	6,296,300	3,217,160	6,105,812	718,148	16,283,400	**32,900,820**
	2020	110,000	6,363,800	4,472,970	8,254,613	1,224,651	20,571,800	**40,997,834**
	2021	300,000	6,432,800	2,871,720	5,581,924	542,661	3,296,400	**19,025,505**
	2022	300,000	6,502,800	2,059,150	7,174,479	948,152	853,000	**17,837,581**
	2023	250,000	6,574,300	2,335,000	5,911,380	677,986	3,300,000	**19,048,666**
	2024	110,000	6,647,200	633,250	4,998,875	461,606	194,600	**13,045,531**
	2025	80,000	6,721,400	545,000	5,805,077	528,430	5,768,100	**19,448,007**

REVENUE ANALYSIS

	Year	Line of Credit	Special Purpose Reserves	Repair & Replacement Reserve	Growth & New Reserve	Water / Sewer / Storm Reserves	Studies & Other	Development Charges	Grants	External Funding	Operating Budget	Total Amount
Actual	**2012**	-	432,000	4,182,500	1,052,500	3,148,400	-	5,689,200	1,196,800	15,000	4,667,152	**21,941,500**
	2013	-	1,116,900	3,237,800	675,200	2,798,300	-	8,953,600	2,006,800	277,100	4,762,400	**27,171,100**
	2014	-	325,500	4,754,200	498,000	953,812	-	355,100	2,134,600	3,245,000	4,935,400	**17,224,100**
	2015	-	871,800	7,648,300	915,700	3,455,500	519,100	2,819,800	1,540,500	-	6,082,000	**23,852,700**
Revenue Forecasts	**2016**	-	914,600	3,988,935	2,126,100	1,532,600	6,000	2,993,100	2,039,600	-	6,268,100	**19,869,035**
	2017	-	1,717,600	5,554,492	339,800	4,284,300	105,800	14,287,800	1,617,500	9,799,700	6,615,400	**44,322,392**
	2018	-	1,314,600	3,785,719	-	3,944,400	-	6,534,300	1,694,600	106,800	6,831,500	**24,211,819**
	2019	-	1,044,600	2,959,276	-	1,857,700	-	14,316,400	1,694,600	-	6,897,300	**28,769,876**
	2020	-	1,062,100	2,347,008	-	1,100,000	-	17,685,400	1,694,600	-	6,964,800	**30,853,908**
	2021	-	839,600	1,758,717	-	4,904,100	30,000	3,068,400	1,694,600	-	7,033,800	**19,329,217**
	2022	-	884,600	1,809,715	-	4,097,100	100,000	767,700	1,694,600	-	7,103,800	**16,457,515**
	2023	-	1,049,600	3,429,700	-	2,584,500	150,000	2,970,000	1,694,600	-	7,175,300	**19,053,700**
	2024	-	534,600	2,116,400	30,300	1,147,100	110,000	164,300	1,694,600	-	7,248,200	**13,045,500**
	2025	-	-	5,081,817	576,800	1,195,700	8,000	5,263,300	-	-	7,322,400	**19,448,017**

KEY ASSUMPTIONS

Asset Management Plan forecasts are based upon projected growth and levels of service as they exist at the time of the plan's update. Key assumptions made included the following:

- Assume that the municipality will continue to receive gas tax grant indefinitely;
- Assume that the municipality will fully collect planned development charge revenue;
- Assume that the municipality will be able to increase its tax Levy allocation towards its Reserves by one percent per annum; and
- Where inflation was deemed appropriate, an inflation rate of 1.1% for 2016, 2.1% for 2017 and 2% on-going was utilized

PROGRAM DELIVERY

PROJECT PROCUREMENT

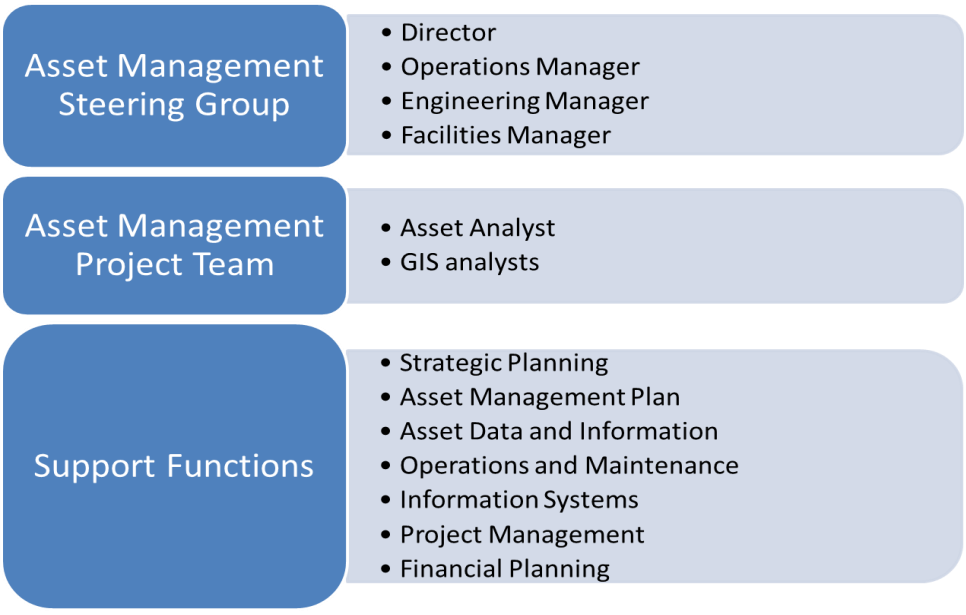
Both operating and capital funded programs follow the same project procurement process which complies with the town's purchasing and financial reporting requirements. All linear asset project procurement is managed through a centralized procurement resource where a common set of standards, procedures and templates are employed. Any related processes are well documented and reviewed on a regular basis and involve the cooperation of various support departments for execution.

Project procurement follows these steps:

Timing	Previous year	Current year
Q1	-	Tender preparation and issuance
Q2	Dept'l review & update of 10 year capital plan	Project start
Q2	Upcoming year's capital projects determined	Project execution
Q3	Senior management review and prioritization of upcoming year's projects	-
Q3 – Q4	Upcoming year's capital project budget presentation and approval by council	Project closeout or carry forward as required

EFFECTIVENESS REVIEW

The town's linear asset management is delivered with the support from all areas of the Infrastructure & Engineering department, as well as from other areas of the corporation. Linear assets are overseen by an asset management steering group which was established as an asset management core function in 2011. This group's capacity has been slowly developing over time. The current linear asset management structure is as follows:



The support functions have not all been formalized at this point but are performed to varying degrees based on risk and priority. These functions are performed by the various designated staff with reporting occurring on an as required basis. The asset management project team consists of three staff that work closely together to support asset related functions. The central application is currently Maximo with plans to expand into other asset areas both through further development of this tool and augmentation with additional practices based on continuous improvement opportunities.

The asset management steering team provides overall guidance and direction for the linear asset management plan. Asset related discussions occur twice a month and needs and priorities are reviewed at least twice a year. Specific discussions also occur throughout the year as required. Topics include budget reviews, reserve fund reviews, annual capital project prioritization and scheduling reviews, risk management reviews, environmental scan and industry opportunity reviews.

In regards to the town's IT and telecom equipment asset management plan, the Executive Information Technology Steering Committee (EITSC) performs a similar function to that the Linear Asset Management Steering Group. The EITSC committee was formed in 2009, recognizing the need to prioritize and support the strategic functions of IT Services. The committee currently meets once a month. The committee's role is multifaceted. The following summarizes the group's intent:

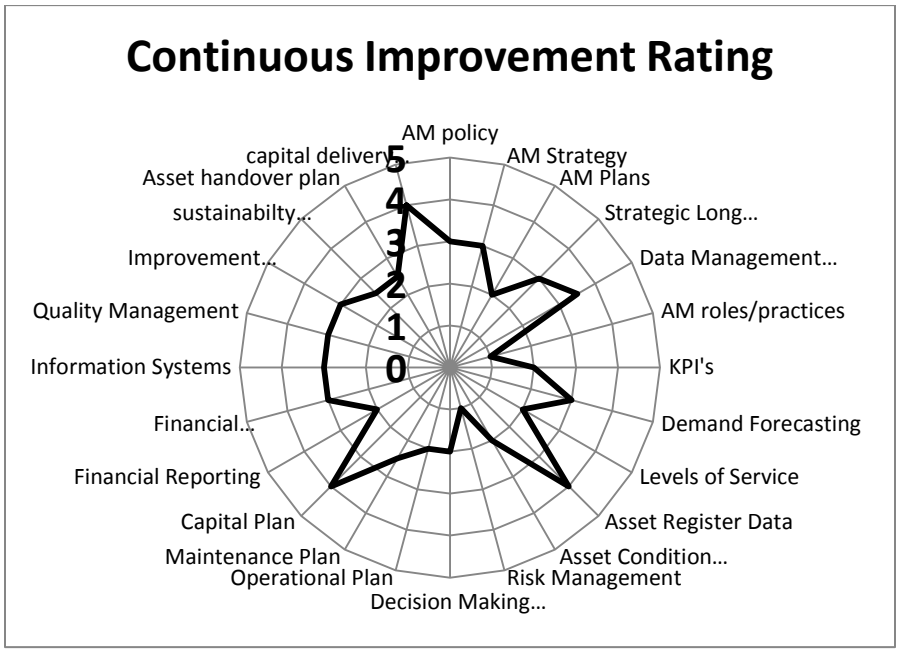
1. To reinforce the application of the agreed upon IT principles in all IT decision making;
2. To provide direction and strategic leadership for the use of IT at Aurora and ensure IT decision making is aligned with corporate goals;
3. To review and prioritize technology dependant projects and resolve resource allocation issues;
4. Facilitate better corporate use (and re-use) of technology systems and corporate resources;
5. Ensure open communications and partnership between the IT division and the other work units of the town so as to promote collaboration;
6. Act as a conduit for information to other management levels within the Town to ensure that the decisions and rationale for priorities and resource allocation (funding) are communicated to all departmental staff;
7. Build a learning organization that can leverage IT knowledge and experience more effectively across the organization;

CONTINUOUS IMPROVEMENT STRATEGY

The continuous improvement strategy for asset management is measured against twenty four criteria that touch on the various aspects of the plan. The purpose of this self-assessment is to identify areas where there is relative opportunity for improvement and plan projects focused on improving the maturity level and application of the various criteria. The following table outlines the definitions for the relative scores.

Score	Description
0	not performed
1	aware of need and risk
2	informal application and undocumented processes
3	partial documented processes partial use
4	application of documented processes
5	Best practice

The following spider graph is a summary of scores for the various criteria across all asset classes. In recent years, significant effort has been made to advancing asset management at the Town including the development of a capital delivery process, quality management systems for water supply, development of salt management plan for environmental sustainability, completion of an asset registry, implementation of asset and work management system, development of first level key performance indicators, digitization and categorization of all linear asset related drawings.



APPENDIX 1 – ASSET MANAGEMENT STRATEGIES

ROADS

INVENTORY: AS OF OCTOBER 2010	There are approximately 179.9 centerline kilometers of roads within the Town of Aurora.
ANTICIPATED ASSET LIFE CYCLE:	The useful life of transportation infrastructure ranges from 15 to 50 years. The useful life of road infrastructure is dependent on the type of surface, climate conditions, and level of service. • Arterial – 33 years • Collector – 34 years • Local – 36 years
INTEGRATED:	Roads are integrated with other buried assets located in the utility corridor such as: water, sewer, storm sewers, hydro, telephone, natural gas and cable. They have an impact on street lighting, traffic signals and sidewalks.
REHABILITATION AND REPLACEMENT CRITERIA:	The Town of Aurora uses AECOM's pavement management software system licensed for Town use. The last pavement management system study has been completed by AECOM in October 2010 and represents a network-level analysis intended to serve as a tool for long-term pavement improving planning. Aurora began formal pavement management with AECOM in 2002 using AECOM's INFRA/PAVE software system that is based on the non-proprietary pavement evaluation system, PCI, which is supported by the Canadian Public Works Association (CPWA). Aurora's street system is comprised of flexible (asphalt) pavements that are about two thirds Local and one third Collector or Arterial functional classification. This breakdown is common among municipal street systems. The vast majority of local roads have an urban cross section (curb/gutter). Local roads with rural cross section are anticipated to be upgraded to urban cross section with their next capital improvement. Regional roads and Private roads are included in the INFRA/PAVE inventory but are not evaluated for condition and are excluded from the analysis and planning modules. The average pavement age is approaching the expected design life for asphalt pavement. The average pavement condition has remained relatively constant over the last nine years at about PCI 72. A PCI value of 65-70 is common among municipalities.

The distribution of pavement condition is encouraging – very few pavements in Poor condition and a large number of pavements in Excellent to Good condition. This implies a limited need for major reconstruction projects at high unit costs for the Poor pavements. The Excellent to Good pavements can provide good performance for a long period by pursuing a low-cost maintenance plan of crack sealing and patching.

Aurora-specific pavement deterioration models were developed by INFRA/PAVE based on nine years of pavement inspection data.

Pavement Class – Standard Engineering Usage:

- Arterial – serves primarily mobility between point A and point B
- Collector – collects local traffic to feed into the Arterial system – partly mobility and partly land access
- Local – serves primarily land access

Pavement Type - Standard Engineering Usage

- Asphalt – petroleum-based asphaltic concrete or "flexible" pavement
- Concrete – Portland cement concrete or "rigid" pavement
- Composite – Asphalt overlay or concrete pavement
- Brick – brick pavement
- Paver Block – concrete blocks designed for pavement application
- Gravel – unbound aggregate material
- Natural – unimproved right-of-way

Inventory - What Pavement do we own?

A breakdown by functional classification and pavement type of more than 965 pavement assets currently within the Town's capital improvement jurisdiction is presented below:

Pavement classification

- Local 69%
- Collector 28%
- Arterial 3%

Pavement Type

- Asphalt Collector 28%
- Asphalt Arterial 3%
- Asphalt Local, Urban 58%
- Asphalt Local, Rural 10%

This classification does not include private roads and regional roads.

Pavement Age

Often, an asphalt pavement that is designed and constructed for the traffic loading it receives can be expected to last about 15-20 years before major rehabilitation. Experience in Ontario has shown that higher volume roads often needs resurfacing at 15-17 years of age while subdivision roads may last for 20-22 years before the first major rehabilitation. The average age of the Tow's pavement system is approaching these age ranges.

Pavement Inspection System

The development of the pavement inspection system in Aurora was formalized in 2002. The entire Town-owned street system was included in the initial inspection. Subsequently, the entire street network was re-inspected in 2005 and the inspection schedule continued with this project in 2010. Current protocol calls for the local street system to be re-inspected on a regular cycle (every 3-5 years).

Pavement inspection consists of identification, classification, and measurement of individual pavement distresses in accordance with the Canadian Public Works Association's Pavement Condition Index (PCI) rating standard. The PCI system uses a 0 to 100 (Failed to Excellent) scale to describe pavement condition. Figure 4 presents the standard PCI ranges and descriptions. Note that current Aurora policy considers local street PCI rating of 25 and collector/arterial/highway streets with a rating of 40 to be the minimum acceptable service level.

PCI Range Descriptions

PCI Range	Description
85 to 100	Excellent
70 to 85	Very Good
55 to 70	Good
40 to 55	Fair
25 to 40	Poor
10 to 25	Very Poor
0 to 10	Failed

PCI Average Trend

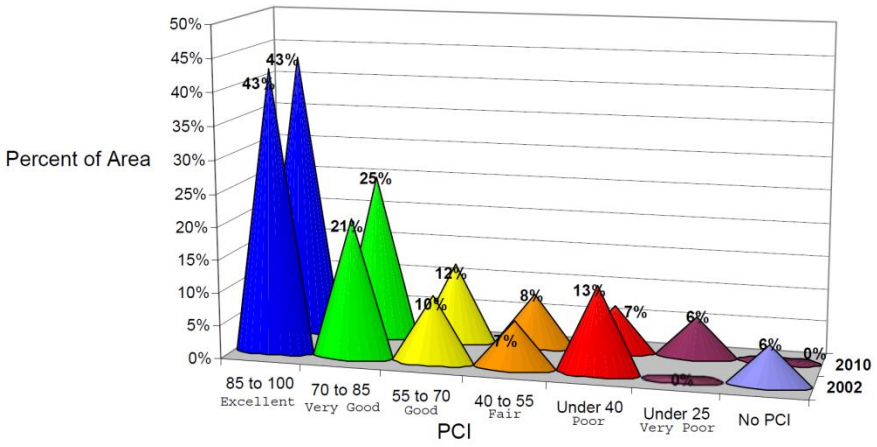
The average PCI rating for the entire pavement network is currently about 72, which falls at the low end of the "Very Good" range. This is no change from the average condition in 2002. The capital and maintenance activities in the last 9 years have been sufficient to maintain the average pavement condition.

An average PCI value of 65 to 70 is common among municipal agencies with a mix of one-third arterial streets and two-thirds local streets like Aurora. A lower average PCI might indicate an unreasonable number of poor pavements in the system. A higher average PCI can mean that the agency is not using up all the performance of a

pavement and is initiating rehabilitation too early – an economic inefficiency.

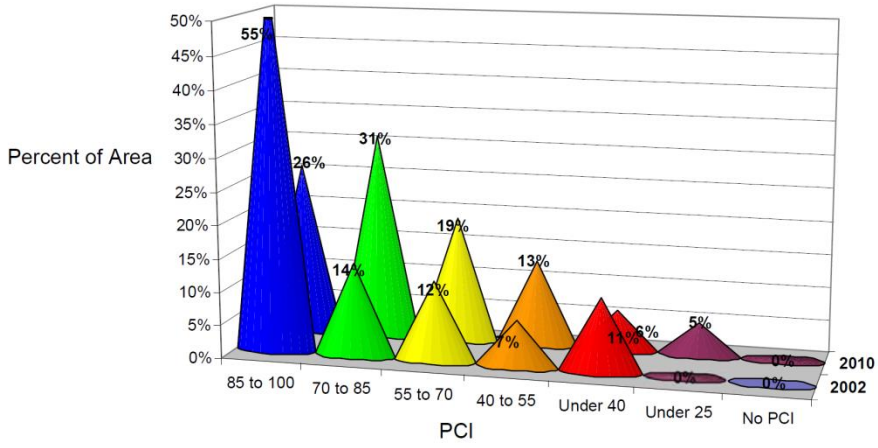
PCI – Distribution Trend

PCI Distribution for Local Streets



In reviewing these pavement condition distributions over time, the combined percentage of pavements in the "Excellent" and "Very Good" and "Good" categories has remained relatively constant for the Local streets. This is a nearly perfect distribution of pavement condition where a majority of pavements are in good condition and are candidates for low-cost maintenance actions that will provide high levels of pavement performance. There are a limited and manageable number of Local class pavement sections in "Fair" to "Poor" condition which are candidates for higher-cost major rehabilitation actions. (Note: The 2002 ranges included "Under 40" which has been divided into two ranges in the 2010 data).

PCI Distribution for Collector/Arterial Streets



	The condition rating distribution for the Collector/Arterial system is similar to the Local system except that in 2010, the distribution in the top three ranges is more even than in 2002. The end result is still that the vast majority of pavement polygons will have a low-cost maintenance need rather than a higher-cost major rehabilitation requirement. And no "bubble" of major investment requirement is approaching. This current distribution trend follows one of the basic premises of pavement management - which it is more cost-effective to maintain pavements at a high service level for a low unit cost than it is to wait until pavements degrade significantly requiring high unit cost repairs. So, investments made in pavement replacement and overlays combined with an effective maintenance program pay off. The result is higher performing pavements for longer periods of time - good service for the public. The overall story told by these PCI distribution figures includes: • Stable numbers of high-performing pavements • Addressing the backlog of low-performing pavements • Preservation of high and mid-performing pavements This result is consistent with good asset management practices. And based on actual condition data instead of pavement age as a surrogate for condition, a much clearer picture of pavement needs is defined. In June 2015, The Town has procured Stantec's RoadMatrix, a Commercial-of-the-shelf pavement management software to replace the INFRA/PAVE software system. Pavement condition data collection will be done town-wide in the summer of 2015 by the Infrastructure Management Services (IMS). The RoadMatrix software system has the ability to provide: • the overall pavement condition summary, • individual pavement condition breakdown, • future deterioration condition based on different funding scenarios (e.g. "no funding", "defined funding" and "required funding for maintaining current overall condition"), • Determined 3, 5 and 10-year road capital reconstruction plans. For the pavement data collection, IMS will use the Laser Road Surface Tester (RST), enhanced with digital imagery and GPS capabilities. The RST, with its 11 camera array, is capable of collecting a full suite of pavement condition data in real time, complete with high accuracy GPS coordinates and multiple view digital images for both rigid and flexible pavements as it traverses the Town's roadways. An integrated Digital Direct Condition Rating System (DDCRS) supplements the RST data for additional distress data elements, quality assurance and inventory information.

	Specialized data processing, using GIS, allows the pavement data to be quickly checked for completeness and quality. When completed, the 2015 pavement condition survey data will be loaded into RoadMatrix and a pavement management report will be issued highlighting the current roads condition, future condition based on different funding scenarios, estimated needs based on a 3, 5 and 10-year horizons and recommended road treatments for each time horizon.
REHABILITATION AND REPLACEMENT STRATEGY:	Using the planning parameters described above, the 10-year capital road reconstruction and resurfacing plan is being developed. The most effective engineering solutions for the existing pavement network may not be achievable under budget limits, operational considerations, capacity requirements, etc. These constraints to planning can include funding source mix, funding limitations, public approval of projects, coordination with other infrastructure work, construction closure limits, traffic capacity needs as well as other considerations unique to Aurora.
LIFE CYCLE CONSEQUENCES:	A final recommended 10-yr capital road reconstruction plan is a living document, the result of integrated planning and iterative processes. INFRA/PAVE provides candidate project lists and multi-year plans with performance (PCI) and budget impacts. Town of Aurora professional engineering staff determines the final plan then that advances selected projects to design construction. The 10-yr Capital Road Reconstruction Plan is part of the Town's 10-yr Capital Investment Plan. If road conditions and maintenance is not adequate, level of service is affected and risks and liabilities are increased.
INTEGRATED ASSET PRIORITIES:	A road rehabilitation project drives the replacement of underground water and sewer infrastructure if the infrastructure is near the end of its life cycle.
CORPORATE/CONSULTING REPORTS ON SUBJECT:	• Public Sector Accounting Board (PSAB) – s. 3150 • Town of Aurora Pavement Management System, Oct. 2010 • 10-yr Capital Investment Plan 2015-2025 • Audited Financial Statements (payment certificates)
ESTIMATED COST:	Total Cumulative Estimated 10-yr Capital Cost for repair and replacement projects for roads and related for the ten year period covering 2015 to 2025 is **$39,848,100**

WATERMAIN SYSTEMS

INVENTORY:	The Town of Aurora has 201.5 kilometers of watermain

ANTICIPATED ASSET LIFE CYCLE:	The anticipated asset lifecycle ranges between 20 and 100 years. Examples:
	• Watermain
	  ○ PVC – 80 years
	  ○ Ductile Iron – 67 years
	  ○ Cast Iron – 50 years
	  ○ Concrete Pressure – 100 years
	• Valves – 30 years
	• Valve Chamber Structures – 55 years
	• Hydrants – 30 years
	• Water Meters – 20 years

INTEGRATED:	May be integrated with road reconstruction projects
REHABILITATION AND REPLACEMENT CRITERIA:	**Condition Assessment Approach** Condition assessments are completed on an annual basis through visual inspection through CCTV which will help identify optimal rehabilitation or replacement year. **Performance Assessment Approach** This is accomplish through: • Water quality and chlorine residual monitoring • Pressure monitoring • Water loss monitoring **Risk Assessment Approach** Proactive maintenance and replacement to manage risk of failure and maintain performance Routine testing to ensure water quality Material and age based evaluation

REHABILITATION AND REPLACEMENT STRATEGY:	Rehabilitation/renewal and expansion activities are scheduled as per the "Ten Year Capital Investment Plan, 2015 to 2025"
LIFE CYCLE CONSEQUENCES:	If the life cycle of the water system were reduced, the level of service is lowered and safety may be compromised.
INTEGRATED ASSET PRIORITIES:	A road rehabilitation project drives the replacement of underground water system infrastructure if the said infrastructure is near the end of its life cycle.
CORPORATE/CONSULTING REPORTS ON SUBJECT:	• Public Sector Accounting Board (PSAB) – s. 3150 • 10-yr Capital Investment Plan 2015-2025 • Audited Financial Statements (payment certificates)
ESTIMATED COST:	Total estimated cumulative capital cost for the 10 year period covering 2015 to 2025: **$14,244,800**

WASTEWATER SYSTEMS

INVENTORY:	The Town of Aurora has 174.6 kilometers of sanitary sewers

ANTICIPATED ASSET LIFE CYCLE:	The anticipated asset lifecycle ranges between 50 and 100 years.
	• Sewers
	  ○ PVC – 80 years
	  ○ Ductile Iron – 67 years
	  ○ Cast Iron – 50 years
	  ○ Concrete – 55 years
	  ○ Asbestos Cement – 67 years
	  ○ High Density Poly Ethylene – 100 years
	  ○ Vitrified Clay – 55 years
	• Maintenance Chambers
	  ○ Concrete – 55 years
	  ○ Brick – 100 years

INTEGRATED:	May be integrated with road reconstruction projects
REHABILITATION AND REPLACEMENT CRITERIA:	**Condition Assessment Approach** Condition assessments are completed on an annual basis through visual inspection through CCTV which will help identify optimal rehabilitation or replacement year. **Performance Assessment Approach** This is accomplish through: • Inflow/infiltration studies • Dye testing • Leak tracking through CCTV **Risk Assessment Approach** Proactive maintenance and replacement to manage risk of failure and maintain performance Material and age based evaluation
REHABILITATION AND REPLACEMENT STRATEGY:	Rehabilitation/renewal and expansion activities are scheduled as per the “Ten Year Capital Investment Plan, 2014 to 2023”

LIFE CYCLE CONSEQUENCES:	If the life cycle of the water system were reduced, the level of service is lowered and safety may be compromised.
INTEGRATED ASSET PRIORITIES:	A road rehabilitation project drives the replacement of underground water system infrastructure if the said infrastructure is near the end of its life cycle.
CORPORATE/CONSULTING REPORTS ON SUBJECT:	• Public Sector Accounting Board (PSAB) – s. 3150 • 10-yr Capital Investment Plan 2015-2025 • Audited Financial Statements (payment certificates)
ESTIMATED COST:	Total estimated cumulative capital cost for the 10 year period covering 2015 to 2025: **$8,653,000**

STORMWATER SYSTEMS & CULVERTS

INVENTORY:	The Town of Aurora has 154.2 kilometers of storm sewers, 44 stormwater management facilities and 26 oil/grit separators

ANTICIPATED ASSET LIFE CYCLE:	The anticipated asset lifecycle ranges between 20 and 80 years
	
	Examples include:
	
	• Sewers
	  ○ PVC – 80 years
	  ○ Ribbed PVC – 80 years
	  ○ Corrugated Pipe – 30 years
	  ○ Concrete – 55 years
	  ○ Asbestos Cement – 67 years
	  ○ Vitrified Clay – 55 years
	• Maintenance Chambers
	  ○ Concrete – 55 years
	  ○ Brick – 100 years
	• Headwalls – 55 years
	• Catchbasins
	  ○ Concrete – 55 years
	  ○ Brick – 100 years
	• Stormwater management facilities – no defined lifecycle in PSAB

INTEGRATED:	May be integrated with road reconstruction projects
REHABILITATION AND REPLACEMENT CRITERIA:	**Condition Assessment Approach** • For storm sewers is completed on an annual basis through visual inspection through CCTV which will help identify optimal rehabilitation or replacement year. • for culverts is completed by visual inspection • for stormwater management facilities is completed by visual inspection as well as according to the operation and maintenance manuals **Performance Assessment Approach** This is accomplish through: • Discharge water quality assessments • Design capacity assessments

	Risk Assessment Approach Proactive maintenance Technical studies to assess overall system priorities
REHABILITATION AND REPLACEMENT STRATEGY:	Rehabilitation/renewal and expansion activities are scheduled as per the "Ten Year Capital Investment Plan, 2014 to 2023"
LIFE CYCLE CONSEQUENCES:	If the life cycle of the stormwater systems were reduced, the level of service is lowered and safety and property value may be compromised due to the risk of flooding.
INTEGRATED ASSET PRIORITIES:	A road rehabilitation project drives the replacement of underground stormwater system infrastructure if the said infrastructure is near the end of its life cycle.
CORPORATE/CONSULTING REPORTS ON SUBJECT:	• Public Sector Accounting Board (PSAB) – s. 3150 • 10-yr Capital Investment Plan 2015-2025 • Audited Financial Statements (payment certificates)
ESTIMATED COST:	Total estimated cumulative capital cost for the 10 year period covering 2015 to 2025: **$13,348,600**

FACILITIES

INVENTORY **(As of the end of 2014)**	The Town has **22** facilities and buildings.
ANTICIPATED ASSET LIFE CYCLE:	Facilities and their components (roof, HVAC, etc.) have an assessed useful life ranging from **15** to **50** years. Some examples include: • Boilers- **25** years • Building Automation System - 2**0** years • Concrete Foundation – 50 years • Generators – 30 years • HVAC - 15 to 25 years • Lighting – 15 years • Parking Lot – 30 years • Roof – 30 years
INTEGRATED:	Individual asset components are reviewed; projects are lumped together per asset to take advantage of the "economies of scale" principle. Consideration is given to minimize the disruption of operations to a given asset over time.
REHABILITATION AND REPLACEMENT CRITERIA:	Each facility is assessed based on its physical condition and its capacity condition. Physical condition is ranked on a scale from very poor to very good. Capacity condition is dependent on the percentage of demand the facility, in its current condition, can support.
REHABILITATION AND REPLACEMENT STRATEGY:	The physical condition ranking helps identify the action that must be taken (renewal/rehabilitation, maintenance, replacement, etc.). The capacity condition ranking helps identify whether the asset is achieving its Expected Level of Service. Assets with a low condition ranking should be replaced or upgraded to meet life cycle, industry, technological and safety standards.
LIFE CYCLE CONSEQUENCES:	Consequences include increased deterioration of building and properties, health and safety concerns, inefficient operation, higher operating costs, accelerated depreciation of Town assets.
INTEGRATED ASSET PRIORITIES:	Replacement is based on actual condition, the point in time within its life cycle and the availability of resources to complete the replacement with minimal disruption to the program/service delivery within the asset.

CORPORATE/CONSULTING REPORTS ON SUBJECT:	• Public Sector Accounting Board (PSAB) – s. 3150 • 10-yr Capital Investment Plan 2015-2025
ESTIMATED COST:	Total estimated cumulative capital cost for the 10 year period covering 2015 to 2025: **$19,633,200**, including $1,375,000 in planned accessibility R&R costs.

VEHICLES

INVENTORY:	The Town has approximately **90** vehicles and related pieces.
ANTICIPATED ASSET LIFE CYCLE:	The useful life of a vehicle varies depending on the service area and vehicle type, size and cost. The assessed range is between **10** and **15** years. Examples include: • Gator and Trailer- **15** years • Pick-up trucks- **10** years • Heavy Trucks(Dump, Plow, Tandem)- **15** years • Vans- **10** years • Loaders-/backhoes- **12** years • Tractors- **15** years
INTEGRATED:	Integrated with technical advances and financial plans, environmental regulations, operational changes, and service increases or decreases.
REHABILITATION AND REPLACEMENT CRITERIA:	Lifecycle cost analysis considering depreciation, fuel, repairs, insurance, downtime costs, etc. will identify optimal replacement year for vehicle classes.
REHABILITATION AND REPLACEMENT STRATEGY:	Review usage to warrant replacement, repair costs should not exceed normal levels for the type of vehicle involved. Review lease, seasonal rental opportunities, refurbishing strategies and possibility of contracting services to third party.
LIFE CYCLE CONSEQUENCES:	As cost per kilometer increases, increased downtime requiring more spare units or work schedules to be lengthened, increasing manpower costs, resulting in a loss of production.
INTEGRATED ASSET PRIORITIES:	Replacement is based on actual condition, the point in time within its life cycle, and the availability of resources to complete the replacement with minimal disruption to the program/service delivery within the asset.
CORPORATE/CONSULTING REPORTS ON SUBJECT:	• Public Sector Accounting Board (PSAB) – s. 3150 • 10-yr Capital Investment Plan 2015-2025 • Town of Aurora Tangible Capital Asset Policy • 18 Year Vehicle/Equipment Replacement Schedule – 2010-2028 (revised Jan 24, 2013)
ESTIMATED COST:	Total estimated cumulative capital cost for the 10 year period covering 2015 to 2025: **$1,624,500**

MACHINERY & EQUIPMENT

INVENTORY:	Equipment includes furniture and fixtures, generators, mowers, trimmers, saw chippers, pumps, nozzles hoses, air packs, specialty water rescue, safety clothing, ladders, communications, technology, extrication and fuel power for all departments. Equipment also includes all items necessary for transportation services, protection services and recreation and culture services. Equipment may be fixed or movable tangible capital asset used for operations. Equipment also includes information technology and telecom equipment such as IT Ethernet cabling, fibre optic cabling, servers, switches & hubs, firewalls, routers, UPS's, desktops, laptops, tablets, server room cooling and fire suppression systems, printer fleet, telephony network cabling, and equipment, handsets.
ANTICIPATED ASSET LIFE CYCLE:	The useful life of equipment ranges from **5** to **25** years. Some examples include: • Playground equipment- **10-20** years • Ice Resurfacers- **5** years • Mowers - **5** years • Solar Powered Signs – **8** years • Air Compressor – **8** years • Computers, printers, monitors & accessories – **5** years • Servers, routers & accessories – **7** years • IT Network Equipment – **5** years • Telephone Lines & Cables – **30** years • Telephone system – **10** years
INTEGRATED:	Individual assets are kept on a replacement schedule roughly matching the useful life ranges. In instances where performance has not yet begun to deteriorate, IT and telecommunication equipment replacements will be delayed in order to more effectively manage resource requirements. They are placed so as not to disrupt the operations.
REHABILITATION AND REPLACEMENT CRITERIA:	The only criterion above useful life is when the asset's productivity decreases.
REHABILITATION AND REPLACEMENT STRATEGY:	Review usage to warrant replacement, repair costs should not exceed normal levels for the type of equipment involved. Review lease, seasonal rental opportunities, refurbishing strategies and possibility of contracting services to third party.
LIFE CYCLE	Consequences include disruption of the operation and potential increased maintenance

CONSEQUENCES:	costs depending on the equipment involved.
INTEGRATED ASSET PRIORITIES:	Replacement is based on actual condition, the point in time within its life cycle, and the availability of resources to complete the replacement with minimal disruption to the program/service delivery within the asset.
CORPORATE/CONSULTING REPORTS ON SUBJECT:	• Public Sector Accounting Board (PSAB) – s. 3150 • 10-yr Capital Investment Plan 2015-2025 • IT Equipment Evergreen plan • 18 Year Vehicle/Equipment Replacement Schedule – 2010-2028 (revised Jan 24, 2013)
ESTIMATED COST:	Total estimated cumulative capital cost for the 10 year period covering 2015 to 2025: **$6,258,000**; this amount includes $1,535,300 in IT and telecom equipment planned R&R costs.

