A wide-angle photograph of the Toronto skyline, featuring the CN Tower and various skyscrapers, viewed from a distance across a lush green park with trees and a grassy field. The sky is clear and blue.

**CITY OF TORONTO**  
**Toronto Water**  
**2013 Recommended Operating Budget**  
**2013 – 2022 Recommended Capital Plan**  
**2013 Recommended Water Rate**  
**Budget Committee, November 7, 2012**

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

# Program Overview



# Program Overview



- Serves 3.3 million residents and businesses in Toronto, and portions of York and Peel
- Over \$28 billion in infrastructure (replacement value)
- Operates many facilities 24 hours per day, 365 days per year
- Infrastructure renewal and state of good repair supported by multi-year business plan
- Program is 100% rate-supported and no reliance on the property tax base to support Toronto Water operating and capital budgets.



# **Inventory of Assets - Replacement Value of \$28 Billion**

## **WASTEWATER - \$19.0 Billion**

- 4 wastewater treatment plants
- 5 storage and detention tanks
- 4,397 km of sanitary, 1,453 km of combined and 396 km of trunk sewer
- 4,937 km of storm sewers and 546 km of roadside ditches
- 151,485 maintenance holes
- 463,300 sewer service connections
- 82 wastewater pumping stations
- 371 km of watercourses, 89 stormwater management ponds
- 2,300 outfalls & 165,662 catchbasins

## **WATER - \$9.0 Billion**

- 4 water filtration plants
- 10 reservoirs and 4 elevated storage tanks
- 5,427 km of distribution watermains and 528 km of trunk watermains
- 60,933 valves and 40,817 hydrants
- 470,202 water service connections, plus York Region (population served 600,000)
- 18 water pumping stations

# Toronto Water Strategic Plan 2010-2020

## Mission Statement

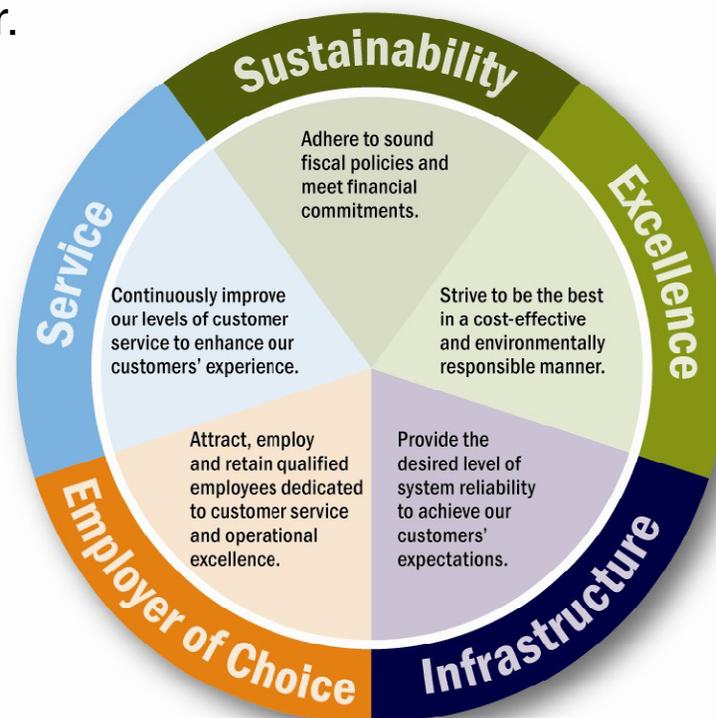
To provide quality water services through supplying drinking water and the treatment of wastewater and stormwater to residents, businesses and visitors in order to protect public health, safety and property in an environmentally and a fiscally responsible manner.

## Vision Statement

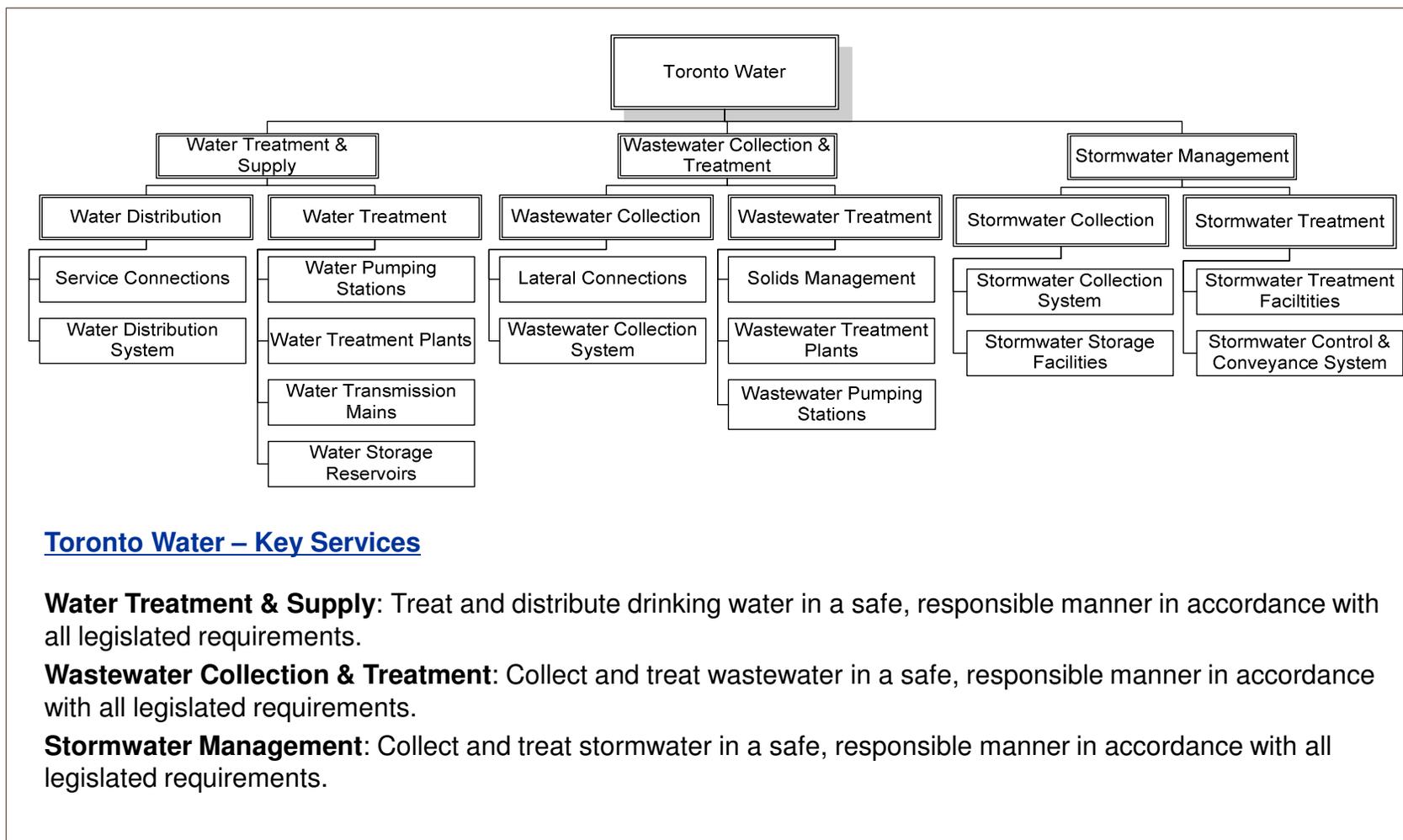
Toronto Water will be a leader in achieve in excellence and efficiency in all aspects of water service delivery.

