2016

Toronto Water Budget

2016 Recommended Opearting Budget 2016-2025 Recommended Capital Plan 2016 Recommended Water Pate

Lou Di Gironimo.General Manager Toronto Water Budget Committee.November 6, 2015

Toronto Water at a Glance

- Serve 3.4 million residents and businesses in Toronto, and portions of York and Peel
- Over \$28.3 billion in infrastructure
- Operates facilities 24 hours per day, 365 days per year
- Program is rate-supported no reliance on the property tax base to support Toronto Water operating and capital budgets



Inventory of Assets

Replacement Value \$28.3 Billion

WASTEWATER/STORMWATER - \$19.2 Billion

- 4 wastewater treatment plants
- 7 storage and detention tanks
- 3,716 km of sanitary, 1,411km of combined and 401 km of trunk sewer
- 4,962 km of storm sewers
- 153,980 maintenance holes
- 507,207 sewer service connections
- 84 wastewater pumping stations
- 371 km of watercourses, 84 stormwater management ponds
- 1,855 outfalls & 172,413 catchbasins

WATER - \$9.1 Billion

- 4 water filtration plants
- 11 reservoirs and 4 elevated storage tanks
- 5,524 km of distribution watermains and 550 km of trunk watermains
- 64,003 valves and 41,417 hydrants
- 510,932 water service connections, plus York Region (population served 600,000)
- 18 water pumping stations

Strategic Actions 2013-2018

City Building

- 1. Implement Smart Urban Growth Strategies
- Invest in Culture
- 3. Develop a Long-term Transportation Plan and Policies

Economic Vitality

- 4. Increase Employment Opportunities
- 5. Accelerate Economic Growth

Environmental Sustainability

- 6. Support Environmental Sustainability
- 7. Develop a Long-term Solid Waste Management Strategy

Social Development

- 8. Support Affordable Housing
- 9. Strengthen Neighbourhoods
- 10. Enhance the City's Quality of Life
- 11. Advance Toronto's Motto 'Diversity our Strength'
- 12. Improve Emergency Response and Prevention

Good Governance

- 13. Open Government by Design
- 14. Engage the Public
- 15. Strengthen Public Service Governance
- 16. Strengthen Intergovernmental Relationships
- 17. Enhance the City's Capacity to Serve Toronto's Diversity
- 18. Develop and Implement a Workforce Plan
- 19. Improve Customer Service
- 20. Enhance Performance Measurement
- 21. Improve Organizational Excellence
- 22. Implement Shared Services

Fiscal Sustainability

- 23. Update the Long-term Fiscal Plan
- 24. Improve Service and Financial Planning
- 25. Ensure State of Good Repair for Infrastructure
- 26. Finance the City's Growth

Toronto Water Strategic Plan 2010-2020

Mission Statement

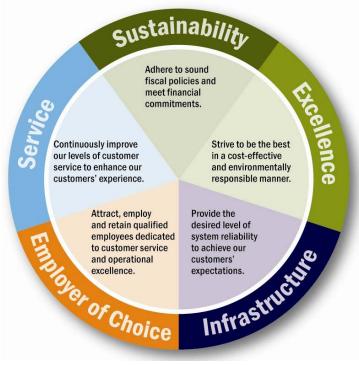
To provide quality water services through supplying drinking water and the treatment of wastewater and stormwater to residents, businesses and visitors in order to protect public health, safety and property in an environmentally and a fiscally responsible manner.

Vision Statement

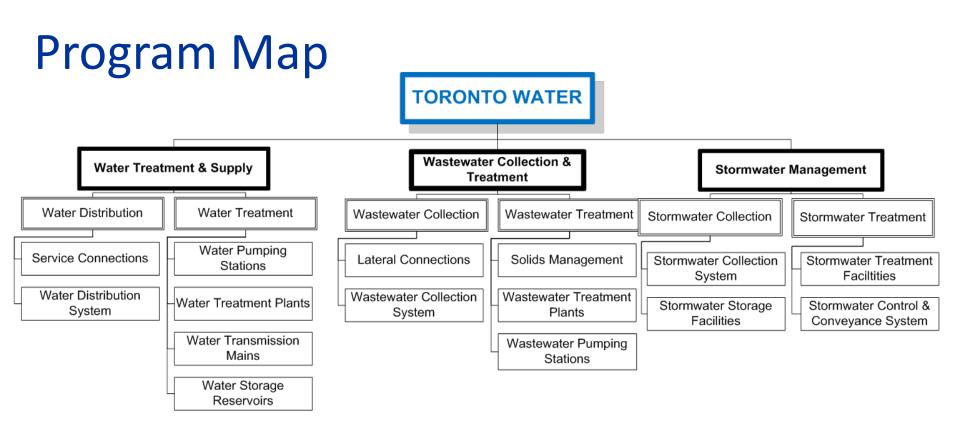
Toronto Water will be a leader in achieving excellence and efficiency in all aspects of water service delivery.

Guiding Principles

- I. Continuous Service Delivery Improvement
- II. Financial Vitality, Viability and Sustainability
- III. Operational Excellence
- IV. Infrastructure Management
- V. Employer of Choice



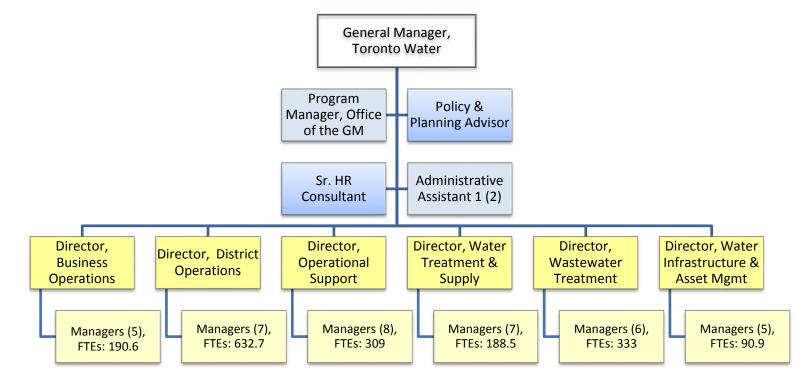
5



Toronto Water – Key Services:

- Water Treatment & Supply: Treat and distribute drinking water in a safe, responsible manner in accordance with all legislated requirements.
- Wastewater Collection & Treatment: Collect and treat wastewater in a safe, responsible manner in accordance with all legislated requirements.
- **Stormwater Management**: Collect and treat stormwater in a safe, responsible manner in accordance with all legislated requirements.