LAND, PARKLAND & LAND REHABILITATION / IMPROVEMENTS

INVENTORY:	The Town of Aurora covers **49** square kilometers, located in the **centre** of the Regional Municipality of York. The town owns approximately **700** acres of combined open space and parkland, in addition to land associated with Municipal Facilities and land maintained for environmental purposes (storm water ponds). There are also approximately 48 kilometres of off-road trails, **32** playgrounds, **9** tennis courts, **7** basketball courts, **17** baseball diamonds, **33** soccer fields and **14** outbuildings/shelter/washrooms.
ANTICIPATED ASSET LIFE CYCLE:	Land usually has an indefinite useful life that exceeds the useful lives of the buildings, roads or structures situated on the land. The cost of the acquired land is not amortized as land normally maintains its value over time. Land improvements (such as landscaping, fencing, etc.) have a useful life ranging from **20-30** years. • Out Buildings, Washrooms and Park Shade Structures - **20-30** years • Parking Lots- **20 -30** years • Sports Fields/Courts- **20-30** years • Trails Paths/Bridges- **25-35** years • Line Fencing **20-35** years
INTEGRATED:	Land and land improvements are integrated with roads, buildings, bridges & culverts, as well as, water and sewers.
REHABILITATION AND REPLACEMENT CRITERIA:	Based on life cycle and visual inspections.
REHABILITATION AND REPLACEMENT STRATEGY:	Assets are reviewed annually and maintenance, rehabilitation/renewal, and expansion activities scheduled as required in the 10 year plan.
LIFE CYCLE CONSEQUENCES:	Land has an indefinite life cycle. However, there is a potential increase in maintenance and rehabilitation costs depending on the improvements involved.
INTEGRATED ASSET PRIORITIES:	Land improvement rehabilitation forecasts should be compared to transportation infrastructure forecasts. The integration of projects occurs internally and externally.
CORPORATE/CONSULTING REPORTS ON SUBJECT:	• Public Sector Accounting Board (PSAB) – s. 3150 • 10-yr Capital Investment Plan 2015-2025 • The Economic Value of Natural Capital Assets Report (June 2013)

ESTIMATED COST:	Total estimated cumulative capital cost for the 10 year period covering 2015 to 2025: **$7,194,300**

URBAN FORESTRY & STREET TREES

INVENTORY:	The Town of Aurora currently maintains an extensive inventory of urban street trees totaling **18,273** trees. The Town of Aurora also has approximately 50ha of woodlot property.
ANTICIPATED ASSET LIFE CYCLE:	Due to locations and environmental impacts 0.85% of the street tree inventory requires replacement on an annual basis. Mortality of street trees is attributed to a number of factors including vehicle collision, insect/disease infestations and poor site conditions. Surviving street trees have a useful life ranging from **30-70** years. Woodlands are ever changing and evolving life cycle although management must occur to ensure long term viability, diversity of species and public safety.
INTEGRATED:	Street Trees are integrated with roads and general urban streetscape, in conjunction with pedestrian and vehicular traffic. Woodlands are integrated with parks and public spaces.
REHABILITATION AND REPLACEMENT CRITERIA:	Based on life cycle, environmental impacts, mechanical injury and visual inspections.
REHABILITATION AND REPLACEMENT STRATEGY:	Street Trees are inspected annually and pruned on a 6-year cycle, with replacement and removal though work order system. Rehabilitation / replacement of street trees based on historic service level and as required by newly emerging threats (i.e. Emerald Ash Borer) and are scheduled as required in the 10 year plan where possible.
LIFE CYCLE CONSEQUENCES:	Consequences include greater public liability risk with defective street trees, diminished quality of urban streetscape, reduced property values, increased maintenance costs and greater risk of further decline of urban forest due to a wide variety of environmental factors.
INTEGRATED ASSET PRIORITIES:	Street tree replacement and maintenance is based on a number of factors including: • actual condition of the asset; • the point in time within its life cycle; and • the availability of resources to complete the necessary functions with minimal disruption to the program/service delivery The integration of projects occurs internally and externally.

CORPORATE/CONSULTING REPORTS ON SUBJECT:	• Public Sector Accounting Board (PSAB) – s. 3150 • 10-yr Capital Investment Plan 2015-2025 • EAB Management Strategy Reports • Aurora Woodlands Managed Forest Plan • The Economic Value of Natural Capital Assets Report (June 2013)
ESTIMATED COST:	Total estimated cumulative capital cost for the 10 year period covering 2015 to 2025, Broken down by: EAB Treatment **$2,120,000** Rehabilitation & Repair: Nil

APPENDIX 2 – LINEAR ASSET INVENTORY REPORT

With the reporting requirements of PSAB 3150, the Town of Aurora submits an inventory of all tracked assets that are owned and maintained by the town. These assets are categorized and required attributes are captured for each category to ensure that there is a proper valuation of the asset for future lifecycle purposes. The critical attribute fields submitted in the PSAB reports are listed below with descriptions and samples for each asset category.

ROADS

PAVEMENT AND CURBS

	Description	Sample	Sample
ID	Unique identifier - not to be recycled	STR-RD-1035-11	STR-RD-1035-12
Project ID	Notes all projects that are involved with installation/improvements	31048	31048-2013
Location Description	Assists with asset identification	Catherine to Centre	Mark Street to Batson Drive
Road Length (m)	Centreline length of the road	119.50	642.10
Road Width (m)	From edge to edge of asphalt	7.5	8
Road Area (m2)	Quantity retrieved from GIS	938.23	5590.38
Road Type	Determined based on traffic volume and speed limit	Local	Local
Right of Way Width	From property line to property line	22	20.12
Lane Count	number of vehicle lanes on ROW	2	2
Date Constructed	Year of last asphalt construction/remediation	2012	2013
Life Span	Estimated years of useful service	36	36
Cost History	Costs incurred by the town or estimated values for the asset's construction/improvement	2012 - $75,022.93	2013 - $428,592.82;

SIDEWALKS & PATHS

	Description	Sample	Sample
ID	Unique identifier - not to be recycled	STR-SW-3110-03	STR-SW-3110-04
Project ID	Notes all projects that are involved with installation/improvements	31104-2013	31104-2013
Location Description	Assists with asset identification	Child Drive to Patrick Drive	Patrick Drive to Murray Drive
Length (m)	Quantity retrieved from GIS	155.0	65.9
Width (m)	From edge to edge	1.5	1.5
Area (m2)	Based on length and width	232.44	98.88
Material	Defined material affects lifecycle and asset purpose	Concrete	Concrete
Date Constructed	Year of installation	2013	2013
Life Span	Estimated years of useful service	30	30
Cost History	Costs incurred by the town or estimated values for the asset's construction/improvement	2013 - $17,617.45;	2013 - $7,494.19;

STREET LUMINAIRES

	Description	Sample	Sample
ID	Unique identifier - not to be recycled	STR-LI-1620-03	STR-LI-1620-04
Project ID	Notes all projects that are involved with installation/improvements		
Pole Material	Asset material, design, and/or function	Trafalgar	Trafalgar
Date Constructed	Year of installation	2005	2005
Life Span	Estimated years of useful service	30	30
Cost History	Costs incurred by the town or estimated values for the asset's construction/improvement	2011 - $5,057.36;	2011 - $5,057.36;

SIGNAGE

	Description	Sample	Sample
ID	Unique identifier - not to be recycled	STR-SN-3110-39	STR-SN-3110-40
Project ID	Notes all projects that are involved with installation/improvements	31104-2013	31104-2013
MTO Code	Regulatory reference type code	RA-1	RA-1T
Date Constructed	Year of installation	2013	2013
Life Span	Estimated years of useful service	10	10
Cost History	Costs incurred by the town or estimated values for the asset's construction/improvement	2013 - $375.87;	2013 - $41.76;

WATERMAIN SYSTEMS

WATERMAINS

	Description	Sample	Sample
ID	Unique identifier - not to be recycled	WTR-LN-3220-06	WTR-LN-3220-07
Project ID	Notes all projects that are involved with installation/improvements	31078	31078
Length	Quantity retrieved from GIS	57.6	78.7
Diameter	Size of watermain pipe diameter	200	200
Material	Defined material affects lifecycle and asset purpose	Polyvinyl Chloride	Polyvinyl Chloride
Date Constructed	Year of installation	2010	2010
Date Relined	Year of full length remediation		
Life Span	Estimated years of useful service	80	80
Cost History	Costs incurred by the town or estimated values for the asset's construction/improvement	2010 - $19,022.29;	2010 - $26,014.13;

WATERMAIN VALVES

	Description	Sample	Sample
ID	Unique identifier - not to be recycled	WTR-WV-4005-02	WTR-WV-4005-03
Project ID	Notes all projects that are involved with installation/improvements	31030	31030
Diameter	Size of watermain pipe diameter the valve is attached to	150	150
Valve within Chamber	Whether the valve is enclosed in an underground chamber or has an access box at grade	No	No
Date Constructed	Year of installation	2006	2006
Life Span	Estimated years of useful service	30	30
Cost History	Costs incurred by the town or estimated values for the asset's construction/improvement	2006 - $2,328.98;	2006 - $2,328.98;

HYDRANTS

	Description	Sample	Sample
ID	Unique identifier - not to be recycled	WTR-HY-1080-01	WTR-HY-1085-01
Project ID	Notes all projects that are involved with installation/improvements	CP2013-1	CP2013-1
Date Constructed	Year of installation	2007	2007
Life Span	Estimated years of useful service	30	30
Cost History	Costs incurred by the town or estimated values for the asset's construction/improvement	2007 - $4,875.87;	2007 - $4,875.87;

WATER BOOSTER STATIONS

	Description	Sample
ID	Unique identifier - not to be recycled	WTR-BS-2190-01
Project ID	Notes all projects that are involved with installation/improvements	
Control System	Electrical control system used for monitoring/managing the pump facility	3 Phase - 600 Volts
Pumps	Size and quantity of pumps part of the facility	2-5", 1-6"
Standby Generator	Type and output of emergency generator	125 Kw Diesel
Date Constructed	Year of installation	1998
Life Span	Estimated years of useful service	50
Cost History	Costs incurred by the town or estimated values for the asset's construction/improvement	2008 - $400,000.00;

WASTEWATER SYSTEMS

SANITARY SEWERS

	Description	Sample	Sample
ID	Unique identifier - not to be recycled	SAN-LN-4110-05	SAN-LN-4110-06
Project ID	Notes all projects that are involved with installation/improvements	31077-2013	31077-2013
Length	Quantity referenced from design schematic	34.5	4.7
Diameter	Size of sewer pipe diameter	300	375
Depth	Average depth of pipe below grade	3.0	1.2
Material	Defined material affects lifecycle and asset purpose	Polyvinyl Chloride	Concrete Pipe
Upstream MH ID	Reference ID for asset located at the upstream of the sewer	SAN-MH-4110-06	SAN-MH-4110-04
Upstream Inverts	Elevation of the sewer at the point of entry	256.55	252.68
Downstream MH ID	Reference ID for asset located at the downstream of the sewer	SAN-MH-4110-05	SAN-MH-4110-07
Downstream MH Inverts	Elevation of the sewer at the point of exit	254.85	252.66
Date Constructed	Year of installation	2011	2011
Date Relined	Year of full length remediation		
Life Span	Estimated years of useful service	80	55
Cost History	Costs incurred by the town or estimated values for the asset's construction/improvement	2011 - $10994.49;	2011 - $1,950.62;

MAINTENANCE CHAMBERS

	Description	Sample	Sample
ID	Unique identifier - not to be recycled	SAN-MH-4110-03	SAN-MH-4110-04
Project ID	Notes all projects that are involved with installation/improvements	31077-2013	31077-2013
Diameter	Distance between the chamber walls	1200	1200
Depth	Full height of the structure	3.1	1.2
Material	Defined material affects lifecycle and asset purpose	Brick	Concrete-Precast
Surface Elevation	Elevation of the top of the structure	260.14	253.93
Date Constructed	Year of installation	1932	2011
Date Relined	Year of full structural remediation		
Life Span	Estimated years of useful service	100	55
Cost History	Costs incurred by the town or estimated values for the asset's construction/improvement	2009 - $3999.66; 2011 - $1585.99;	2011 - $4,417.07;

SANITARY PUMPING STATIONS

	Description	Sample	Sample
ID	Unique identifier - not to be recycled	SAN-PS-4465-01	SAN-PS-5060-01
Project ID	Notes all projects that are involved with installation/improvements		
Wet Well	Total storage capacity	30.31 m^3	4.52 m^3
Control System	Electrical control system used for monitoring/managing the pump facility	3 Phase - 575 Volts	3 Phase - 220 Volts
Pumps	Size and quantity of pumps part of the facility	2 - CP 3140 HT	2 - 4" Pumps
Standby Generator	Type and output of emergency generator	40 Kw Diesel	40 Kw Diesel
Date Constructed	Year of installation	2003	1996
Life Span	Estimated years of useful service	50	50
Cost History	Costs incurred by the town or estimated values for the asset's construction/ improvement	2003 - $602,063.78;	1996 - $290,000.00;

STORMWATER SYSTEMS & CULVERTS

STORM SEWERS

	Description	Sample	Sample
ID	Unique identifier - not to be recycled	STM-LN-4085-08	STM-LN-4085-09
Project ID	Notes all projects that are involved with installation/improvements	31076	31076
Length	Quantity referenced from design schematic	63.70	81.40
Diameter	Size of sewer pipe diameter	300	375
Depth	Average depth of pipe below grade	1.7	1.7
Material	Defined material affects lifecycle and asset purpose	Ribbed Polyvinyl Chloride (Ultra Rib)	Ribbed Polyvinyl Chloride (Ultra Rib)
Upstream MH ID	Reference ID for asset located at the upstream of the sewer	STM-MH-4085-05	STM-MH-4085-06
Upstream Inverts	Elevation of the sewer at the point of entry	266.88	265.48
Downstream MH ID	Reference ID for asset located at the downstream of the sewer	STM-MH-4085-06	STM-MH-4070-11
Downstream MH Inverts	Elevation of the sewer at the point of exit	265.56	264.26
Date Constructed	Year of installation	2011	2011
Date Relined	Year of full structural remediation		
Life Span	Estimated years of useful service	80	80
Cost History	Costs incurred by the town or estimated values for the asset's construction/improvement	2011 - $23,110.28;	2011 - $32,896.44;

MAINTENANCE CHAMBERS

	Description	Sample	Sample
ID	Unique identifier - not to be recycled	STM-MH-1715-02	STM-MH-1715-03
Project ID	Notes all projects that are involved with installation/improvements	S2012-1	S2012-1
Diameter	Distance between the chamber walls	1200	1800
Depth	Full height of the structure	3.2	3.7
Material	Defined material affects lifecycle and asset purpose	Brick	Concrete-Precast
Surface Elevation	Elevation of the top of the structure	255.40	255.35
Date Constructed	Year of installation	2007	2007
Date Relined	Year of full structural remediation		
Life Span	Estimated years of useful service	55	55

Cost History	Costs incurred by the town or estimated values for the asset's construction/improvement	2007 - $3,800.00;	2007 - $5,300.00;

CATCHBASINS

	Description	**Sample**	**Sample**
ID	Unique identifier - not to be recycled	STM-CB-1030-05	STM-CB-1030-06
Project ID	Notes all projects that are involved with installation/improvements	31048	31048
Material	Defined material affects lifecycle and asset purpose	Concrete-Precast	Concrete-Precast
Date Constructed	Year of installation	2003	2012
Life Span	Estimated years of useful service	55	55
Cost History	Costs incurred by the town or estimated values for the asset's construction/improvement	2009 - $2,728.79; 2012 - $1,244.55;	2012 - $4,465.67;

DRAIN COLLECTOR SEWERS

	Description	Sample	Sample
ID	Unique identifier - not to be recycled	STM-DC-1220-01	STM-DC-1220-02
Project ID	Notes all projects that are involved with installation/improvements		
Length	Quantity referenced from design scematic	77.3	76.4
Diameter	Size of sewer pipe diameter	250	250
Depth	Avereage depth of pipe below grade	4.3	4.4
Material	Defined material affects lifecycle and asset purpose	Concrete Pipe	Concrete Pipe
Drain Type	Defined function of sewer	Foundation Drain	Foundation Drain
Upstream MH ID	Reference ID for asset located at the upstream of the sewer	SAN-MH-1220-03	SAN-MH-1220-02
Upstream Inverts	Elevation of the sewer at the point of entry	253.64	253.175
Downstream MH ID	Reference ID for asset located at the downstream of the sewer	SAN-MH-1220-02	SAN-MH-1225-05
Downstream Inverts	Elevation of the sewer at the point of exit	253.175	252.66
Date Constructed	Year of installation	1996	1996
Date Relined	Year of full structural remediation		
Life Span	Estimated years of useful service	55	55
Cost History	Costs incurred by the town or estimated values for the asset's construction/improvement	2009 - $40,087.76;	2009 - $40,444.55;

STORM WATER MANAGEMENT PONDS

	Description	Sample	Sample
ID	Unique identifier - not to be recycled	STM-PN-5060-01	STM-PN-5070-01
Project ID	Notes all projects that are involved with installation/improvements		
Facility ID	Reference ID to other projects	NC11	NW1
Legal Land Parcel	Parcel of land the pond can be found on	PLAN 65M2873 PT BLK 26 & PLAN 65M3573 BLOCK 274	PLAN 65M2781 PT LOT 78; 65R20120 PART 59
Area (m2)	Quantity retrieved from GIS	16751.6	3781.8
Facility Type	Typical pond functionality	Wet Pond	Wet Pond
Date Constructed	Year of installation	1999	2006
Cost History	Costs incurred by the town or estimated values for the asset's construction/improvement	2009 - $1,072,101.86;	2009 - $166,403.6;

BRIDGES & CULVERTS

	Description	Sample	Sample
ID	Unique identifier - not to be recycled	STM-CV-1045-02	STM-CV-1155-01
Project ID	Notes all projects that are involved with installation/improvements		
Type	Defined by whether there is fill on the structure or not	Culvert	Bridge
Material	Defined material affects lifecycle and asset purpose	Large Steel Culvert	Large Concrete Culvert
Dimensions	Record measurements of the various dimensions of the culvert	10'1" X 15'6" CSPA, Stone Arches	19.0m wide by 638.4m long bridge structure on John West Way
Date Constructed	Year of installation	1983	1989
Life Span	Estimated years of useful service	30	40
Cost History	Costs incurred by the town or estimated values for the asset's construction/improvement	2009 - $4,584.38;	1989 - $1,250,000.00;

CONTINUOUS DEFLECTIVE SEPARATION & OIL-GRIT SEPARATOR UNITS

	Description	Sample	Sample
ID	Unique identifier - not to be recycled	STM-OG-1035-01	STM-OG-1035-02
Project ID	Notes all projects that are involved with installation/improvements	31048-2013	31048-2013
Make	Defines filter function/configuration	Continuous Deflective Separation	Continuous Deflective Separation
Model	Specific model numbers set by manufacturer	5654-10	3030-8
Date Constructed	Year of installation	2013	2013
Life Span	Estimated years of useful service	30	30
Cost History	Costs incurred by the town or estimated values for the asset's construction/improvement	2013 - $114,920.37;	2013 - $51,454.67;

HEADWALLS

	Description	Sample	Sample
ID	Unique identifier - not to be recycled	STM-OF-3110-02	STM-OF-3110-03
Project ID	Notes all projects that are involved with installation/improvements		31104-2013
Outflow Diameter	Diameter of sewer pipe(s) that outfall at the headwall	525	1050
Date Constructed	Year of installation	2006	2013
Life Span	Estimated years of useful service	55	55
Cost History	Costs incurred by the town or estimated values for the asset's construction/improvement	2013 - $4,258.56;	2013 - $10,026.75;

APPENDIX 3 - DETAILED 10-YEAR FINANCIAL FORECAST FOR INFRASTRUCTURE ASSETS

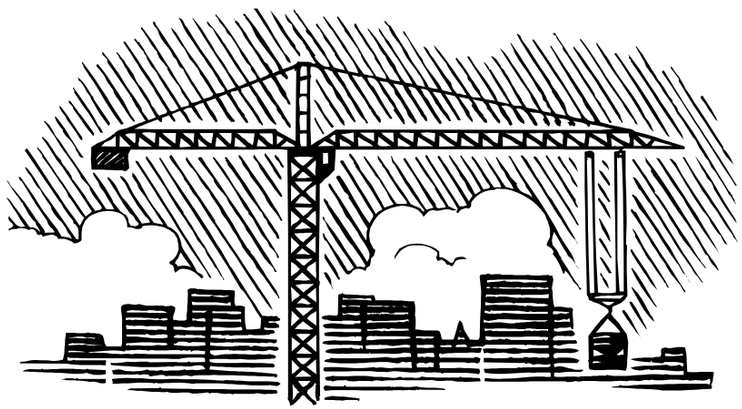
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
REVENUE											
Line of Credit	-	-	-	-	-	-	-	-	-	-	-
Special Purpose Reserves	871,800	914,600	1,717,600	1,314,600	1,044,600	1,062,100	839,600	884,600	1,049,600	534,800	-
Repair & Replacement Reserve	7,648,380	3,988,935	5,554,492	3,785,719	2,959,276	2,347,008	1,758,717	1,809,715	3,429,700	2,116,400	5,081,817
Growth & New Reserves	915,700	2,126,100	339,800	-	-	-	-	-	-	30,300	576,800
Studies & Other	519,100	6,000	105,800	-	-	-	30,000	100,000	150,000	110,000	8,000
Water / Sewer / Storm Reserves	3,455,500	1,532,600	4,284,300	3,944,400	1,857,700	1,100,000	4,904,100	4,097,100	2,584,500	1,147,100	1,195,700
Development Changes	2,819,800	2,993,100	14,287,800	6,534,300	14,316,400	17,685,400	3,068,400	767,700	2,970,000	164,300	5,263,300
Grants	1,540,500	2,039,600	1,617,500	1,694,600	1,694,600	1,694,600	1,694,600	1,694,566	1,694,500	1,694,400	-
External Funding	-	-	9,799,700	106,700	-	-	-	-	-	-	-
Other Revenue	-	-	-	-	-	-	-	-	-	-	-
Operating Revenues	6,082,000	6,268,100	6,615,400	6,831,500	6,897,300	6,964,800	7,033,800	7,103,800	7,175,300	7,248,200	7,322,400
	23,852,780	19,869,035	44,322,392	24,211,819	28,769,876	30,853,908	19,329,217	16,457,515	19,053,700	13,045,500	19,448,017

CAPITAL COSTS											
Storm Water Management	1,721,600	288,300	1,754,838	1,953,969	779,429	675,000	1,079,200	2,339,757	1,171,031	804,029	781,400
Wastewater Management	970,450	614,100	978,600	1,300,671	578,266	575,000	1,456,800	545,189	551,597	543,062	539,300
Water Management	956,850	1,180,230	2,150,850	1,289,792	1,100,000	450,000	2,968,100	1,812,140	1,461,839	400,000	475,000
Facilities	4,703,680	2,008,000	17,690,300	3,905,000	11,434,200	14,891,300	2,316,700	1,225,000	1,250,000	234,000	1,850,000
Fleet & Equipment	633,800	1,406,455	2,555,000	1,225,360	618,307	1,224,896	845,527	721,455	701,000	659,360	717,307
Roads	5,979,300	4,823,050	7,324,928	6,987,679	8,295,296	9,748,442	5,559,968	3,481,240	2,906,933	3,022,849	8,263,610
Land, Parkland, Land Improvements	2,114,500	3,150,800	6,121,950	3,402,250	3,291,300	2,631,600	2,621,900	890,000	4,202,000	625,000	20,000
Non-Infrastructure Solutions	1,405,000	1,320,000	1,700,000	1,377,000	280,000	110,000	300,000	300,000	250,000	110,000	80,000
	18,485,180	14,790,935	40,276,466	21,441,721	26,376,798	30,306,238	17,148,195	11,314,781	12,494,400	6,398,300	12,726,617
OPERATING COSTS - MAINTENANCE											
Storm Water Management	325,100	330,600	341,400	343,700	345,800	348,000	350,300	352,600	355,000	357,400	359,800
Wastewater Management	530,000	532,500	540,800	543,400	545,500	547,700	550,000	552,200	554,500	556,900	559,300
Water Management	1,283,500	1,286,900	1,335,500	1,348,400	1,363,100	1,378,100	1,393,500	1,409,100	1,425,000	1,441,300	1,457,800
Facilities	1,001,300	1,057,000	1,122,800	1,165,900	1,176,100	1,186,600	1,197,200	1,208,000	1,219,100	1,230,300	1,241,800
Fleet & Equipment	551,300	558,900	645,300	682,700	691,100	699,600	708,300	717,200	726,200	735,400	744,800
Roads	1,339,700	1,421,200	1,522,600	1,628,700	1,649,500	1,670,900	1,692,700	1,714,900	1,737,600	1,760,600	1,784,100
Land, Parkland, Land Improvements	450,100	480,000	506,000	517,700	525,200	532,900	540,800	548,800	556,900	565,300	573,800
	5,481,000	5,667,100	6,014,400	6,230,500	6,296,300	6,363,800	6,432,800	6,502,800	6,574,300	6,647,200	6,721,400
CASH SURPLUS (DEFICIT)	**(113,400)**	**(589,000)**	**(1,968,474)**	**(3,460,402)**	**(3,903,222)**	**(5,816,130)**	**(4,251,778)**	**(1,360,066)**	**(15,000)**	**-**	**-**
TOTAL DEFICIT											**(21,477,472)**

10 YEAR CAPITAL INVESTMENT PLAN

2015 Budget and 10 Year Outlook (2016 to 2025)

Summary



"The 10 Year Capital Investment Plan serves as a roadmap for staff and Council when considering not only the spending of money to buy new, or maintain its existing capital assets, but also to plan for the projects' long term funding so that the money is available when needed."

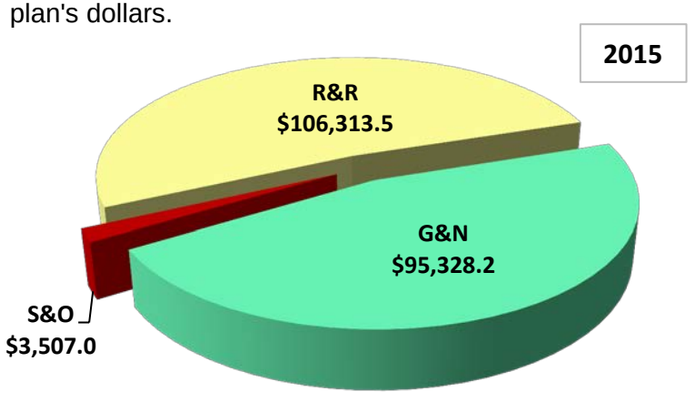
Other than the identified 2015 budget items, council has not approved or endorsed any of the specific items in the plan. This document is to be used as a reference tool only, and represents a consolidation of the views of various staff members responsible for maintaining assets and services. Other than library facilities, the document does not include any Library Board projects.

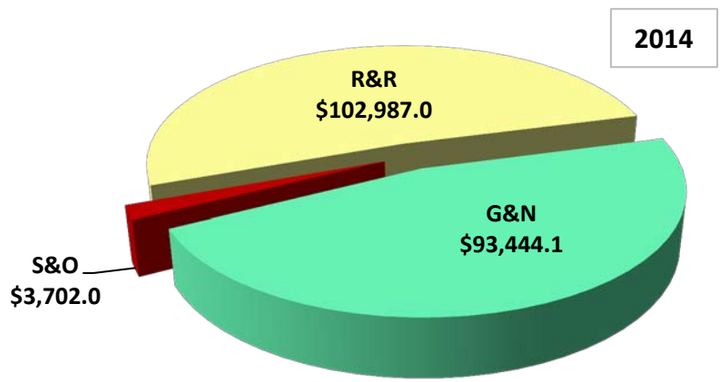
TEN YEAR CAPITAL INVESTMENT PLAN - 2015 to 2025

INTRODUCTION

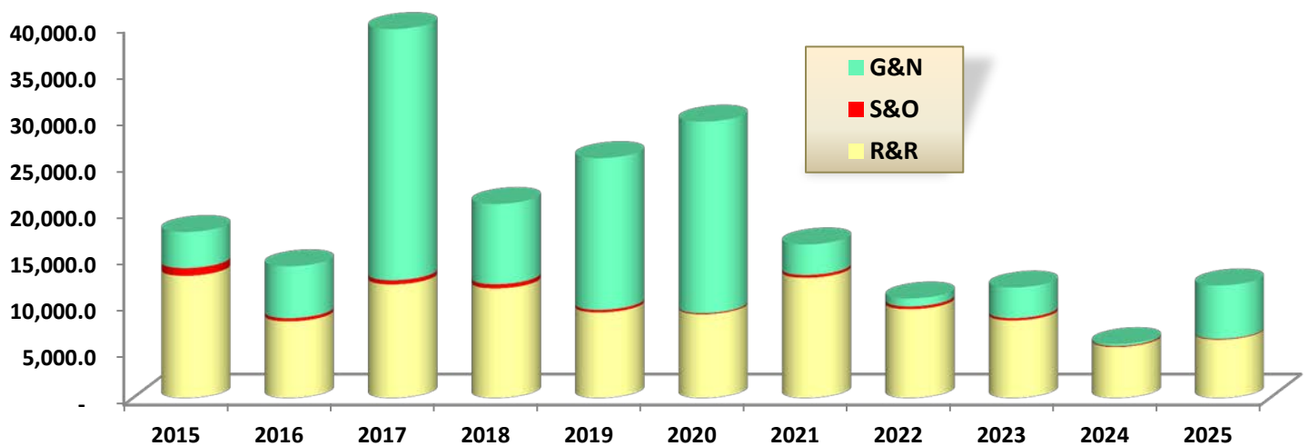
The Town currently owns approximately five hundred million dollars in assets comprised of roads; bridges; buildings; parks; underground water, wastewater and storm water infrastructure; streetlights; and vehicles, etc. This investment needs to be protected through planning for the repair or replacement of these assets to properly maintain them; and equally as important is the planning for the funding for these projects.

The 2015 10 Year Capital Investment Plan (total of 11 years - 2015 to 2025) identifies 370 projects with a total capital expenditure of $205,148,626. Of this, almost 250 projects relate to Repair and/or Replacement ('R&R') of existing infrastructure representing $106,313,466 or 51.8% of the total plan's dollars; 101 projects relate to Growth Related or New Assets ('G&N'), representing $95,328,160 or 46.5% of of the total plan's dollars; and less than 30 projects relate to Studies and Other projects ('S&O'), representing $3,507,000 or 1.7% of the total plan's dollars.