## Guiding Principles

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



# Toronto Water Program Map



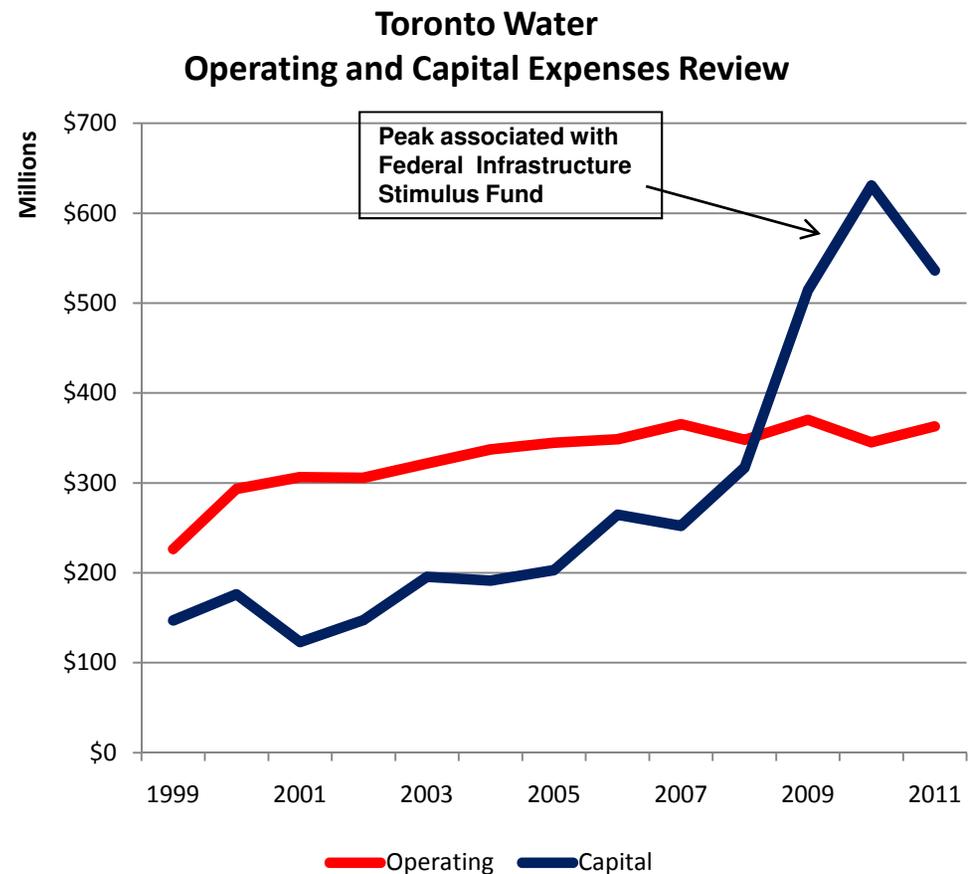
# Financial Performance

## Stable Operating Costs

- Since amalgamation, staffing has been reduced by over 355 net positions

## Capital Spending

- Increased revenue generated by rate increases have been reinvested in infrastructure
- Capital investment has tripled over the last ten years
- Rate increases have gone directly to capital program



# Program Challenges

## Strict Regulatory Control & Oversight

- The water and wastewater industry continues to experience increased legislative and regulatory reform impacting both operating and capital budgets.
- New requirements January 2013 include a Statutory Standard of Care to be exercised by Council/Senior Managers under the Safe Drinking Water Act.
- The Federal Systems Effluent Regulations, enacted on July 18, 2012, includes new enforcement activities and potential penalties for non-compliance including:
  - Eliminating chlorinated effluent from Ashbridges Bay Treatment Plan by January 1, 2015.
  - Measuring and reporting all combine sewer overflows within the City.



# Program Challenges...(cont'd.)

## Aging Infrastructure and Capital Renewal Rates

- \$1.6 billion backlog (\$1.1 billion for underground assets; \$500 million for water/wastewater treatment plants and facilities).

## Inadequate Reserve Balances

- For the past three years, Toronto Water has exceeded capital delivery targets, coupled with declining consumption leading to lower than forecasted revenues has depleted reserves.

## Long-term Financial Stability

- Existing 10-year financial plan relies primarily on successive water rate increases to fund continued infrastructure investment to 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 decrease by 1.5% each year until 2015.



---

# 2013 Recommended Operating Budget



# Service Performance

<b>WATER TREATMENT AND SUPPLY</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Operating Cost for the Distribution/Transmission of Drinking Water per km of Water Distribution Pipe	\$24,722.11	\$23,160.32	\$18,410.19
Number of Watermain Break per 100 km of Water Distribution Pipe (excluding connections)	20.8	21.6	27.3
Operating Cost for the Treatment of Drinking Water per Megalitre of Drinking Water Treated	\$209.47	\$149.64	\$182.85
Operating Cost for the Treatment and Distribution/Transmission of Drinking Water per Megalitre of Drinking Water Treated	\$572.73	\$498.53	\$462.60

<b>WASTEWATER COLLECTION AND TREATMENT</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Operating Cost of Wastewater Collection/Conveyance per km of Pipe	\$19,706.93	\$15,816.40	\$18,041.34
Annual Number of Wastewater Main Backups per 100 km of Wastewater Main	5.27	8.01	10.79
Operating Cost of Wastewater Treatment/Disposal per Megalitre Treated	\$403.99	\$434.59	\$389.21
Operating Cost of Wastewater Treatment/Disposal and Collection/Conveyance per Megalitre Treated	\$646.47	\$641.16	\$616.99

<b>STORMWATER MANAGEMENT</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Operating Cost for Urban Stormwater Management per km of Drainage System	\$1,232.23	\$4,708.70	\$7,718.16
Total Costs of Urban Stormwater Management per km of Drainage System	\$1,232.23	\$5,105.55	\$8,250.51