Toronto Water – Organizational Structure



2015 Full and Part Time Staff

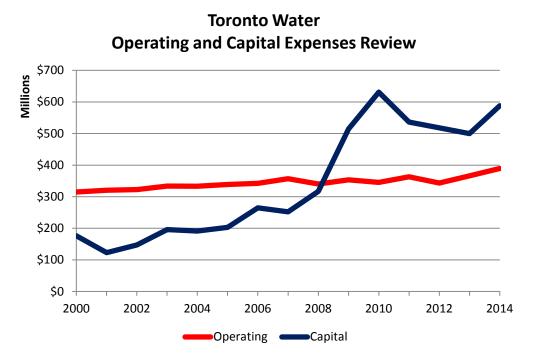
Category	Senior Management	Management	Exempt Professional & Clerical	Union	Total
Permanent	1.0	174.0	170.0	1,311.0	1,656.0
Temporary	0.0	5.0	2.0	93.7	100.7
Total	1.0	179.0	172.0	1,404.7	1,756.7

Toronto Water Program Challenges

Program Challenges

Long-term Financial Stability	Existing 10-year financial plan relies primarily on successive water rate increases to fund continued infrastructure investment and conform with pay-as-you-go financing strategy.
Declining Water Consumption	Downward trend over the last decade, despite population growth. Anticipate base water consumption will continue to decline.
Aging Infrastructure	Significant state of good repair backlog for underground assets; water/wastewater treatment plants and facilities. Currently updating condition assessments on major assets.
Basement Flooding	Significant investment required to manage basement flooding issues across the city.
Strict Regulatory Control & Oversight	Water and wastewater industry continues to experience increased legislative and regulatory reform impacting both operating and capital budgets – i.e. the Federal Effluent Regulations, enacted on July 18, 2012, includes new enforcement activities and potential penalties for non-compliance.
Managing Reserve Balances	Ensuring positive reserve balances during major capital spending years. Simultaneous large scale projects are planned for the next five years.
Consideration of Options for Paying for Toronto Water's Stormwater Management Capital Program	Staff report with consideration of options is on the agenda at the November 13 Budget Committee, as per Council direction, along with a companion report, led by Economic Development, that reviews all costs to manufacturers in Toronto.

Financial Performance (Actual Costs)



Stable Operating Costs

 Operating costs have been growing relatively slowly over the past 15 years except for the past two years.

Capital Spending

- Increased revenue generated by rate increases have been reinvested in infrastructure.
- Capital investment has almost tripled over the last ten years.

Toronto Water 2016 Recommended Operating Budget

Operating Budget Challenges

Maintaining stable operating costs	Continue to find efficiencies while ensuring legislative compliance.
Managing the continuous increase in costs from internal and external sources	Increase in personnel costs, materials and supplies, electricity, chemicals, parts and machinery due to inflation; and greater than inflation increase for some contracted services.
Operating impact of completed capital projects	Process improvements and technological enhancements require additional resources for maintenance.
Asset management & critical response processes	Ensure operational resilience and minimize risks to assets during extreme weather occurrences.
Ongoing service priorities	Ensure efficient and effective response time to customer service demands.
Workforce planning & development	Develop hiring strategies to fill critical, vulnerable and hard to fill positions including on the job training programs.

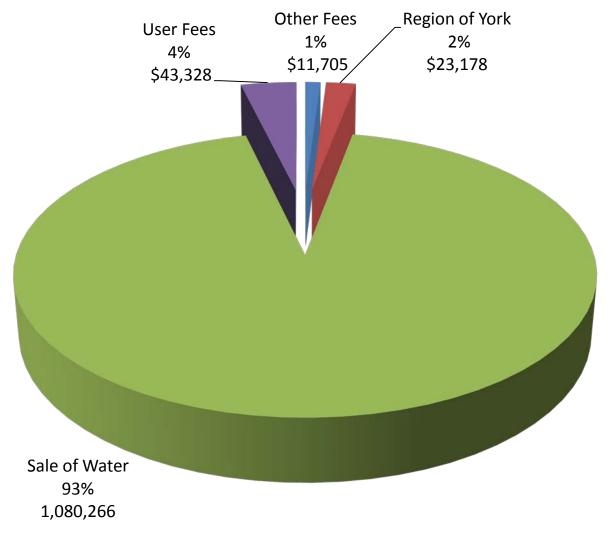
2015 Projected Year End Variance

Budget Variance and Projection to year end:

			2015	2015	2015 Approve	ed
	2013	2014	Approved	Projected	Budget vs Project	cted
(In \$000's)	Actuals	Actuals	Budget	Actuals	Actuals	
	\$	\$	\$	\$	\$	%
Gross Expenditures	373,896	397,604	438,450	430,803	7,646	1.7%
Revenues	972,627	1,017,417	1,081,135	1,063,937	(17,198)	-1.6%
Capital Contribution	598,731	619,813	642,685	633,133	(9,552)	-1.5
Approved Positions	1,726.8	1,751.7	1,758.7	1,598.7	160.0	9.1%