The expenditures are not spread equally over the 11 year period, with major G&N projects in 2017, 2019 and 2020 influencing the phasing:



TEN YEAR CAPITAL INVESTMENT PLAN - 2015 to 2025

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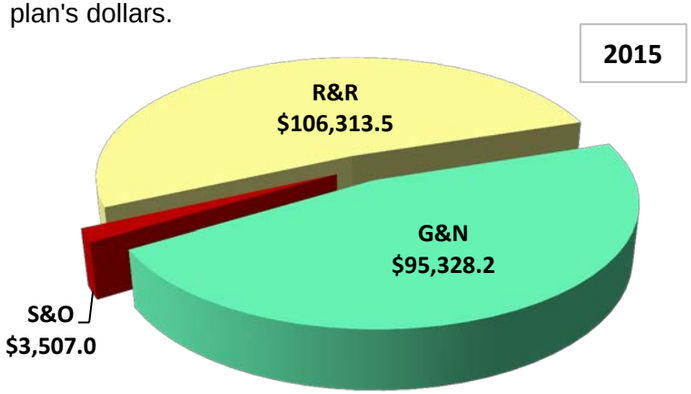

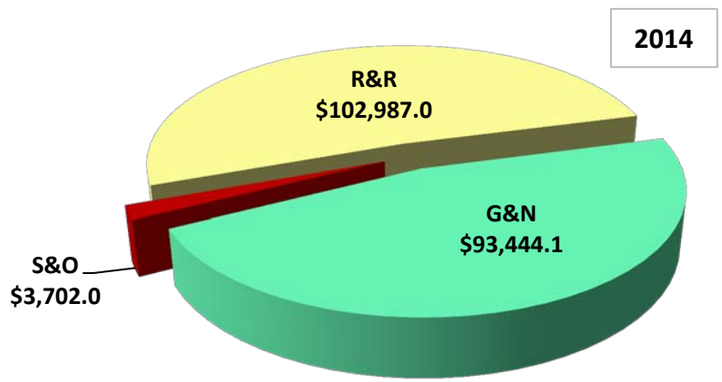

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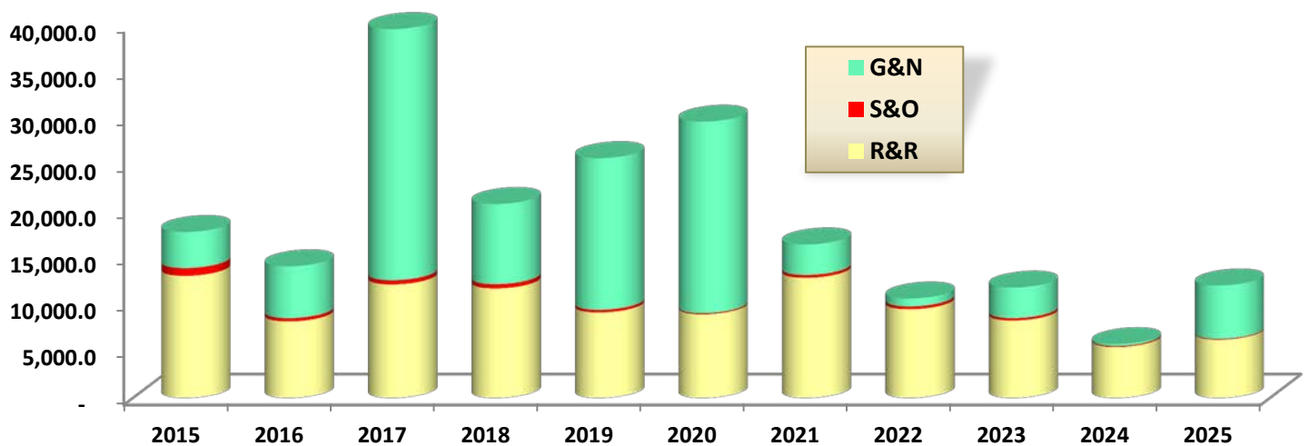
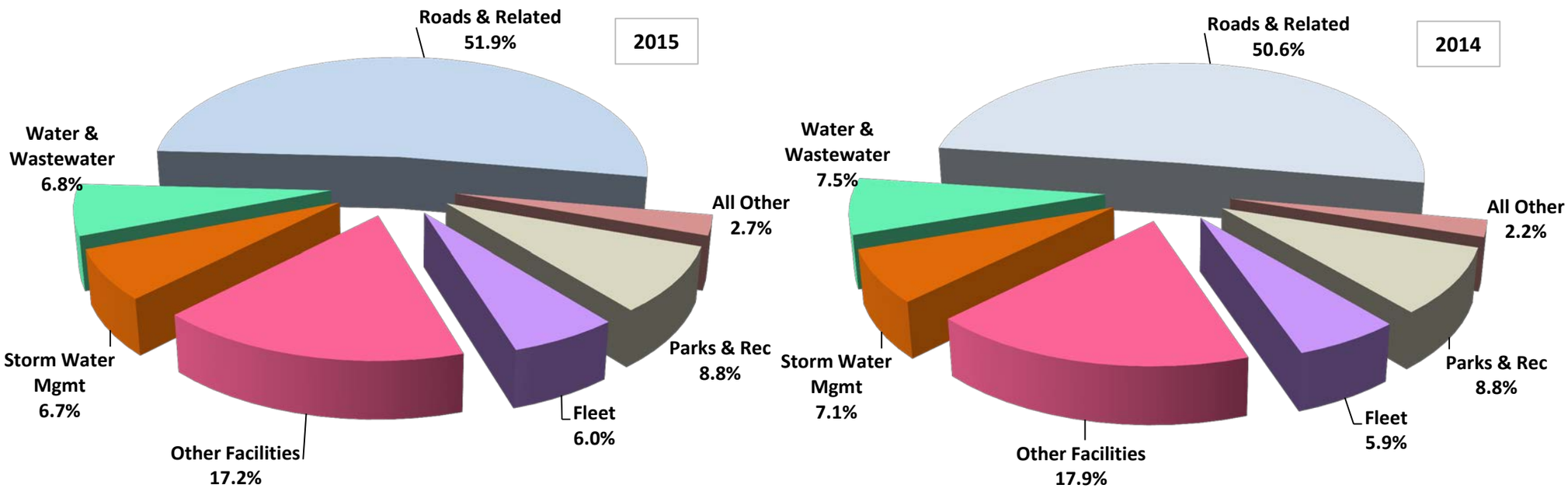


TEN YEAR CAPITAL INVESTMENT PLAN - 2015 to 2025

R & R PROJECTS

As one would expect Repair and Replacement (R & R) projects represent the greatest proportion of the Town's planned investment representing over 56% of the total plan.

The following is the 11 year category breakdown of the $106.3 million R&R expenditure:



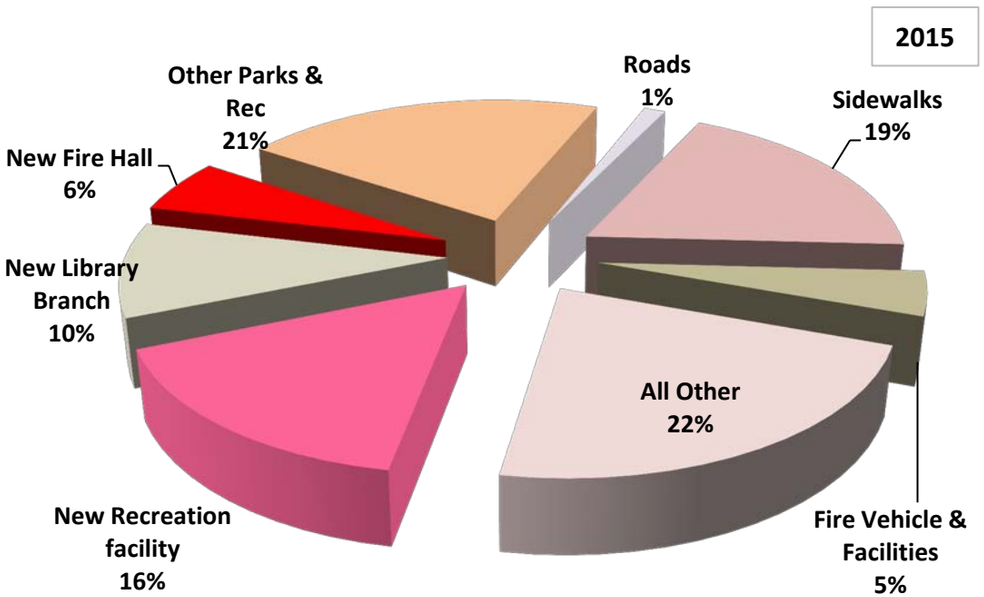
TEN YEAR CAPITAL INVESTMENT PLAN - 2015 to 2025

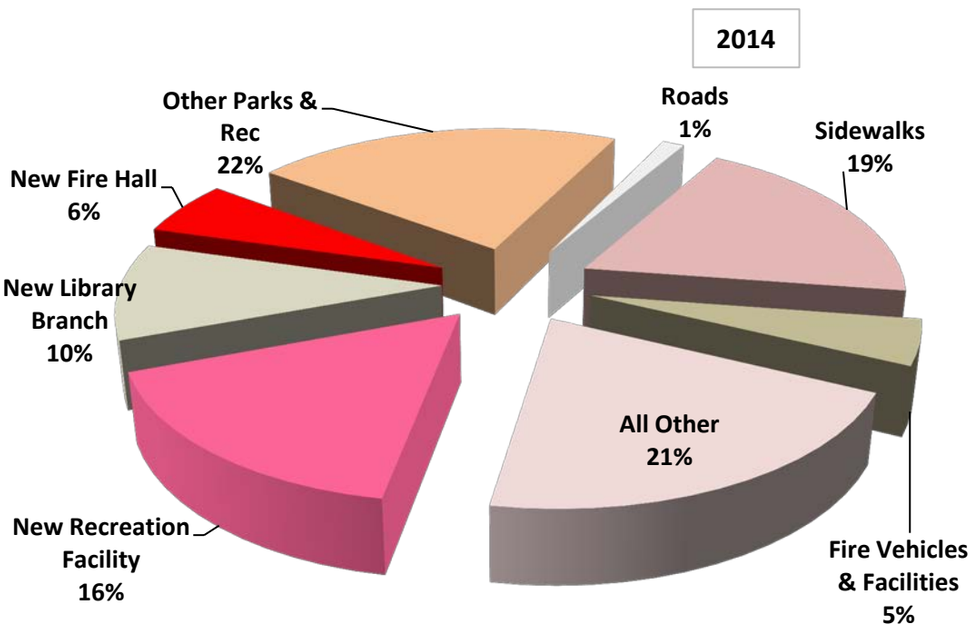
G & N PROJECTS

There are a number of significant new projects identified throughout the 11 years of the Long Term Capital Investment Plan. These include $15,250,000 for the design and construction of a new recreation facility (a three year project beginning in 2019), a $9,500,000 3 year project beginning in 2018 for the design and construction of a new library, and $ 16,065,000 for the construction of a new fire hall commencing in 2017. *These estimates presently reflect the values as they were captured and funded within the Town's 2013 DC Study. These estimates may be subject to change as the requirements and designs for these above noted facilities are finalized.*

In addition to these specific large projects there are 23 new sidewalk projects totalling $17,386,910; and 24 Parks & Recreation projects, including new Trails, a Skate Board Park, new court facilities, and 16 pedestrian crossings associated with the Trail Network, all totalling $18,385,000.

The following is the 11 year category breakdown of the $95.3 million G&N expenditure:





TEN YEAR CAPITAL INVESTMENT PLAN - 2015 to 2025

S & O PROJECTS

Over the 11 years of the Long Term Capital Investment Plan there are 24 projects totalling $3,507,000. These include an update of the Town's Strategic Plan (2019); an update of the Development Charges Background Study (2018); an I.T. Strategic Plan (2020); 2 Official Plan Reviews (2016 and 2021), along with a series of growth related planning studies. In addition, I.E.S. is planning a number of studies in the transportation and environmental areas as well as $800,000 in water and waste water related studies. Parks and Recreation is planning studies on parks maintenance standards,community buildings use study and an update of the Parks and Recreation Master Plan.

By Department, the S&O Project's $3,507,000 is anticipated to be spread as follows:

Administration	$	805.0	23.0%
Planning		600.0	17.1%
I.E.S.		1,935.0	55.2%
Parks and recreation		167.0	4.8%
	$	3,507.0	

TEN YEAR CAPITAL INVESTMENT PLAN - 2015 to 2025

MAJOR PROJECT FUNDING

As mentioned above, there are major NEW projects that tend to smooth out the values in the funding model - they are:

	New Rec Facility	New Library Branch	New Fire Hall	TOTAL
Funding from Development Charges	13,725.0	8,550.0	6,158.6	28,433.6
Grants	-	-	-	-
Funding from Town of Newmarket	-	-	9,906.4	9,906.4
Funding from Growth & New Reserve	1,525.0	950.0	-	2,475.0
	15,250.0	**9,500.0**	**16,065.0**	**40,815.0**

FUNDING and RESERVES

As shown graphically on Page 1 of this Executive Summary, the funding requirement varies significantly by year, through the period of the Long Term Capital Investment Plan. This is a problem for a municipality that must collect its main source of revenue (Property Tax) relatively consistently from year to year with a desire of avoiding tax rate fluctuations due to capital needs. This problem is overcome by smoothing the funds coming from taxation through the use of Reserves which act as a "buffer".

The other issue is one of ensuring that the Town has the required funding when it is needed. Annually updating the longer term capital plan is crucial in meeting this need.

The Town has embarked on a program of funding the Infrastructure Reserves from each year's operating budget. This annual amount has approval to grow each year by a variable percentage % of the current year's Town-only projected core Tax Levy. This method ensures a steady (albeit growing) and consistent source of funds going to the Infrastructure Reserves, so that long term capital planning and resultant spending is possible. In recognition of growing inflationary and aging asset pressures, ELT recommended a growth rate of 1.00% for period covering 2015-2025. Town-only projected core Tax Levy per year is recommended as follows:

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
0.60%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%

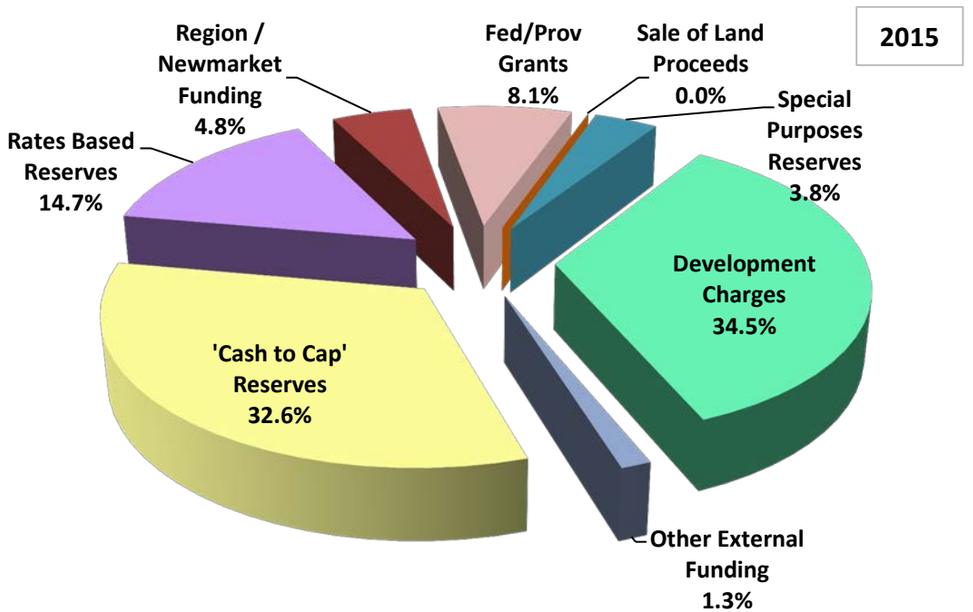
It should be noted that in addition to internal sources, capital funding sources also include government grants (Federal Gas Tax, the federal government's "Action Plan", Ontario Community Infrastructure Fund (OCIF) being examples), Development Charges, and certain Planning and Engineering Fees charged to developers, although these other sources are usually used for Growth & New projects.

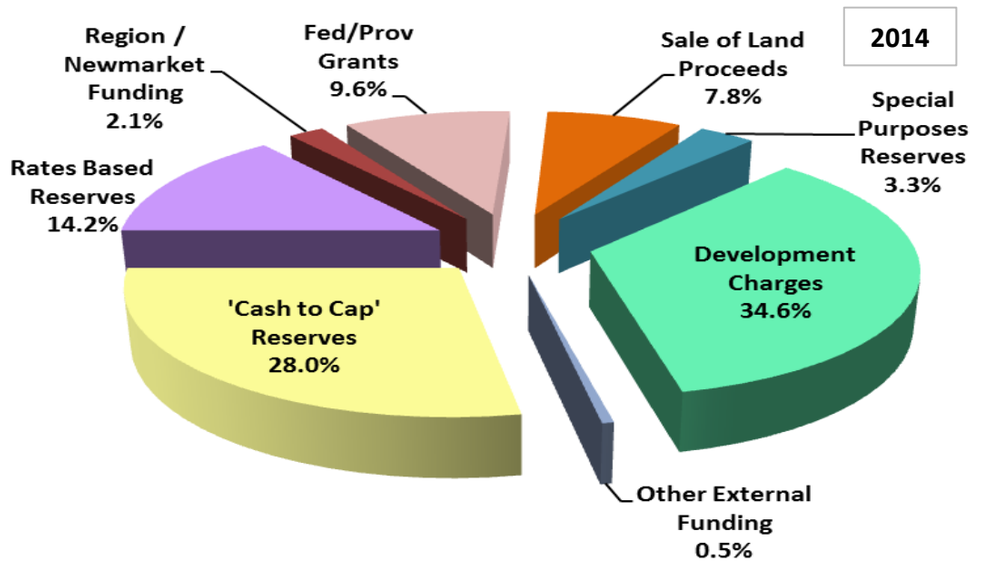
TEN YEAR CAPITAL INVESTMENT PLAN - 2015 to 2025

FUNDING and RESERVES (continued)

In this 2015 Long Term Capital Investment Plan, the following shows the requirement for funding from the Infrastructure Reserve accounts, which are in turn funded through the annual "Cash to Capital" coming from the operating budget. (values shown are in thousands of dollars)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	TOTAL
Total Capital Funding	17,884.2	14,189.9	39,675.5	20,840.7	25,775.8	29,705.2	16,547.2	10,713.8	11,893.4	5,797.3	12,125.6	205,148.6
External Sources	(8,687.6)	(7,480.0)	(31,881.9)	(13,419.7)	(19,088.3)	(21,367.1)	(10,681.7)	(7,269.0)	(8,298.7)	(3,540.6)	(6,459.0)	(138,173.4)
from 'Cash to Cap' Reserves	9,196.5	6,710.0	7,793.6	7,421.1	6,687.5	8,338.2	5,865.5	3,444.8	3,594.7	2,256.7	5,666.6	66,975.2





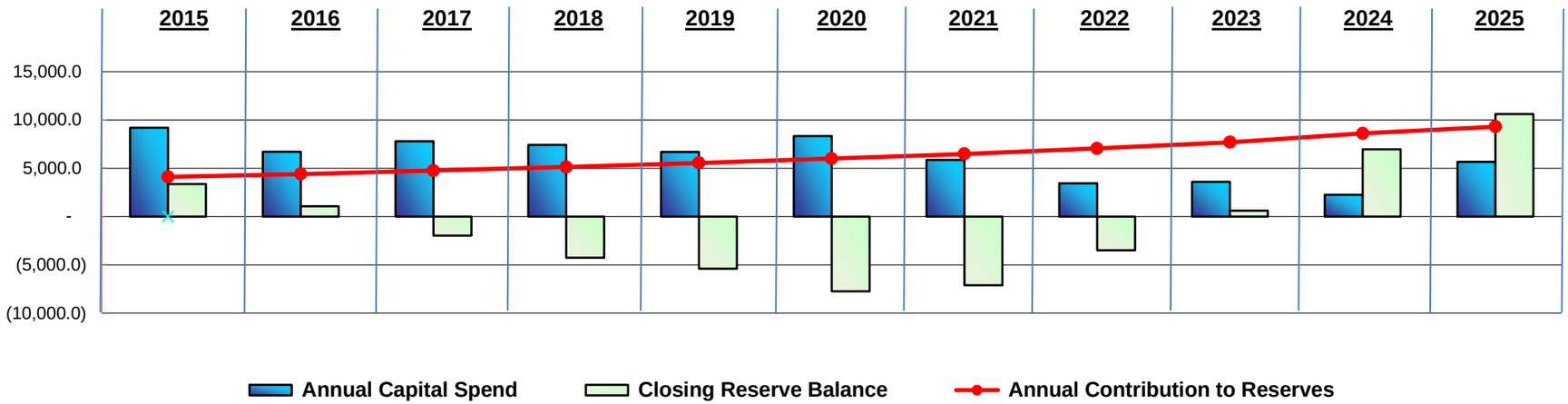
Using the "buffer" provided by Reserve Accounts results in Reserve Account Continuity that looks like this:

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	TOTAL
Opening Reserve Value	**8,462.8**	3,372.3	1,070.3	(1,968.4)	(4,258.9)	(5,393.0)	(7,729.1)	(7,105.2)	(3,488.1)	610.7	6,966.1	**8,462.8**
+ Cash to Capital	3,796.9	3,977.2	4,359.7	4,764.7	5,198.4	5,658.4	6,144.8	6,650.8	7,177.2	7,959.9	8,529.7	**64,217.7**
+ % of Prior Tax Levy	180.3	382.5	405.0	433.7	460.0	486.4	506.0	526.4	547.7	569.8	592.9	**5,090.7**
+ Interest on Reserve Bal	128.8	48.3	(9.8)	(67.8)	(105.0)	(142.8)	(161.4)	(115.3)	(31.3)	82.4	191.3	**(182.6)**
Minus Capital Spend	(9,196.5)	(6,710.0)	(7,793.6)	(7,421.1)	(6,687.5)	(8,338.2)	(5,865.5)	(3,444.8)	(3,594.7)	(2,256.7)	(5,666.6)	**(66,975.2)**
Closing Reserve Value	3,372.3	1,070.3	(1,968.4)	(4,258.9)	(5,393.0)	(7,729.1)	(7,105.2)	(3,488.1)	610.7	6,966.1	**10,613.4**	**10,613.4**

This is shown graphically on the following page and, in more detail, on page 11

TEN YEAR CAPITAL INVESTMENT PLAN - 2015 to 2025

FUNDING and RESERVES (continued)



As shown above, based upon the presently proposed funding allocations from the annual operating budget, the resultant reserve levels will not be sufficient in order to accomodate the planned capital spend requirement based upon the defined benchmark of two times the ten year average funding requirement not being met.

TEN YEAR CAPITAL INVESTMENT PLAN - 2015 to 2025

SUMMARY OF ANNUAL CAPITAL SPEND REQUESTS

	Pg Ref	2015 (Approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	10 YEAR OUTLOOK
REPAIR and REPLACEMENT PROJECTS													
Administration		-	-	-	-	-	-	-	-	-	-	-	**-**
Corp & Financial	15	72.8	214.5	650.0	53.4	41.3	39.9	194.5	70.5	50.0	48.4	16.3	**1,378.7**
Building / By-law	17	125.0	350.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	**1,250.0**
Roads & Related	18	5,199.0	3,410.0	5,548.2	7,064.1	4,889.6	4,521.7	8,467.7	6,375.3	3,866.4	3,075.4	2,766.2	**49,984.5**
Water Projects	25	370.0	540.0	1,200.0	500.0	1,000.0	300.0	1,000.0	300.0	1,000.0	300.0	300.0	**6,440.0**
Wastewater Projects	26	330.0	30.0	50.0	-	-	-	-	-	-	-	-	**80.0**
Stormwater Projects	27	1,366.0	-	825.0	600.0	625.0	600.0	625.0	600.0	625.0	600.0	625.0	**5,725.0**
Parks & Recreation	28	742.5	1,575.8	1,362.0	1,152.3	716.3	881.6	696.9	490.0	1,052.0	625.0	20.0	**8,571.8**
Facilities	31	4,538.7	1,623.0	2,040.3	1,640.0	1,334.2	1,556.3	1,366.7	1,125.0	1,150.0	134.0	1,750.0	**13,719.5**
Fleet	36	420.0	505.0	459.0	696.0	506.0	1,024.0	500.0	500.0	500.0	600.0	700.0	**5,990.0**
Planning		-	-	-	-	-	-	-	-	-	10.0	-	**10.0**
		13,164.0	**8,248.3**	**12,234.5**	**11,805.7**	**9,212.4**	**9,023.5**	**12,950.8**	**9,560.8**	**8,343.4**	**5,492.7**	**6,277.5**	**93,149.5**
												Total including 2015	**106,313.5**
GROWTH and NEW PROJECTS													
Administration	41	100.0	-	-	-	-	-	-	-	-	-	-	**-**
Legal / Legislative	42	275.0	-	-	-	-	-	-	-	-	-	-	**-**
Corp & Financial	43	30.0	15.0	45.0	60.0	-	10.0	-	-	-	-	-	**130.0**
Building / By-law	44	-	311.0	400.0	100.0	-	-	-	-	-	-	-	**811.0**
Fire & Emergency	45	-	60.0	16,065.0	175.0	-	-	-	-	-	-	-	**16,300.0**
I.E.S.	46	1,763.2	2,325.7	3,986.0	2,768.0	3,638.4	5,426.8	371.4	303.0	-	194.6	5,768.1	**24,782.0**
Parks & Recreation	47	1,372.0	1,575.0	4,760.0	2,250.0	2,575.0	1,750.0	1,925.0	400.0	3,150.0	-	-	**18,385.0**
Facilities	49	40.0	35.0	50.0	2,165.0	10,000.0	13,235.0	850.0	-	-	-	-	**26,335.0**
Fleet	49	110.0	300.0	435.0	140.0	70.0	150.0	150.0	150.0	150.0	-	-	**1,545.0**
Planning & Dev.	50	200.0	970.0	1,250.0	930.0	-	-	-	-	-	-	-	**3,150.0**
		3,890.2	**5,591.7**	**26,991.0**	**8,588.0**	**16,283.4**	**20,571.8**	**3,296.4**	**853.0**	**3,300.0**	**194.6**	**5,768.1**	**91,438.0**
												Total including 2015	**95,328.2**

TEN YEAR CAPITAL INVESTMENT PLAN - 2015 to 2025

SUMMARY OF ANNUAL CAPITAL SPEND REQUESTS - continued

		2015 (Approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	10 YEAR OUTLOOK
STUDIES and OTHER PROJECTS													
Administration	53	150.0	-	-	30.0	80.0	30.0	-	30.0	-	110.0	-	**280.0**
Corp & Financial	54	90.0	-	-	125.0	-	80.0	-	-	-	-	80.0	**285.0**
Planning	55	-	300.0	-	-	-	-	300.0	-	-	-	-	**600.0**
I.E.S.	56	465.0	50.0	450.0	250.0	200.0	-	-	270.0	250.0	-	-	**1,470.0**
Parks & Recreation	57	125.0	-	-	42.0	-	-	-	-	-	-	-	**42.0**
		830.0	**350.0**	**450.0**	**447.0**	**280.0**	**110.0**	**300.0**	**300.0**	**250.0**	**110.0**	**80.0**	**2,677.0**
												Total including 2015	**3,507.0**
TOTAL FUNDING REQUIREMENT													
	Share												
Administration	0.1%	250.0	-	-	30.0	80.0	30.0	-	30.0	-	110.0	-	**280.0**
Customer / Legislative	0.0%	275.0	-	-	-	-	-	-	-	-	-	-	**-**
Corp & Financial	1.0%	192.8	229.5	695.0	238.4	41.3	129.9	194.5	70.5	50.0	48.4	96.3	**1,793.7**
Building / By-law	1.1%	125.0	661.0	500.0	200.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	**2,061.0**
Fire & Emergency	8.7%	-	60.0	16,065.0	175.0	-	-	-	-	-	-	-	**16,300.0**
Planning	2.0%	200.0	1,270.0	1,250.0	930.0	-	-	300.0	-	-	10.0	-	**3,760.0**
Total I.E.S.	47.2%	9,493.2	6,355.7	12,059.2	11,182.1	10,353.0	10,848.4	10,464.1	7,848.3	5,741.4	4,170.0	9,459.3	**88,481.5**
Parks & Recreation	14.4%	2,239.5	3,150.8	6,122.0	3,444.3	3,291.3	2,631.6	2,621.9	890.0	4,202.0	625.0	20.0	**26,998.8**
Facilities	21.4%	4,578.7	1,658.0	2,090.3	3,805.0	11,334.2	14,791.3	2,216.7	1,125.0	1,150.0	134.0	1,750.0	**40,054.5**
Fleet	4.0%	530.0	805.0	894.0	836.0	576.0	1,174.0	650.0	650.0	650.0	600.0	700.0	**7,535.0**
		17,884.2	**14,189.9**	**39,675.5**	**20,840.7**	**25,775.8**	**29,705.2**	**16,547.2**	**10,713.8**	**11,893.4**	**5,797.3**	**12,125.6**	**187,264.4**
												Total including 2015	**205,148.6**

TEN YEAR CAPITAL INVESTMENT PLAN - 2015 to 2025

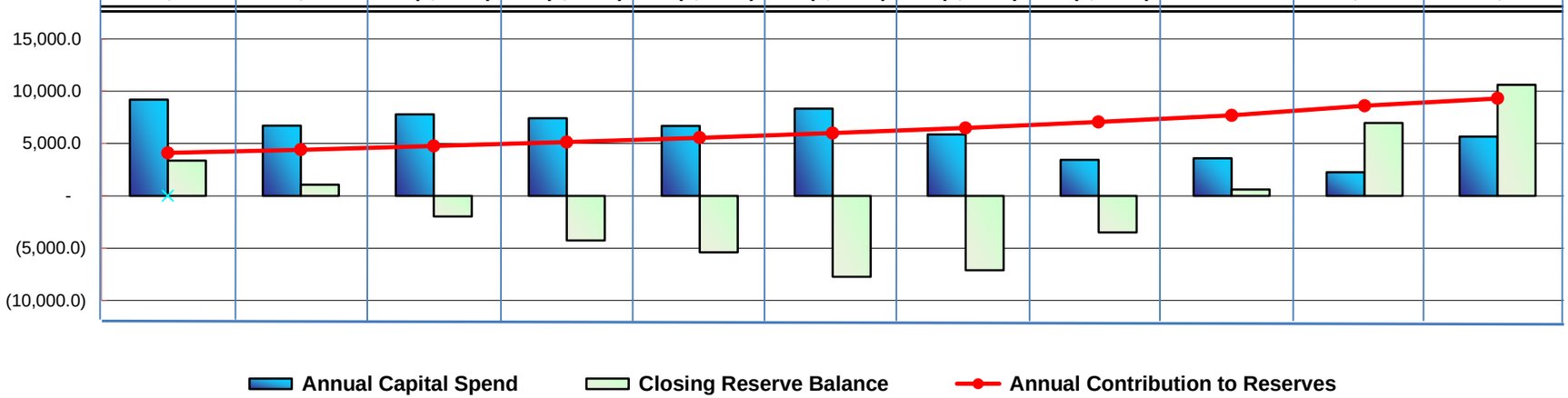
SOURCES OF FUNDING

	Base 2015 (approved)	2016 Yr 1	2017 Yr 2	2018 Yr 3	2019 Yr 4	2020 Yr 5	2021 Yr 6	2022 Yr 7	2023 Yr 8	2024 Yr 9	2025 Yr 10	10 YEAR OUTLOOK
Total Capital Needs:												
Repair & Replacement	13,164.0	8,248.3	12,234.5	11,805.7	9,212.4	9,023.5	12,950.8	9,560.8	8,343.4	5,492.7	6,277.5	93,149.5
Growth & New	3,890.2	5,591.7	26,991.0	8,588.0	16,283.4	20,571.8	3,296.4	853.0	3,300.0	194.6	5,768.1	91,438.0
Studies & Other	830.0	350.0	450.0	447.0	280.0	110.0	300.0	300.0	250.0	110.0	80.0	2,677.0
TOTAL CAPITAL NEEDS	17,884.2	14,189.9	39,675.5	20,840.7	25,775.8	29,705.2	16,547.2	10,713.8	11,893.4	5,797.3	12,125.6	187,264.4
											Total including 2015	**205,148.6**
CONSOLIDATED FUNDING SOURCES:												
R & R Reserve - Tax	(7,648.3)	(3,988.9)	(5,445.5)	(5,542.1)	(4,995.5)	(5,516.8)	(5,687.6)	(3,299.5)	(3,429.7)	(2,116.5)	(5,081.8)	(45,103.8)
Growth & New Reserve	(915.7)	(2,691.1)	(2,098.1)	(1,644.5)	(1,512.0)	(2,783.4)	(147.9)	(45.3)	(15.0)	(30.3)	(576.8)	(11,544.4)
Studies & Other Reserve	(632.5)	(30.0)	(250.0)	(234.5)	(180.0)	(38.0)	(30.0)	(100.0)	(150.0)	(110.0)	(8.0)	(1,130.5)
Cash to Capital Sourced	**(9,196.5)**	**(6,710.0)**	**(7,793.6)**	**(7,421.1)**	**(6,687.5)**	**(8,338.2)**	**(5,865.5)**	**(3,444.8)**	**(3,594.7)**	**(2,256.7)**	**(5,666.6)**	**(57,778.6)**
R & R Reserve - Rates	(3,455.5)	(1,532.6)	(4,284.3)	(3,944.4)	(1,857.7)	(1,100.0)	(4,904.1)	(4,097.1)	(2,584.5)	(1,147.1)	(1,195.7)	(26,647.5)
Development Charges	(2,819.8)	(2,993.1)	(14,287.8)	(6,534.3)	(14,316.4)	(17,685.4)	(3,068.4)	(767.7)	(2,970.0)	(164.3)	(5,263.3)	(68,050.7)
Development / Sale of Land	-	-	-	-	-	-	-	-	-	-	-	-
Special Purposes Reserves * (se	(871.8)	(914.6)	(1,717.6)	(1,314.6)	(1,044.6)	(1,062.1)	(839.6)	(884.6)	(1,049.6)	(534.6)	-	(9,362.1)
Federal / Provincial Grants	(1,540.5)	(1,617.5)	(1,617.5)	(1,694.6)	(1,694.6)	(1,694.6)	(1,694.6)	(1,694.6)	(1,694.6)	(1,694.6)	-	(15,097.0)
External Gov't Funding	-	-	(9,799.7)	(106.8)	-	-	-	-	-	-	-	(9,906.4)
Other External Funding	-	(422.1)	-	-	-	-	-	-	-	-	-	(422.1)
TOTAL FUNDING SOURCES	(17,884.2)	(14,189.9)	(39,500.5)	(21,015.7)	(25,600.8)	(29,880.2)	(16,372.2)	(10,888.8)	(11,893.4)	(5,797.3)	(12,125.6)	(187,264.4)
											Total including 2015	**(205,148.6)**
* Special Purposes Reserves:												
Building Dept	-	(255.0)	(100.0)	-	-	-	-	-	-	-	-	(355.0)
Cash in Lieu of Parkland	(302.2)	(190.0)	(948.0)	(570.0)	(475.0)	(417.5)	(365.0)	(40.0)	(715.0)	(300.0)	-	(4,020.5)
Council Discretionary Res	-	-	-	-	-	-	-	-	-	-	-	-
EAB Reserve	(235.0)	(235.0)	(235.0)	(410.0)	(235.0)	(410.0)	(240.0)	(410.0)	-	-	-	(2,175.0)
Landscape Fees	-	-	-	-	-	-	-	-	-	-	-	-
	(871.8)	(914.6)	(1,717.6)	(1,314.6)	(1,044.6)	(1,062.1)	(839.6)	(884.6)	(1,049.6)	(534.6)	-	(9,362.1)