## 2012 Budget Variance (forecast December 31, 2012)

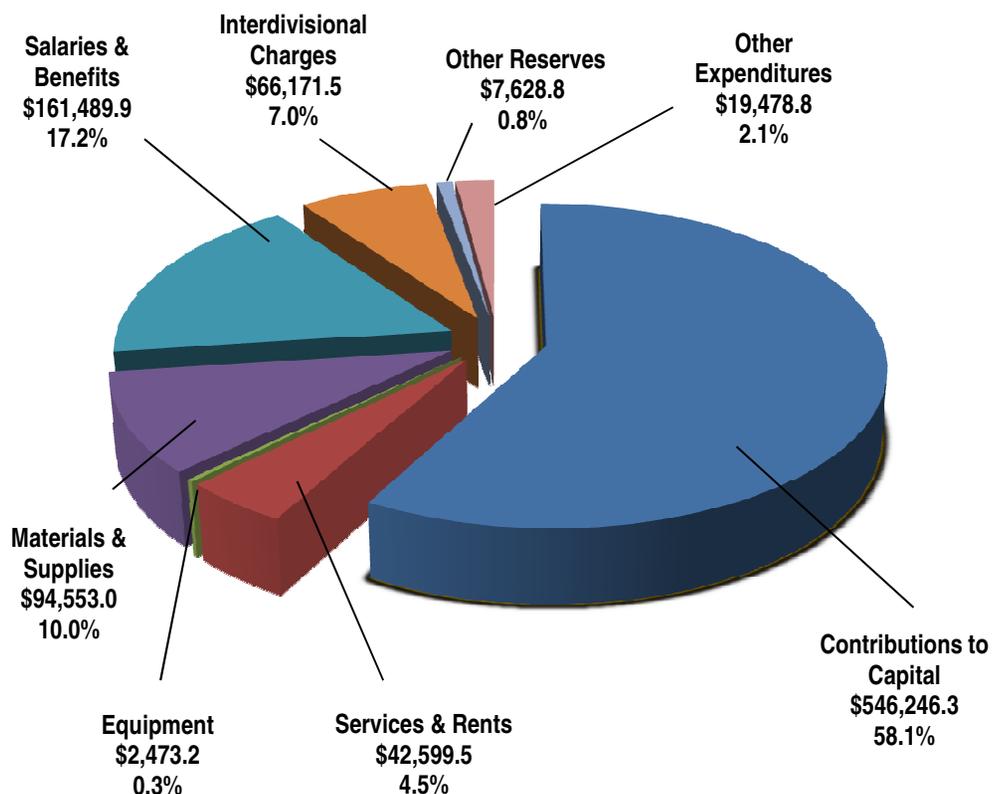
	2010 Actuals	2011 Actuals	2012 Approved* Budget	2012 Projected Actuals**	2012 Approved Budget vs Projected Actual Variance	
(In \$000s)	\$	\$	\$	\$	\$	%
<b>Gross Expenditures</b>	352,884.8	381,227.8	383,957.2	358,996.4	(24,960.8)	(6.5)
<b>Revenues</b>	758,000.1	809,449.4	895,243.8	875,602.6	(19,641.2)	(2.2)
<b>Capital Contribution</b>	405,115.3	428,221.6	511,286.6	516,606.2	5,319.6	1.0
<b>Approved Positions</b>	1,731.4	1,723.4	1,689.8	1,438.0	(251.8)	(14.9)

\* 2012 Approved Budget adjusted for in-year changes.

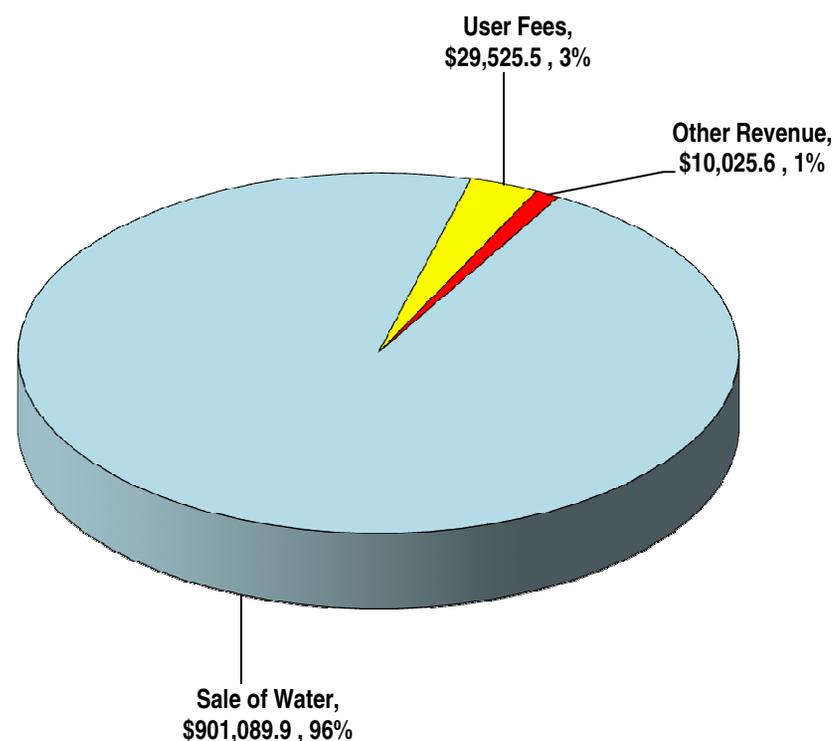
\*\* Based on the Third Quarter Operating Budget Variance Report.

# 2013 Gross Operating Expenditures by Service and Funding Sources \$940,641,000

## 2013 Operating Budget by Expenditure Category (\$000s)



## 2013 Operating Budget by Funding Source (\$000s)



# 2013 Requested Operating Budget \$394 Million

	2012		2013 Recommended Operating Budget			Change - 2013 Recommended Operating Budget v. 2012 Appvd. Budget		FY Incremental Outlook	
	Approved Budget	Projected Actual	2013 Rec. Base	2013 Rec. New/Enhanced	2013 Rec. Budget			2014	2015
	\$	\$	\$	\$	\$			%	\$
(In \$000s)									
<b>GROSS EXP.</b>	383,957.2	358,996.4	394,394.6		394,394.6	10,437.4	2.7	4,783.8	3,124.8
<b>REVENUE</b>	895,243.8	875,602.6	940,057.1	583.9	940,641.0	45,397.2	5.1	168.0	604.8
<b>CAPITAL CONTRIBUTION</b>	511,286.6	516,606.2	545,662.5	583.9	546,246.4	34,959.8	6.8	(4,615.8)	(2,519.9)
<b>Approved Positions</b>	1,689.8	1,438.0	1,724.8	0.0	1,724.8	35.0	2.1	2.0	4.0