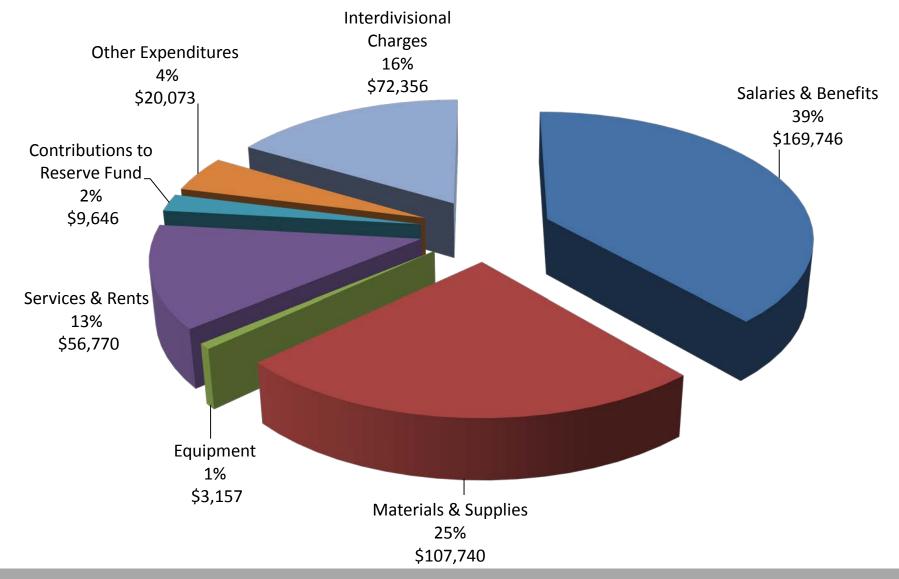
- Toronto Water is projecting revenues from the sale of water to be 1.6% below target.
- This results in a forecasted year-end deficit of \$9.55 million.

2016 Operating Budget Funding Sources (\$millions) \$1.158 Billion



2016 Operating Budget by Service (\$millions) \$1.158 Billion Water Treatment & Supply 17% \$194,207 Wastewater Treatment 19% \$221,936 Stormwater Management **Capital Contribution** 2% 62% \$23,345 \$718,990

2016 Operating Budget by Expenditure (\$millions) \$439.489 Million (Gross)



16

2016 Recommended Base Budget

	BASE BUDGET COMPARISON (\$000s)					
(in \$000's)	2015 Approved	2016 Budget	\$ Increase			
(11 \$000 \$)	Budget	Recommended	(Decrease)	% Incr. (Decr.)		
Gross Expenditures	438,450	439,489	1,039	0.2%		
Capital Contribution	642,685	718,990	76,305	11.9%		
Total Expenditures	1,081,135	1,158,479	77,344	7.2%		
Other Revenues	54,728	55,034	306	0.6%		
Sale of Water	1,026,407	1,103,445	77,038	7.5%		
Total Revenues	1,081,135	1,158,479	77,344	7.2%		
No. of Positions	1,759	1,754	(5)			

 Toronto Water was able to offset gross expenditure pressures of \$17.246 million with \$16.513 million in savings and revenue change (3.77% of 2015 Approved Gross Expenditure).

2016 Operating Budget Changes (\$millions)

Increases		Cost Reductions/Savings	
Prior Year Council Approvals and Annualizations	\$ 2.094	Operating Costs – Water & Wastewater	\$ 0.286
Operating Impact of Capital	\$ 0.658	Energy, utility & other savings	\$ 1.066
Contributions & Transfers	\$ 0.636	Cost Sharing w/SWM – Utility Billing	\$ 0.339
Inter-divisional Charges	\$ 4.959	Reversal of Winter Emergency Funding	\$ 6.587
Process Control Systems	\$ 0.717	Water Meter Program	\$ 0.313
Co-ordinated Spill Response & repurposing	\$ 0.624	Deletion of Vacancies	\$ 0.078
Ontario One – Provincial Call Centre	\$ 0.100	WSIB & Additional Day Absorption	\$ 1.424
Operating Costs – Wastewater Production	\$ 1.278	Contingency Reduction – Chemical, Biosolids & Bad Debt	\$ 1.895
ECONOMIC FACTORS		District Operations – Phase Contracted Services	\$ 4.000
Non-Payroll Inflations; Energy, Utilities, Materials, Equipment & Services	\$ 6.180	Salary Adjustments	\$ 0.221
		REVENUE CHANGES	
		User Fees – Inflation & Volume	\$ 0.243
		Other Revenue & Recoveries	\$ 0.061
TOTAL PRESSURES	\$ 17.246	SAVINGS & REVENUE CHANGES	\$ 16.513

2016 Operating Budget Changes (\$millions)

Table 3: 2016 Total Recommended Service Change Summary

	2016 Recommended Service Changes					Total R	ec'd Service Ch	anges	Incremental Change				
	Water Treatment & Supply		Wastewater Stormwater Collection & Management Treatment Management		\$ \$		#	2017 Plan			2018 Plan		
Description (\$000s)	Gross	Capital Contribution	Gross	Capital Contribution	Gross	Capital Contribution	Gross	Capital Contribution	Pos.	Capital Contribution	Pos.	Capital Contribution	Pos.
Base Changes:													
Base Expenditure Changes													
Operating Impact of Capital - Automated Meter Reader Project (AMR)	(1,179.9)	390.3	74.1	(74.1)	3.3	(3.3)	(1,102.5)	312.9	(17.0)				
AMR - Capital Savings (Reflected in the	(_,,			(. 112)	2.0	(5.5)	(_,)	0.2215	(=:::0)				
2016 Recommended Operating Budget as a decreased Contribution from Capital)		789.6						789.6					
Absorb Costs of WSIB/Mod Duties	(342.9)	342.9	(388.5)	388.5	(59.9)	59.9	(791.3)	791.3					
Reduce Contingencies - Lower chemical in			(00010)		(00.07)								
Water Reduce Contingencies - Lower chemical in Wastewater	(510.0)	510.0	(510.0)	510.0			(510.0)	510.0					
Reduce Contingencies - Delete Bad Debt Expense/Provision for Doubtful Accounts	(187.5)	187.5	(168.8)	168.8	(18.8)	18.8	(375.0)	375.0					
Reduce Contingencies - Reduce Bio-Solids Contracted Services			(500.0)	500.0			(500.0)	500.0					
Phase funding for District Operations	(2,455.3)	2,455.3	(1,308.5)	1,308.5	(236.2)	236.2	(4,000.0)	4,000.0		(4,000.0)			
Base Expenditure Change	(4,675.6)	4,675.7	(2,801.5)	2,801.5	(311.6)	311.6	(7,788.8)	7,788.8	(17.0)	(4,000.0)			ĺ
Base Revenue Changes													
User Fee Revenue Increase - Inflationary Factor		119.8		112.0		11.0		242.9					
Base Revenue Change		119.8		112.0		11.0		242.9					
Sub-Total	(4,675.6)	4,795.5	(2,801.5)	2,913.6	(311.6)	322.6	(7,788.8)	8,031.7	(17.0)	(4,000.0)			
Service Efficiencies													
Absorb Costs of Additional Calendar Day in													
2016	(277.6)	277.6	(305.3)	305.3	(49.8)	49.8	(632.8)	632.8				1	
District Operations - Deletion of Vacancies	(49.3)	49.3	(24.4)	24.4	(4.8)	4.8	(78.5)	78.5	(1.0)				
Sub-Total	(326.9)	326.9	(329.7)	329.7	(54.6)	54.6	(711.3)	711.3	(1.0)				
Total Changes	(5,002.6)	5,122.4	(3,131.2)	3,243.3	(366.2)	377.2	(8,500.1)	8,743.0	(18.0)	(4,000.0)			