TEN YEAR CAPITAL INVESTMENT PLAN - 2015 to 2025

TAX FUNDED RESERVE BALANCE CONTINUITY / CASH FLOW

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Opening Reserve Balances:											
R & R Reserves - Tax	6,690.7	2,222.0	1,659.3	(66.0)	(1,581.4)	(2,211.2)	(2,994.7)	(3,565.2)	(1,314.8)	1,289.7	5,970.5
Growth & New Reserve	1,367.1	1,263.6	(565.0)	(1,758.3)	(2,437.6)	(2,911.4)	(4,589.5)	(3,544.9)	(2,274.6)	(842.6)	712.6
Studies & Other Reserve	405.0	(113.4)	(24.0)	(144.2)	(239.8)	(270.3)	(144.9)	4.9	101.2	163.6	283.1
Opening Reserve Balances	**8,462.8**	**3,372.3**	**1,070.3**	**(1,968.4)**	**(4,258.9)**	**(5,393.0)**	**(7,729.1)**	**(7,105.2)**	**(3,488.1)**	**610.7**	**6,966.1**
Reserve 'Revenue':											
+ Cash to Capital (Base)	3,796.9	3,977.2	4,359.7	4,764.7	5,198.4	5,658.4	6,144.8	6,650.8	7,177.2	7,959.9	8,529.7
+ % of Prior Tax Levy	180.3	382.5	405.0	433.7	460.0	486.4	506.0	526.4	547.7	569.8	592.9
Total from Operating Budget	3,977.2	4,359.7	4,764.7	5,198.4	5,658.4	6,144.8	6,650.8	7,177.2	7,724.9	8,529.7	9,122.6
Reserve Balance Interest	128.8	48.3	(9.8)	(67.8)	(105.0)	(142.8)	(161.4)	(115.3)	(31.3)	82.4	191.3
Total Revenue/Funding	**4,106.0**	**4,408.0**	**4,754.9**	**5,130.6**	**5,553.4**	**6,002.0**	**6,489.4**	**7,061.9**	**7,693.6**	**8,612.1**	**9,313.9**
Annual Capital Spend:											
R & R Reserve - Tax	7,648.3	3,988.9	5,445.5	5,542.1	4,995.5	5,516.8	5,687.6	3,299.5	3,429.7	2,116.5	5,081.8
Growth & New Reserve	915.7	2,691.1	2,098.1	1,644.5	1,512.0	2,783.4	147.9	45.3	15.0	30.3	576.8
Studies & Other Reserve	632.5	30.0	250.0	234.5	180.0	38.0	30.0	100.0	150.0	110.0	8.0
Annual Capital Spend	**9,196.5**	**6,710.0**	**7,793.6**	**7,421.1**	**6,687.5**	**8,338.2**	**5,865.5**	**3,444.8**	**3,594.7**	**2,256.7**	**5,666.6**
Closing Reserve Balances:											
R & R Reserve - Tax	2,222.0	1,659.3	(66.0)	(1,581.4)	(2,211.2)	(2,994.7)	(3,565.2)	(1,314.8)	1,289.7	5,970.5	8,228.5
Growth & New Reserve	1,263.6	(565.0)	(1,758.3)	(2,437.6)	(2,911.4)	(4,589.5)	(3,544.9)	(2,274.6)	(842.6)	712.6	1,860.9
Studies & Other Reserve	(113.4)	(24.0)	(144.2)	(239.8)	(270.3)	(144.9)	4.9	101.2	163.6	283.1	524.0
Closing Reserve Balance:	**3,372.3**	**1,070.3**	**(1,968.4)**	**(4,258.9)**	**(5,393.0)**	**(7,729.1)**	**(7,105.2)**	**(3,488.1)**	**610.7**	**6,966.1**	**10,613.4**



10 YEAR CAPITAL INVESTMENT PLAN

2015 Budget and 10 Year Outlook (2015 to 2024)

REPAIR & REPLACEMENT

2015 to 2025 = $106,313,466

(see PAGE 13)

GROWTH & NEW

2015 to 2025 = $95,328,010

(see PAGE 38)

STUDIES & OTHER

2015 to 2025 = $3,507,000

(see PAGE 50)

Total Investment Value for 2015 to 2025 = $205,148,626

REPAIR & REPLACEMENT ASSETS

(Anticipated Spend of $106,313,466 over 11 years)

Specific Repair & Replacement Assets are at the following pages:

REPAIR AND REPLACEMENT INVESTMENT PLAN - SUMMARY OF CAPITAL NEEDS

	2015 (Approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	10 YEAR OUTLOOK
TOTAL R & R INVESTMENTS												
C.F.S.	72,800	214,455	650,000	53,360	41,307	39,896	194,527	70,455	50,000	48,360	16,307	1,378,667
B.B.S.	125,000	350,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,250,000
Roads & Related	5,199,000	3,410,020	5,548,226	7,064,081	4,889,551	4,521,662	8,467,716	6,375,326	3,866,366	3,075,371	2,766,200	49,984,519
Water Projects	370,000	540,000	1,200,000	500,000	1,000,000	300,000	1,000,000	300,000	1,000,000	300,000	300,000	6,440,000
Wastewater Projects	330,000	30,000	50,000	-	-	-	-	-	-	-	-	80,000
Stormwater Projects	1,366,000	-	825,000	600,000	625,000	600,000	625,000	600,000	625,000	600,000	625,000	5,725,000
P.R.S.	742,500	1,575,800	1,361,950	1,152,250	716,300	881,600	696,900	490,000	1,052,000	625,000	20,000	8,571,800
Facilities	4,538,680	1,623,000	2,040,300	1,640,000	1,334,200	1,556,300	1,366,700	1,125,000	1,150,000	134,000	1,750,000	13,719,500
Fleet	420,000	505,000	459,000	696,000	506,000	1,024,000	500,000	500,000	500,000	600,000	700,000	5,990,000
Planning	-	-	-	-	-	-	-	-	-	10,000	-	10,000
	13,163,980	**8,248,275**	**12,234,476**	**11,805,691**	**9,212,358**	**9,023,458**	**12,950,843**	**9,560,781**	**8,343,366**	**5,492,731**	**6,277,507**	**93,149,486**
											Total including 2015	**106,313,466**
Funding Sources:												
R&R - Tax Based	(7,648,347)	(3,988,886)	(5,445,529)	(5,542,075)	(4,995,479)	(5,516,774)	(5,687,559)	(3,299,511)	(3,429,715)	(2,116,456)	(5,081,807)	(45,103,791)
R&R - Water Rates	(856,850)	(1,080,230)	(2,050,850)	(1,189,792)	(1,000,000)	(350,000)	(2,868,100)	(1,712,140)	(1,361,839)	(300,000)	(375,000)	(12,287,951)
R&R - Sewer Rates	(470,450)	(114,100)	(478,600)	(800,671)	(78,266)	(75,000)	(956,800)	(45,189)	(51,597)	(43,062)	(39,300)	(2,682,585)
R&R -Storm Rates	(2,128,200)	(288,300)	(1,754,838)	(1,953,969)	(779,429)	(675,000)	(1,079,200)	(2,339,757)	(1,171,031)	(804,029)	(781,400)	(11,626,953)
Cash in Lieu - Parkland	(50,000)	(92,500)	(417,500)	(155,000)	(195,000)	(242,500)	(190,000)	-	(400,000)	(300,000)	-	(1,992,500)
EAB Reserve	(235,000)	(235,000)	(235,000)	(235,000)	(235,000)	(235,000)	(240,000)	(235,000)	-	-	-	(1,650,000)
Federal Gas Tax	(1,540,515)	(1,617,541)	(1,617,541)	(1,694,566)	(1,694,566)	(1,694,566)	(1,694,566)	(1,694,566)	(1,694,566)	(1,694,566)	-	(15,097,044)
OCIF	(234,618)	(234,618)	(234,618)	(234,618)	(234,618)	(234,618)	(234,618)	(234,618)	(234,618)	(234,618)	-	(2,111,562)
Building Reserve	-	(175,000)	-	-	-	-	-	-	-	-	-	(175,000)
Growth & New Reserves	-	-	-	-	-	-	-	-	-	-	-	-
Grants / Donations	-	(422,100)	-	-	-	-	-	-	-	-	-	(422,100)
	(13,163,980)	**(8,248,275)**	**(12,234,476)**	**(11,805,691)**	**(9,212,358)**	**(9,023,458)**	**(12,950,843)**	**(9,560,781)**	**(8,343,366)**	**(5,492,731)**	**(6,277,507)**	**(93,149,486)**
											Total including 2015	**(106,313,466)**

REPAIR & REPLACEMENT PROJECTS - CORPORATE & FINANCIAL SERVICES

	2015 (Approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
Corporate & Financial Services												
14047 Desktops & Notebooks	-											
Servers	-											
Network equipment & Hardware	72,800	114,455	50,000	53,360	41,307	39,896	194,527	70,455	50,000	48,360	16,307	751,467
Office Equipment (Projector, etc.)	-											
Telecommunication	-											
14012 Financial System Upgrade	-	100,000	600,000	-	-	-	-	-	-	-	-	700,000
	72,800	**214,455**	**650,000**	**53,360**	**41,307**	**39,896**	**194,527**	**70,455**	**50,000**	**48,360**	**16,307**	**1,451,467**
Funding Sources:												
Information Technology												
R & R Reserve	**(72,800)**	**(214,455)**	**(650,000)**	**(53,360)**	**(41,307)**	**(39,896)**	**(194,527)**	**(70,455)**	**(50,000)**	**(48,360)**	**(16,307)**	**(1,451,467)**

REPAIR & REPLACEMENT PROJECTS - CORPORATE & FINANCIAL SERVICES

Supplemental Detail - "Evergreening"

	2015 (Approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
"Evergreening" Detail:												
2008 PC's (48 @ $1,100)	52,800	-	-	-	-	-	-	-	-	-	-	52,800
2009 PC's (1 @ $900)		900									-	900
2010 PC's (41 @ $900)		36,900									-	36,900
2011 PC's (21@ $900)	-		18,900	-	-	-	-	-	-	-	-	18,900
2012 PC's (22 @ $900)	-	-	-	19,800	-	-	-	-	-	-	-	19,800
PC's for Training (11 @ $900)	-	-	-	9,900	-	-	-	-	-	-	-	9,900
2014 PC's (7 @ $900)	-	-	-	-	-	6,300	-	-	-	-	-	6,300
2015 PC's (81 @ $900)	-	-	-	-	-		72,900	-	-	-	-	72,900
2016 PC's (42 @ $900)	-	-	-	-	-	-	-	37,800	-	-	-	37,800
2017 PC's (21 @ $900)	-	-	-	-	-	-	-	-	18,900	-	-	18,900
2018 PC's (33 @ 900)	-	-	-	-	-	-	-	-	-	29,700	-	29,700
2009 Laptops (3 @ $1,555)	-	4,665	-	-	-	-	-	-	-	-	-	4,665
2010 Laptops (18 @ $1,555)	-	27,990		-	-	-	-	-	-	-	-	27,990
2011 Laptops (20 @ $1555)	-	-	31,100		-	-	-	-	-	-	-	31,100
2012 Laptops (12 @ $1555)	-	-	-	18,660	-	-	-	-	-	-	-	18,660
2013 Laptops (5 @ $1555)	-	-	-	-	7,775	-	-	-	-	-	-	7,775
2014 Laptops (6 @ $1555)	-	-	-	-	-	9,330	-	-	-	-	-	9,330
2015 Laptops (5 @ $1,555)	-	-	-	-	-	-	7,775	-	-	-	-	7,775
2016 Laptops (21 @ $1555)	-	-	-	-	-	-	-	32,655	-	-	-	32,655
2017 Laptops (20 @ $1555)	-	-	-	-	-	-	-	-	31,100	-	-	31,100
2018 Laptops (12 @ $1555)	-	-	-	-	-	-	-	-	-	18,660	-	18,660
2019 Laptops (5 @ $1555)	-	-	-	-	-	-	-	-	-	-	7,775	7,775
2013 Tablets - (2 @ $4266)	-	-	-	-	8,532	-	-	-	-	-	-	8,532
2014 Tablets - (1 @ $4,266)	-	-	-	-	-	4,266	-	-	-	-	-	4,266
2015 Tablets - (22 @ $4,266)	-	-	-	-	-	-	93,852	-	-	-	-	93,852
2019 Tablets - (2 @ $4266)	-	-	-	-	-	-	-	-	-	-	8,532	8,532
Server Replacements	-	-	-	-	25,000	-	-	-	-	-	-	25,000
Replacement of CISCO switches etc	20,000	44,000	-	5,000	-	20,000	20,000	-	-			109,000
	72,800	**114,455**	**50,000**	**53,360**	**41,307**	**39,896**	**194,527**	**70,455**	**50,000**	**48,360**	**16,307**	**751,467**

REPAIR & REPLACEMENT PROJECTS - BUILDING / BYLAW

		2015 (approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total Project
Building and Bylaw Services													
12002	Accessibility Committee	125,000	350,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	**1,375,000**
		125,000	**350,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**1,375,000**

REPAIR & REPLACEMENT PROJECTS - ROADS & RELATED

		2015 (Approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
Combined Recon Proj (31103):	Road Const'n	712,700	-	483,712	-	-	-	-	-	-	-	-	**1,196,412**
Centre Street - Yonge to Walton	Water Service	24,550	-	13,950	-	-	-	-	-	-	-	-	**38,500**
	Sanitary Sewer	14,150	-	35,500	-	-	-	-	-	-	-	-	**49,650**
(Fed Gas Tax Funding of $25,000)	Storm Sewer	50,600	-	36,838	-	-	-	-	-	-	-	-	**87,438**
	TOTAL	**802,000**	**-**	**570,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**1,372,000**
Combined Recon Proj (31117):	Road Const'n	-	-	-	72,750	1,364,893	-	-			-	-	**1,437,643**
Corbett Crescent	Water Service	-	-	-	-	-	-	-			-	-	**-**
Cossar Drive	Sanitary Sewer	-	-	-	-	28,177	-	-			-	-	**28,177**
Springburn Crescent	Storm Sewer	-	-	-	-	62,034	-	-			-	-	**62,034**
	TOTAL	**-**	**-**	**-**	**72,750**	**1,455,104**	**-**	**-**	**-**	**-**	**-**	**-**	**1,527,854**
Combined Recon Proj (31118):	Road Const'n	-	-	-	-	-	-	175,964	1,729,265	-	-	-	**1,905,229**
Browning Court	Water Service	-	-	-	-	-	-	-	790,119	-	-	-	**790,119**
Johnson Road	Sanitary Sewer	-	-	-	-	-	-	-	25,284	-	-	-	**25,284**
Holman Crescent	Storm Sewer	-	-	-	-	-	-	-	973,427	-	-	-	**973,427**
	TOTAL	**-**	**-**	**-**	**-**	**-**	**-**	**175,964**	**3,518,095**	**-**	**-**	**-**	**3,694,059**
Combined Recon Proj (31096):	Road Const'n	1,650,000		-	-	-	-	-	-	-	-	-	**1,650,000**
Bluegrass Drive	Water Service				-	-	-	-	-	-	-	-	**-**
Skyview Lane	Sanitary Sewer	-		-	-	-	-	-	-	-	-	-	**-**
Steeplechase Ave.	Storm Sewer	150,000		-	-	-	-	-	-	-	-	-	**150,000**
(Fed Gas Tax Funding of $122,800)	**TOTAL**	**1,800,000**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**1,800,000**
Combined Recon Proj (31105):	Road Const'n	75,000	638,600		-	-	-	-	-	-	-	-	**713,600**
Haida Dr. (section)	Water Service	-	68,900		-	-	-	-	-	-	-	-	**68,900**
Trillium Dr.	Sanitary Sewer	-	10,200		-	-	-	-	-	-	-	-	**10,200**
(Fed Gas Tax Funding of $75,000)	Storm Sewer	-	168,000		-	-	-	-	-	-	-	-	**168,000**
	TOTAL	**75,000**	**885,700**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**960,700**
Combined Recon Proj (31108):	Road Const'n	100,000	-	752,500	-	-	-	-	-	-	-	-	**852,500**
Haida Dr. (section)	Water Service	-	-	405,900	-	-	-	-	-	-	-	-	**405,900**
Algonquin Cres.	Sanitary Sewer	-	-	13,100	-	-	-	-	-	-	-	-	**13,100**
	Storm Sewer	-	-	500,100	-	-	-	-	-	-	-	-	**500,100**
(Fed Gas Tax Funding of $100,000)	**TOTAL**	**100,000**	**-**	**1,671,600**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**1,771,600**

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REPAIR & REPLACEMENT PROJECTS - ROADS & RELATED - continued

		2015 (Approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
Combined Recon Proj (31109):	Road Const'n	-	105,000	-	653,200	-	-	-	-	-	-	-	**758,200**
Kennedy Street West	Water Service	-	-	-	492,900	-	-	-	-	-	-	-	**492,900**
Temperance Street	Sanitary Sewer	-	-	-	536,000	-	-	-	-	-	-	-	**536,000**
	Storm Sewer	-	-	-	459,000	-	-	-	-	-	-	-	**459,000**
	TOTAL	**-**	**105,000**	**-**	**2,141,100**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**2,246,100**
Recon Brookland - Yonge to Banbury (31107)	Road Const'n	48,000	-	325,000	-	-	-	-	-	-	-	-	**373,000**
	Water Service	-	-	275,000	-	-	-	-	-	-	-	-	**275,000**
	Sanitary Sewer	-	-	375,000	-	-	-	-	-	-	-	-	**375,000**
(Fed Gas Tax Funding of $48,000)	Storm Sewer	-	-	375,000	-	-	-	-	-	-	-	-	**375,000**
	TOTAL	**48,000**	**-**	**1,350,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**1,398,000**
Recon - Catherine Avenue (31111)	Road Const'n	50,000	546,400		-	-	-	-	-	-	-	-	**596,400**
	Water Service	-	250,000	-		-	-	-	-	-	-	-	**250,000**
	Sanitary Sewer	-	11,800		-	-	-	-	-	-	-	-	**11,800**
(Fed Gas Tax Funding of $50,000)	Storm Sewer	-	100,000	-		-	-	-	-	-	-	-	**100,000**
(Fed Gas Tax Funding of $226,441)	**TOTAL**	**50,000**	**908,200**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**958,200**
Combined Recon Proj (31112):	Road Const'n	1,251,400	170,390	-	-	-	-	-	-	-	-	-	**1,421,790**
Industrial Parkway North	Water Service	462,300	221,330	-	-	-	-	-	-	-	-	-	**683,630**
Industrial Parkway South	Sanitary Sewer	126,300	62,100	-	-	-	-	-	-	-	-	-	**188,400**
Industry Street	Storm Sewer	155,000	20,300	-	-	-	-	-	-	-	-	-	**175,300**
(Fed Gas Tax Funding of $80,000)	**TOTAL**	**1,995,000**	**474,120**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**2,469,120**
Combined Recon Proj (31113):	Road Const'n	-	120,000	-	1696500	-	-	-	-	-	-	-	**1,816,500**
Murray Drive-Golf Links Drive	Water Service	-	-	-	-	-	-	-	-	-	-	-	**-**
Pinehurst Court	Sanitary Sewer	-	-	-	28400	-	-	-	-	-	-	-	**28,400**
	Storm Sewer	-	-	-	282500	-	-	-	-	-	-	-	**282,500**
	TOTAL	**-**	**120,000**	**-**	**2,007,400**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**2,127,400**
Combined Recon Proj (31114):	Road Const'n	-	50,000	222,600		-	-	-	-	-	-	-	**272,600**
Ransom Court	Water Service	-	-	156,000		-	-	-	-	-	-	-	**156,000**
Ransom Street	Sanitary Sewer	-	-	5,000		-	-	-	-	-	-	-	**5,000**
	Storm Sewer	-	-	17,900		-	-	-	-	-	-	-	**17,900**
	TOTAL	**-**	**50,000**	**401,500**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**451,500**

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REPAIR & REPLACEMENT PROJECTS - ROADS & RELATED - continued

		2015 (Approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
Combined Recon Proj (31116):	Road Const'n	-	-	-	-	-	227,762	2,426,438		-	-	-	**2,654,200**
Edward Street	Water Service	-	-	-	-	-	-	868,100		-	-	-	**868,100**
Dunning Avenue	Sanitary Sewer	-	-	-	-	-	-	881,800		-	-	-	**881,800**
	Storm Sewer	-	-	-	-	-	-	379,200		-	-	-	**379,200**
	TOTAL	**-**	**-**	**-**	**-**	**-**	**227,762**	**4,555,538**	**-**	**-**	**-**	**-**	**4,783,300**
Combined Recon Proj (31119):	Road Const'n	-	-	-	-	-	-	133,534	1,262,326		-	-	**1,395,860**
Adair Drive	Water Service	-	-	-	-	-	-	-	622,021		-	-	**622,021**
Bailey Crescent	Sanitary Sewer	-	-	-	-	-	-	-	19,905		-	-	**19,905**
Davidson Road	Storm Sewer	-	-	-	-	-	-	-	766,330		-	-	**766,330**
	TOTAL	**-**	**-**	**-**	**-**	**-**	**-**	**133,534**	**2,670,582**	**-**	**-**	**-**	**2,804,116**
Combined Recon Proj (31120):	Road Const'n	-	-	-	51,152	974,045	-	-	-	-	-	-	**1,025,197**
Aurora Heights Drive	Water Service	-	-	-	-	-	-	-	-	-	-	-	**-**
Delayne to Bathurst	Sanitary Sewer	-	-	-	-	13,785	-	-	-	-	-	-	**13,785**
	Storm Sewer	-	-	-	-	34,462	-	-	-	-	-	-	**34,462**
	TOTAL	**-**	**-**	**-**	**51,152**	**1,022,292**	**-**	**-**	**-**	**-**	**-**	**-**	**1,073,444**
Combined Recon Proj (31121):	Road Const'n	-	-	-	-	-	-	-	62,675	1,166,127		-	**1,228,802**
Crawford Rose Drive	Water Service	-	-	-	-	-	-	-	-	-	-	-	**-**
Valley Crescent	Sanitary Sewer	-	-	-	-	-	-	-	-	24,442		-	**24,442**
	Storm Sewer	-	-	-	-	-	-	-	-	63,579		-	**63,579**
	TOTAL	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**62,675**	**1,254,148**	**-**	**-**	**1,316,823**
Recon - Golf Links (31122)	Road Const'n	-	-	-	62,567	1,660,018	-	-	-	-		-	**1,722,585**
	Water Service	-	-	-	-	-	-	-	-	-	-	-	**-**
	Sanitary Sewer	-	-	-	-	36,304	-	-	-	-		-	**36,304**
	Storm Sewer	-	-	-	-	57,933	-	-	-	-		-	**57,933**
	TOTAL	**-**	**-**	**-**	**62,567**	**1,754,255**	**-**	**-**	**-**	**-**	**-**	**-**	**1,816,822**
Recon - Orchard Hts Blvd (31123)	Road Const'n	-	-	-	-	-	-	-	-	79,582	1,526,013		**1,605,595**
	Water Service	-	-	-	-	-	-	-	-	-	-	-	**-**
	Sanitary Sewer	-	-	-	-	-	-	-	-	-	23,986		**23,986**
	Storm Sewer	-	-	-	-	-	-	-	-	-	34,462		**34,462**
	TOTAL	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**79,582**	**1,584,461**	**-**	**1,664,043**

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REPAIR & REPLACEMENT PROJECTS - ROADS & RELATED - continued

		2015 (Approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
Combined Recon Proj (31124):	Road Const'n	-	-	-	-	-	-	-	123,974	1,606,978		-	**1,730,952**
Henderson Drive	Water Service	-	-	-	-	-	-	-	-	361,839		-	**361,839**
Poplar Crescent	Sanitary Sewer	-	-	-	-	-	-	-	-	27,155		-	**27,155**
	Storm Sewer	-	-	-	-	-	-	-	-	482,452		-	**482,452**
	TOTAL	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**123,974**	**2,478,424**	**-**	**-**	**2,602,398**
Recon - Windham Tr (31125)	Road Const'n	-	-	-	-	-	-	-	-	54,212	894,867		**949,079**
	Water Service	-	-	-	-	-	-	-	-	-	-	-	**-**
	Sanitary Sewer	-	-	-	-	-	-	-	-	-	19,076		**19,076**
	Storm Sewer	-	-	-	-	-	-	-	-	-	169,567		**169,567**
	TOTAL	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**54,212**	**1,083,510**	**-**	**1,137,722**
Industrial Pkwy N (31145)	Road Const'n	-		50,000	442,200	-	-	-	-	-	-	-	**492,200**
Wellington to Scanlon Crt	Water Service	-	-	-	-	-	-	-	-	-	-	-	**-**
	Sanitary Sewer	-	-	-	-	-	-	-	-	-	-	-	**-**
	Storm Sewer	-	-		221,300	-	-	-	-	-	-	-	**221,300**
	TOTAL	**-**	**-**	**50,000**	**663,500**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	713,500
Recon - Harriman (31126)	Road Const'n	-	-	51,350	351,256		-	-	-	-	-	-	**402,606**
	Water Service	-	-	-	196,892		-	-	-	-	-	-	**196,892**
	Sanitary Sewer	-	-	-	236,271		-	-	-	-	-	-	**236,271**
	Storm Sewer	-	-	-	242,571		-	-	-	-	-	-	**242,571**
	TOTAL	**-**	**-**	**51,350**	**1,026,990**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	1,078,340
Recon - (31140)	Road Const'n	-	-	48,376	818,924		-	-	-	-	-	-	**867,300**
Westview Dr & Archerhill Crt	Water Service	-	-	-	-	-	-	-	-	-	-	-	**-**
	Sanitary Sewer	-	-	-	-	-	-	-	-	-	-	-	**-**
	Storm Sewer	-	-	-	148,598		-	-	-	-	-	-	**148,598**
	TOTAL	**-**	**-**	**48,376**	**967,522**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	1,015,898
Recon - (31128)	Road Const'n	-	-	-	-		-	-	-	-	201,900	2,495,500	**2,697,400**
Orchard Hts Blvd-Crawford Rose- Yonge St	Water Service	-	-	-	-	-	-	-	-	-	-	75,000	**75,000**
	Sanitary Sewer	-	-	-	-	-	-	-	-	-	-	39,300	**39,300**
	Storm Sewer	-	-	-	-		-	-	-	-	-	156,400	**156,400**
	TOTAL	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**201,900**	**2,766,200**	2,968,100

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REPAIR & REPLACEMENT PROJECTS - ROADS & RELATED - continued

		2015 (Approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
Recon - (31149) Tamarac Trail	Road Const'n	-	-		-		80,000	1,600,000	-	-	-	-	**1,680,000**
	Water Service	-	-	-	-	-	-	1,000,000	-	-	-	-	**1,000,000**
	Sanitary Sewer	-	-	-	-	-	-	75,000	-	-	-	-	**75,000**
	Storm Sewer	-	-	-	-		-	75,000	-	-	-	-	**75,000**
	TOTAL	**-**	**-**	**-**	**-**	**-**	**80,000**	**2,750,000**	**-**	**-**	**-**	**-**	**2,830,000**
Recon - (31150) Whispering Pine Tr	Road Const'n	-	-	-	-	62,500	1,250,000	-	-	-		-	**1,312,500**
	Water Service	-	-	-	-	-	50,000	-	-	-	-	-	**50,000**
	Sanitary Sewer	-	-	-	-	-	75,000	-	-	-	-	-	**75,000**
	Storm Sewer	-	-	-	-		75,000	-	-	-	-	-	**75,000**
	TOTAL	**-**	**-**	**-**	**-**	**62,500**	**1,450,000**	**-**	**-**	**-**	**-**	**-**	**1,512,500**
TOTAL MAJOR ROAD RECONSTRUCTION	**Road Const'n**	**3,887,100**	**1,630,390**	**1,933,538**	**4,148,549**	**4,061,456**	**1,557,762**	**4,335,936**	**3,178,240**	**2,906,899**	**2,622,780**	**2,495,500**	**32,758,150**
	Water Service	**486,850**	**540,230**	**850,850**	**689,792**	**-**	**50,000**	**1,868,100**	**1,412,140**	**361,839**	**-**	**75,000**	**6,334,801**
	Sanitary Sewer	**140,450**	**84,100**	**428,600**	**800,671**	**78,266**	**75,000**	**956,800**	**45,189**	**51,597**	**43,062**	**39,300**	**2,743,035**
	Storm Sewer	**355,600**	**288,300**	**929,838**	**1,353,969**	**154,429**	**75,000**	**454,200**	**1,739,757**	**546,031**	**204,029**	**156,400**	**6,257,553**
	TOTAL	**4,870,000**	**2,543,020**	**4,142,826**	**6,992,981**	**4,294,151**	**1,757,762**	**7,615,036**	**6,375,326**	**3,866,366**	**2,869,871**	**2,766,200**	**48,093,539**
ROAD RESURFACING													
Haida / McDonald-Aurora Hts (31127)		-	-	322,000	-	-	-	-	-	-	-	-	**322,000**
Mosley / Yonge-Berczy (31129)		-	-	-	-	-	270,000			-	-	-	**270,000**
Old Bloomington - Asphalt Paving (31025)		25,000	630,000		-	-	-	-	-	-	-	-	**655,000**
Cranberry/Trillium/Highland (31131)		-	-	428,400			-	-	-	-	-	-	**428,400**
Wiles Ct / Murray to end (31132)		-	-	95,000	-	-	-	-	-	-	-	-	**95,000**
Larmont / Wellington-Metcalfe (31133)		-	-	-	-	-	135,900			-	-	-	**135,900**
Victoria / Wellington-Metcalfe (31134)		-	-	-	-	-	-	168,900			-	-	**168,900**
Wells / Wellington-Metcalfe (31135)		-	-	-	-	-	-	143,400			-	-	**143,400**
Metcalfe/ Victoria - Metcalfe (31136)		-	-	-	-	170,000			-	-	-	-	**170,000**
Mary St / Wellington-Industry (31137)		-	-	-	-	375,400			-	-	-	-	**375,400**
Industrial/N of Scanlon-S of Industry (31138)		-	-	-		50,000	2,300,000		-	-	-	-	**2,350,000**
TOTAL ROAD RESURFACING		**25,000**	**630,000**	**845,400**	**-**	**595,400**	**2,705,900**	**312,300**	**-**	**-**	**-**	**-**	**5,114,000**

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REPAIR & REPLACEMENT PROJECTS - ROADS & RELATED - continued

		2015 (Approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
SIDEWALK & BOULEVARD													
S/W - Henderson/Tamarac-Poplar (34611)			25,000	410,000									**435,000**
S/W - St John's - Gateway to Industrial Pkwy (34613)					71,100								**71,100**
S/W - Hennderson/Bathurst - Watts Meadow (34616)											205,500		**205,500**
S/W - Edward St - 100 m E of Yonge to Dunning (34617)							28,000	279,500					**307,500**
S/W - Yonge St - Henderson to Industrial Pkwy S (34634)		-	-		-		30,000	260,880	-	-	-	-	**290,880**
TOTAL SIDEWALK & BOULEVARD		**-**	**25,000**	**410,000**	**71,100**	**-**	**58,000**	**540,380**	**-**	**-**	**205,500**	**-**	**1,309,980**
OTHER													
R/W - Wellington & George (31142)		-		150,000		-	-	-	-	-	-	-	**150,000**
Street Light Poles St John's (34710)		35,000		-	-	-	-	-	-	-	-	-	**35,000**
Street Light Poles Bayview (34711)		75,000	150,000										**225,000**
Field Asset Data Wireless Devices (31144)		90,000	62,000		-	-	-	-	-	-	-	-	**152,000**
Pavement Condition Assessment (31147)		104,000											**104,000**
TOTAL OTHER		**304,000**	**212,000**	**150,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**666,000**
TOTAL ROADS & RELATED	**Road Const'n**	**4,216,100**	**2,497,390**	**3,338,938**	**4,219,649**	**4,656,856**	**4,321,662**	**5,188,616**	**3,178,240**	**2,906,899**	**2,828,280**	**2,495,500**	**39,848,130**
	Water Service	**486,850**	**540,230**	**850,850**	**689,792**	**-**	**50,000**	**1,868,100**	**1,412,140**	**361,839**	**-**	**75,000**	**6,334,801**
	Sanitary Sewer	**140,450**	**84,100**	**428,600**	**800,671**	**78,266**	**75,000**	**956,800**	**45,189**	**51,597**	**43,062**	**39,300**	**2,743,035**
	Storm Sewer	**355,600**	**288,300**	**929,838**	**1,353,969**	**154,429**	**75,000**	**454,200**	**1,739,757**	**546,031**	**204,029**	**156,400**	**6,257,553**
	TOTAL	**5,199,000**	**3,410,020**	**5,548,226**	**7,064,081**	**4,889,551**	**4,521,662**	**8,467,716**	**6,375,326**	**3,866,366**	**3,075,371**	**2,766,200**	**55,183,519**

REPAIR & REPLACEMENT PROJECTS - ROADS & RELATED - continued

		2015 (Approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
TOTAL ROADS & RELATED FUNDING SOURCES:													
Federal Gas Tax:													
Combined Recon Proj (31096)	Reconstruction	(856,000)		-	-	-	-	-	-	-	-	-	(856,000)
Combined Recon Proj (31105)	Reconstruction	(75,000)		-		-	-	-	-	-	-	-	(75,000)
Combined Recon Proj (31108)	Reconstruction	(100,000)		-		-	-	-	-	-	-	-	(100,000)
Combined Recon Proj (31107)	Reconstruction	(48,000)		-		-	-	-	-	-	-	-	(48,000)
Combined Recon Proj (31111)	Reconstruction	(50,000)	(226,441)	-	-	-	-	-	-	-	-	-	(276,441)
Unallocated Other		(411,515)	(1,391,100)	(1,617,541)	(1,694,566)	(1,694,566)	(1,694,566)	(1,694,566)	(1,694,566)	(1,694,566)	(1,694,566)	-	(15,282,118)
Total Federal Gas Tax		(1,540,515)	(1,617,541)	(1,617,541)	(1,694,566)	(1,694,566)	(1,694,566)	(1,694,566)	(1,694,566)	(1,694,566)	(1,694,566)	-	(16,637,559)
OCIF		(234,618)	(234,618)	(234,618)	(234,618)	(234,618)	(234,618)	(234,618)	(234,618)	(234,618)	(234,618)		(2,346,180)
Other			(14,000)										(14,000)
Water R & R Reserve		(486,850)	(540,230)	(850,850)	(689,792)	-	(50,000)	(1,868,100)	(1,412,140)	(361,839)	-	(75,000)	(6,334,801)
Waste Water R & R Reserve		(140,450)	(84,100)	(428,600)	(800,671)	(78,266)	(75,000)	(956,800)	(45,189)	(51,597)	(43,062)	(39,300)	(2,743,035)
Storm Water R & R Reserve		(355,600)	(288,300)	(929,838)	(1,353,969)	(154,429)	(75,000)	(454,200)	(1,739,757)	(546,031)	(204,029)	(156,400)	(6,257,553)
NET Roads R & R Reserve		(2,440,967)	(631,231)	(1,486,779)	(2,290,465)	(2,727,672)	(2,392,478)	(3,259,432)	(1,249,056)	(977,715)	(899,096)	(2,495,500)	(20,850,391)
		(5,199,000)	**(3,410,020)**	**(5,548,226)**	**(7,064,081)**	**(4,889,551)**	**(4,521,662)**	**(8,467,716)**	**(6,375,326)**	**(3,866,366)**	**(3,075,371)**	**(2,766,200)**	**(55,183,519)**