# 2013 Operating Budget Changes (\$ millions)

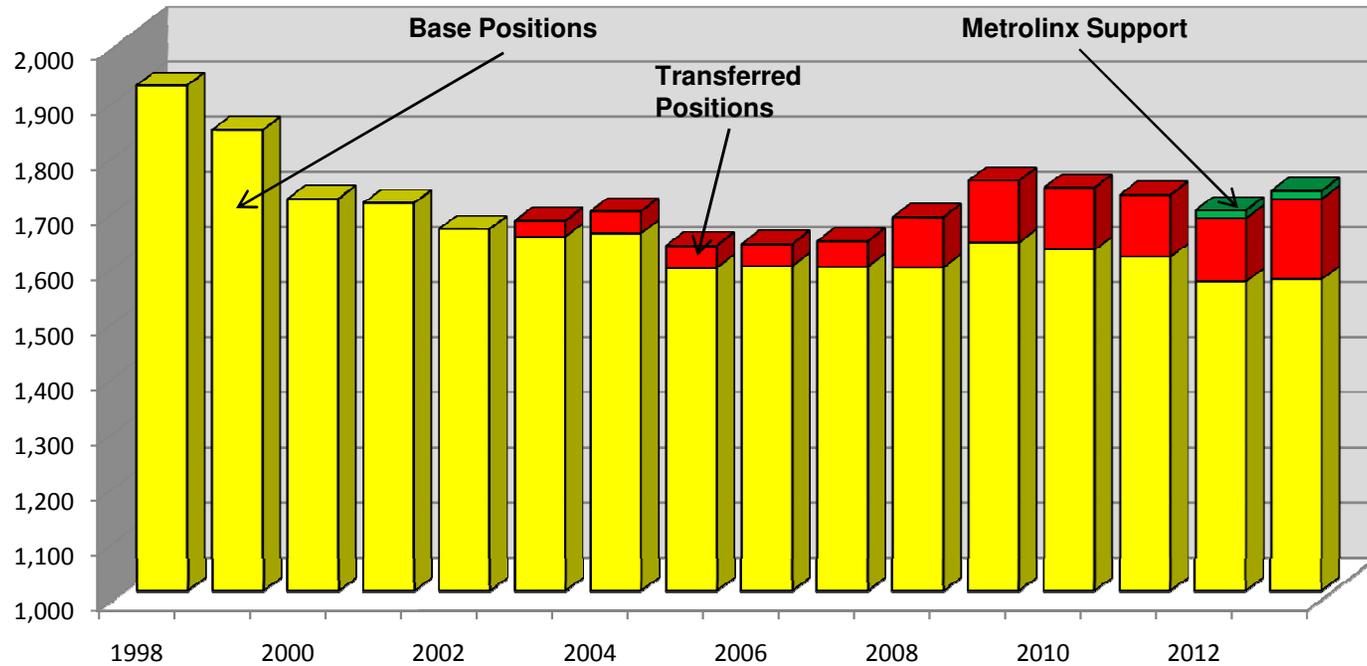
## Significant Budget Changes for 2013

<b>Reductions:</b>		<b>Increases:</b>	
Annualized Impact of 2012 Budget	(\$1.095)	Operating Impact of Capital	\$5.562
Customer Service Unit Efficiencies	(\$0.113)	Other Base Budget changes	\$1.864
PCS & OPS Unit Efficiencies	(\$0.141)		
Reductions Based on Actuals	(\$2.129)	<b>Economic Factors:</b>	
Tree Planting DC Recovery	(\$0.195)	Other Non-Labour Inflationary	
Other Service Efficiencies	(\$0.478)	increases	\$3.374
		Staff cost Increases per Contracts	\$3.524
<b>Revenue Changes:</b>			
Base User Fees & Other Revenue	(\$1.917)		
Inflationary Adjustment to Fees	(\$0.281)		

# 2013 Operating Budget Request – By Category and Funding Source

Category of Expense	2010	2011	2012	2012	2013	2013 Change from		2014	2015
	Actual	Actual	Budget	Projected	Recomm.	2012 Approved		Outlook	Outlook
	\$	\$	\$	\$	\$	\$	%	\$	\$
Salaries and Benefits	141,791.6	147,615.4	158,763.5	140,339.2	161,489.9	2,726.4	1.7%	162,669.3	165,447.1
Materials and Supplies	84,784.7	83,123.9	91,588.7	85,365.5	94,553.0	2,964.3	3.2%	96,985.5	97,382.5
Equipment	2,908.4	3,179.5	2,330.7	2,330.7	2,473.2	142.5	6.1%	2,473.2	2,473.2
Services & Rents	35,594.7	42,101.9	38,759.0	33,450.8	42,599.5	3,840.5	9.9%	42,959.5	42,959.5
Contributions to Capital	405,115.3	438,492.2	511,286.6	511,779.9	546,246.3	34,959.7	6.8%	546,246.3	546,246.3
Contributions to Reserve/Res Funds	7,748.3	8,050.4	6,965.4	6,965.4	7,628.8	663.3	9.5%	8,828.8	8,828.8
Other Expenditures	17,631.2	21,780.5	18,884.4	21,975.0	19,478.8	594.4	3.1%	19,478.8	19,478.8
Interdivisional Charges	62,425.8	65,105.7	66,665.4	66,165.4	66,171.5	(494.0)	-0.7%	65,783.3	65,783.3
<b>TOTAL GROSS EXPENDITURES</b>	<b>758,000.0</b>	<b>809,449.4</b>	<b>895,243.8</b>	<b>868,372.2</b>	<b>940,641.0</b>	<b>45,397.1</b>	<b>5.1%</b>	<b>945,424.7</b>	<b>948,599.5</b>
Interdivisional Recoveries	83.0	120.4	3.2	3.2	-	-3.2	-100.00%	-	-
Provincial Subsidies	-	-	-	-	-	0	n/a	-	-
Federal Subsidies	-	-	-	-	-	0	n/a	-	-
Other Subsidies	68.1	-	-	-	-	0	n/a	-	-
User Fees & Donations	14,300.7	39,143.6	35,260.0	30,901.6	29,525.5	(5,734.5)	-16.3%	29,693.6	30,298.4
Transfers from Capital Fund	1,413.5	2,100.3	2,178.5	2,178.5	1,989.0	(189.5)	-8.7%	1,989.0	1,989.0
Contribution from Reserve Funds	-	6,392.7	-	-	195.0	195.0	n/a	195.0	195.0
Sundry Revenues	3,577.3	6,741.7	2,692.1	2,692.1	7,841.6	5,149.5	191.3%	7,841.6	7,841.6
Sale of Water	738,557.4	754,950.7	855,110.0	837,916.3	901,089.9	45,979.9	5.4%	901,089.9	901,089.9
<b>TOTAL REVENUE</b>	<b>758,000.0</b>	<b>809,449.4</b>	<b>895,243.8</b>	<b>873,691.8</b>	<b>940,641.0</b>	<b>45,397.20</b>	<b>5.1%</b>	<b>940,809.1</b>	<b>941,413.9</b>
<b>TOTAL NET EXPENDITURES</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>(5,319.5)</b>	<b>0</b>	<b>0</b>	<b>0.00%</b>	<b>4,615.7</b>	<b>7,185.6</b>
<b>APPROVED POSITIONS</b>	<b>1,731.40</b>	<b>1,676.30</b>	<b>1,689.80</b>	<b>1,438.0</b>	<b>1,724.80</b>	<b>35</b>	<b>2.10%</b>	<b>1,726.8</b>	<b>1,730.8</b>

# Staffing Trends – Approved Positions



	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>Base Positions</b>	1,916	1,836	1,711	1,703	1,656	1,642	1,648	1,586	1,589	1,588	1,587	1,632	1,619	1,606	1,561	1,565
<b>Transfers</b>	0	0	0	0	0	29	40	40	40	46	91	112	112	112	115	146
<b>In Year (Metrolinx)</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	14
<b>Total Positions</b>	1,916	1,836	1,711	1,703	1,656	1,671	1,688	1,626	1,629	1,634	1,678	1,744	1,731	1,718	1,690	1,725

---

# 2013 Recommended Capital Budget



# 2012 Key Accomplishments



## Completion of major capital projects

- Avenue Road Watermain
- Expansion of the Milliken Pumping Station and Reservoir
- Expansion of the Dufferin Reservoir
- F.J. Horgan Water Treatment Plant – production capacity increased by 40% including conversion to ozone primary disinfection at plant.
- Coxwell Sanitary Trunk Sewer Bypass
- Ashbridges Bay WWTP Primary Treatment and Odour Control (D-Building)



# 2012 Key Accomplishments...(cont'd.)

## Water Meter Program

- Achieved 96% installation target
- Total residential meters installed in 2012: 79,459 (total meters installed since 2010 –126,483)

## Corrosion Control Program

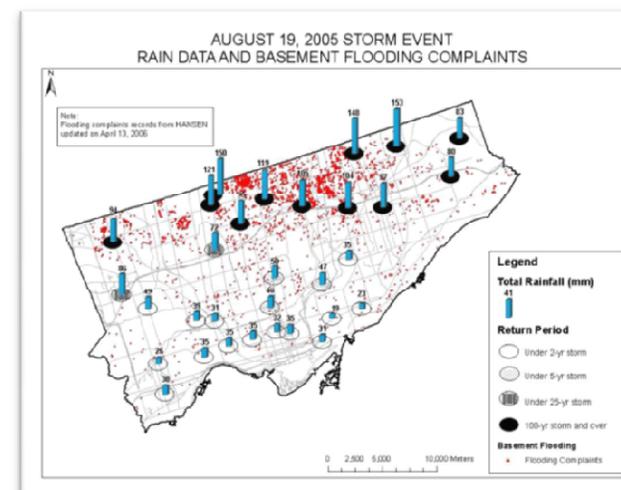
- Detailed design for the construction of Corrosion Control Facilities in progress – implementation Fall 2013