• Note: \$8.7 million is 2% of the 2015 Approved Gross Expenditure of \$438,226 million.

DEDICATED TO PROVIDING SERVICE EXCELLENCE: QUALITY DRINKING WATER WASTEWATER TREATMENT STORMWATER MANAGEMENT

Vacancies

	2014 Po	sitions		201	15 YTD (Octo	ober) Positic	ons
Budget	Actual	Vacancies	%	Budget	Actual	Vacancies	%
1,751.65	1,576.65	175.0	10.0%	1,758.65	1,600.65	158.0	9.0%

Explanation for vacancies:

- High turnover due to retirements, internal promotions and transfers.
- Difficulty finding fully qualified candidates for critical positions such a Electrical & Instrumentation Control Technicians, Plant Technicians and Transmission Technicians.
- Historically, long hiring cycles due to the need to conduct technical assessments.

Strategies to fill vacancies:

- Development of a Five-Year Workforce Plan up to December 2018 to improve the hiring process.
- Hiring strategy will focus on effective/timely recruitment and will include:
 - Streamlining of assessment framework
 - Providing on-the-job training
 - Creating an assessment database

Toronto Water 2016 – 2025 Recommended Capital Budget

DEDICATED TO PROVIDING SERVICE EXCELLENCE: QUALITY DRINKING WATER WASTEWATER TREATMENT STORMWATER MANAGEMENT

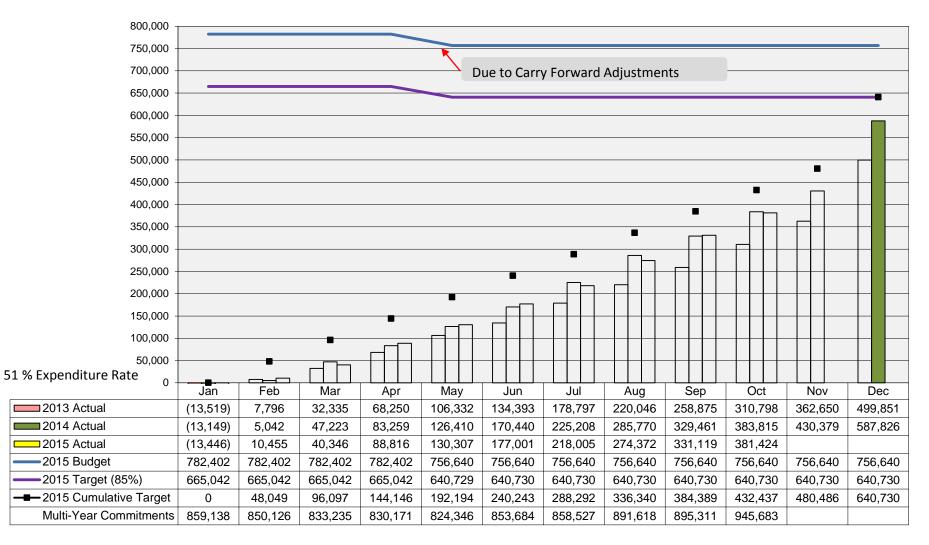
Capital Budget Challenges

Long-term Financial Stability	Existing 10-year financial plan relies primarily on successive water rate increases to fund continued infrastructure investment and conforms with pay-as-you-go financing strategy.
Planning for Growth	The City of Toronto is experiencing significant growth with many landowners submitting development applications to amend the zoning by- law to increase the permitted density. A strategy is required to ensure that water and wastewater services are available for new developments.
Aging Infrastructure	Significant state of good repair backlog for underground assets; water/wastewater treatment plants and facilities. Currently updating condition assessments on major assets. Escalating unit rates for pipe replacement.
Basement Flooding	Significant investment required to manage basement flooding issues across the city.
Strict Regulatory Control & Oversight	Water and wastewater industry continues to experience increased legislative and regulatory reform impacting both operating and capital budgets – i.e. the Federal Effluent Regulations, enacted on July 18, 2012, includes new enforcement activities and potential penalties for non- compliance.
Managing Reserve Balances	Ensuring positive reserve balances during major capital spending years. Simultaneous large scale projects are planned for the next five years.

2015 Key Accomplishments

Program Area	Key Accomplishments
Water Treatment & Supply (\$238 Million)	 Approximately 38 km of watermain replacement (\$58M) and 58 km of structural watermain lining (\$36M) Water service replacement – (\$25M) Clark WTP – filter rehabilitation (awarded in 2014) Gerrard Street transmission watermain - to be completed in 2015 (\$78M) Water Meter Program (\$168M)
Wastewater Treatment & Collection (\$283 Million)	 17 km of sewer replacement and Waterfront Toronto contribution (\$56M) and 125 km of sewer rehabilitation (\$32M) ABTP – P building upgrades, fine bubble aeration - ongoing (\$30M) ABTP – awarded engineering services for Integrated pumping station and outfall HCTP – biosolids upgrades, odour control upgrades - ongoing (\$17M) HTP – chlorine facility upgrades, new substation, gas compressor upgrades, odour control - ongoing (\$41M)
Stormwater Management (\$102 Million)	 Basement Flooding Protection Program - ongoing (\$62M) Wet Weather Flow Master Plan - ongoing (\$40M)