REPAIR & REPLACEMENT PROJECTS - WATER SPECIFIC PROJECTS

		2015 (Approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
STRUCTURAL WATERMAIN RELINING													
Project 43054	Water Service	-	-	700,000	-	700,000	-	700,000	-	700,000	-		**2,800,000**
	Sanitary Sewer	-	-	-	-	-	-	-	-	-	-	-	**-**
	Storm Sewer	-	-	-	-	-	-	-	-	-	-	-	**-**
	TOTAL	**-**	**-**	**700,000**	**-**	**700,000**	**-**	**700,000**	**-**	**700,000**	**-**	**-**	**2,800,000**
DECOMMISSION WELL HOUSE													
Project 43047	Water Service	-	40,000		-								**40,000**
	Sanitary Sewer	-	-	-	-	-	-	-	-	-	-	-	**-**
	Storm Sewer	-	-	-	-	-	-	-	-	-	-	-	**-**
	TOTAL	**-**	**40,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**40,000**
WATER METER REPLACEMENT PROGRAM													
Project 43038	Water Service	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	**3,300,000**
	Sanitary Sewer	-	-	-	-	-	-	-	-	-	-	-	**-**
	Storm Sewer	-	-	-	-	-	-	-	-	-	-	-	**-**
	TOTAL	**300,000**	**300,000**	**300,000**	**300,000**	**300,000**	**300,000**	**300,000**	**300,000**	**300,000**	**300,000**	**300,000**	**3,300,000**
BULK METER INSTALLATION													
Project 43044	Water Service	-	200,000	200,000	200,000	-	-	-	-	-	-		**600,000**
	Sanitary Sewer	-	-	-	-	-	-	-	-	-	-	-	**-**
	Storm Sewer	-	-	-	-	-	-	-	-	-	-	-	**-**
	TOTAL	**-**	**200,000**	**200,000**	**200,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**600,000**
BATHURST/ORCHARD HTS													
Project 43053	Water Service	70,000											**70,000**
	Sanitary Sewer	-	-	-	-	-	-	-	-	-	-	-	**-**
	Storm Sewer	-	-	-	-	-	-	-	-	-	-	-	**-**
	TOTAL	**70,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**70,000**
TOTAL WATER SPECIFIC PROJECTS													
	Water Service	**370,000**	**540,000**	**1,200,000**	**500,000**	**1,000,000**	**300,000**	**1,000,000**	**300,000**	**1,000,000**	**300,000**	**300,000**	**6,810,000**
	Sanitary Sewer	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
	Storm Sewer	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
	TOTAL	**370,000**	**540,000**	**1,200,000**	**500,000**	**1,000,000**	**300,000**	**1,000,000**	**300,000**	**1,000,000**	**300,000**	**300,000**	**6,810,000**

REPAIR & REPLACEMENT PROJECTS - WASTEWATER SPECIFIC PROJECTS

		2015 (Approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
DECOMMISSION SEWER LINE													
Project 41007	Water Service	-	-	-	-	-	-	-	-	-	-	-	**-**
Wells St PS	Sanitary Sewer	300,000	-	-	-	-	-	-			-		**300,000**
	Storm Sewer	-	-	-	-	-	-	-	-	-	-	-	**-**
													-
3 PHASE ELECTRICAL POWER													**-**
Project 41009	Water Service	-	-	-	-	-	-	-	-	-	-	-	**-**
	Sanitary Sewer	30,000	30,000	50,000	-	-	-	-	-	-	-		**110,000**
	Storm Sewer	-	-	-	-	-	-	-	-	-	-	-	**-**
	TOTAL	**330,000**	**30,000**	**50,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**410,000**

REPAIR & REPLACEMENT PROJECTS - STORM WATER SPECIFIC PROJECTS

		2015 (Approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
CHANNEL IMPROVEMENTS													
Project 42052	Water Service	-	-	-	-	-	-	-	-	-	-	-	-
Child Dr	Sanitary Sewer	-	-	-	-	-	-	-	-	-	-	-	-
	Storm Sewer	721,000	-	-	-	-	-	-	-	-	-		**721,000**
	TOTAL	**721,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**721,000**
REHABILITATION OF CULVERT													
Project 42053	Water Service	-	-	-	-	-	-	-	-	-	-	-	-
Yonge St	Sanitary Sewer	-	-	-	-	-	-	-	-	-	-	-	-
	Storm Sewer	445,000	-		-		-		-	-	-		**445,000**
	TOTAL	**445,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**445,000**
MAINTENANCE OF CULVERT													
Project 42054	Water Service	-	-	-	-	-	-	-	-	-	-	-	-
Yonge St	Sanitary Sewer	-	-	-	-	-	-	-	-	-	-	-	-
	Storm Sewer	100,000		200,000	-	-	-	-	-	-	-		**300,000**
	TOTAL	**100,000**	**-**	**200,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**300,000**
LAKE SIMCOE PROTECTION PLAN													
Project 42056	Water Service	-	-	-	-	-	-	-	-	-	-	-	-
Capital Works	Sanitary Sewer	-	-	-	-	-	-	-	-	-	-	-	-
	Storm Sewer	-	-	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	**5,400,000**
	TOTAL	**-**	**-**	**600,000**	**600,000**	**600,000**	**600,000**	**600,000**	**600,000**	**600,000**	**600,000**	**600,000**	**5,400,000**
BRIDGE ASSESSMENT													
Project 42058	Water Service	-	-	-	-	-	-	-	-	-	-	-	-
	Sanitary Sewer	-	-	-	-	-	-	-	-	-	-	-	-
	Storm Sewer	100,000	-	25,000	-	25,000	-	25,000		25,000	-	25,000	**225,000**
	TOTAL	**100,000**	**-**	**25,000**	**-**	**25,000**	**-**	**25,000**	**-**	**25,000**	**-**	**25,000**	**225,000**
TOTAL STORM WATER SPECIFIC PROJECTS													
	Water Service	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
	Sanitary Sewer	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
	Storm Sewer	**1,366,000**	**-**	**825,000**	**600,000**	**625,000**	**600,000**	**625,000**	**600,000**	**625,000**	**600,000**	**625,000**	**7,091,000**
	TOTAL	**1,366,000**	**-**	**825,000**	**600,000**	**625,000**	**600,000**	**625,000**	**600,000**	**625,000**	**600,000**	**625,000**	**7,091,000**

REPAIR & REPLACEMENT PROJECTS - PARKS & RECREATION

		2015 (approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
73189	Artificial Turf Repair - Soccer goal areas	-	35,000	35,000	35,000	35,000	35,000	-	-	-	-	-	**175,000**
73190	Town Park - Bandshell/Washroom Roof & Paint	-	-	-	-	-	-	25,000	-	-	-	-	**25,000**
73191	Basketball Court Resurfacing	-	-	50,000	-	-	-	-	-	-	-	-	**50,000**
73192	Boardwalk Resurface	-	-	-	-	-	-	-	-	75,000	-	-	**75,000**
73193	Bridge Assessment	50,000	15,000	-	-	-	-	-	-	-	-	-	**65,000**
73196	Fleury Park Gazebo	-	-	-	-	-	-	-	-	35,000	-	-	**35,000**
73198	Field Renovation - Norm Weller Park			-	350,000					-	-	-	**350,000**
73201	Field Drainage - Diamonds/Soccer - L Wilson Park	-	-	-	-	80,000	-	-	-	-	-	-	**80,000**
73203	James Lloyd Park Shelter-Replace/Repair	-	-	-	-	-	-	-	-	32,000	-	-	**32,000**
73204	L Willson Park - Gazebo	-	-	-	-	-	-	-	-	70,000	-	-	**70,000**
73206	Playground - E Hadar Park	100,000	-	-	-	-	-	-	-	-	-	-	**100,000**
73207	Playground -Wm Kennedy Park	-	-	125,000	-	-	-	-	-	-	-	-	**125,000**
73208	Playground - James Lloyd Park	-	150,000	-	-	-	-	-	-	-	-	-	**150,000**
73209	Playground - Lundy Park	-	-	75,000	-	-	-	-	-	-	-	-	**75,000**
73210	Playground - Wilson Park	-	-	100,000	-	-	-	-	-	-	-	-	**100,000**
73211	Playground - Hamilton Park	-	-	-	100,000	-	-	-	-	-	-	-	**100,000**
73212	Playground - Taylor Park	-	-	-	175,000	-	-	-	-	-	-	-	**175,000**
73213	Playground - Harman Park	-	-	-	-	150,000	-	-	-	-	-	-	**150,000**
73214	Playground - Tamarac Park	-	-	-	-	85,000	-	-	-	-	-	-	**85,000**
73215	Playground - L Willson Park	-	-	-	-	120,000	-	-	-	-	-	-	**120,000**
73216	Playground - Copland Park	-	-	-		-	200,000	-	-	-	-	-	**200,000**
73217	Playground - Summit Park	-	-	-	-	-	125,000	-	-	-	-	-	**125,000**
73218	Playground - Tom's Park	-	-	-	-	-	125,000	-	-	-	-	-	**125,000**
73219	Playground - Evans Park	-	-	-	-	-	-	100,000	-	-	-	-	**100,000**
73220	Playground - Atkinson Park	-	-	-	-	-	-	125,000	-	-	-	-	**125,000**
73221	Playground - Chapman Park	-	-	-	-	-	-	120,000	-	-	-	-	**120,000**
73222	Playground - Town Park	-	-	-	-	-	-	-	-	200,000	-	-	**200,000**
73154	Playground Surface Restoration Various Parks	10,000	10,300	10,600	10,900	11,300	11,600	11,900	20,000	20,000	20,000	20,000	**156,600**
73263	Playground/Boardwalk - Brentwood Park	-	-	-	-	-	-	-	-	-	200,000	-	**200,000**
73264	Playground & Pathway - Optimist Park	-	-	-	-	-	-	-	-	-	200,000	-	**200,000**
73265	Playground & Pathway - Thompson Park	-	-	-	-	-	-	-	-	-	180,000	-	**180,000**
73223	Artificial Turf - Sheppards Bush	-	-	500,000	-	-	-	-	-	-	-	-	**500,000**

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REPAIR & REPLACEMENT PROJECTS - PARKS & RECREATION - continued

		2015 (approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
73224	Artificial Turf - St Max	-	-	-	-	-	-	-	-	600,000	-	-	**600,000**
73225	Splash Pad - Ada Johnson Park	-	-	-	-	-	-	-	30,000		-	-	**30,000**
73226	Splash Pad - Town Park	-	-	40,000	-	-	-	-	40,000	-	-	-	**80,000**
73227	Tennis Court - N Weller Park	-	-	20,000	-	-	-	-	-	20,000	-	-	**40,000**
73228	Tennis Court - Fleury Park	-	40,000	-	-	-	-	-	40,000	-	-	-	**80,000**
73229	Tennis Court - Summit Park	-	20,000	-	-	-	-	-	20,000	-	-	-	**40,000**
73230	Tennis Court - McMahon Park	-	75,000	-	-	-	-	-	75,000	-	-	-	**150,000**
73231	Tennis Court - David English Park	-	-	-	20,000	-	-	-	-	-	25,000	-	**45,000**
73232	Trail/Playground - Jack Wood Park	-	-	-	100,000		-	-	-	-	-	-	**100,000**
73235	Walkway Repave - Copland Park	-	50,000	-	-	-	-	-	-	-	-	-	**50,000**
73236	Walkway Repave - Wilson Park	-	-	50,000		-	-	-	-	-	-	-	**50,000**
73237	Walkway Repave - Summit Park	-	-	-	-	-	75,000		-	-	-	-	**75,000**
73238	Walkway Repave - Tom's Park	-	-	-	-	-	75,000		-	-	-	-	**75,000**
73239	Walkway Repave - Atkinson Park	-	-	-	-	-	-	75,000	-	-	-	-	**75,000**
73240	Walkway/Basketball Repave - Tamarac Park	-	-	-	30,000	-	-	-	-	-	-	-	**30,000**
73241	Walkway/Basketball Repaving - Wm Kennedy Park	-	-	25,000	-	-	-	-	-	-	-	-	**25,000**
73242	Washroom - Fleury Park *	-	150,000	-	-	-	-	-	30,000	-	-	-	**180,000**
73134	Parks/Trails Signage Strategy Study & Implementation	157,500	195,500	96,350	96,350	-	-	-	-	-	-	-	**545,700**
73160	Emerald Ash Borer Mgmt Prog	235,000	235,000	235,000	235,000	235,000	235,000	240,000	235,000	-	-	-	**1,885,000**
73268	Wildlife Park - North Dam	100,000	600,000	-	-	-	-	-	-	-	-	-	**700,000**
73269	Case Woodlot Perimeter Fencing	70,000	-	-	-	-	-	-	-	-	-	-	**70,000**
73272	Hillary House Heritage Fencing	20,000	-	-	-	-	-	-	-	-	-	-	**20,000**
		742,500	**1,575,800**	**1,361,950**	**1,152,250**	**716,300**	**881,600**	**696,900**	**490,000**	**1,052,000**	**625,000**	**20,000**	**9,314,300**

Funding Sources:

R & R Infrastructure Reserves	(457,500)	(1,248,300)	(709,450)	(762,250)	(286,300)	(404,100)	(266,900)	(255,000)	(652,000)	(325,000)	(20,000)	**(5,386,800)**
Cash in Lieu of Parkland Reserve	(50,000)	(92,500)	(417,500)	(155,000)	(195,000)	(242,500)	(190,000)	-	(400,000)	(300,000)	-	**(2,042,500)**
EAB Reserve	(235,000)	(235,000)	(235,000)	(235,000)	(235,000)	(235,000)	(240,000)	(235,000)	-	-	-	**(1,885,000)**
Donations	-	-	-	-	-	-	-	-	-	-	-	**-**
	(742,500)	**(1,575,800)**	**(1,361,950)**	**(1,152,250)**	**(716,300)**	**(881,600)**	**(696,900)**	**(490,000)**	**(1,052,000)**	**(625,000)**	**(20,000)**	**(9,314,300)**

REPAIR & REPLACEMENT PROJECTS - FACILITIES

	2015 (approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
Stronach Aurora Recreation Center:												
Exterior												
Re-pave Parking Lot (72136)	-	-	-	-	-	-	-	-	-	-	1,000,000	**1,000,000**
Replace Asphalt Flat Roof (72137)	-	-	-	-	-	-	-	-	-	-	750,000	**750,000**
Exterior Lighting Retrofit (72221)*	-	15,000	-	-	-	-	-	-	-	-	-	**15,000**
Interior											-	
Rubber Flooring (72164)	134,600	-	-	-	-	-	-	-	-	-	-	**134,600**
Replacement of Floor Scrubber (72240)	-	18,000	-	-	-	-	-	-	-	-	-	**18,000**
Pool Liner Replacement (72221)*	-	250,000	-	-	-	-	-	-	-		-	**250,000**
Electrical											-	
LED Lighting - Pool & Ice Pads (72221)*		110,000	-	-							-	**110,000**
Fire Control Panel (72166)	-	-	-	-	-	46,700	-	-	-	-	-	**46,700**
Equipment											-	
Chemical Controllers (72165)	-	-	-	-	-	15,000	-	-	-	-	-	**15,000**
Replace Screw Compressor (72140)	-	-	200,000	-	-	-	-	-	-	-	-	**200,000**
Ice Plant, Heat Exchanger (72236)	35,000	-	-	-	-	-	-	-	-	-	-	**35,000**
Replace 2 Original Boilers (72221)*	-	50,000	-	-	-	-	-	-	-	-	-	**50,000**
Sliding Doors (72223)	-	-	-	-	75,000	-	-	-	-	-	-	**75,000**
Aurora Recreation Center Total	**169,600**	**443,000**	**200,000**	**-**	**75,000**	**61,700**	**-**	**-**	**-**	**-**	**1,750,000**	**2,699,300**
Town Hall:												
Exterior												
Exterior Windows (72168)	-	-	172,300	-	-	-	-	-	-	-		**172,300**
Interior												
Workstation Refresh, Carpet, Paint (72201)	90,000	90,000	90,000	90,000	90,000	90,000	90,000	90,000	90,000	90,000	-	**900,000**
Bldg Dept Counter Enhancements (24010)	-	175,000	-	-	-	-	-	-	-	-	-	**175,000**
Mechanical											-	
LAN Room HVAC (72169)	-	-	-	-	69,000	-	-	-	-	-	-	**69,000**
Building Humidifiers (72203)	35,000	-	-	-	-	-	-	-	-	-	-	**35,000**
Elevator Card Access (72205)	10,000	-	-	-	-	-	-	-	-	-	-	**10,000**
Electrical											-	
CC A/V System Upgrade (72238)	65,000	45,000	-	-	-	-	-	-	-	-	-	**110,000**
Town Hall Total	**200,000**	**310,000**	**262,300**	**90,000**	**159,000**	**90,000**	**90,000**	**90,000**	**90,000**	**90,000**	**-**	**1,471,300**

REPAIR & REPLACEMENT PROJECTS - FACILITIES - continued

	2015 (approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
Aurora Family Leisure Complex:												
Exterior												
Arena Deficiencies Roof, Building Envelope (72242)	2,000,000	-	-	-	-	-	-	-	-	-	-	**2,000,000**
Interior												
Arena Floor (72228)	45,000	-	-	-	-	-	-	-	-	-	-	**45,000**
Men's Washroom (72206)	-	-	95,000	-	-	-	-	-	-	-	-	**95,000**
2nd Floor Flooring (72207)	-	-		70,000	-	-	-	-	-	-	-	**70,000**
Program Room (72208)	-	-	125,000	-	-	-	-	-	-	-	-	**125,000**
Pool Tile and Drains (72209)	-	-	350,000	-	-	-	-	-	-	-	-	**350,000**
Rubber Flooring Arena and Seating (72224	-	-	85,000	-	-	-	-	-	-	-	-	**85,000**
Mold Abatement (72243)	136,580	-		-	-	-	-	-	-	-	-	**136,580**
Mechanical / Equipment												
Dasher Board System (72171)	-	-	300,000	-	-	-	-	-	-	-	-	**300,000**
Duct Work (72210)	-	-	75,000	-	-	-	-	-	-	-	-	**75,000**
Arena Dehumidifiers (72226)	135,000	-	-	-	-	-	-	-	-	-	-	**135,000**
Replace Whirlpool and Pool Heaters (72247)	-	50,000	-	-	-	-	-	-	-	-	-	**50,000**
Fitness Equipment (74007)	-	-	33,000	58,000	42,000	-	-	35,000	60,000	44,000	-	**272,000**
Electrical												
LED Lighting Arena and Pool (72225)	-	-	50,000	-	-	-	-	-	-	-	-	**50,000**
Family Leisure Complex Total	**2,316,580**	**50,000**	**1,113,000**	**128,000**	**42,000**	**-**	**-**	**35,000**	**60,000**	**44,000**	**-**	**3,788,580**
Aurora Community Center:												
Exterior												
Entry Doors (72227)	-	-	-	-	-	-	95,000	-	-	-	-	**95,000**
Front Exterior Walkways (72229)	-	-	-	-	-	-	95,000	-	-	-	-	**95,000**
Rooftop H & S (72235)	48,000	-	-	-	-	-	-	-	-	-	-	**48,000**
Exterior Painting (72175)*	-	20,000	-	-	-	-	-	-	-	-	-	**20,000**
Interior												
Sport Flooring (72172)	-		-	-	-	149,600	-	-	-	-	-	**149,600**
Auditorium Flooring (72173)	-	-	-	-	18,000	-	-	-	-	-	-	**18,000**
LED Lighting Retrofit (72175)*	-	55,000	-	-	-	-	-	-	-	-	-	**55,000**
Elevator Cab and Mech Controller Update (72239)	70,000	-	-	-	-	-	-	-	-	-	-	**70,000**
Mechanical												
Compressors (72174)	-	-	-	233,600	-	-	-	-	-	-	-	**233,600**
Rooftop HVAC (72132)	-	-	250,000	-							-	**250,000**
Condensors (72175)*	-	250,000	-		-	-	-	-	-	-	-	**250,000**
Chiller (72176)	-	-	-	92,000	-	-	-	-	-	-	-	**92,000**
Replacement of Four Boilers (72175)*	-	100,000	-	-	-	-	-	-	-	-	-	**100,000**
Site Works												
Re-pave Lot (72133)	1,419,500	-	-	-	-	-	-	-	-	-	-	**1,419,500**
Aurora Community CenterTotal	**1,537,500**	**425,000**	**250,000**	**325,600**	**18,000**	**149,600**	**190,000**	**-**	**-**	**-**	**-**	**2,895,700**

REPAIR & REPLACEMENT PROJECTS - FACILITIES - continued

	2015 (approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
52/56 Victoria Street												
52/56 Victoria St Total	-	-	-	-	-	-	-	-	-	-	-	**-**
215 Industrial Parkway												
Hydro Building Total	-	-	-	-	-	-	-	-	-	-	-	**-**
Factory Theatre												
Exterior												
Exterior Windows (72186)	-	-	-	-	-	60,200		-	-	-	-	**60,200**
Roof Coverings (72187)	-	-	-	-	-	74,800	-	-	-	-	-	**74,800**
Factory Theatre Total	**-**	**-**	**-**	**-**	**-**	**135,000**	**-**	**-**	**-**	**-**	**-**	**135,000**
Lawn Bowling /Tennis Clubhouse												
Exterior												
Exterior Windows (72188)	-	20,000	-	-	-	-	-	-	-	-	-	**20,000**
Site Works												
Parking Lot (72189)	-	-	-	41,400	-	-	-	-	-	-	-	**41,400**
Tennis Clubhouse Total	**-**	**20,000**	**-**	**41,400**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**61,400**
Office & Garage - 9 Scanlon												
Office & Garage Total	-	-	-	-	-	-	-	-	-	-	-	**-**
Equipment Depot - 9 Scanlon												
Equipment Depot Total	-	-	-	-	-	-	-	-	-	-	-	**-**
Victoria Hall												
Exterior												
Exterior Windows (72190)	-	-	-	-	15,200	-	-	-	-	-		**15,200**
Victoria Hall Total	**-**	**-**	**-**	**-**	**15,200**	**-**	**-**	**-**	**-**	**-**	**-**	**15,200**

REPAIR & REPLACEMENT PROJECTS - FACILITIES - continued

	2015 (approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
89 Mosley Street												
Exteriors/Interiors												
Building Condition (72241)*	150,000	275,000	-	-	-	-	-	-	-	-		**425,000**
89 Mosley Street	**150,000**	**275,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**425,000**
Church Street School / Museum												
Electrical												
LED Lighting Retrofit (72218)	-	-	15,000	-	-	-	-	-	-	-	-	**15,000**
Exterior											-	**-**
Brick Repairs (72121)	-	-	-	30,000	-	-	-	-	-	-	-	**30,000**
Exterior Doors (72192)	-	-	-	-	-	-	86,700	-	-	-	-	**86,700**
22 Church/Library Drainage and Walkway (72219)	35,000	45,000	-	-	-	-	-	-	-	-	-	**80,000**
Interior											-	
Elevator (72217)	-	-	-	-	-	95,000	-	-	-	-	-	**95,000**
School Museum Total	**35,000**	**45,000**	**15,000**	**30,000**	**-**	**95,000**	**86,700**	**-**	**-**	**-**	**-**	**306,700**
Library - 15145 Yonge Street												
Electrical												
LED Lighting (72234)	-	-	25,000	-	-	-	-	-	-	-	-	**25,000**
Interior	-	-	-	-	-	-	-	-	-	-	-	
Horizontal Interior Drain (72233)	50,000	-	-	-	-	-	-	-	-	-	-	**50,000**
Boiler Replacement (72246)	-	-	100,000	-	-	-	-	-	-	-	-	**100,000**
Exterior											-	
Concrete (72232)	40,000	-	-	-	-	-	-	-	-	-	-	**40,000**
Brick Repairs (72248)	-	30,000	-	-	-	-	-	-	-	-	-	**30,000**
Accessible Doors (72258)	-	-	20,000	-	-	-	-	-	-	-	-	**20,000**
Library Total	**90,000**	**30,000**	**145,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	265,000
Seniors Centre - 90 John West Way												
Electrical												
LED Lighting (72213)	-	-	30,000	-	-	-	-	-	-	-	-	**30,000**
Senior Centre Total	**-**	**-**	**30,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**30,000**
Future Facilities Maintenance (72196)	**-**	**-**	**-**	**1,000,000**	**1,000,000**	**1,000,000**	**1,000,000**	**1,000,000**	**1,000,000**	**-**	**-**	**6,000,000**
Cameras - HDIP - (72204)	**25,000**	**25,000**	**25,000**	**25,000**	**25,000**	**25,000**	**-**	**-**	**-**	**-**	**-**	**150,000**
Electronic Sign - (72244)	**15,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**15,000**
REPAIR & REPLACEMENT TOTAL	**4,538,680**	**1,623,000**	**2,040,300**	**1,640,000**	**1,334,200**	**1,556,300**	**1,366,700**	**1,125,000**	**1,150,000**	**134,000**	**1,750,000**	**18,258,180**

REPAIR & REPLACEMENT - FLEET

	FLEET NUMBER	2015 (APPROVED)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
1/2 Tonne Pick-Up (34155)	*500*	30,000											**30,000**
Kubota/60"ZeroTurn (71093)	*249*	-	-	-	15,000		-	-	-	-	-	-	**15,000**
Kubota/60"ZeroTurn (71094)	*254*	-	-	-	15,000		-	-	-				**15,000**
Kubota/60"ZeroTurn (71095)	*255*	-	-	-	15,000		-	-	-				**15,000**
Kubota/60"ZeroTurn (71096)	*256*	-	-	-	15,000		-	-	-				**15,000**
Ice Resurfacer (34156)	*591*	85,000											**85,000**
Olympia/ST95 (34186)	*592*	-	85,000		-	-	-	-	-	-	-	-	**85,000**
3 Tonne Truck (34239)	*16*		90,000	-	-	-	-	-	-	-	-	-	**90,000**
GMC Savana (34189)	*11*	45,000	-	-	-	-	-	-	-	-	-	-	**45,000**
GMC Savana (34190)	*12*	45,000	-	-	-	-	-	-	-	-	-	-	**45,000**
GMC/Savana (34191)	*501*	35,000	-	-	-	-	-	-	-	-	-	-	**35,000**
Olympia/ST95 (34192)	*594*	-	85,000		-	-	-	-	-	-	-	-	**85,000**
Genie lift (34193)	*597*	-	-	65,000	-	-	-	-	-	-	-	-	**65,000**
Frt/FL80 (34194)	*29*	180,000		-	-	-	-	-	-	-	-	-	**180,000**
Frt/FL80 (34236)	*31*	-	200,000	-	-	-	-	-	-	-	-	-	**200,000**
Ford/F450 (34195)	*19*	-	-	86,000		-	-	-	-	-	-	-	**86,000**
GMC/K3500 (34196)	*18*	-	-	80,000		-	-	-	-	-	-	-	**80,000**
Ransome/950D (71103)	*243*	-	-	60,000		-				-	-	-	**60,000**
Ford F 150 (34197)	*2*	-	-	30,000		-	-	-	-	-	-	-	**30,000**
Ford F150 (34198)	*14*	-	-	30,000		-	-	-	-	-	-	-	**30,000**
SmithcoEasyLiner (71104)	*230*	-	-	18,000		-	-	-	-	-	-	-	**18,000**
AirWay/6' (71105)	*233*	-	-	-	10,000		-	-	-	-	-	-	**10,000**
JD/4x4 (71106)	*207*	-	-	-	145,000		-	-	-	-	-	-	**145,000**

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REPAIR & REPLACEMENT - FLEET - continued

Shown in $ 000's	FLEET NUMBER	2015 (APPROVED)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
Skid Steer Loader (71107)	*225*	-	-	-	145,000		-	-	-	-	-	-	**145,000**
GMC Sierra Crew Cab (71108)	*224*	-	-	-	65,000		-	-	-	-	-	-	**65,000**
GMC 1 Ton Dump (71109)	*228*	-	-	-	55,000		-	-	-	-	-	-	**55,000**
JD/870 (71110)	*209*	-	-		36,000		-	-	-	-	-	-	**36,000**
GMC Sierra (71111)	*200*	-	-	-	30,000		-	-	-	-	-	-	**30,000**
Bartell/SP86/Grinder (34199)	*88*	-	-	-	25,000		-	-	-	-	-	-	**25,000**
Hoe Pak (34214)	*14*	-	-	-	20,000		-	-	-	-	-	-	**20,000**
Chev pick up (34218)	*503*	-	-	-	30,000		-	-	-	-	-	-	**30,000**
Sports Field Top Dresser (73275)	*236*	-	45,000	-	-	-	-	-	-	-	-	-	**45,000**
GMC/3500 (34220)	*15*	-	-	-	-	70,000	-	-	-	-	-	-	**70,000**
Chev/Cab (71112)	*205*	-	-	-	-	50,000	-	-	-	-	-	-	**50,000**
Chev (71113)	*206*	-	-	-	-	45,000	-	-	-	-	-	-	**45,000**
Kubota 4x4 Tractor (34221)	*599*	-	-	-	-	40,000	-	-	-	-	-	-	**40,000**
JD/5400 (71114)	*223*	-	-	-	-	36,000			-	-	-	-	**36,000**
Chev/1500 (34222)	*10*	-	-	-	-	30,000			-	-	-	-	**30,000**
Chev/1500 (34223)	*6*	-	-	-	-	30,000			-	-	-	-	**30,000**
Chev/1500 (71115)	*201*	-	-	-	-	30,000			-	-	-	-	**30,000**
Provision for new purchase (34224)		-	-	-	-	30,000			-	-	-	-	**30,000**
Provision for new purchase (34225)		-	-	-	-	-	30,000			-	-	-	**30,000**
Toyoto Tacoma pick up (24006)	*403*	-	-	-	40,000		-	-		-	-	-	**40,000**
Cat/416B (34226)	*41*	-	-	-	-	145,000		-		-	-	-	**145,000**
Int/2554 (34227)	*32*	-	-	-	-	-	275,000			-	-	-	**275,000**
Back Hoe 420E IT (71116)	*238*	-	-	-		-	155,000			-	-	-	**155,000**
Zamboni 525 (34228)	*595*	-	-	-	-	-	85,000			-	-	-	**85,000**

continued……

REPAIR & REPLACEMENT - FLEET - continued

Shown in $ 000's	FLEET NUMBER	2015 (APPROVED)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
Catepillar/420E (71117)	*43*	-	-	-	-	-	155,000			-	-	-	**155,000**
JD/5225 Tractor (71118)	*241*	-	-	-	-	-	80,000			-	-	-	**80,000**
Woodchipper (34229)	*300*	-	-	-	-	-	48,000			-	-	-	**48,000**
Chev Express (34230)	*20*	-	-	45,000		-	-	-		-	-	-	**45,000**
Chev Express (34231)	*21*	-	-	45,000		-	-	-		-	-	-	**45,000**
JD/4320 Tractor (71119)	*240*	-	-	-	-	-	40,000			-	-	-	**40,000**
JD/5500 (71120)	*220*	-	-	-	-	-	36,000			-	-	-	**36,000**
Chev Silverado (71121)	*207*	-	-	-	35,000		-	-		-	-	-	**35,000**
Chev Silverado (34232)	*5*	-	-	-	-	-	30,000			-	-	-	**30,000**
Chev Silverado (34233)	*22*	-	-	-	-	-	30,000			-	-	-	**30,000**
Chev Silverado (71122)	*212*	-	-	-	-	-	30,000			-	-	-	**30,000**
Chev Silverado (34234)	*3*	-	-	-	-	-	30,000			-	-	-	**30,000**
FUTURE Unidentified Allowance (34235)		-	-	-	-	-	-	500,000	500,000	500,000	600,000	700,000	**2,800,000**
Total Fleet R & R COSTS		**420,000**	**505,000**	**459,000**	**696,000**	**506,000**	**1,024,000**	**500,000**	**500,000**	**500,000**	**600,000**	**700,000**	**6,410,000**

REPAIR & REPLACEMENT PROJECTS - PLANNING

	2015 (approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
Repair & Replacement												
Plotter Equipment (81013)	-	-	-	-	-	-	-	-	-	10,000	-	10,000
	-	-	-	-	-	-	-	-	-	10,000	-	**10,000**
Funding Sources:												
R & R	-	-	-	-	-	-	-	-	-	(10,000)	-	(10,000)
	-	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**(10,000)**	**-**	**(10,000)**

GROWTH & NEW ASSETS

(Anticipated Spend of $95,328,010 over 11 years)

Specific Growth & New Assets are at the following pages:

GROWTH AND NEW ASSETS INVESTMENT PLAN - SUMMARY OF CAPITAL NEEDS

	2015 (Approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	10 YEAR OUTLOOK
GROWTH and NEW												
Administrative Officer	100,000	-	-	-	-	-	-	-	-	-	-	-
Legal & Legislative	275,000	-	-	-	-	-	-	-	-	-	-	-
Corporate & Financial Servic	30,000	15,000	45,000	60,000	-	10,000	-	-	-	-	-	130,000
Building & Bylaw Services	-	311,000	400,000	100,000	-	-	-	-	-	-	-	811,000
Fire Services	-	60,000	16,065,000	175,000	-	-	-	-	-	-	-	16,300,000
Infrastructure & Environment	1,546,500	840,660	2,541,690	2,633,030	3,638,440	4,088,780	371,350	303,000	-	194,600	5,768,110	20,379,660
P & R Services	1,372,000	1,575,000	4,760,000	2,250,000	2,575,000	1,750,000	1,925,000	400,000	3,150,000	-	-	18,385,000
Facilities	40,000	35,000	50,000	2,165,000	10,000,000	13,235,000	850,000	-	-	-	-	26,335,000
Fleet	110,000	300,000	435,000	140,000	70,000	150,000	150,000	150,000	150,000	-	-	1,545,000
Planning & Development	200,000	970,000	1,250,000	930,000	-	-	-	-	-	-	-	3,150,000
TOTAL GROWTH & NEW	**3,673,500**	**4,106,660**	**25,546,690**	**8,453,030**	**16,283,440**	**19,233,780**	**3,296,350**	**853,000**	**3,300,000**	**194,600**	**5,768,110**	**87,035,660**
Water/Sewer Projects	216,700	1,485,000	1,444,300	135,000	-	1,338,000	-	-	-	-	-	4,402,300
TOTAL GROWTH & NEW	**3,890,200**	**5,591,660**	**26,990,990**	**8,588,030**	**16,283,440**	**20,571,780**	**3,296,350**	**853,000**	**3,300,000**	**194,600**	**5,768,110**	**91,437,960**
											Total including 2015	**95,328,160**
Funding Sources:												
Development Charges	(2,797,300)	(2,723,094)	(14,287,771)	(6,421,800)	(14,316,396)	(17,613,402)	(2,798,408)	(767,700)	(2,970,000)	(164,333)	(5,191,299)	(67,254,203)
Federal Gax Tax	-	-	-	-	-	-	-	-	-	-	-	-
Special Purposes Reserves	(177,200)	(177,500)	(630,500)	(590,000)	(280,000)	(350,000)	(175,000)	(215,000)	(315,000)	-	-	(2,733,000)
Growth & New Reserves	(915,700)	(2,691,066)	(2,098,069)	(1,644,480)	(1,512,044)	(2,783,378)	(147,942)	(45,300)	(15,000)	(30,267)	(576,811)	(11,544,357)
R & R Reserves	-	-	-	-	-	-	-	-	-	-	-	-
Development / Sale of Land	-	-	-	-	-	-	-	-	-	-	-	-
Water & Sewer Reserves	-	-	-	-	-	-	-	-	-	-	-	-
Internal Borrowing	-	-	-	-	-	-	-	-	-	-	-	-
External Funding	-	-	(9,799,650)	(106,750)	-	-	-	-	-	-	-	(9,906,400)
	(3,890,200)	**(5,591,660)**	**(26,815,990)**	**(8,763,030)**	**(16,108,440)**	**(20,746,780)**	**(3,121,350)**	**(1,028,000)**	**(3,300,000)**	**(194,600)**	**(5,768,110)**	**(91,437,960)**
											Total including 2015	**(95,328,160)**

GROWTH AND NEW PROJECTS - OFFICE OF THE C.A.O.