## Basement Flooding Environmental Assessments (EA)

- EA studies for 15 of 34 chronic basement flooding areas completed (18 studies to be completed by the end of 2014, one additional study to be completed in 2015)



Street & basement flooding



# 2012 Key Accomplishments....(cont'd.)



## Wet Weather Flow Master Plan – Completed EAs

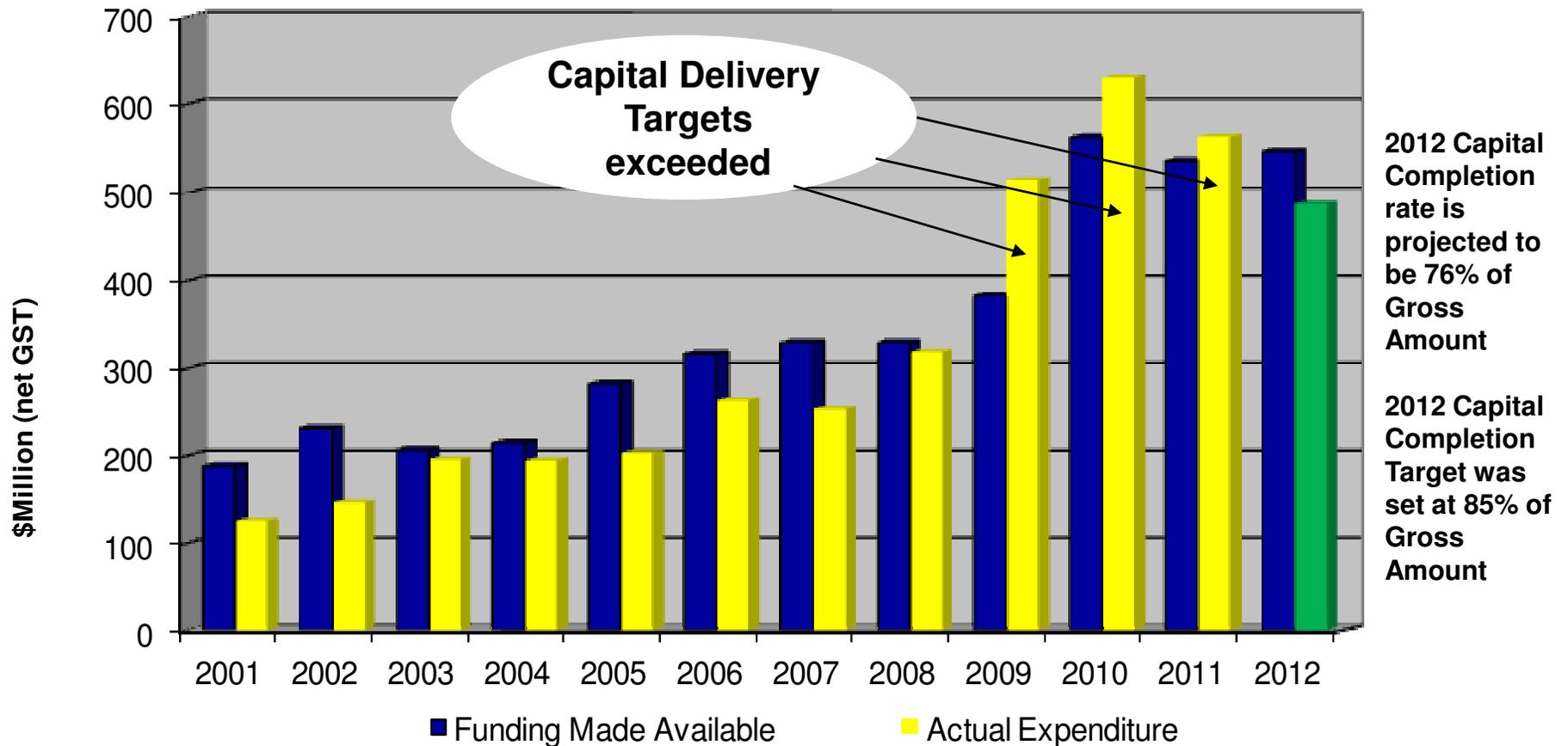
- Don River and Central Waterfront Project EA
- Etobicoke Stormwater Management Facilities Class EA
- Duncan Creek Erosion Control and Creek Restoration Master Plan Class EA
- Mud Creek Geomorphic Systems Master Plan Class EA



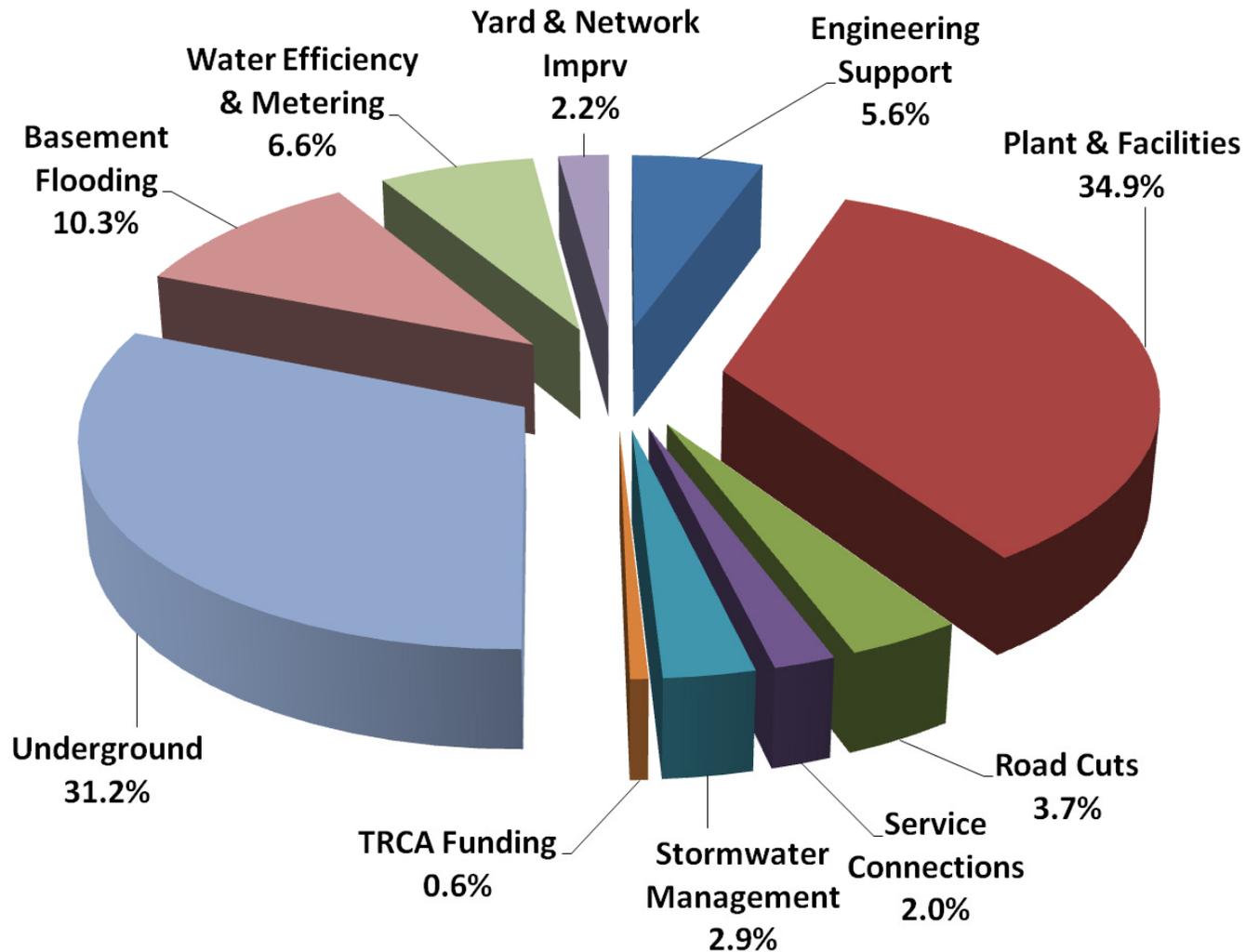
## Portlands Acceleration Initiative – Waterfront Sanitary Service Master Plan Class EA

- Completion of Environmental Assessment to support sanitary servicing needs for the redevelopment of the waterfront area.