Capital Spending – Year Over Year Comparison



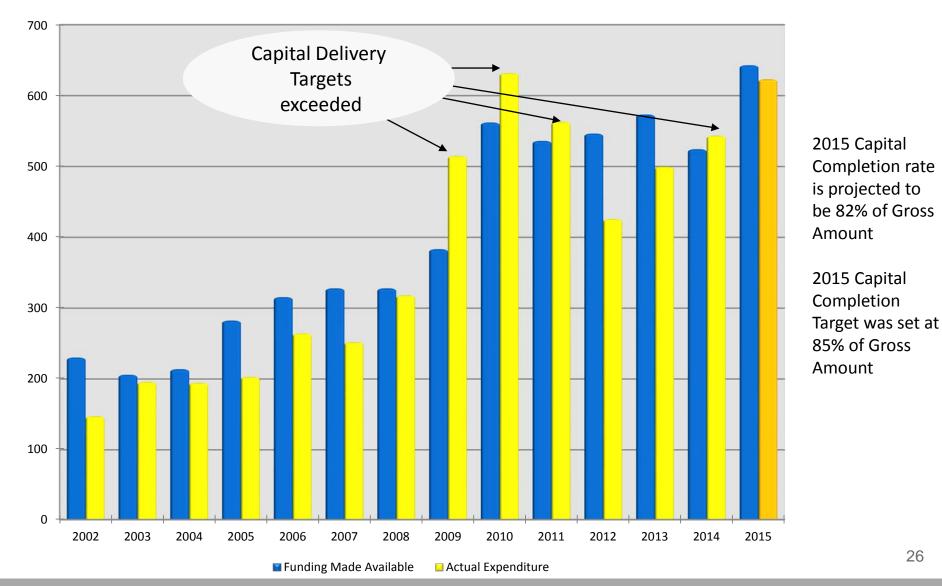
2015 Capital Spending - Budget to Actual Comparison

2015 Approved	Actuals as of Se	ptember 30, 2015	Projected Actu	als at Year End	Unspent Balance		
\$	\$	% Spent	\$	% Spent	\$	% Unspent	
756,639,841	321,191,792	42.4%	623,190,821	82.4%	133,449,020	17.6%	

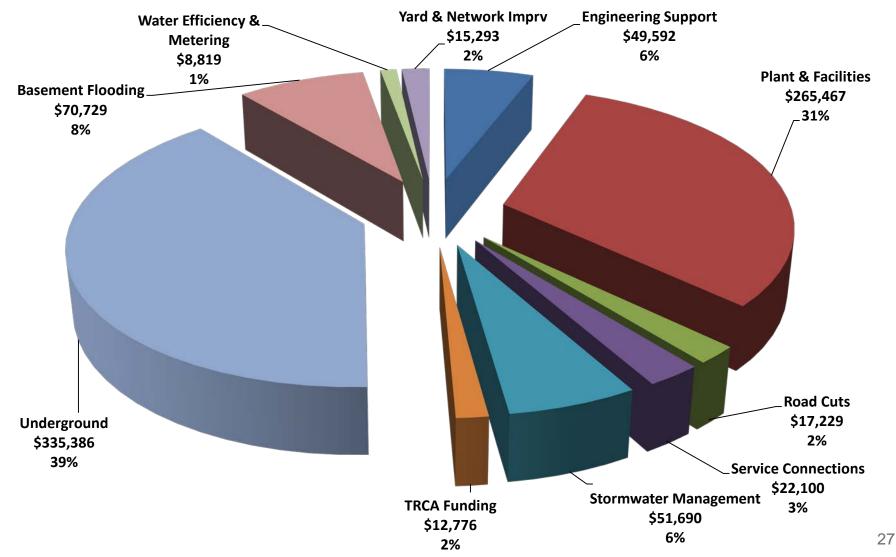
Key Points:

- Target expenditure is 85%
- Spending to date this year is comparable to spending in prior years
- \$939 million of commitments in active contracts
- Market rates for construction work in the roadway are trending up approximately 200%

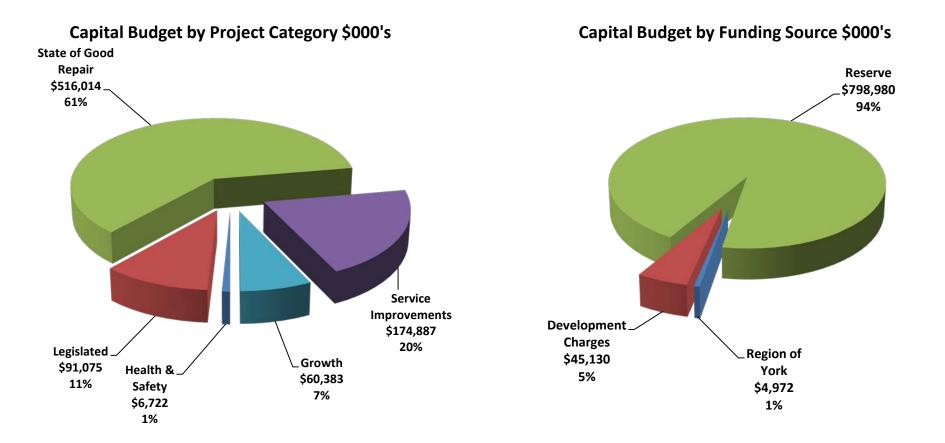
2002-2015 Capital Budget Expenditure Rate (\$millions)