	2015 (approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
Growth & New												
12030 Hydro-Seeding of Leslie St Lan	100,000											100,000
	100,000	-	-	-	-	-	-	-	-	-	-	**100,000**
Funding Sources:												
Growth & New	(100,000)	-	-	-	-	-	-	-	-			(100,000)
	(100,000)	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**			**(100,000)**

GROWTH AND NEW PROJECTS - LEGAL & LEGISLATIVE SERVICES

		2015 (approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
Growth & New													
13008	Meeting Mgmt Software	75,000	-	-	-	-	-	-	-	-	-	-	75,000
14035	Records/Information Mgmt	200,000	-	-	-	-	-	-	-	-	-	-	200,000
		275,000	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**275,000**
Funding Sources:													
	Development Charges	-	-	-	-	-	-	-	-	-	-	-	-
	Growth & New Reserve	(275,000)	-	-	-	-	-	-	-	-	-	-	(275,000)
		(275,000)	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**(275,000)**

GROWTH & NEW PROJECTS - CORPORATE & FINANCIAL SERVICES

		2015 (approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
Growth & New													
14037	Joint Ops LAN room & DR site	-	-	45,000	60,000	-	10,000	-	-	-	-	-	115,000
14065	Mobility Solutions	30,000	15,000	-	-	-	-	-	-	-	-	-	45,000
		30,000	**15,000**	**45,000**	**60,000**	**-**	**10,000**	**-**	**-**	**-**	**-**	**-**	**160,000**
Funding Sources:													
	Growth & New Reserve	(30,000)	(15,000)	(45,000)	(60,000)	-	(10,000)	-	-	-	-	-	(160,000)
		(30,000)	**(15,000)**	**(45,000)**	**(60,000)**	**-**	**(10,000)**	**-**	**-**	**-**	**-**	**-**	**(160,000)**

GROWTH & NEW PROJECTS - BUILDING & BY-LAW SERVICES

		2015 (approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
Growth & New													
12016	Customer Care Centre	-	100,000	200,000	100,000	-	-	-	-	-	-	-	400,000
12025	Customer Relationship Mgmt (CRM)		86,000										86,000
24005	Online Services	-	-	200,000	-	-	-	-	-	-	-	-	200,000
24011	Mobile Devices for BBS		100,000										100,000
24012	Bylaw Permit Parking Program		25,000										25,000
		-	**311,000**	**400,000**	**100,000**	**-**	**-**	**-**	**-**	**-**	**-**	-	**811,000**
													-
													-
Funding Sources:													
Development Charges		-	-	-	-	-	-	-	-	-	-	-	-
Building Reserve													
	Online Services	-	-	(100,000)	-	-	-	-	-	-	-	-	(100,000)
	Mobile Devices		(80,000)										(80,000)
Growth & New		-	-										-
	Customer Care Centre	-	(100,000)	(200,000)	(100,000)	-	-	-	-	-	-	-	(400,000)
	Customer Relationship Mgmt		(86,000)										(86,000)
	Online Services	-	-	(100,000)		-	-	-	-	-	-	-	(100,000)
	Mobile Devices		(20,000)										(20,000)
	Bylaw Permit Parking Program		(25,000)										(25,000)
		-	**(311,000)**	**(400,000)**	**(100,000)**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**(811,000)**

GROWTH & NEW PROJECTS - FIRE SERVICES

		2015 (approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
Growth & New													
21005	New Fire Training Facility	-	-	10,050,000	-	-	-	-	-	-	-	-	10,050,000
21101	CYFS - Access Control Locks		28,000										28,000
21102	Pumper for New Fire Stations			565,000	-	-	-	-	-	-	-	-	565,000
21103	CYFS - Water Softeners		16,000										16,000
21006	New Fire Station			5,450,000	-	-	-	-	-	-	-	-	5,450,000
21104	Turn Out Gear for New Crews				175,000	-	-	-	-	-	-	-	175,000
21105	CYFS - Outdoor Electric Display Signs		16,000										16,000
		-	**60,000**	**16,065,000**	**175,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**16,300,000**
Funding Sources:													
	Development Charges	-	-	(6,265,350)	(68,250)	-	-	-	-	-	-	-	(6,333,600)
	Growth & New		(60,000)										(60,000)
	Contribution from Newmarket	-	-	(9,799,650)	(106,750)	-	-	-	-	-	-	-	(9,906,400)
		-	**(60,000)**	**(16,065,000)**	**(175,000)**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**(16,300,000)**

GROWTH AND NEW PROJECTS - I.E.S. / ROADS / SIDEWALKS / SANITARY SEWER

	Growth & New Projects:	2015 (approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
31101	Recon & Upgrade - Vandorf Sideroad	1,200,000	-	-	-	-	-	-	-	-	-		1,200,000
31151	Streetlights		50,000										50,000
34515	Allocation for Growth Related Traffic Congestion		-			303,000			303,000				606,000
34516	Yonge St/Church St Signalization				206,040								206,040
34518	Pedestrian Crossings as per 2014 DC Study				72,050			72,050			72,050		216,150
34519	Traffic Calming as per 2014 DC Study				122,550			122,550			122,550		367,650
34522	Speed Message Board	12,000											12,000
34524	Orchard Heights Blvd - west of Yonge				91,910	-							91,910
34614	S/W - Murray/Kennedy - 225m N	57,700		-	-	-	-	-	-	-	-	-	57,700
34615	S/W - Edward/Firehall - Dunning	109,800		-	-	-	-	-	-	-	-	-	109,800
34610	S/W, Multi -Use Trail & Illumination Leslie St S	-	-	182,810									182,810
34612	S/W - Bloomington Rd - Bayview to E Town Limit	-	-	-	-		1,524,000	-	-	-	-	-	1,524,000
34623	S/W - Bayview - Bloomington to Vandorf	-	-	-		1,000,000	-	-	-	-	-	-	1,000,000
34619	S/W - Bayview Ave - Vandorf to Wellington	-	-	-	70,000	1,500,000	-	-	-	-	-	-	1,570,000
34620	S/W, Multi -Use Trail & Illumination Leslie St N	-	-	361,580	-	-	-	-	-	-	-	-	361,580
34621	S/W - Bayview Ave - Hartwell to St John's	152,000	-	-	-	-	-	-	-	-	-	-	152,000
34625	S/W - Bayview Ave - St John's to N Town limit	-	-	-	-	-	-	176,750	-	-	-	-	176,750
34627	S/W - Ind Pkwy N - E. Side, AFLC to St John's	-	515,660		-	-	-	-	-	-	-	-	515,660
34629	S/W - Mary - Ind. Pkwy S. to Wellington	-	75,000	586,000		-	-	-	-	-	-	-	661,000
34630	S/W - Yonge - Batson Dr to 185 m North	-	-		25,000	120,440		-	-	-	-	-	145,440
34631	S/W - Yonge - 185m N of Batson to St John's	-	-		30,000	304,000	-	-	-	-	-	-	334,000
34632	S/W - E side Yonge - St John's to N Town Limit	-	-		20,000	180,000		-	-	-	-	-	200,000
34633	S/W - W side Yonge - St John's to N Town Limit	-	-		20,000	231,000	-	-	-	-	-	-	251,000
34635	S/W - St John's - Bayview To E Town limit	-	-	1,411,300	-	-			-	-	-	-	1,411,300
34636	S/W - Wellington St E. - Leslie to First Commerce	-	-	-	303,000	-	-	-	-	-	-	-	303,000
34637	S/W - Leslie St - 600 m N of Wellington to N Town	-	-	-	1,216,100	-	-	-	-	-	-	-	1,216,100
34638	S/W - Vandorf Sdrd - Bayview to 300m E	-	-	-	-	-	-	-	-	-	-	149,480	149,480
34639	S/W - Bathurst St - Bloomington Sdrd - N Town Lin	-	-	-	-	-	-	-	-	-	-	5,618,630	5,618,630
34640	S/W - Yonge St - Bloomington GO Bridge, E & W	-	-	-	-		1,424,780	-	-	-	-	-	1,424,780
34641	S/W - Industry St - Industrial Pkwy S - Mary St.	-	-	-	341,380	-	-	-	-	-	-	-	341,380
34642	S/W - Civic Square Gate	15,000	-	-	-	-	-	-	-	-	-	-	15,000
41005	Yonge St Sanitary Sewer Replacement	-	-	-	250,000	-	2,478,000	-	-	-	-	-	2,728,000
41006	Leslie St Sanitary Sewer - Service to 2C Lands	-	1,485,000	-	-	-	-	-	-	-	-	-	1,485,000
41010	SCADA Monitoring System	-	200,000	-	-	-	-	-	-	-	-	-	200,000
43048	St John's Sdrd - Leslie to 2C	216,700	-	1,444,300	-	-	-	-	-	-	-	-	1,661,000
		1,763,200	**2,325,660**	**3,985,990**	**2,768,030**	**3,638,440**	**5,426,780**	**371,350**	**303,000**	**-**	**194,600**	**5,768,110**	**26,545,160**
	Funding Sources:												
	Development Charges - Roads	(1,363,800)	(509,094)	(2,195,121)	(2,209,050)	(3,183,396)	(2,653,902)	(323,408)	(272,700)	-	(164,333)	(5,191,299)	(18,066,103)
	Development Charges - Sanitary Sewer	-	-	-	-	-	-	-	-	-	-		-
	Development Charges - Water	(216,700)	(1,485,000)	(1,444,300)	(135,000)	-	(1,338,000)	-	-	-	-		(4,619,000)
	External Funding		-	-	-	-	-	-	-	-	-	-	-
	Federal Gas Tax	-	-	-	-	-	-	-	-	-	-	-	-
	Growth and New Reserve	(182,700)	(331,566)	(346,569)	(423,980)	(455,044)	(1,434,878)	(47,942)	(30,300)	-	(30,267)	(576,811)	(3,860,057)
		(1,763,200)	**(2,325,660)**	**(3,985,990)**	**(2,768,030)**	**(3,638,440)**	**(5,426,780)**	**(371,350)**	**(303,000)**	**-**	**(194,600)**	**(5,768,110)**	**(26,545,160)**

GROWTH AND NEW PROJECTS - PARKS & RECREATION SERVICES

Forecast Excludes Purchases of Parklands

	Growth & New Projects:	2015 (approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
73085	Arboretum Development	100,000	100,000	100,000	100,000	100,000	-	-	-	-	-	-	500,000
73177	Pedestrian Underpasses (3 locations on Leslie St and 2 locations on St John's Sdrd	-	475,000	-	-	-	-	-	-	-	-	-	475,000
73243	Grade Separated crossing Wellington St east of John West Way	-	-	1,500,000	-	-	-	-	-	-	-	-	1,500,000
73244	Grade Separated crossing Vandorf Road at Archerhill	-	-	-	-	-	-	-	300,000		-	-	300,000
73245	Grade Separated crossing Bayview Avenue at Stone Rd and Benville Drive	-	-	-	600,000	-	-	-	-	-	-	-	600,000
73246	Grade Separated Crossing Yonge street at Elderberry	-	-	-	-	-	-	-	-	1,500,000	-	-	1,500,000
73147	Trail Construction (Trail Master Plan in 2C development area based on $100 per lin. Meter 3 phases 5000 lin meter)	150,000	-	-	-	-	-	-	-	-	-	-	150,000
73247	Trail Construction (Trail Master Plan in Coutts /Pandolfo development area based on $100 per lin. Meter 2 phases 100 lin meter ea.phase)	-		100,000	100,000	-	-	-	-	-	-	-	200,000
73107	Former Kwik Kopy Trail Connection	35,000	-	-	-	-	-	-	-	-	-	-	35,000
73156	Multi Use Courts per Master Plan	-	-	130,000	-	-	-	-	-	-	-	-	130,000
73251	GPS Tracking System	-	-	15,000	-	-	-	-	-	-	-	-	15,000
73248	Rail Crossings at grade McRoberts	-	-	-	-	-	-	-	-	100,000	-	-	100,000
73249	Rail Crossing at grade Vata Court	-	-	-	-	-	-	-	100,000	-	-	-	100,000
73252	Queens Diamond Jubilee Park Accessible P	387,000	-	-	-	-	-	-	-	-	-		387,000
73174	Additional Playground - 2017	-	-	350,000	-	-	-	-	-	-	-		350,000
73175	Additional Playground - 2019	-	-	-	-	350,000	-	-	-	-	-		350,000
73169	Wildlife Park (Phase I, II & III)	200,000	-	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	-	-	-		5,200,000
73161	Site Servicing - Stewart Burnett	200,000	-	-	-	-	-	-	-	-	-		200,000

continued……..

GROWTH AND NEW PROJECTS - PARKS & RECREATION SERVICES

Forecast Excludes Purchases of Parklands

		2015 (approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
73162	Hard Ball Diamond	-		1,200,000	-	-	-	-	-	-	-		1,200,000
73165	BMX Park	-	-	-	450,000	-	-	-	-	-	-		450,000
73271	Hartwell Way Overpass Contribution	300,000											300,000
73253	Beach Volleyball Court	-	-	40,000	-	-	-	-	-	-	-		40,000
73254	Pond Water Feature	-	-	40,000	-	-	-	-	-	-	-		40,000
74009	Museum Curator	-	-	60,000	-	-	-	-	-	-	-	-	60,000
73279	Leslie Street Underpass A	-	1,000,000	-	-	-	-	-	-	-	-		1,000,000
73256	Sand Based Field (Harmon Park)	-	-	-	-	200,000	-	-	-	-	-		200,000
73171	Rail Crossings - Grade Separated Loraview Ln, St Johns Sdrd, Walton Dr, Milgate Pl	-	-	-	-	750,000	750,000	750,000	-	750,000	-		3,000,000
73257	Outdoor Rink with boards and refridgeration	-	-	-	-	-	-	-	-	800,000	-		800,000
73258	Oak Ridges/Nokiidaa Trail Extension	-	-	50,000	-	-	-	-	-	-	-		50,000
73119	Street Tree Planting	-	-	175,000	-	175,000	-	175,000	-	-	-		525,000
		1,372,000	**1,575,000**	**4,760,000**	**2,250,000**	**2,575,000**	**1,750,000**	**1,925,000**	**400,000**	**3,150,000**	**-**	**-**	**19,757,000**
Funding Sources:													
	Development Charges - Parks Dev	(1,144,800)	(427,500)	(3,991,500)	(1,935,000)	(2,070,000)	(1,575,000)	(1,575,000)	(360,000)	(2,835,000)	-	-	(15,913,800)
	Cash in Lieu - Parkland	(177,200)	(97,500)	(530,500)	(265,000)	(280,000)	(175,000)	(175,000)	(40,000)	(315,000)	-	-	(2,055,200)
	Parks Master Plan	-	-	-	-	-	-	-	-	-	-	-	-
	Landscape Fee Reserve	-	-	(175,000)	-	(175,000)	-	(175,000)	-	-	-	-	(525,000)
	Growth & New Reserve	(50,000)	(1,050,000)	(63,000)	(50,000)	(50,000)	-	-	-	-	-	-	(1,263,000)
	Region of York	-	-	-	-	-	-	-	-	-	-	-	-
	School Board Funding	-	-	-	-	-	-	-	-	-	-	-	-
		(1,372,000)	**(1,575,000)**	**(4,760,000)**	**(2,250,000)**	**(2,575,000)**	**(1,750,000)**	**(1,925,000)**	**(400,000)**	**(3,150,000)**	**-**	**-**	**(19,757,000)**

GROWTH AND NEW PROJECTS - FACILITIES & FLEET

		2015 (approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
Growth and New:													
Facilities:													
72113	New Recreation Facility	-	-	-	-	2,400,000	12,000,000	850,000		-	-	-	15,250,000
72114	New Library	-	-	-	665,000	7,600,000	1,235,000		-	-	-	-	9,500,000
73168	Artificial Ice Rink	-	-	-	1,500,000			-	-	-	-	-	1,500,000
72194	Water Bottle Fill Stations	40,000	-	-	-	-	-	-	-	-	-	-	40,000
72111	Bldg Automation System Network	-	-	50,000	-	-	-	-	-	-	-	-	50,000
72250	AFLC - Roof Top Unit		35,000										35,000
	Total Facilities	**40,000**	**35,000**	**50,000**	**2,165,000**	**10,000,000**	**13,235,000**	**850,000**	**-**	**-**	**-**	**-**	**26,375,000**
Fleet:													
34162	Additions to the Town Fleet	-	-	-	100,000	-	150,000	150,000	150,000	150,000			700,000
24009	Pick-up Truck - By Law Services	30,000		-	-	-	-	-	-	-	-	-	30,000
34182	2 Tonne Flat Bed Salt, Sander Plov	80,000		-	-	-	-	-	-	-	-	-	80,000
71090	Mini Excavator - Parks	-	-	-	40,000		-	-	-	-	-	-	40,000
71091	Skid Steer and Tracks - Parks	-	-	65,000	-	-	-	-	-	-	-	-	65,000
71092	Truck and Float - Parks	-	-	100,000		-	-	-	-	-	-	-	100,000
34168	New 6 Ton Dump Truck with Plow	-	-	180,000									180,000
34184	Water Truck	-	-	-	-	70,000			-	-	-	-	70,000
34187	3 Tonne Truck	-	-	90,000	-	-	-	-	-	-	-	-	90,000
34238	Street Sweeper	-	300,000	-	-	-	-	-	-	-	-	-	300,000
	Total Fleet	**110,000**	**300,000**	**435,000**	**140,000**	**70,000**	**150,000**	**150,000**	**150,000**	**150,000**	**-**	**-**	**1,655,000**
	Total Facilities and Fleet	**150,000**	**335,000**	**485,000**	**2,305,000**	**10,070,000**	**13,385,000**	**1,000,000**	**150,000**	**150,000**	**-**	**-**	**28,030,000**
Funding Sources:													
	Development Charges	(72,000)	(301,500)	(391,500)	(2,074,500)	(9,063,000)	(12,046,500)	(900,000)	(135,000)	(135,000)	-	-	(25,119,000)
	Special Purposes	-	-	-	(150,000)	-	-	-	-	-	-	-	(150,000)
	Water & Sewer Reserves	-	-	-	-	-	-	-	-	-	-	-	-
	Parks Master Plan	-	-	-	-	-	-	-	-	-	-	-	-
	Land Sales Proceeds	-	-	-	-	-	-	-	-	-	-	-	-
	Repair & Replacement Reserve	-	-	-	-	-	-	-	-	-	-	-	-
	Growth & New Reserve	(78,000)	(33,500)	(93,500)	(80,500)	(1,007,000)	(1,338,500)	(100,000)	(15,000)	(15,000)	-	-	(2,761,000)
	Financing	-	-	-	-	-	-	-	-	-	-	-	-
		(150,000)	**(335,000)**	**(485,000)**	**(2,305,000)**	**(10,070,000)**	**(13,385,000)**	**(1,000,000)**	**(150,000)**	**(150,000)**	**-**	**-**	**(28,030,000)**

GROWTH & NEW PROJECTS - PLANNING & DEVELOPMENT SERVICES

	2015 (approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
Growth & New												
Community Improvement Plan (81015)	200,000	200,000	200,000	200,000		-	-	-	-	-	-	800,000
Aurora Promenade Streetscape (81016)		770,000	1,050,000	730,000								2,550,000
	200,000	**970,000**	**1,250,000**	**930,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**3,350,000**
												-
												-
Funding Sources:												
Growth & New	(200,000)	(970,000)	(1,250,000)	(930,000)	-	-	-	-	-	-	-	(3,350,000)
	(200,000)	**(970,000)**	**(1,250,000)**	**(930,000)**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**(3,350,000)**

STUDIES & OTHER ASSETS

(Anticipated Spend of $3,507,000 over 11 years)

Specific Studies & Other Assets are at the following pages:

STUDIES AND OTHER PROJECTS INVESTMENT PLAN - SUMMARY OF CAPITAL NEEDS

	2015 (Approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	10 YEAR OUTLOOK
STUDIES and OTHER												
Chief Administrative Officer	150,000	-	-	30,000	80,000	30,000	-	30,000	-	110,000	-	280,000
Financial Services	90,000	-	-	125,000	-	80,000	-	-	-	-	80,000	285,000
Planning	-	300,000	-	-	-	-	300,000	-	-	-	-	600,000
Infrastructure & Environment	465,000	50,000	450,000	250,000	200,000	-	-	270,000	250,000	-	-	1,470,000
Parks & Recreation	125,000	-	-	42,000	-	-	-	-	-	-	-	42,000
	830,000	**350,000**	**450,000**	**447,000**	**280,000**	**110,000**	**300,000**	**300,000**	**250,000**	**110,000**	**80,000**	**2,677,000**
											Total including 2015	**3,507,000**
Funding Sources:												
Studies & Other Reserve	(632,500)	(30,000)	(250,000)	(234,500)	(180,000)	(38,000)	(30,000)	(100,000)	(150,000)	(110,000)	(8,000)	(1,130,500)
Development Charges	(22,500)	(270,000)	-	(112,500)	-	(72,000)	(270,000)	-	-	-	(72,000)	(796,500)
Special Purposes Reserves	(175,000)	-	(200,000)	(100,000)	(100,000)	-	-	(200,000)	(100,000)	-	-	(700,000)
Infrastructure Sustainability (Tax)	-	-	-	-	-	-	-	-	-	-	-	-
Water/Sewer/Storm Res	-	(50,000)	-	-	-	-	-	-	-	-	-	(50,000)
External Grants	-	-	-	-	-	-	-	-	-	-	-	-
	(830,000)	**(350,000)**	**(450,000)**	**(447,000)**	**(280,000)**	**(110,000)**	**(300,000)**	**(300,000)**	**(250,000)**	**(110,000)**	**(80,000)**	**(2,677,000)**
											Total including 2015	**(3,507,000)**

STUDIES AND OTHER PROJECTS - CHIEF ADMINISTRATIVE OFFICER

		2015 (approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
Studies & Other													
12015	Town of Aurora Strategic Plan	50,000	-	-	-	80,000	-	-	-	-	80,000	-	210,000
12026	Organization Structure Review	100,000	-	-	-	-	-	-	-	-	-	-	100,000
12032	Resident Survey 2016 - 2024	-	-	-	30,000		30,000		30,000		30,000		120,000
		150,000	**-**	**-**	**30,000**	**80,000**	**30,000**	**-**	**30,000**	**-**	**110,000**	**-**	**430,000**
Funding Sources:													
	Studies & Other	(150,000)	-	-	(30,000)	(80,000)	(30,000)	-	(30,000)	-	(110,000)	-	(430,000)
		(150,000)	**-**	**-**	**(30,000)**	**(80,000)**	**(30,000)**	**-**	**(30,000)**	**-**	**(110,000)**	**-**	**(430,000)**

STUDIES AND OTHER PROJECTS - CORPORATE & FINANCIAL SERVICES

	2015 (approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
Studies & Other												
14061 DC Background Study	-	-	-	125,000		-	-	-	-	-	-	125,000
14062 Business Continuity/Disaster Recove	25,000	-	-	-	-	-	-	-	-	-	-	25,000
14063 IT Strategic Plan	-	-	-	-	-	80,000		-	-	-	80,000	160,000
14064 Contamination Investigations (PSAB	65,000	-	-	-	-	-	-	-	-	-	-	65,000
	90,000	**-**	**-**	**125,000**	**-**	**80,000**	**-**	**-**	**-**	**-**	**80,000**	**375,000**
Funding Sources:												
Development Charges	(22,500)	-	-	(112,500)	-	(72,000)	-	-	-	-	(72,000)	(279,000)
Studies & Other	(67,500)	-	-	(12,500)	-	(8,000)	-	-	-	-	(8,000)	(96,000)
	(90,000)	**-**	**-**	**(125,000)**	**-**	**(80,000)**	**-**	**-**	**-**	**-**	**(80,000)**	**(375,000)**

STUDIES & OTHER PROJECTS - PLANNING & DEVELOPMENT SERVICES

	2015 (approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
Studies & Other												
81001 Official Plan Review	-	300,000	-	-	-	-	300,000	-	-	-	-	600,000
	-	**300,000**	**-**	**-**	**-**	**-**	**300,000**	**-**	**-**	**-**	**-**	**600,000**
Funding Sources:												
Development Charges	-	(270,000)	-	-	-	-	(270,000)	-	-	-	-	(540,000)
Studies & Other	-	(30,000)		-	-	-	(30,000)	-	-	-	-	(60,000)
	-	**(300,000)**	**-**	**-**	**-**	**-**	**(300,000)**	**-**	**-**	**-**	**-**	**(600,000)**

STUDIES & OTHER PROJECTS - INFRASTRUCTURE & ENVIRONMENTAL SERVICES

		2015 (approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
Studies and Other													
31053	Salt Management Plan	-	-	-	100,000	-	-	-	-	100,000	-	-	200,000
31106	Assess Retaining Walls Condition			200,000	-	-	-	-	20,000	-	-		220,000
42057	Town-Wide Stream Erosion	100,000	-	-	-	-	-	-	-	-	-		100,000
72191	Green Facilities Operating Policies	-	-	50,000	-	-	-	-	50,000		-		100,000
34185	Green Fleet Operating Policies	-	-	-	50,000	-	-	-	-	50,000			100,000
34513	Update Master Transportation Study	-	-	-	100,000	-	-	-	-	100,000	-		200,000
43040	Water Hydraulic Model	100,000	-	-	-	100,000	-	-	-	-	-		200,000
41004	Wastewater Hydraulic Model	100,000	-	-	-	100,000	-	-	-	-	-		200,000
42059	Storm Sewer Reserve Fund and Rates Study		50,000				-						50,000
43046	Water System Leak Detection Study	-	-	200,000	-	-	-	-	200,000		-		400,000
72202	Building Condition Report	150,000	-	-	-	-	-	-	-	-	-		150,000
72237	Library, LED Light Study	15,000	-	-	-	-	-	-	-	-	-		15,000
		465,000	**50,000**	**450,000**	**250,000**	**200,000**	**-**	**-**	**270,000**	**250,000**	**-**	**-**	**1,935,000**
Funding Sources:													
	Engineering Fees	(100,000)	-	(200,000)	(100,000)	(100,000)		-	(200,000)	(100,000)	-		(800,000)
	Infrastructure Sustainability - Roads	-	-	-	-	-	-	-	-	-	-	-	-
	Infrastructure Sustainability - Water	-	-	-	-	-	-	-	-	-	-	-	-
	Infrastructure Sustainability - Wastewater	-	-	-	-	-	-	-	-	-	-	-	-
	Infrastructure Sustainability - Storm	-	(50,000)	-	-	-	-	-	-	-	-	-	(50,000)
	Studies & Other	(365,000)	-	(250,000)	(150,000)	(100,000)	-	-	(70,000)	(150,000)	-		(1,085,000)
		(465,000)	**(50,000)**	**(450,000)**	**(250,000)**	**(200,000)**	**-**	**-**	**(270,000)**	**(250,000)**	**-**	**-**	**(1,935,000)**

STUDIES & OTHER PROJECTS - PARKS & RECREATION SERVICES

		2015 (approved)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
STUDIES & OTHER													
73131	Parks Maintenance Standards	-	-	-	42,000		-	-	-	-	-		42,000
73195	Community Buildings Use Study	50,000	-	-	-	-	-	-	-	-	-		50,000
73270	Parks & Recreation Master Plan	75,000	-	-	-	-	-	-	-	-	-		75,000
		125,000	**-**	**-**	**42,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**167,000**
Funding Sources:													
	Cash in Lieu of Parkland	(75,000)	-	-	-	-	-	-	-	-	-		(75,000)
	Studies and Other	(50,000)	-	-	(42,000)	-	-	-	-	-	-		(92,000)
		(125,000)	**-**	**-**	**(42,000)**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**(167,000)**

FUNDING SOURCES / RESERVE BALANCES / CASH FLOWS

SOURCES OF CAPITAL PLAN FUNDING:

10 YEAR RESERVE FORECASTS & CASH FLOW:

10 YEAR DEVELOPMENT CHARGE BALANCES & CASH FLOW:

ESTIMATED SOURCES OF FUNDING - CONSOLIDATED

The Sources of Funding Are Estimates at this Time and May Change When Projects Are Presented for Approval

	Base 2015 (approved)	2016 Yr 1	2017 Yr 2	2018 Yr 3	2019 Yr 4	2020 Yr 5	2021 Yr 6	2022 Yr 7	2023 Yr 8	2024 Yr 9	2025 Yr 10	10 YEAR OUTLOOK
Total Capital Needs:												
Repair & Replacement Program	13,163,980	8,248,275	12,234,476	11,805,691	9,212,358	9,023,458	12,950,843	9,560,781	8,343,366	5,492,731	6,277,507	93,149,486
Growth & New Total	3,890,200	5,591,660	26,990,990	8,588,030	16,283,440	20,571,780	3,296,350	853,000	3,300,000	194,600	5,768,110	91,437,960
Studies & Other Total	830,000	350,000	450,000	447,000	280,000	110,000	300,000	300,000	250,000	110,000	80,000	2,677,000
TOTAL CAPITAL NEEDS (see Page 10)	**17,884,180**	**14,189,935**	**39,675,466**	**20,840,721**	**25,775,798**	**29,705,238**	**16,547,193**	**10,713,781**	**11,893,366**	**5,797,331**	**12,125,617**	**187,264,446**
											Total including 2015	**205,148,626**
CONSOLIDATED FUNDING SOURCES:												
Repair & Replacement Reserve - Tax	(7,648,347)	(3,988,886)	(5,445,529)	(5,542,075)	(4,995,479)	(5,516,774)	(5,687,559)	(3,299,511)	(3,429,715)	(2,116,456)	(5,081,807)	(45,103,791)
Repair & Replacement Reserve - Rates	(3,455,500)	(1,532,630)	(4,284,288)	(3,944,432)	(1,857,695)	(1,100,000)	(4,904,100)	(4,097,086)	(2,584,467)	(1,147,091)	(1,195,700)	(26,647,489)
Growth & New Reserve	(915,700)	(2,691,066)	(2,098,069)	(1,644,480)	(1,512,044)	(2,783,378)	(147,942)	(45,300)	(15,000)	(30,267)	(576,811)	(11,544,357)
Studies & Other Reserve	(632,500)	(30,000)	(250,000)	(234,500)	(180,000)	(38,000)	(30,000)	(100,000)	(150,000)	(110,000)	(8,000)	(1,130,500)
Development Charges	(2,819,800)	(2,993,094)	(14,287,771)	(6,534,300)	(14,316,396)	(17,685,402)	(3,068,408)	(767,700)	(2,970,000)	(164,333)	(5,263,299)	(68,050,703)
Development / Sale of Land	-	-	-	-	-	-	-	-	-	-	-	-
Special Purposes Reserves * (see below)	(871,818)	(914,618)	(1,717,618)	(1,314,618)	(1,044,618)	(1,062,118)	(839,618)	(884,618)	(1,049,618)	(534,618)	-	(9,362,062)
Federal / Provincial Grants (incl Gas Tax)	(1,540,515)	(1,617,541)	(1,617,541)	(1,694,566)	(1,694,566)	(1,694,566)	(1,694,566)	(1,694,566)	(1,694,566)	(1,694,566)	-	(15,097,044)
External Funding (Region / Newmarket)	-	-	(9,799,650)	(106,750)	-	-	-	-	-	-	-	(9,906,400)
Other External Funding (Donations)	-	(422,100)	-	-	-	-	-	-	-	-	-	(422,100)
TOTAL FUNDING SOURCES	**(17,884,180)**	**(14,189,935)**	**(39,500,466)**	**(21,015,721)**	**(25,600,798)**	**(29,880,238)**	**(16,372,193)**	**(10,888,781)**	**(11,893,366)**	**(5,797,331)**	**(12,125,617)**	**(187,264,446)**
											Total including 2015	**(205,148,626)**
* Special Purposes Reserves:												
Building Dept	-	(255,000)	(100,000)	-	-	-	-	-	-	-	-	(355,000)
Cash in Lieu of Parkland	(302,200)	(190,000)	(948,000)	(570,000)	(475,000)	(417,500)	(365,000)	(40,000)	(715,000)	(300,000)	-	(4,020,500)
Council Discretionary Reserve	-	-	-	-	-	-	-	-	-	-	-	-
EAB Reserve	(235,000)	(235,000)	(235,000)	(410,000)	(235,000)	(410,000)	(240,000)	(410,000)	-	-	-	(2,175,000)
Landscape Reserve Fee	-	-	-	-	-	-	-	-	-	-	-	-
	(871,818)	(914,618)	(1,717,618)	(1,314,618)	(1,044,618)	(1,062,118)	(839,618)	(884,618)	(1,049,618)	(534,618)	-	(9,362,062)