# 2001-2012 Capital Budget Expenditure Rates (\$millions)

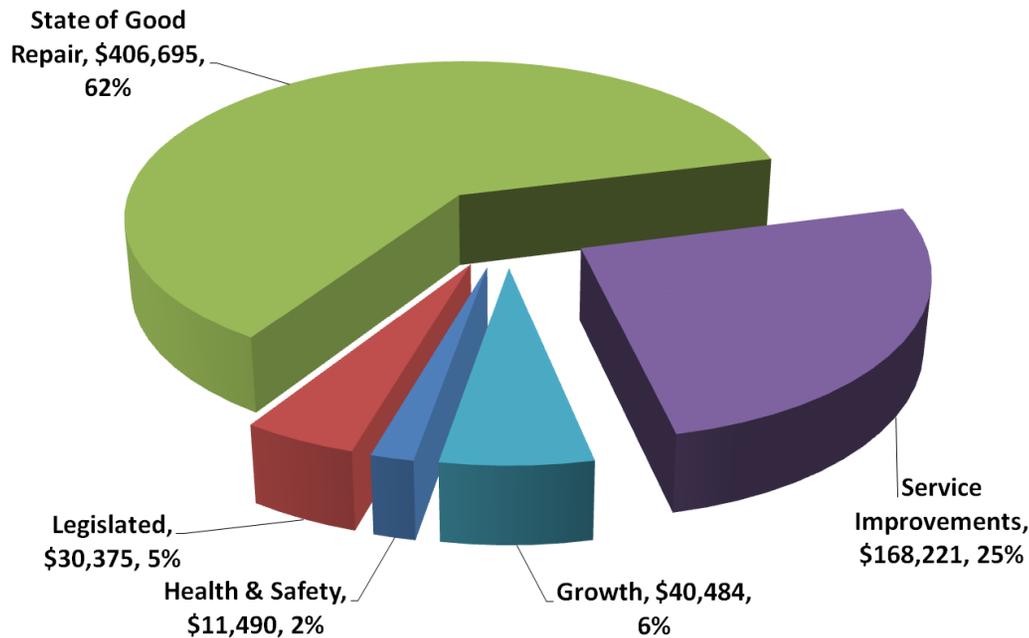


# 2013 Capital Budget \$657 Million (Gross)

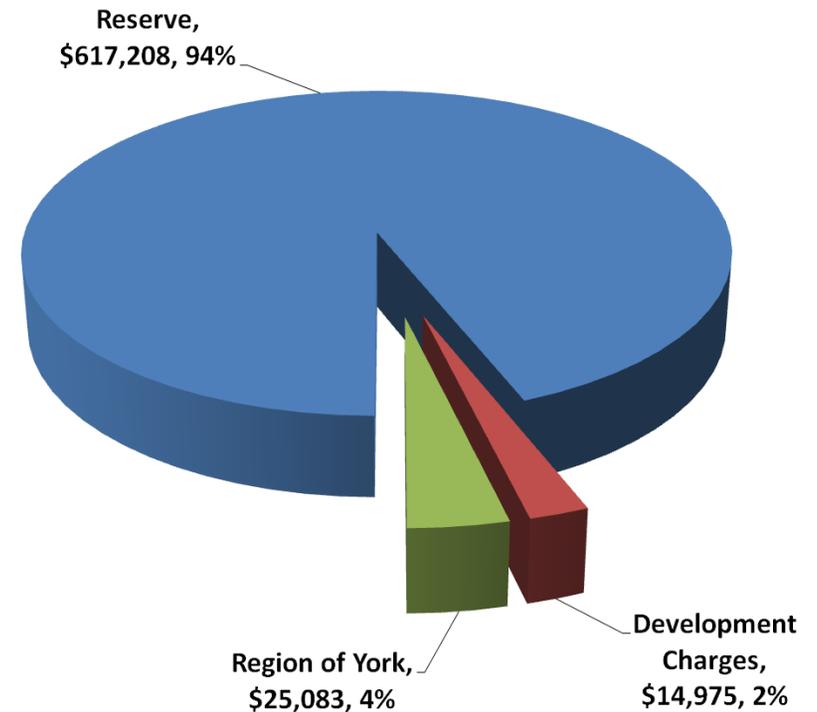


# 2013 Capital Budget by Project Category and Funding Source

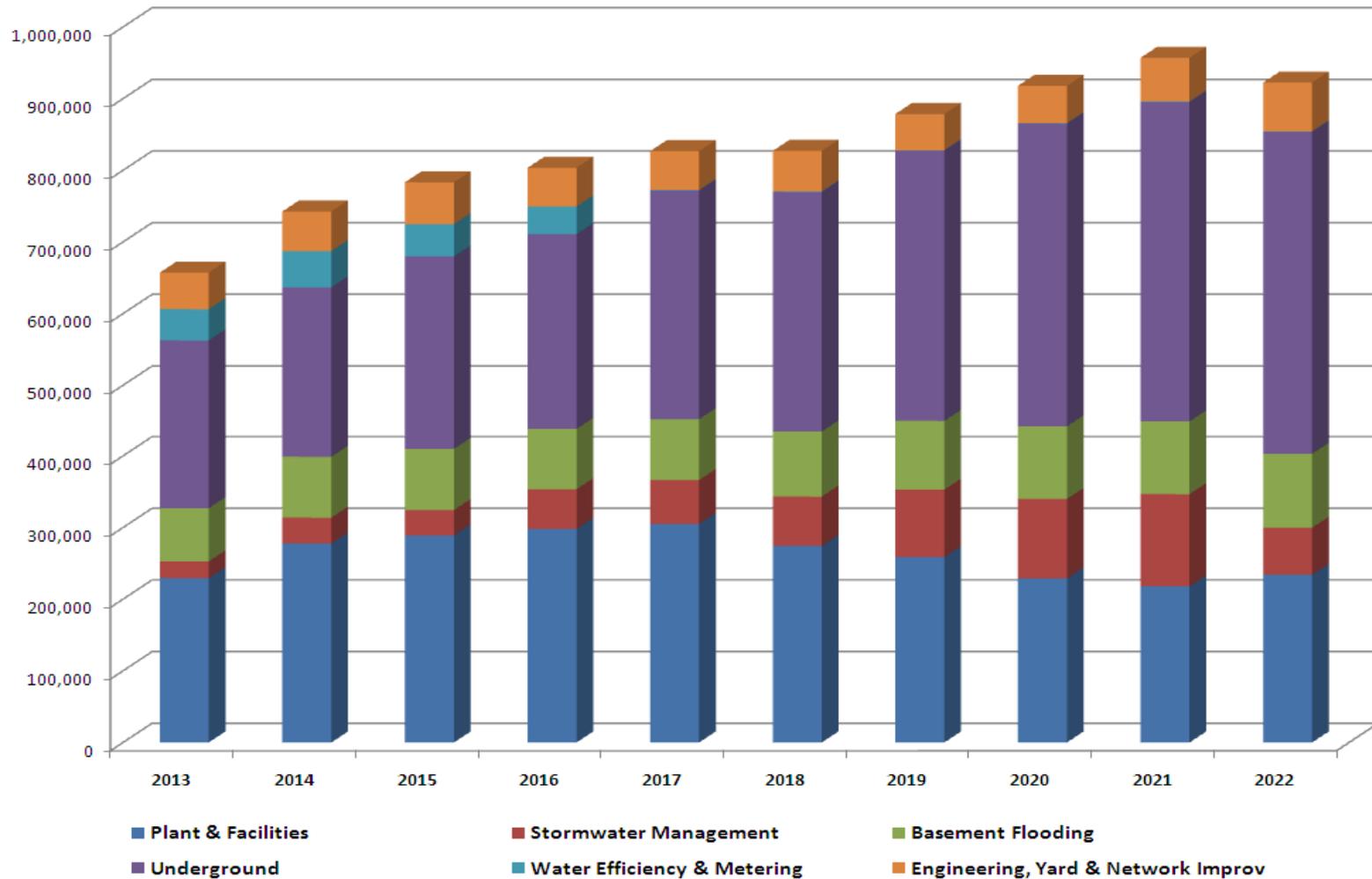
2013 Capital Budget by Project Category \$000's