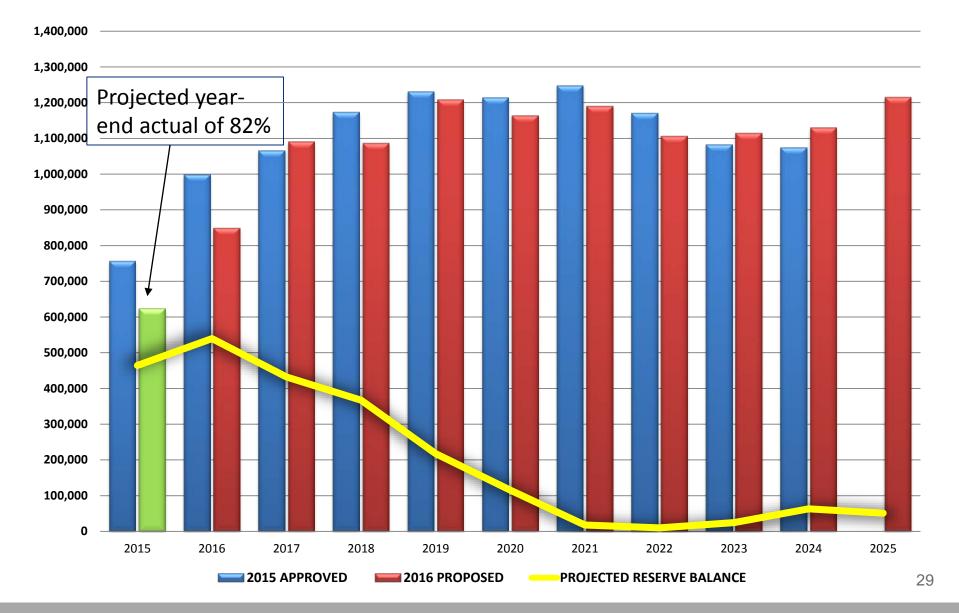
2016 Capital Budget (\$millions) \$849 Million (Gross)



2016 Capital Budget by Project Category & Funding Source (\$millions)

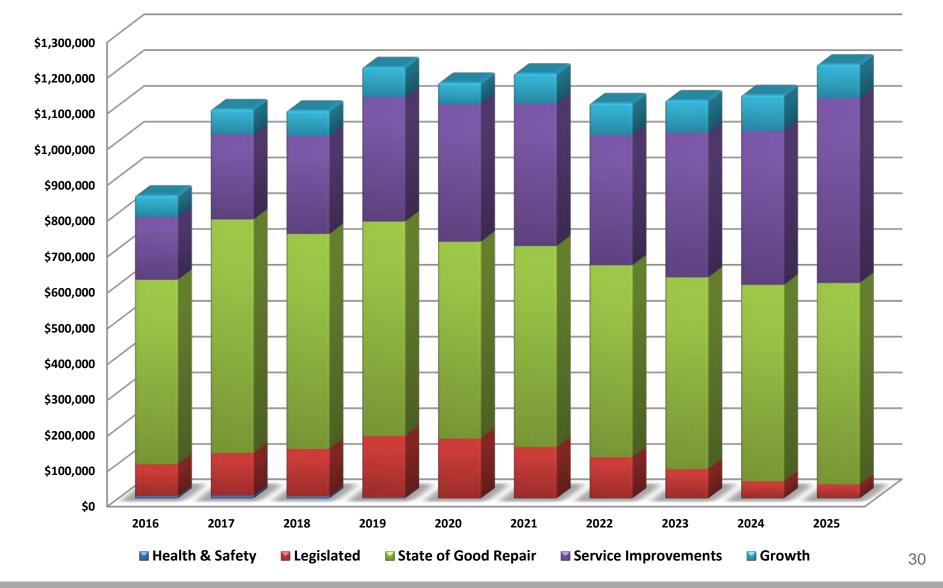


10-Year Capital Plan Comparison (\$millions)