ESTIMATED SOURCES OF FUNDING - REPAIR & REPLACEMENT

The Sources of Funding Are Estimates at this Time and May Change When Projects Are Presented for Approval

	Base 2015 (approved)	2016 Yr 1	2017 Yr 2	2018 Yr 3	2019 Yr 4	2020 Yr 5	2021 Yr 6	2022 Yr 7	2023 Yr 8	2024 Yr 9	2025 Yr 10	10 YEAR OUTLOOK
Repair & Replacement Requirement (Pg 13)	**13,163,980**	**8,248,275**	**12,234,476**	**11,805,691**	**9,212,358**	**9,023,458**	**12,950,843**	**9,560,781**	**8,343,366**	**5,492,731**	**6,277,507**	**93,149,486**
											Total including 2015	**106,313,466**
FUNDING SOURCES - TAX BASED:												
Repair & Replacement Reserve - Tax	(7,648,347)	(3,988,886)	(5,445,529)	(5,542,075)	(4,995,479)	(5,516,774)	(5,687,559)	(3,299,511)	(3,429,715)	(2,116,456)	(5,081,807)	(45,103,791)
Special Purposes Reserves * (see below)	(519,618)	(1,159,218)	(887,118)	(624,618)	(664,618)	(712,118)	(664,618)	(469,618)	(634,618)	(534,618)	-	(6,351,162)
Federal Gas Tax	(1,540,515)	(1,617,541)	(1,617,541)	(1,694,566)	(1,694,566)	(1,694,566)	(1,694,566)	(1,694,566)	(1,694,566)	(1,694,566)	-	(15,097,044)
Other External Funding	-	-	-	-	-	-	-	-	-	-	-	-
	(9,708,480)	**(6,765,645)**	**(7,950,188)**	**(7,861,259)**	**(7,354,663)**	**(7,923,458)**	**(8,046,743)**	**(5,463,695)**	**(5,758,899)**	**(4,345,640)**	**(5,081,807)**	**(66,551,997)**
FUNDING SOURCES - RATES BASED:												
Repair & Replacement Reserve - Rates:												
Water Project Funding	(856,850)	(1,080,230)	(2,050,850)	(1,189,792)	(1,000,000)	(350,000)	(2,868,100)	(1,712,140)	(1,361,839)	(300,000)	(375,000)	(12,287,951)
Waste Water Project Funding	(470,450)	(114,100)	(478,600)	(800,671)	(78,266)	(75,000)	(956,800)	(45,189)	(51,597)	(43,062)	(39,300)	(2,682,585)
Storm Water Project Funding	(2,128,200)	(288,300)	(1,754,838)	(1,953,969)	(779,429)	(675,000)	(1,079,200)	(2,339,757)	(1,171,031)	(804,029)	(781,400)	(11,626,953)
	(3,455,500)	**(1,482,630)**	**(4,284,288)**	**(3,944,432)**	**(1,857,695)**	**(1,100,000)**	**(4,904,100)**	**(4,097,086)**	**(2,584,467)**	**(1,147,091)**	**(1,195,700)**	**(26,597,489)**
TOTAL 'R & R' FUNDING SOURCES	**(13,163,980)**	**(8,248,275)**	**(12,234,476)**	**(11,805,691)**	**(9,212,358)**	**(9,023,458)**	**(12,950,843)**	**(9,560,781)**	**(8,343,366)**	**(5,492,731)**	**(6,277,507)**	**(93,149,486)**
											Total including 2015	**(106,313,466)**
* Special Purposes Reserves & Other:												
Building Department	-	(175,000)	-	-	-	-	-	-	-	-	-	(175,000)
Proceeds from Land Sales	-	-	-	-	-	-	-	-	-	-	-	-
Cash in Lieu of Parkland	(50,000)	(92,500)	(417,500)	(155,000)	(195,000)	(242,500)	(190,000)	-	(400,000)	(300,000)	-	(1,992,500)
EAB Reserve	(235,000)	(235,000)	(235,000)	(235,000)	(235,000)	(235,000)	(240,000)	(235,000)	-	-	-	(1,650,000)
	(519,618)	(1,159,218)	(887,118)	(624,618)	(664,618)	(712,118)	(664,618)	(469,618)	(634,618)	(534,618)	-	(6,351,162)

ESTIMATED SOURCES OF FUNDING - GROWTH & NEW

The Sources of Funding Are Estimates at this Time and May Change When Projects Are Presented for Approval

	Base 2015 (approved)	2016 Yr 1	2017 Yr 2	2018 Yr 3	2019 Yr 4	2020 Yr 5	2021 Yr 6	2022 Yr 7	2023 Yr 8	2024 Yr 9	2025 Yr 10	10 YEAR OUTLOOK
Growth & New Requirement (Pg 38)	**3,890,200**	**5,591,660**	**26,990,990**	**8,588,030**	**16,283,440**	**20,571,780**	**3,296,350**	**853,000**	**3,300,000**	**194,600**	**5,768,110**	**91,437,960**
											Total including 2015	**95,328,160**
'GROWTH & NEW' FUNDING SOURCES:												
Growth & New Reserve	(915,700)	(2,691,066)	(2,098,069)	(1,644,480)	(1,512,044)	(2,783,378)	(147,942)	(45,300)	(15,000)	(30,267)	(576,811)	(11,544,357)
Development Charges	(2,797,300)	(2,723,094)	(14,287,771)	(6,421,800)	(14,316,396)	(17,613,402)	(2,798,408)	(767,700)	(2,970,000)	(164,333)	(5,191,299)	(67,254,203)
Special Purposes Reserves * (see below)	(177,200)	(177,500)	(630,500)	(590,000)	(280,000)	(350,000)	(175,000)	(215,000)	(315,000)	-	-	(2,733,000)
Federal Gas Tax	-	-	-	-	-	-	-	-	-	-	-	-
External Funding (Newmarket for Fire)	-	-	(9,799,650)	(106,750)	-	-	-	-	-	-	-	(9,906,400)
Development / Sale of Land	-	-	-	-	-	-	-	-	-	-	-	-
Repair & Replacement Reserve - Tax	-	-	-	-	-	-	-	-	-	-	-	-
Repair & Replacement Reserve - Rates	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL GROWTH & NEW FUNDING	**(3,890,200)**	**(5,591,660)**	**(26,815,990)**	**(8,763,030)**	**(16,108,440)**	**(20,746,780)**	**(3,121,350)**	**(1,028,000)**	**(3,300,000)**	**(194,600)**	**(5,768,110)**	**(91,437,960)**
											Total including 2015	**(95,328,160)**

* Special Purposes Reserves:												
Engineering Fees	-	-	-	-	-	-	-	-	-	-	-	-
Building Dept	-	(80,000)	(100,000)	-	-	-	-	-	-	-	-	(180,000)
Tax Rate Stabilization	-	-	-	-	-	-	-	-	-	-	-	-
Cash in Lieu of Parkland	(177,200)	(97,500)	(530,500)	(415,000)	(280,000)	(175,000)	(175,000)	(40,000)	(315,000)	-	-	(2,028,000)
Landscape Fees	-	-	-	(175,000)	-	(175,000)	-	(175,000)	-	-	-	(525,000)
	(177,200)	(177,500)	(630,500)	(590,000)	(280,000)	(350,000)	(175,000)	(215,000)	(315,000)	-	-	(2,733,000)

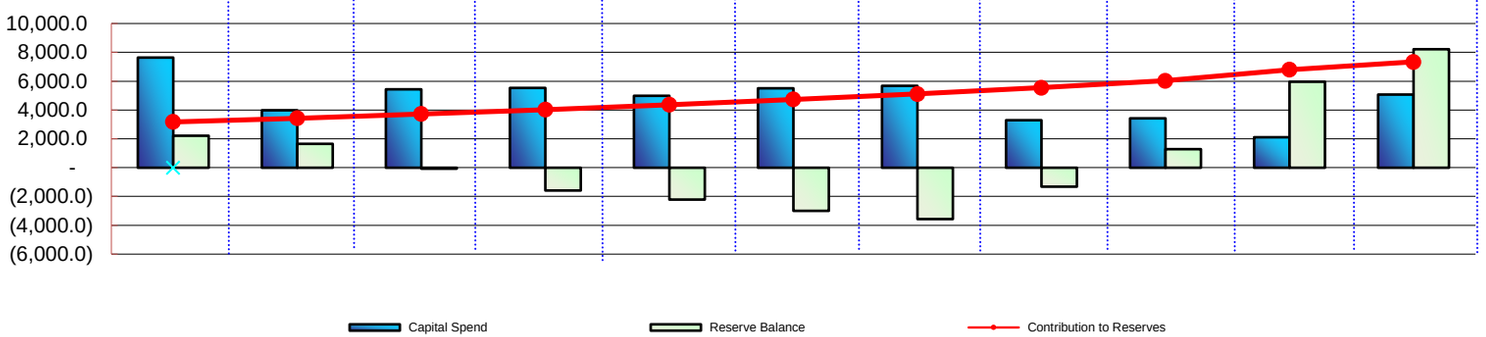
ESTIMATED SOURCES OF FUNDING - STUDIES & OTHER

The Sources of Funding Are Estimates at this Time and May Change When Projects Are Presented for Approval

	Base 2015 (approved)	2016 Yr 1	2017 Yr 2	2018 Yr 3	2019 Yr 4	2020 Yr 5	2021 Yr 6	2022 Yr 7	2023 Yr 8	2024 Yr 9	2025 Yr 10	10 YEAR OUTLOOK
Studies & Other Requirement (Pg 50)	**830,000**	**350,000**	**450,000**	**447,000**	**280,000**	**110,000**	**300,000**	**300,000**	**250,000**	**110,000**	**80,000**	**2,677,000**
											Total including 2015	**3,507,000**
'STUDIES & OTHER' FUNDING SOURCES:												
Studies & Other Reserve	(632,500)	(30,000)	(250,000)	(234,500)	(180,000)	(38,000)	(30,000)	(100,000)	(150,000)	(110,000)	(8,000)	(1,130,500)
Development Charges	(22,500)	(270,000)	-	(112,500)	-	(72,000)	(270,000)	-	-	-	(72,000)	(796,500)
Special Purposes Reserves * (see below)	(175,000)	-	(200,000)	(100,000)	(100,000)	-	-	(200,000)	(100,000)	-	-	(700,000)
External Grants	-	-	-	-	-	-	-	-	-	-	-	-
Repair & Replacement Reserve - Tax	-	-	-	-	-	-	-	-	-	-	-	-
Repair & Replacement Reserve - Rates	-	(50,000)	-	-	-	-	-	-	-	-	-	(50,000)
TOTAL STUDIES & OTHER FUNDING	**(830,000)**	**(350,000)**	**(450,000)**	**(447,000)**	**(280,000)**	**(110,000)**	**(300,000)**	**(300,000)**	**(250,000)**	**(110,000)**	**(80,000)**	**(2,677,000)**
											Total including 2015	**(3,507,000)**
* Special Purposes Reserves:												
Engineering Fees	(100,000)	-	(200,000)	(100,000)	(100,000)	-	-	(200,000)	(100,000)	-	-	(700,000)
Cash in Lieu of Parkland	(75,000)	-	-	-	-	-	-	-	-	-	-	-
Landscape Reserve Fee	-	-	-	-	-	-	-	-	-	-	-	-
	(175,000)	-	(200,000)	(100,000)	(100,000)	-	-	(200,000)	(100,000)	-	-	(700,000)

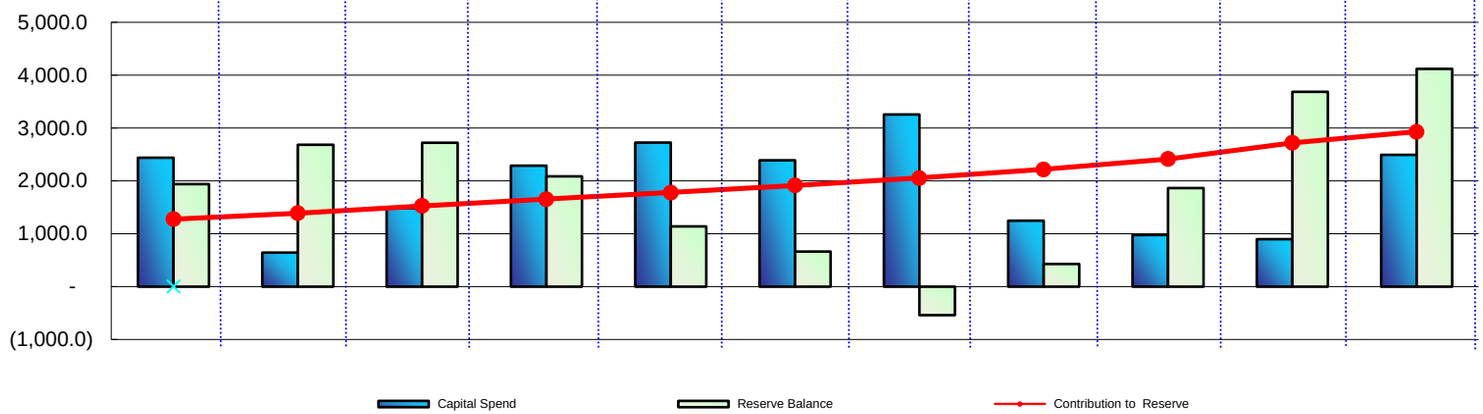
RESERVE FORECAST & CASH FLOW - TOTAL TAX BASED R & R RESERVE

Shown in $ 000's	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	11 Year TOTAL
												Opening Bal
Opening R & R Reserve Balance	**6,690.7**	**2,222.0**	**1,659.3**	**(66.0)**	**(1,581.4)**	**(2,211.2)**	**(2,994.7)**	**(3,565.2)**	**(1,314.8)**	**1,289.7**	**5,970.5**	**6,690.7**
Reserve 'Revenue':												
Share of Cash to Capital	3,082.7	3,384.0	3,702.9	4,044.5	4,406.9	4,790.0	5,188.5	5,603.1	6,034.5	6,718.3	7,185.3	54,140.7
Reserve Balance Interest (@ 2.20%)	97.0	42.2	17.3	(17.9)	(41.2)	(56.7)	(71.4)	(53.2)	(0.3)	78.9	154.5	149.2
Total Revenue/Funding	**3,179.7**	**3,426.2**	**3,720.2**	**4,026.6**	**4,365.7**	**4,733.3**	**5,117.1**	**5,549.9**	**6,034.2**	**6,797.2**	**7,339.8**	**54,289.9**
Funding Requests:												
From R & R Reserves	7,648.3	3,988.9	5,445.5	5,542.1	4,995.5	5,516.8	5,687.6	3,299.5	3,429.7	2,116.5	5,081.8	52,752.1
Total Funding Requests	**7,648.3**	**3,988.9**	**5,445.5**	**5,542.1**	**4,995.5**	**5,516.8**	**5,687.6**	**3,299.5**	**3,429.7**	**2,116.5**	**5,081.8**	**47,670.3**
Closing R&R Reserve Balance	**2,222.0**	**1,659.3**	**(66.0)**	**(1,581.4)**	**(2,211.2)**	**(2,994.7)**	**(3,565.2)**	**(1,314.8)**	**1,289.7**	**5,970.5**	**8,228.5**	**8,228.5**
Made up of:												
Roads	1,941.1	2,686.3	2,724.7	2,088.4	1,141.0	664.8	(538.7)	429.7	1,866.6	3,688.2	4,123.1	4,123.1
Facilities	(1,813.8)	(1,772.1)	(2,649.6)	(3,028.8)	(2,987.5)	(3,043.1)	(2,776.5)	(2,122.6)	(1,336.9)	719.3	1,341.3	1,341.3
Information Technology	896.1	822.6	833.4	646.9	693.1	263.9	404.2	598.7	850.7	1,091.4	1,294.0	1,294.0
Fleet	1,112.2	223.6	(106.9)	(462.8)	(308.0)	(229.3)	30.8	351.5	322.3	693.7	1,429.7	1,429.7
Parks & Recreation	115.8	(2.7)	(555.1)	(506.8)	(434.9)	(349.2)	(406.6)	(328.2)	(215.1)	(78.6)	106.6	106.6
Council Discretionary	(29.4)	(298.5)	(312.6)	(318.3)	(314.9)	(301.8)	(278.3)	(243.9)	(197.9)	(143.6)	(66.3)	(66.3)
	2,222.0	1,659.3	(66.0)	(1,581.4)	(2,211.2)	(2,994.7)	(3,565.2)	(1,314.8)	1,289.7	5,970.5	8,228.5	8,228.5



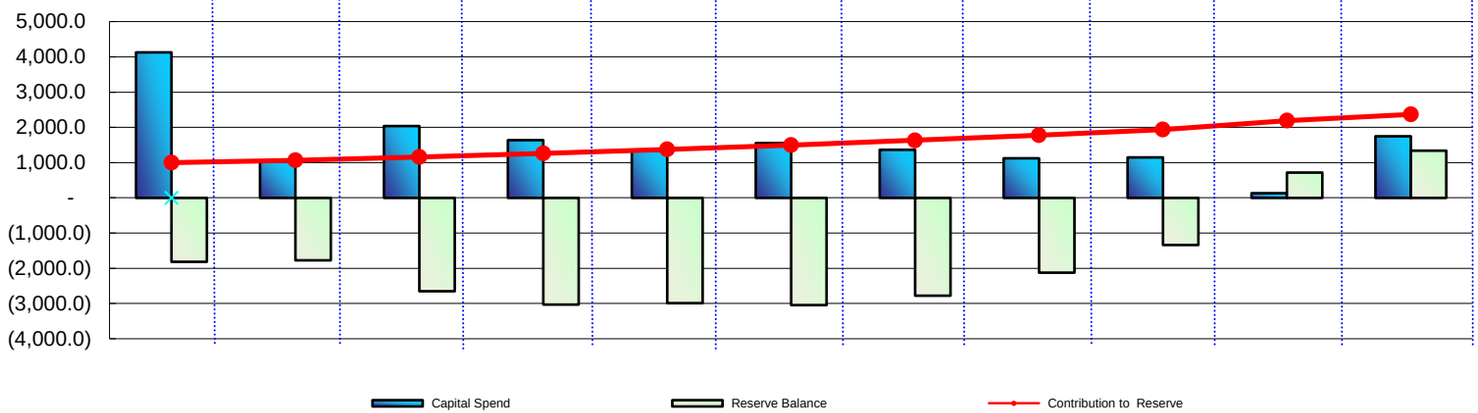
RESERVE FORECAST & CASH FLOW - TAX BASED 'R & R' RESERVE - **ROADS**

Shown in $ 000's	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	11 Year TOTAL
Opening R & R Reserve Balance	**3,106.5**	**1,941.1**	**2,686.3**	**2,724.7**	**2,088.4**	**1,141.0**	**664.8**	**(538.7)**	**429.7**	**1,866.6**	**3,688.2**	**3,106.5**
Reserve 'Revenue':												
Share of Cash to Capital	1,220.7	1,340.0	1,466.4	1,601.6	1,745.1	1,896.8	2,054.6	2,218.8	2,389.7	2,660.4	2,845.4	21,439.5
Reserve Balance Interest (@ 2.20%)	54.9	50.4	58.8	52.5	35.2	19.5	1.3	(1.3)	24.9	60.3	85.0	441.5
Total Revenue/Funding	**1,275.6**	**1,390.4**	**1,525.2**	**1,654.1**	**1,780.3**	**1,916.3**	**2,055.9**	**2,217.5**	**2,414.6**	**2,720.7**	**2,930.4**	**21,881.0**
Funding Requests:												
Total Funding Requests	**2,441.0**	**645.2**	**1,486.8**	**2,290.5**	**2,727.7**	**2,392.5**	**3,259.4**	**1,249.1**	**977.7**	**899.1**	**2,495.5**	**20,864.4**
Closing R&R Reserve Balance	**1,941.1**	**2,686.3**	**2,724.7**	**2,088.4**	**1,141.0**	**664.8**	**(538.7)**	**429.7**	**1,866.6**	**3,688.2**	**4,123.1**	**4,123.1**



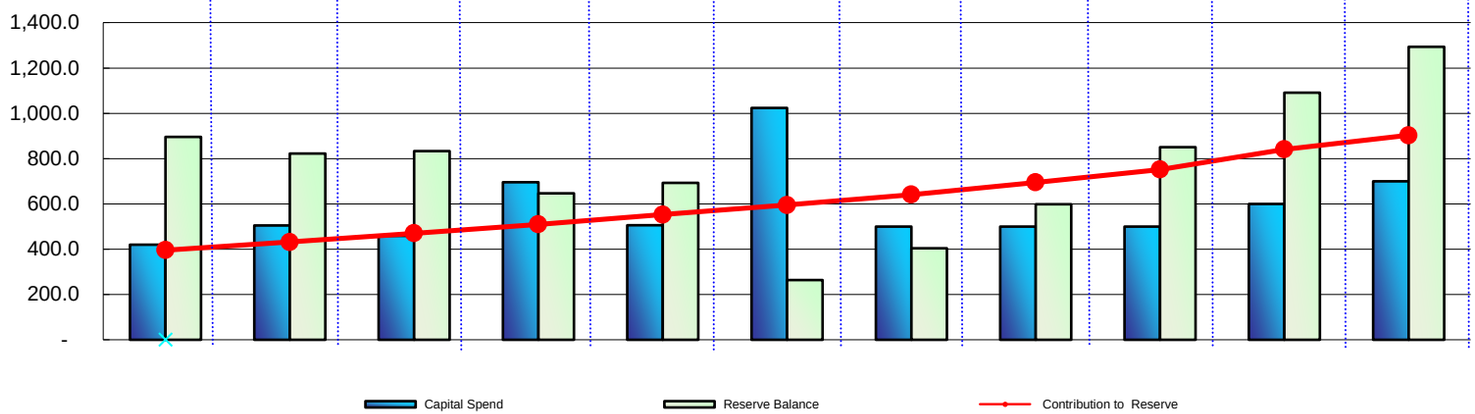
RESERVE FORECAST & CASH FLOW - TAX BASED 'R & R' RESERVE - **FACILITIES**

Shown in $ 000's	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	11 Year TOTAL
Opening R & R Reserve Balance	**1,315.7**	**(1,813.8)**	**(1,772.1)**	**(2,649.6)**	**(3,028.8)**	**(2,987.5)**	**(3,043.1)**	**(2,776.5)**	**(2,122.6)**	**(1,336.9)**	**719.3**	**1,315.7**
Reserve 'Revenue':												
Share of Cash to Capital	1,008.0	1,106.6	1,210.9	1,322.6	1,441.0	1,566.3	1,696.6	1,832.2	1,973.3	2,196.9	2,349.6	17,704.0
Reserve Balance Interest (@ 2.20%)	(5.4)	(39.0)	(48.1)	(61.8)	(65.5)	(65.6)	(63.3)	(53.3)	(37.6)	(6.7)	22.4	(423.9)
Total Revenue/Funding	**1,002.6**	**1,067.6**	**1,162.8**	**1,260.8**	**1,375.5**	**1,500.7**	**1,633.3**	**1,778.9**	**1,935.7**	**2,190.2**	**2,372.0**	**17,280.1**
Funding Requests:												
Total Funding Requests	**4,132.1**	**1,025.9**	**2,040.3**	**1,640.0**	**1,334.2**	**1,556.3**	**1,366.7**	**1,125.0**	**1,150.0**	**134.0**	**1,750.0**	**17,254.5**
Closing R&R Reserve Balance	**(1,813.8)**	**(1,772.1)**	**(2,649.6)**	**(3,028.8)**	**(2,987.5)**	**(3,043.1)**	**(2,776.5)**	**(2,122.6)**	**(1,336.9)**	**719.3**	**1,341.3**	**1,341.3**



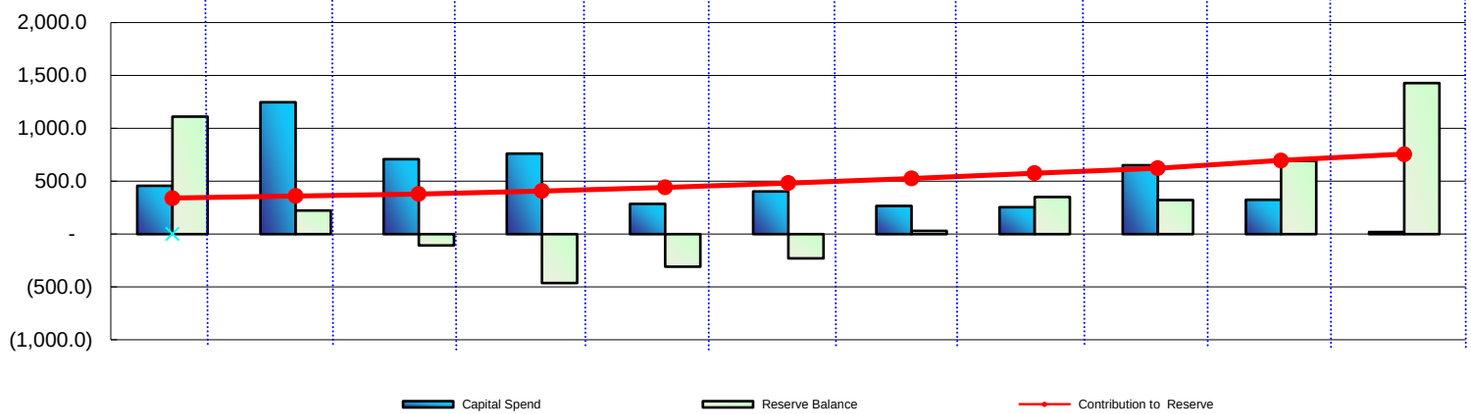
RESERVE FORECAST & CASH FLOW - TAX BASED 'R & R' RESERVE - **FLEET**

Shown in $ 000's	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	11 Year TOTAL
Opening R & R Reserve Balance	**920.2**	**896.1**	**822.6**	**833.4**	**646.9**	**693.1**	**263.9**	**404.2**	**598.7**	**850.7**	**1,091.4**	**920.2**
Reserve 'Revenue':												
Share of Cash to Capital	376.1	412.8	451.8	493.4	537.6	584.4	633.0	683.6	736.2	819.6	876.6	6,605.1
Reserve Balance Interest (@ 2.20%)	19.8	18.7	18.0	16.1	14.6	10.4	7.3	10.9	15.8	21.1	26.0	178.7
Total Revenue/Funding	**395.9**	**431.5**	**469.8**	**509.5**	**552.2**	**594.8**	**640.3**	**694.5**	**752.0**	**840.7**	**902.6**	**6,783.8**
Funding Requests:												
Total Funding Requests	**420.0**	**505.0**	**459.0**	**696.0**	**506.0**	**1,024.0**	**500.0**	**500.0**	**500.0**	**600.0**	**700.0**	**6,410.0**
Closing R&R Reserve Balance	**896.1**	**822.6**	**833.4**	**646.9**	**693.1**	**263.9**	**404.2**	**598.7**	**850.7**	**1,091.4**	**1,294.0**	**1,294.0**



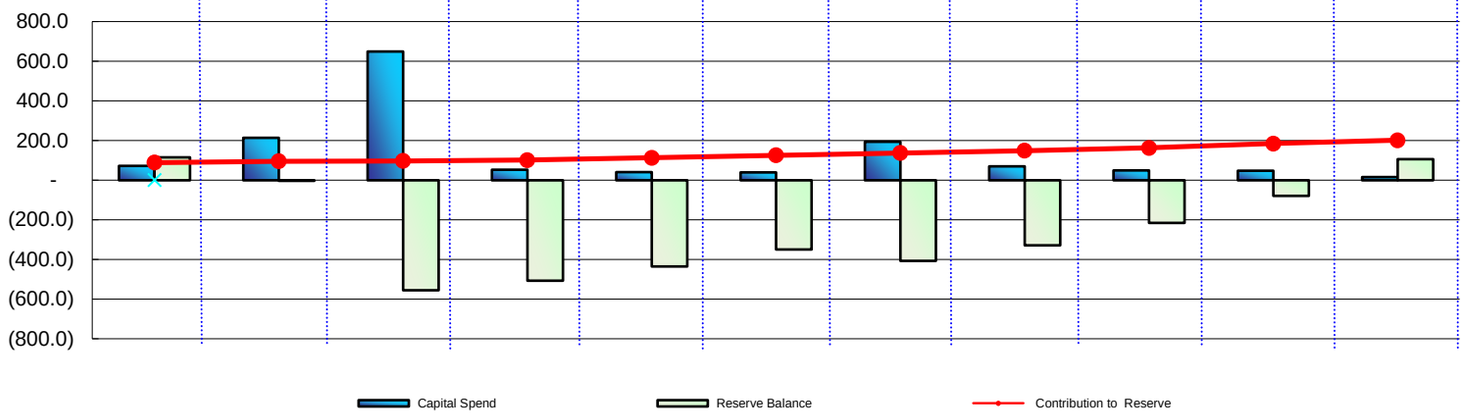
RESERVE FORECAST & CASH FLOW - TAX BASED 'R & R' RESERVE - **PARKS & RECREATION**

Shown in $ 000's	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	11 Year TOTAL
Opening R & R Reserve Balance	**1,229.8**	**1,112.2**	**223.6**	**(106.9)**	**(462.8)**	**(308.0)**	**(229.3)**	**30.8**	**351.5**	**322.3**	**693.7**	**1,229.8**
Reserve 'Revenue':												
Share of Cash to Capital	314.4	345.2	377.7	412.5	449.5	488.6	529.2	571.5	615.5	685.3	732.9	5,522.3
Reserve Balance Interest (@ 2.20%)	25.5	14.5	1.3	(6.2)	(8.4)	(5.8)	(2.2)	4.2	7.3	11.1	23.1	64.4
Total Revenue/Funding	**339.9**	**359.7**	**379.0**	**406.3**	**441.1**	**482.8**	**527.0**	**575.7**	**622.8**	**696.4**	**756.0**	**5,586.7**
Funding Requests:												
Total Funding Requests	**457.5**	**1,248.3**	**709.5**	**762.3**	**286.3**	**404.1**	**266.9**	**255.0**	**652.0**	**325.0**	**20.0**	**5,386.8**
Closing R&R Reserve Balance	**1,112.2**	**223.6**	**(106.9)**	**(462.8)**	**(308.0)**	**(229.3)**	**30.8**	**351.5**	**322.3**	**693.7**	**1,429.7**	**1,429.7**



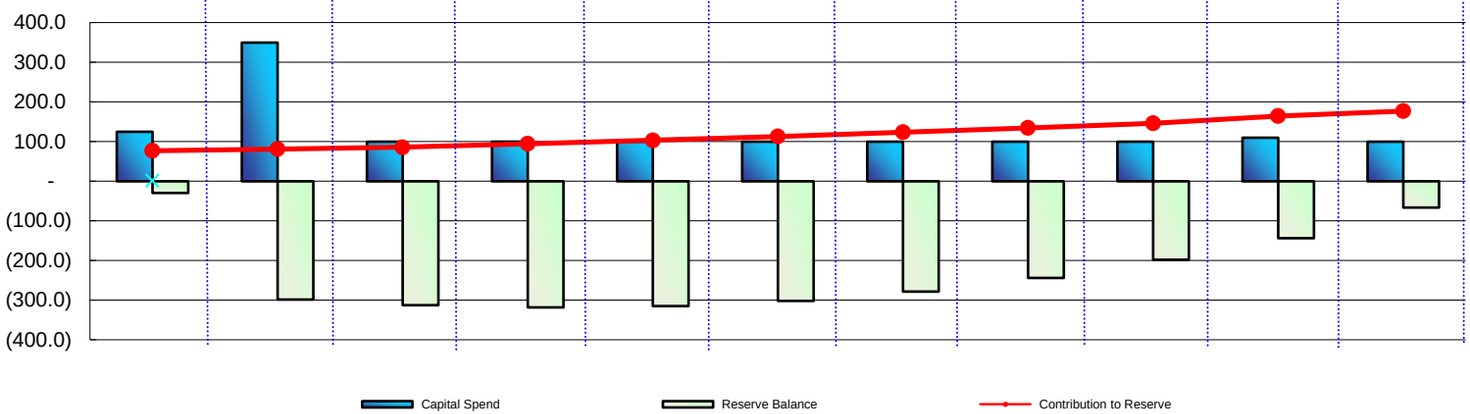
RESERVE FORECAST & CASH FLOW - TAX BASED 'R & R' RESERVE - **INFORMATION TECHNOLOGY**