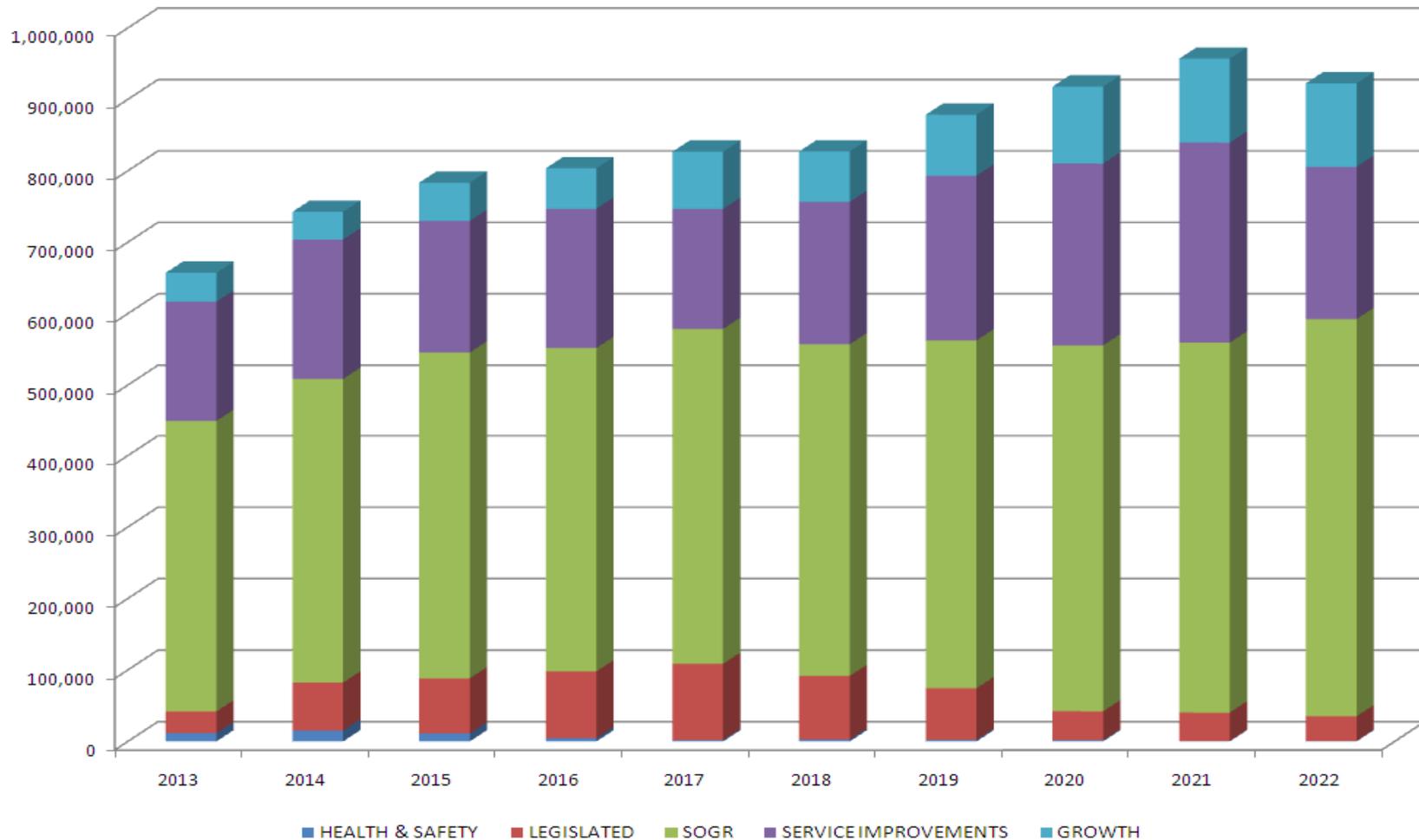
2013 Capital Budget Funding Source \$000's



# 2013-2022 Capital Plan by Asset Class (\$000s)



# 2013-2022 Capital Plan by Category (000s)



# Summary of Major Capital Projects



## New & Future Major Projects

- **Initiation of new projects in 2013**
  - Ashbridges Bay WWTP Primary Treatment and Odour Control (P Building) – mitigates impacts to local community
  - Highland Creek WWTP – odour control upgrades
  - Humber WWTP – odour control upgrades
  - Emery Creek storm water management ponds
- **Future major capital projects**
  - Phase 1 of project to twin the Coxwell Sanitary Trunk Sewer (2014)
  - Bonar Creek storm water management pond (2014)
  - ABTP UV Disinfection (2015)
  - ABTP M&T Pumping Station Rebuild (2016)

# **Program Challenges – Future Year Issues**

---

## **Recommended Reductions in 2012-2021 Capital**

**Decreases of \$1.132 billion or 14% in ten year plan attributed to:**

- Accelerated capital spending during 2009-2011
- Declining water consumption forecast
- Accommodating increased capital costs for recent Council Direction (i.e. Highland Creek Biosolids, Ashbridges UV Disinfection)

## **Significant Unfunded Pressures:**

- Additional \$385 million in unfunded capital pressures
- Wet Weather Flow Master Plan \$1.2 billion+