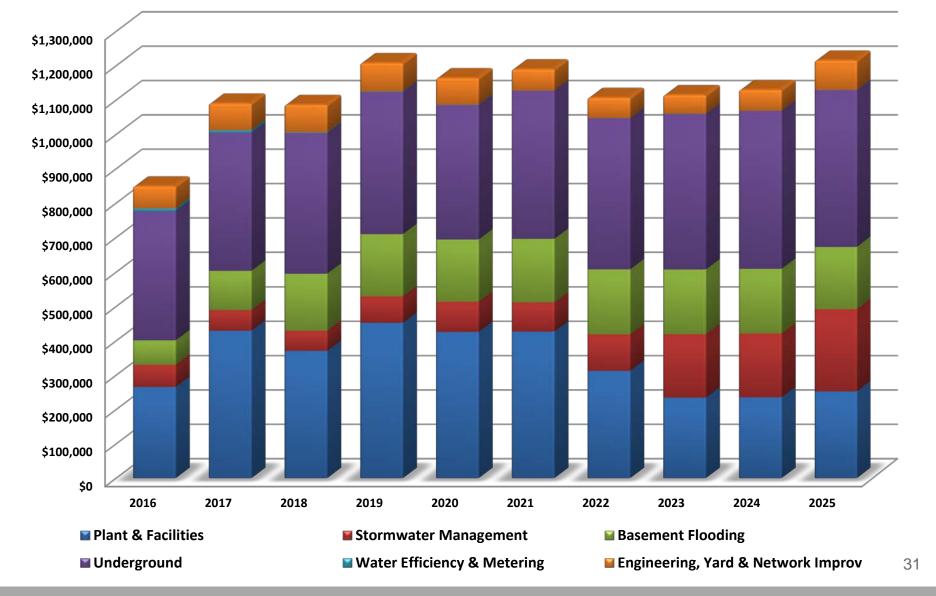


DEDICATED TO PROVIDING SERVICE EXCELLENCE: QUALITY DRINKING WATER WASTEWATER TREATMENT STORMWATER MANAGEMENT

2016 – 2025 Capital Plan by Category



2016 – 2025 Capital Plan by Asset Class

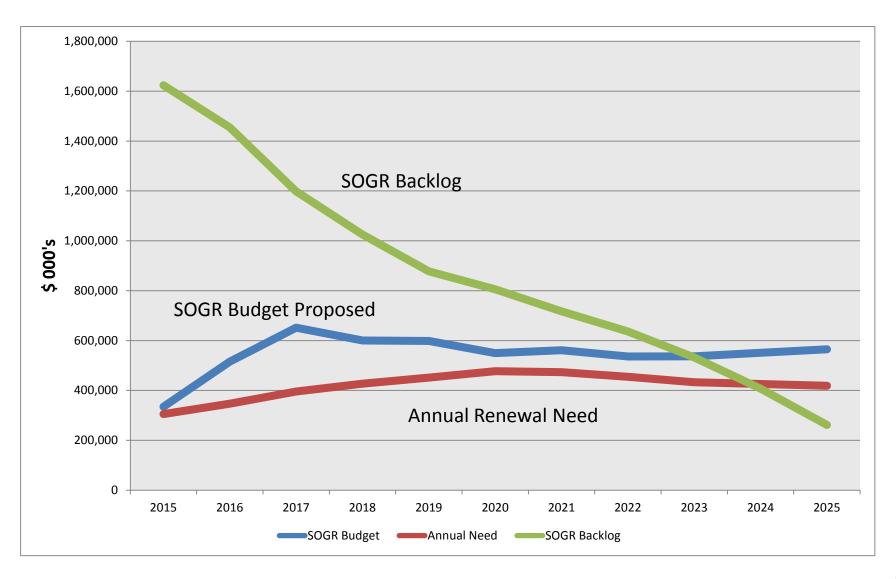


DEDICATED TO PROVIDING SERVICE EXCELLENCE: QUALITY DRINKING WATER WASTEWATER TREATMENT STORMWATER MANAGEMENT

Capital Overview 2016-2025 – \$11.155 Billion

Program Area	Major Capital Projects
Water Treatment & Supply (\$3.633 Billion)	 Treatment Plants - rehabilitation of filters, process & equipment upgrades (\$387M) Storage & Pumping - reservoir & PS rehab (\$258M) Transmission watermains - expansion and replacement (\$208M) Watermains - replacement, rehabilitation, TCHC, WSR, new connections (\$2.760B) Water Meter Program - to complete program (\$19M)
Wastewater Treatment & Collection (\$4.731 Billion)	 Ashbridges Bay - IPS, UV disinfection, outfall, odour control upgrades (\$1.671B) Highland Creek - biosolids beneficial use, odour control upgrades, liquid train rehab (\$594M) Humber Treatment - odour control upgrades, secondary treatment upgrades (\$419M) Pumping Stations, Forcemains & Trunk Sewers (\$512M) Sanitary/storm sewers - replacement, rehabilitation, Waterfront Toronto (\$1.534B)
Stormwater Management (\$2.791 Billion)	 Basement Flooding - subsidies, EA's, engineering, construction (\$1.641B) Wet Weather Flow - ponds, CSO's, TRCA, trunk sewer crossings in watercourses (\$903M) TW Erosion Control Sites - to protect infrastructure in ravines (\$104M) TRCA Operating Funding - to support operating requirements (\$46M) TRCA Capital Funding - to fund maintenance and erosion sites (\$96M)

State of Good Repair Funding & Backlog



Toronto Water Service Performance

2015 Key Service Accomplishments

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Service Level Description Water Treatment & Supply		2012	2013	2014	2015 Q1 Q2 Q3	2016	2017	2018
Watermain Breaks per 100 km of Water	Approved/Target	20.8	20.8	20.8	20.8	24.8	23.1	23.1
Distribution Pipe	Actual	18.2	25.1	29.6	23.3	n.a.	n.a.	n.a.
Percent Water Meters Read Automaticall	Approved/Target	36%	57%	83%	95%	96%	97%	98%
	Actual	33%	62%	93%	99%	n.a.	n.a.	n.a.
Water Treatment Non-Compliance Events	Approved/Target	0	0	0	0	0	0	0
	Actual	2	4	0	0	n.a.	n.a.	n.a.
Electrical kWH per ML of water pumped	Approved/Target	317	317	340	340	340	340	340
	Actual	337	335	337	343	n.a.	n.a.	n.a.
Wastewater Collection & Treatment								
Wastewater Main Backups per 100 km	Approved/Target	5.27	5.27	5.27	5.27	5.27	5.27	5.27
of Wastewater Main	Actual	9.96	11.79	13.38	10.56	n.a.	n.a.	n.a.
Percent Blocked Service Lines	Approved/Target	60%	60%	60%	60%	60%	60%	65%
Responded to First-Call	Actual	69%	62%	59%	66%	n.a.	n.a.	n.a.
Wastewater Treatment Non-Compliance	Approved/Target	0	0	0	0	0	0	0
Events	Actual	0	1	1	2	n.a.	n.a.	n.a.
Stormwater Management								
KM of Stormwater Collection Network	Approved/Target	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Actual	4,943	4,971	4,986	4,962	n.a.	n.a.	n.a.
Catch Basins Cleaned	Approved	75,000	75,000	75,000	95,000	95,000	95,000	95,000
	Actual	97,803	101,328	100,175	68,862	n.a.	n.a.	n.a.

Service Standards

Service Standards measure response times to 311 Customer Service Requests. These measures are an indication of how we are able to respond to operational and environmental issues.

Activity Type	Service Levels							
	2012	2013 to 2015	% Within Standard YTD 2015 (Q1+Q2+Q3)	Target Performance				
Watermain-Possible Break	8 hours	2 hours	71%	85%				
Water Service Line-Leaking	24 hours	4 hours	59%	75%				
Water Service Line -Low Pressure, Low Flow	40 bus days	24 hours	73%	75%				
Water Service Line - No Water	24 hours	4 hours	24%	75%				
Water Service Line - Turn Off/Burst	8 hours	2 hours	78%	75%				
Water Service Line -Turn Off (non emergency)	24 hours	8 hours	83%	75%				
Water Service Line -Turn On	4 hours	8 hours	92%	75%				

Toronto Water 2016 Recommended Water Rate

Water Rate Model Assumptions for 2016

Consumption Forecast

- 2015 and 2016: 1.5% below 2014 actual (\$14 million revenue impact)
- 2017 and forward: 0.5% decrease a year