Shown in $ 000's	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**11 Year TOTAL**
Opening R & R Reserve Balance	**100.0**	**115.8**	**(2.7)**	**(555.1)**	**(506.8)**	**(434.9)**	**(349.2)**	**(406.6)**	**(328.2)**	**(215.1)**	**(78.6)**	**100.0**
Reserve 'Revenue':												
Share of Cash to Capital	86.3	94.8	103.7	113.2	123.4	134.1	145.3	156.9	169.0	188.1	201.2	1,516.0
Reserve Balance Interest (@ 2.20%)	2.3	1.2	(6.1)	(11.6)	(10.2)	(8.5)	(8.2)	(8.0)	(5.9)	(3.2)	0.3	(57.9)
Total Revenue/Funding	**88.6**	**96.0**	**97.6**	**101.6**	**113.2**	**125.6**	**137.1**	**148.9**	**163.1**	**184.9**	**201.5**	**1,458.1**
Funding Requests:												
Total Funding Requests	**72.8**	**214.5**	**650.0**	**53.4**	**41.3**	**39.9**	**194.5**	**70.5**	**50.0**	**48.4**	**16.3**	**1,451.5**
Closing R&R Reserve Balance	**115.8**	**(2.7)**	**(555.1)**	**(506.8)**	**(434.9)**	**(349.2)**	**(406.6)**	**(328.2)**	**(215.1)**	**(78.6)**	**106.6**	**106.6**



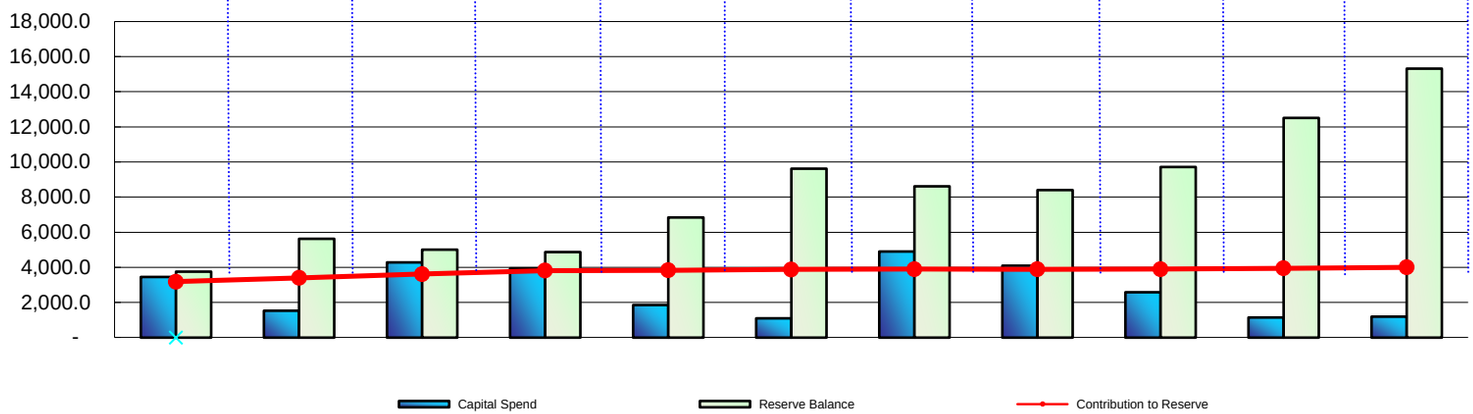
RESERVE FORECAST & CASH FLOW - TAX BASED 'R & R' RESERVE - **DISCRETIONARY**

Shown in $ 000's	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	11 Year TOTAL
Opening R & R Reserve Balance	**18.5**	**(29.4)**	**(298.5)**	**(312.6)**	**(318.3)**	**(314.9)**	**(301.8)**	**(278.3)**	**(243.9)**	**(197.9)**	**(143.6)**	**18.5**
Reserve 'Revenue':												
Share of Cash to Capital	77.2	84.6	92.4	101.2	110.3	119.8	129.8	140.1	150.8	168.0	179.6	1,353.8
Reserve Balance Interest (@ 2.20%)	(0.1)	(3.6)	(6.6)	(6.9)	(6.9)	(6.7)	(6.3)	(5.7)	(4.8)	(3.7)	(2.3)	(53.6)
Total Revenue/Funding	**77.1**	**81.0**	**85.8**	**94.3**	**103.4**	**113.1**	**123.5**	**134.4**	**146.0**	**164.3**	**177.3**	**1,300.2**
Funding Requests:												
Accessibility Committee Projects (pg 16)	**125.0**	**350.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**110.0**	**100.0**	**1,385.0**
Closing R&R Reserve Balance	**(29.4)**	**(298.5)**	**(312.6)**	**(318.3)**	**(314.9)**	**(301.8)**	**(278.3)**	**(243.9)**	**(197.9)**	**(143.6)**	**(66.3)**	**(66.3)**



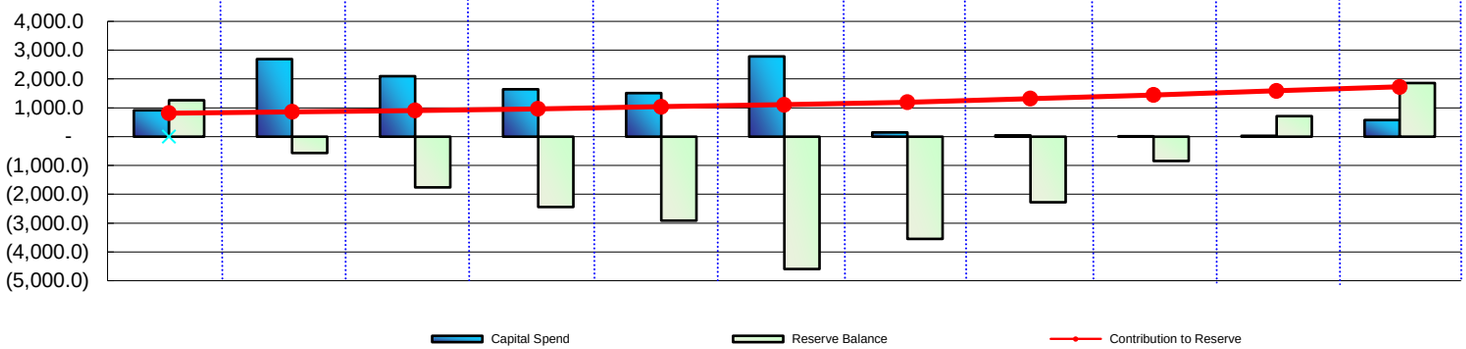
RESERVE FORECAST & CASH FLOW - RATE BASED RESERVE BALANCES

Shown in $ 000's	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	11 Year TOTAL
Water / Wastewater Reserve Balance	(119.9)	658.6	1,791.0	1,800.6	2,557.6	4,253.4	6,647.0	5,655.9	6,733.4	8,182.2	10,745.2	(119.9)
Storm Water Reserve Balance	4,148.8	3,099.5	3,887.2	3,209.6	2,315.7	2,589.7	2,975.2	2,960.6	1,671.2	1,535.1	1,766.9	4,148.8
Total "Rates" Reserve Balances	**4,028.9**	**3,758.1**	**5,678.2**	**5,010.2**	**4,873.3**	**6,843.1**	**9,622.2**	**8,616.5**	**8,404.6**	**9,717.3**	**12,512.1**	**4,028.9**
Reserve 'Revenue':												
NET From Water User Charges	1,500.0	1,600.0	1,700.0	1,800.0	1,800.0	1,800.0	1,800.0	1,800.0	1,800.0	1,800.0	1,800.0	19,200.0
NET From Wastewater User Charges	600.0	700.0	800.0	900.0	900.0	900.0	900.0	900.0	900.0	900.0	900.0	9,300.0
From Storm Water User Charges (Commencing in 2018 increasing at 2.5% per year)	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	11,000.0
Water / Wastewater Reserve Bal Int @ 2.20%	5.8	26.7	39.1	47.4	74.1	118.6	133.8	134.8	162.3	206.0	261.5	1,210.1
Storm Water Reserve Bal Int @ 2.20%	78.9	76.0	77.2	60.1	53.4	60.5	64.6	50.4	34.9	35.9	41.3	633.2
Total Revenue/Funding	**3,184.7**	**3,402.7**	**3,616.3**	**3,807.5**	**3,827.5**	**3,879.1**	**3,898.4**	**3,885.2**	**3,897.2**	**3,941.9**	**4,002.8**	**41,343.3**
Funding Requests:												
Water / Wastewater Funding Needs	1,327.3	1,194.3	2,529.5	1,990.5	1,078.3	425.0	3,824.9	1,757.3	1,413.4	343.1	414.3	16,297.8
Storm Water Funding Needs	2,128.2	288.3	1,754.8	1,954.0	779.4	675.0	1,079.2	2,339.8	1,171.0	804.0	781.4	13,755.2
Total Funding Requests	**3,455.5**	**1,532.6**	**4,284.3**	**3,944.4**	**1,857.7**	**1,100.0**	**4,904.1**	**4,097.1**	**2,584.5**	**1,147.1**	**1,195.7**	**30,053.0**
Ending R&R Reserve Balance	**3,758.1**	**5,628.2**	**5,010.2**	**4,873.3**	**6,843.1**	**9,622.2**	**8,616.5**	**8,404.6**	**9,717.3**	**12,512.1**	**15,319.2**	**15,319.2**



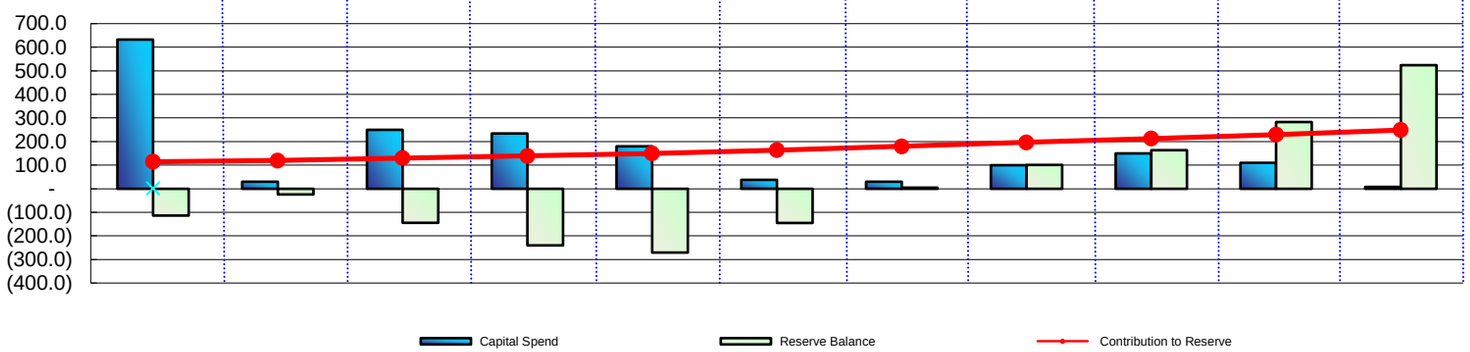
RESERVE FORECAST & CASH FLOW - GROWTH & NEW RESERVE

Shown in $ 000's	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	11 Year TOTAL
Opening G & N Reserve Balance	1,367.1	1,263.6	(565.0)	(1,758.3)	(2,437.6)	(2,911.4)	(4,589.5)	(3,544.9)	(2,274.6)	(842.6)	712.6	1,367.1
Opening Federal Gas Tax Reserve Balance	-	-	-	-	-	-	-	-	-	-	-	-
Total R & R Reserve Balance	**1,367.1**	**1,263.6**	**(565.0)**	**(1,758.3)**	**(2,437.6)**	**(2,911.4)**	**(4,589.5)**	**(3,544.9)**	**(2,274.6)**	**(842.6)**	**712.6**	**1,367.1**
Reserve 'Revenue':												
Share of Cash to Capital	783.6	854.8	930.1	1,010.8	1,096.4	1,186.9	1,281.0	1,379.0	1,480.9	1,586.9	1,697.2	13,287.6
Reserve Balance Interest (@ 2.20%)	28.6	7.6	(25.3)	(45.7)	(58.2)	(81.6)	(88.5)	(63.3)	(33.9)	(1.4)	28.0	(333.7)
Total Revenue/Funding	**812.2**	**862.4**	**904.8**	**965.1**	**1,038.2**	**1,105.3**	**1,192.5**	**1,315.7**	**1,447.0**	**1,585.5**	**1,725.2**	**12,953.9**
Funding Requests:												
From G & N Reserve Only (page 49)	915.7	2,691.1	2,098.1	1,644.5	1,512.0	2,783.4	147.9	45.3	15.0	30.3	576.8	12,460.1
Total Funding Requests	**915.7**	**2,691.1**	**2,098.1**	**1,644.5**	**1,512.0**	**2,783.4**	**147.9**	**45.3**	**15.0**	**30.3**	**576.8**	**12,460.1**
Ending R&R Reserve Balance	**1,263.6**	**(565.0)**	**(1,758.3)**	**(2,437.6)**	**(2,911.4)**	**(4,589.5)**	**(3,544.9)**	**(2,274.6)**	**(842.6)**	**712.6**	**1,860.9**	**1,860.9**



RESERVE FORECAST & CASH FLOW - STUDIES & OTHER RESERVE

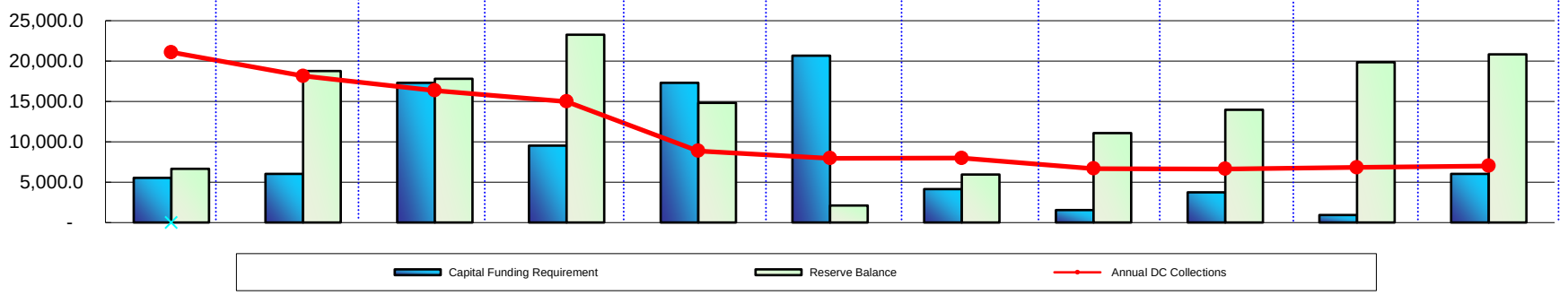
Shown in $ 000's	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	11 Year TOTAL
Opening S & O Reserve Balance	405.0	(113.4)	(24.0)	(144.2)	(239.8)	(270.3)	(144.9)	4.9	101.2	163.6	283.1	405.0
Total R & R Reserve Balance	**405.0**	**(113.4)**	**(24.0)**	**(144.2)**	**(239.8)**	**(270.3)**	**(144.9)**	**4.9**	**101.2**	**163.6**	**283.1**	**405.0**
Reserve 'Revenue':												
Share of Cash to Capital	110.9	120.9	131.6	143.0	155.1	167.9	181.3	195.1	209.5	224.5	240.1	1,880.1
Reserve Balance Interest (@ 2.20%)	3.2	(1.5)	(1.8)	(4.2)	(5.6)	(4.5)	(1.5)	1.2	2.9	4.9	8.8	1.9
Total Revenue/Funding	**114.1**	**119.4**	**129.8**	**138.8**	**149.5**	**163.4**	**179.8**	**196.3**	**212.4**	**229.4**	**248.9**	**1,882.0**
Funding Requests:												
From S & O Reserve Only (page 49)	632.5	30.0	250.0	234.5	180.0	38.0	30.0	100.0	150.0	110.0	8.0	1,763.0
Total Funding Requests	**632.5**	**30.0**	**250.0**	**234.5**	**180.0**	**38.0**	**30.0**	**100.0**	**150.0**	**110.0**	**8.0**	**1,763.0**
Ending R&R Reserve Balance	**(113.4)**	**(24.0)**	**(144.2)**	**(239.8)**	**(270.3)**	**(144.9)**	**4.9**	**101.2**	**163.6**	**283.1**	**524.0**	**524.0**



DEVELOPMENT CHARGES - LONG TERM CASH FLOW AND RESERVE BALANCES

TOTAL

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Project Total
Opening Balance	**(8,891.6)**	**6,649.0**	**18,757.9**	**17,798.3**	**23,253.0**	**14,816.0**	**2,105.5**	**5,942.0**	**11,071.7**	**13,958.2**	**19,850.0**	**(8,891.6)**
Reserve 'Revenue':												
Contribution from Developers	21,094.0	17,854.2	15,939.9	14,530.2	8,446.2	7,765.3	7,885.9	6,485.7	6,352.3	6,451.6	6,552.9	119,358.2
Reserve Balance Interest (@ 2.20%)	(24.4)	276.4	397.7	446.7	414.2	184.1	87.6	185.1	272.3	367.8	442.5	3,050.1
Total Revenue	**21,069.6**	**18,130.6**	**16,337.6**	**14,976.8**	**8,860.4**	**7,949.4**	**7,973.5**	**6,670.8**	**6,624.7**	**6,819.5**	**6,995.5**	**122,408.4**
Funding Requests:												
Capital Requirement	2,934.8	3,108.1	14,402.8	6,649.3	14,431.4	17,800.4	3,183.4	882.7	3,085.0	279.3	5,378.3	72,135.5
Operating Requirement	2,594.2	1,013.7	994.5	972.9	966.0	959.5	953.5	658.4	653.2	648.3	643.8	11,058.0
Developer DC Credible Work	-	1,900.0	1,900.0	1,900.0	1,900.0	1,900.0	-	-	-	-	-	9,499.8
Total Requirements	**5,529.0**	**6,021.7**	**17,297.2**	**9,522.1**	**17,297.3**	**20,659.9**	**4,136.9**	**1,541.1**	**3,738.2**	**927.7**	**6,022.1**	**92,693.3**
Ending R&R Reserve Balance	**6,649.0**	**18,757.9**	**17,798.3**	**23,253.0**	**14,816.0**	**2,105.5**	**5,942.0**	**11,071.7**	**13,958.2**	**19,850.0**	**20,823.4**	**20,823.4**



APPENDIX 4 - 18 YEAR VEHICLE/EQUIPMENT REPLACEMENT SCHEDULE

IES OPERATIONS VEHICLE REPLACEMENT SCHEDULE – 2006 TO 2023

Number	Year	MakeModel	Attachments	Dpt	Life	Qty	Cost	Reserve	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Pick-up Truck 1/2 Ton																														
2	2007	Ford F 150		R	10	1	30	3												30										
3	2010	Chev Silverado		R	10	1	30	3															30							
5	2010	Chev Silverado		R	10	1	30	3															30							
10	1999	Chev/1500		R	10	1	30	3				30										30								
13	2004	GMC Sierra		R	10	1	30	3									30													
14	2007	Ford F150		W	10	1	30	3												30										
22	2010	Chev Silverado		R	10	1	30	3															30							
Pick-up Truck 3/4,1Ton ,4x4,CC																														
8	2003	Ford/F250	Plow,Sander	R	10	1	45	4.5								45										45				
Van																														
6	1999	Chev/1500		W	10	1	30	3				30										30								
9	1997	Ford Aerostar		W	10	1	30	3			30			30							30									
11	2005	GMC Savani		W	10	1	45	4.5										45												
12	2005	GMC Savana		W	10	1	45	4.5										45												
20	2010	Chev Express		W	10	1	45	4.5															45							
21	2010	Chev Express		W	10	1	45	4.5															45							
Truck 1 Ton,Stake,Flat,Dump																														
15	1999	GMC/3500		W	10	1	70	7				70										70								
16	2007	GMC/5500 3ton dump		R	10	1	80	8																						
18	1999	GMC/K3500	HoistPlowSdr	R	10	1	80	8				80								80		80								80
Speciality Truck																														
19	2005	Ford/F450	Sign Body	R	12	1	90	7.500												86										
Dump Truck 6 Ton																														
25	2008	Freightliner	Plow, Spread	R	15	1	190	12.6667																						
26	1999	Int/4900	Plow,Spread	R	15	1	180	12						190			180													
27	2010	Freightliner	Plow/Spreader	R	15	1	190	12																				190		
29	2002	Frt/FL80	Plow,Spread	R	15	1	180	12												180										
30	2003	Frt/FL80	Plow,Spread	R	15	1	180	12													180									
31	2004	Frt/FL80	Plow,Spread	R	15	1	180	12														180								
33	2007	Frt/FL80	Plow,Spread	R	15	1	180	12																	180					
Sewer Flusher																														
32	1994	Int/2554	Pumps,Tanks	W	12	1	250	20.833		275													275							
Road Sweeper																														
40	2010	Pelican		R	12	1	200	16.667																	200					
Road Grader																														
38s	1970	Champ/D60(	Plow, Wing	R	35	1	0	0.000																						
Backhoe Loader																														
41	1993	Cat/416B	Backhoe/Load	R	12	1	145	12.083		145				145								145								
43	2008	Catepillar/42	Backhoe	R	12	1	155	12.917															155							
44	2001	Cat/924G	2.5 Loader	R	12	1	180	15								180														
Tractor																														
46	2003	Trackless	Spreader	R	12	1	110	9.167										110												
47	2002	JD/4310		R	12	1	36	3.000									36													
48	2002	JD/4310		R	12	1	36	3.000									36													
Air Compressor																														
51	1991	GardDen	Jhammer/#52	R	20	1	10	0.500						10																
Steamer																														
54	1996	Thompson	SteamJenny	R	15	1	15	1						15																
Sewer Camera																														
108	1998	Ratech		W	15	1	15	1.000								15														
Trailer																														
87	1988	/Tandem		R	20	1	10	0.5			10																			
Asphalt Equipment																														
86	1988	Bomag/Roller/Trailer		R	20	1	15	0.750			15			15																
88	1998	Bartell/SP86/Grinder		R	20	1	25	1.250														25								
Mower																														
Misc PW Equipment																														
114	1998	Hoe Pak	for # 41	W	20	1	20	1.000														20								
Ice Resurfacer																														
Various Small Equipment																														
		< $10,000 each		W	5		50	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10				
		< $10,000 each		R	5		75	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15				
GrossTotal						**41**	**3442**	**288**	**25**	**445**	**80**	**235**	**25**	**430**	**25**	**265**	**307**	**225**	**25**	**431**	**280**	**560**	**635**	**25**	**405**	**70**				
Total Net of 10% salvage								260	23	401	72	212	23	387	23	239	276	203	23	388	252	504	572	23	365	63				
Total Net of 4% ROI (example			824.5					227																						

SUMMARY		Gross	Net of Salvage	Net of Interest&Salvage
Water	W	66.83	60.18	55.602
Roads	R	221.50	199.44	184.28
Parks	P	0.00	0.00	0
Leisure	L	0.00	0.00	0
		288.33	**259.62**	**239.9**

Note:

1. Equipment Life; Pick-ups/Vans/1Ton Truck - 10, Sweeper/Loader/Flusher/Tractor - 12, Dump Truck/Large Mowers/Trailer - 15
2. Equipment due in2005 and prior and not replaced is listed as Overdue (OD).
3. Total quantity of equipment does not include the "varius small equipment"
4. The $$ under each year for "small equipment" represents an average replacement expenditure each year for units under $10,000 each.
5. The Reserve contribution for each unit will automatically recalculate if the life or replacement cost is changed
6. The column total and the "User Group Summary" will recalculate when the numbers in the columns are changed or moved. The numbers in the year columns must be altered manually.
7. The "life" chosen for the "small equipment groups" is an estimate to generate some annual budget totals. The users wil need to evaluate the individual units and prepare an annual plan.
8. All cost figures are in thousands.
9. "Cost" is the current estimated replacement in 2006 $$.
10. Total annual requirements have been reduced by an estimated 10% salvage (see Chart 2).
11. The suffix "s" to the unit number denotes a spare unit that does not contribute to the reserve and is not to be replaced.

PARKS/IES FACILITIES VEHICLE/EQUIPMENT REPLACEMENT SCHEDULE - 2006 TO 2023

Number	Year	Make	Model	Attachments	Dpt	Life	Qty	Cost	Reserve	OD
BY-LAW VEHICLES										
400	2008	Smart	Car		B/L	10	1	19	1.9	
403	2009	Toyota	Tacoma, 1/2ton p/up		B/L	10	1	25	2.5	
404	2013	Ford	Escape SUV		B/L	10	1	28	2.8	
Pick-up Truck 1/2 Ton										
200	2008	GMC	Sierra		P	10	1	30	3	
212	2010	Chev	Silverado		P	10	1	30	3	
224	2008	GMC	Sierra-Crew Cab		P	10	1	50	5	
248	2002	Ford	F150		P	10	1	30	3	
250	2004	Ford	F150		P	10	1	30	3	
500	2003	Ford	F150		F	10	1	30	3	
503	2008	Chev	pick up		F	10	1	30	3	
504	2010	Chev	Silvera 1/2 Ton	p/up	F	10	1	30	3	
Pick-up Truck 3/4,1Ton ,4x4,CC										
201	2012	Ford	F150	3/4 ton p/up	P	10	1	35	3.5	
202	2003	Ford	F350	Plow	P	10	1	50	5	
203	2011	Ford	F350	p/up crewcab	P	10	1	50	5	
204	2011	Chev	Silvera	3/4 ton p/up	P	10	1	35	3.5	
205	2013	Ford	F250	3/4 ton p/up	p	10	1	35	3.5	
206	2013	Ford	F250	3/4 ton p/up	P	10	1	35	3.5	
207	2010	GMC	Sierra 3500HD		P	10	1	50	5	
Van										
501	2005	GMC/Savan	3/4 Ton		F	10	1	35	3.5	
505	2012	Nissan	NV2£	1/2 Ton	F	10	1	35	3.500	
Truck 1 Ton,Stake,Flat,Dump										
226	2011	Ford	F350	1 ton dump bx	P	10	1	50	5	
228	2008	Chev Sierra	GMC 1 Ton Du		P	10	1	55	5.500	
251	2004	Chev	Silvera	Dump	P	10	1	45	4.5	
252	2004	Chev	Silvera	Dump	P	10	1	45	4.5	
Speciality Truck										
242	1999	Chev/1 Ton	Garbage Comp		P	15	1	90	6.000	
Dump Truck 6 Ton										
Sewer Flusher										
Road Sweeper										
Road Grader										
Backhoe Loader										
225	2007	CAT	24B-24(	Skid Steer Loa	P	12	1	50	4.167	
238	2008	Back Hoe	420E IT		P	12	1	155	12.917	
Tractor										
219	2002	New Holland	4x4	Loader	P	12	1	60	5.000	
221	2002	New Holland	4x4	Loader	P	12	1	60	5.000	
223	1995	JD/5400			P	12	1	36	3.000	
240	2008	JD/4320	Tractor		P	12	1	40	3.333	
241	2008	JD/5225	Tractor		P	12	1	80	6.667	
257	2010	JD/997	ZTrack		P	12	1			
599	2007	Kubolta	4x4	Tractor	L	12	1	40	3.333	
Air Compressor										

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APPENDIX 5 - ASSET MANAGEMENT RELATED SOFTWARE

WORKPLACE ASSET MANAGEMENT SYSTEM (WAMS): MAXIMO

Goal: The intent of a developing a new Workplace Asset Management System (WAMS) for the Town was to assist in the planning, management and administrative functions that are essential for the successful maintenance and management of the Town's assets. The WAMS is intended to be used by multiple Town departments and will serve as an operational and management tool for managing work orders and their transactional workflows. The selected tool for the WAMS is Maximo, an enterprise asset management software solution by IBM.

Implementation Date: Maximo was implemented in May 2013

Status: Maximo is being used for work and maintenance management and is integrated with GIS. Staff are creating and closing work orders and tying them to Town assets. The Customer Service team is using the Self Service component to submit service requests for staff to review and take action. Staff will be piloting mobile devices in 2015 that will allow users to connect to Maximo in the field in real time. This will allow users to complete work orders as the work is being done and not after-the-fact in the office.

GEOGRAPHIC INFORMATION SYSTEM: ESRI ARCGIS

Goal: Capture all infrastructure data sets digitally.

Implementation Date: ESRI ArcGIS was first utilized in the Planning and Development Services Department in 2002. In 2008, the Infrastructure & Environmental Services (IES) Department began to track the asset data spatially. These data sets include: water (e.g. valves, water mains), wastewater (e.g. pipes, manholes), storm (e.g. pipes, manholes, swmp) and streets (e.g. lighting, signs). All other data sets outside of IES are maintained by Planning.

Status: Asset data is represented spatially and currently undergoing QA/QC to populate the attribute data. This is being done on a street by street basis, and all assets on the street are being reviewed and updated where applicable. ArcGIS has been used to create an IES Infrastructure web map that can be used internally by Staff to show asset locations. When users click on an assets, a list of attributes are displayed in the table and there are hyperlinks that will open the design drawings and any CCTV video files as applicable.

REFERENCE INFORMATION MANAGEMENT: DRAWINGS DATABASE

Goal: Digital repository of all construction and as-built infrastructure drawings.

Implementation Date: 2009

Status: Microsoft Access Database maintained by IES that catalogues all drawing sets. The drawings have been scanned as PDF and or TIF images. The images are geo-referenced and can be brought into ArcGIS for asset digitization purposes. New drawings are added based on development and reconstruction projects. Starting in 2015, facility drawings are being scanned and added to the database.

AUTOMATED VEHICLE LOCATION (AVL): WEBTECH WIRELESS

Goal: GPS monitoring of sidewalk and snow plow truck routes during the winter maintenance season.

Implementation Date: Winter Season 2012/13

Status: Third year of program, ability to track plows in real-time or select historical data based on user-defined requirements. Query all vehicles or specific ones, run reports (activity summary, stops) and utilize breadcrumbs to playback route progress. New for the 2014/15 winter season was the development and implementation of the "Where's My Snowplow" web map. This public facing website allowed residents and Staff to see what roads had been plowed and when they were completed.

CONDITION ASSESSMENT TOOLS

Goal: Review/assign asset condition rating based on field observations

Implementation Date:
Roads – InfraPave Pavement Condition Index (PCI), 2002
Roads – Pavement Condition Data Collection and Stantec RoadMatrix software, Target 2015/2016
Sanitary & Storm – CCTV, digital records initiated in 2008 and ongoing
Sidewalk – RoutePatrol Manager for Sidewalks, 2013

Status:
Roads – InfraPave is software developed by Aecom (formerly EarthTech) that is used to assess the condition of pavement distresses on accordance with the Canadian Public Works Association's Pavement Condition Index (PCI) rating. The PCI is a 0 to 100-scale measurement to describe pavement condition. Inspections began in 2002 and have been reinspected on a 3-5 year cycle (2005, 2010). The Town is currently reviewing other options to assess pavement conditions

Roads – Road Matrix is software developed by Stantec that is used to assess the condition of pavement distresses. This software was purchased in 2015 to replace the outdated InfraPave system. The Town is undergoing a data collection exercise wherein the vendor will use their vehicles to inspect Town's road network, identifying, classifying and measuring individual pavement distresses. Right-of-Way (ROW) images will also be collected. The data will be imported into Road Matrix and this software and its built-in decision support tools will be configured to analyse the data to generate new PCI ratings that will guide and or support the Town's 10 Year Road Reconstruction Plans.

Sanitary & Storm – CCTV video inspections for sanitary pipes, maintenance holes, storm pipes and maintenance holes is being collected annually. Data is being stored on a network computer and is used to assess underground infrastructure. The CCTV video files are being linked to the applicable GIS asset feature(s). Through the use of the IES Infrastructure web map, Staff can now click on an asset and open the video for review as needed.

Sidewalk – Route Patrol Manager (RPM) is GPS integrated road patrolling and maintenance management software from R. J. Burnside. RPM identifies deficiencies with Town related assets such as roads, sidewalks and light poles. It also captures road conditions, air and pavement temperature. RPM tracks these deficiencies and conditions from the time they are added in the field to the time they are completed, ensuring compliance with the Town's level of

service. RPM also provides detailed reports and maps showing when roads were patrolled and the exact time the deficiencies were identified and repaired. You can also use RPM to view previous patrol routes and historical asset deficiencies.

Trimble GPS Unit – The Trimble GPS Unit provides field workers with a reliable tool to collect, verify, maintain and locate various Town owned assets with high precision and accuracy. A GPS Unit can be used to collect GIS asset data such as Sanitary Pipes, Hydrants, Sidewalks, etc. in real time situations. It also gives you the ability to locate buried or snow covered assets. It not only allows you to capture the spatial component but also gives you the option of entering as much attribute information about an asset as you wish. This improves the accuracy and reliability of data in various Town applications. With this tool in place, the service levels provided by our IES Operations and Parks Divisions will be enhanced. These employees will have the ability to make better decisions by accessing current and accurate asset related data through the GPS device while out in the field.

MOBILE DEVICES

Goal: Acquire & configure mobile devices for field inspections and work orders

Implementation Date: Panasonic ToughPad tablets 2015

Status: Through a reliable and secure virtual private network (VPN) connection, Staff is able to use the ToughPad tablets to receive Maximo Service Requests and Work Orders in real-time while out in the field. Staff can also connect to the network to retrieve drawings, CCTV videos, and other documents. The tablets will also be used to pilot software for on-demand water meter readings. UniPro is software developed by Sensus in conjunction with the UniPro Communicator. These tools will allow users to down load meter readings at the meter and generate reports that may be used to detect anomalies in the system (private side leaks, inflow and infiltration) that require rehabilitation.

FUTURE PROJECTS

Water Hydraulic Modelling: Water Modelling Software

Goal: Create a hydraulic model to analyze the Town's water system. The model will utilize physical network information from GIS (pipes, nodes, valves) engineering drawings, and manufacturer specifications in conjunction with network demands (pumping records/stations, treatment records, population). The model can be used to support decisions on master planning, pumping station sizing, infrastructure rehabilitation, system expansion and improvements.

Implementation Date: Target 2015/2016

Status: Currently reviewing software options

Wastewater Hydraulic Modelling: Wastewater Modelling Software

Goal: Create a hydraulic model to analyze the Town's wastewater system. The model will utilize physical network information from GIS (pipes, nodes, valves) engineering drawings, and manufacturer specifications in conjunction with network demands (pumping records/stations, treatment records, population). The model can be used to

support decisions on master planning, pumping station sizing, infrastructure rehabilitation, system expansion and improvements.

Implementation Date: Target 2015/2016

Status: Currently reviewing software options