Capital Expenditure Rate Forecast

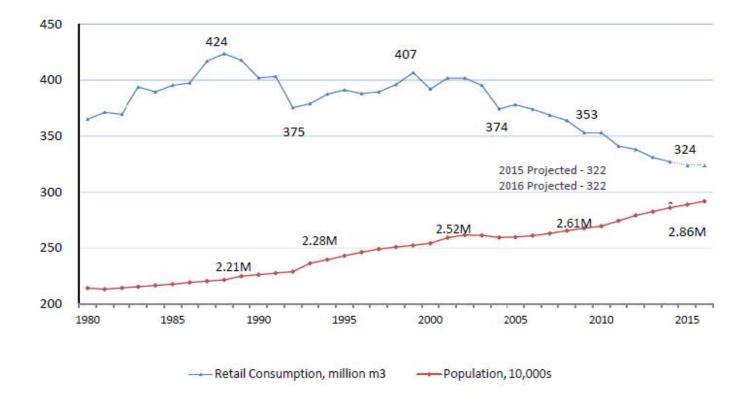
- 2015: 82%
- 2016 and forward: 85%

Rate Increases

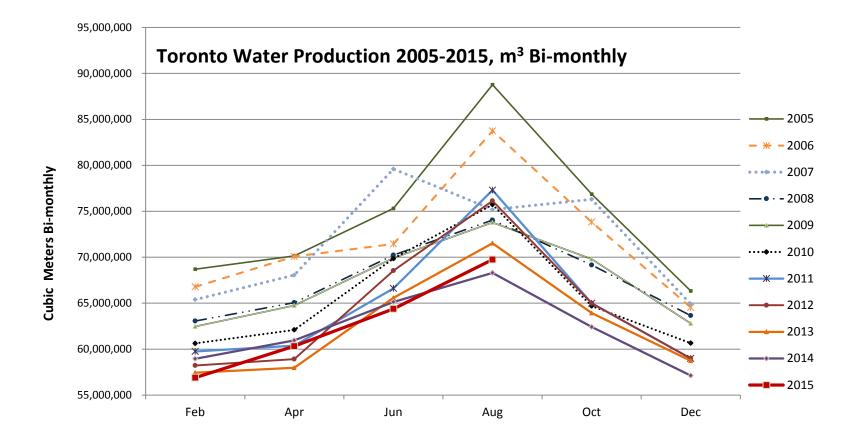
- 2016: 8%
- 2017-2018: 5%
- 2019-forward: 3%



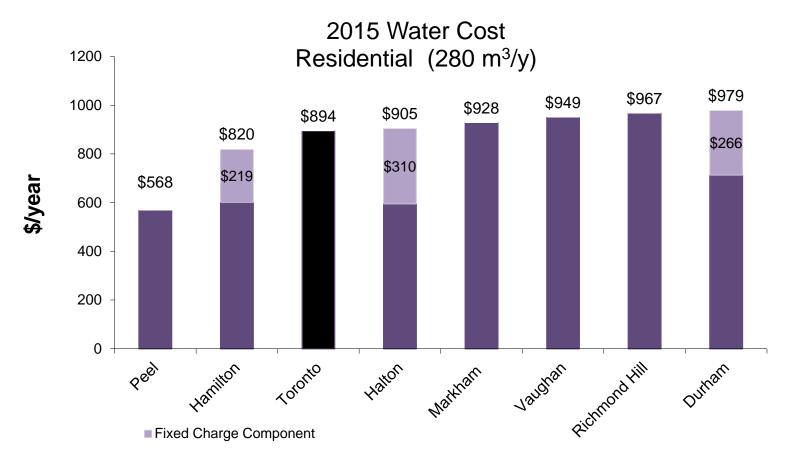
Population and Water Consumption



Water Production

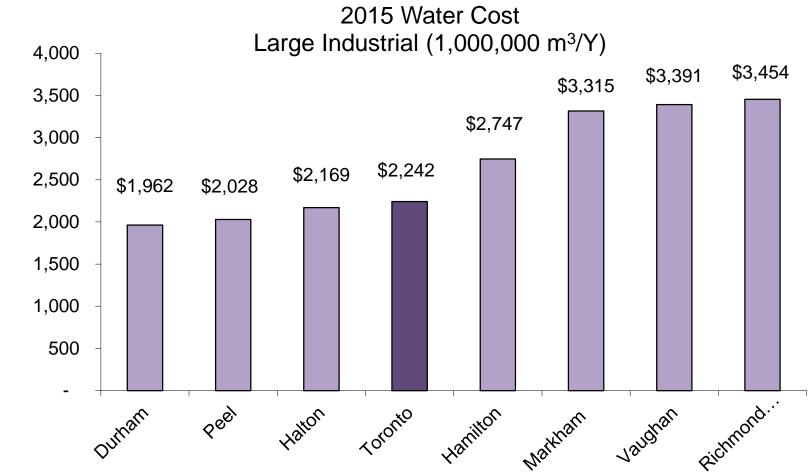


How Does Toronto Compare?



* Note: Peel stormwater funded by property tax in 2014 which will change for Mississauga in 2016

How Does Toronto Compare?



42

2016 Water Rate Increase Impact

Type of Property	Average Consumption	20	015 Annualized Cost	2016 Projected cost			2016 Rate Increase Impact			
Residential	280	\$	894	\$	966	\$	72	8.0%		
Commercial	100,000	\$	319,453	\$	345,009	\$	25,556	8.0%		
Industrial	100,000	\$	229,364	\$	247,714	\$	18,349	8.0%		
Large Industrial	1,000,000	\$	2,241,890	\$	2,421,242	\$	179,351	8.0%		

• Daily cost for all residential drinking water, wastewater and stormwater services only \$2.65 per day.

Projected Water Rate Increase

			2016 - 2025 Plan									
TORONTO WATER	2015 Budget	2015 Projected Actual	2016	2017	2018	2019*	2020	2021	2022	2023*	2024	2025
Water Rate Increase	8%	8%	8%	5%	5%	3.6%	3%	3%	3%	3.6%	3%	3%
WATER RATE REVENUE , \$M	\$1,004	\$987	\$1,080	\$1,127	\$1,178	\$1,206	\$1,243	\$1,274	\$1,305	\$1,337	\$1,378	\$1,412
Water Rate Revenue Increase, \$M			9.4%	4.4%	4.4%	2.5%	3.1%	2.5%	2.5%	2.5%	3.1%	2.5%
CAPITAL RESERVE CLOSING BALANCE	\$513.1	\$463.7	\$538.8	\$430.9	\$366.0	\$216.1	\$113.9	\$15.7	\$7.5	\$22.1	\$60.1	\$47.7

* Post election year – new rates applied in March