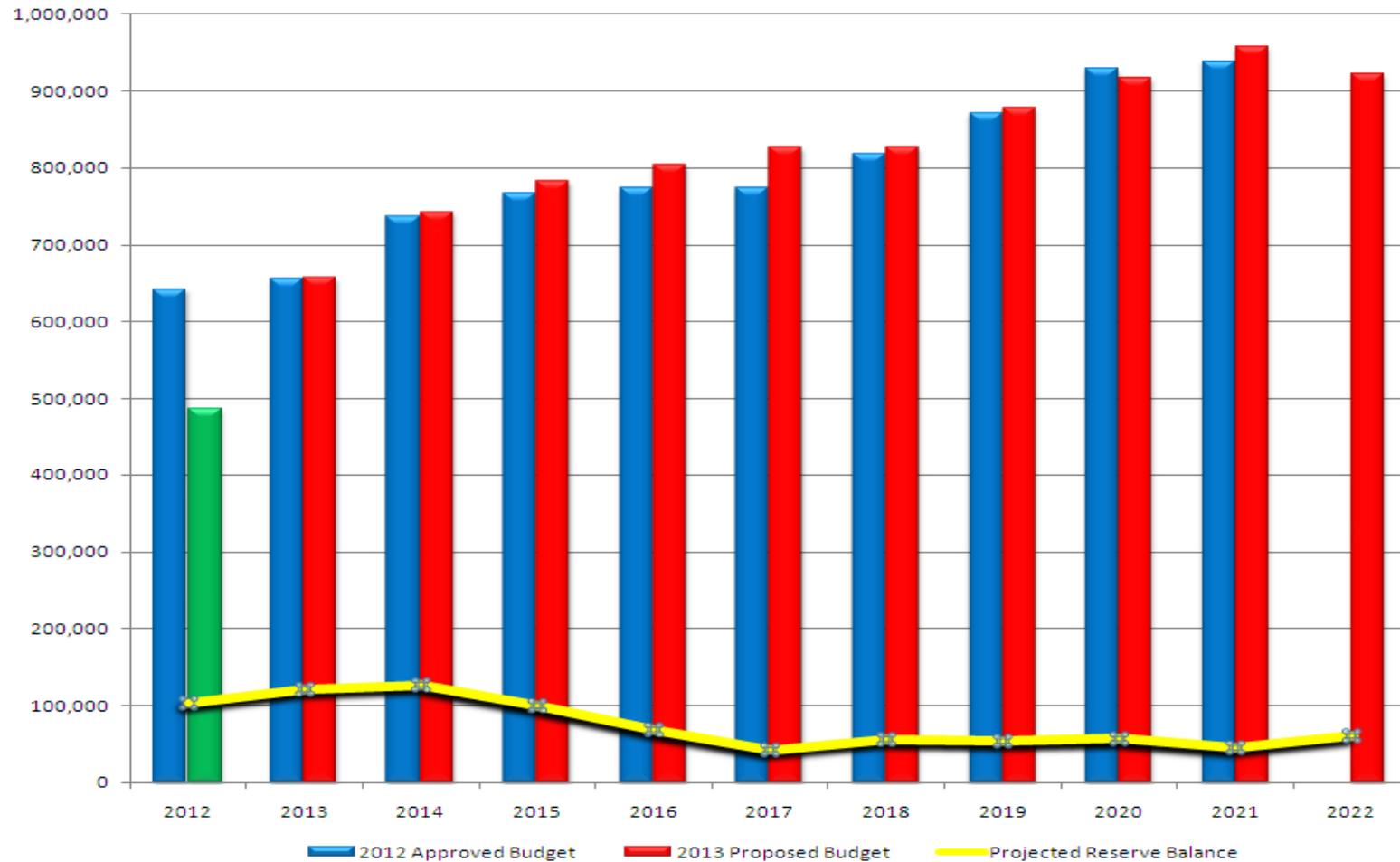
# Key Issues for 2013 and Beyond

## Summary of Toronto Water Capital Budget Pressures

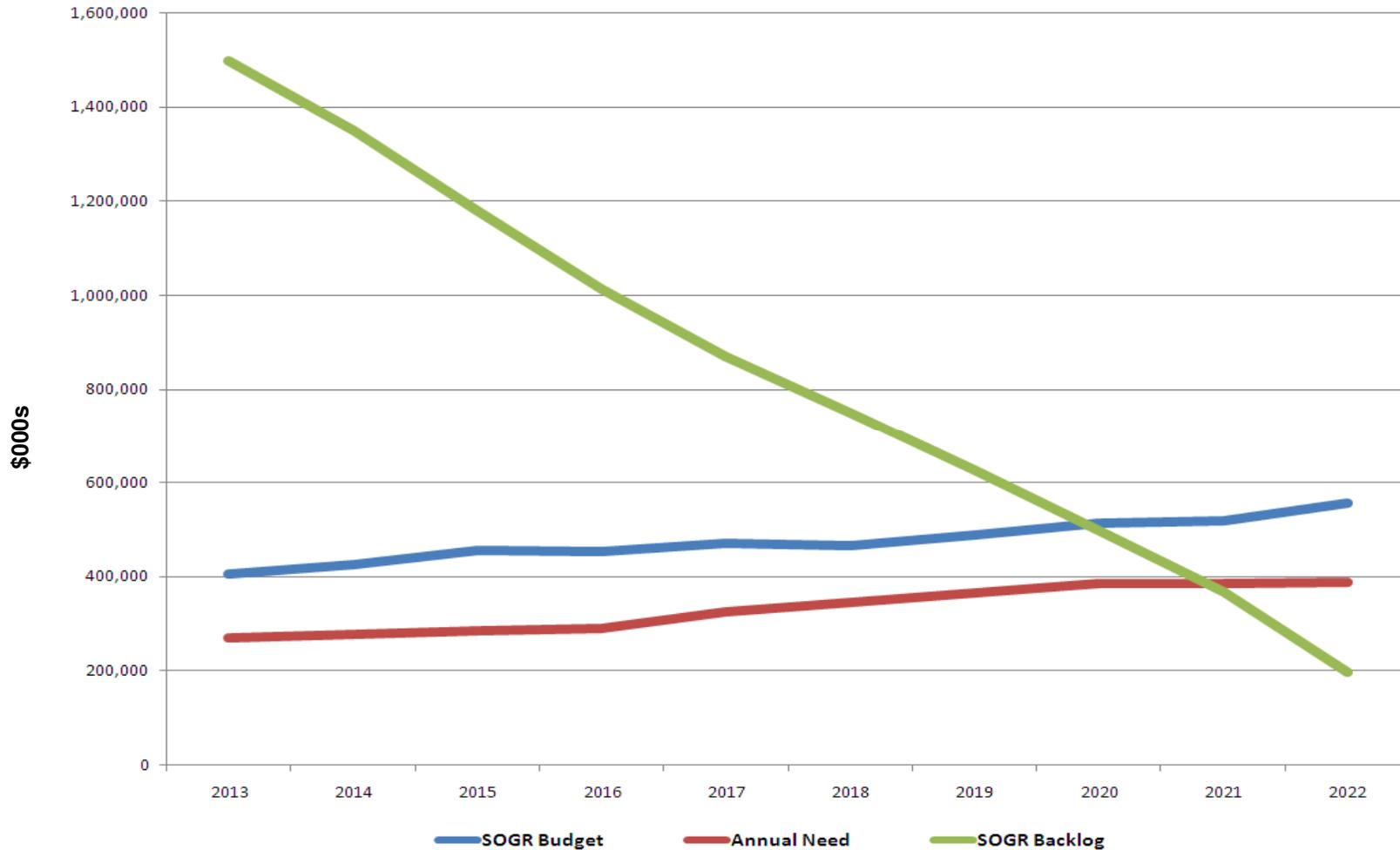
Project/Program	2013-2022 (\$ millions)	2023-2032 (\$ millions)
<b>Budgeted Pressures</b>		
a) Highland Creek Wastewater Treatment Plant – Biosolids Handling Cost Increase	\$ 8.6	--
b) Ashbridges Bay Wastewater Treatment Plant – Disinfection Cost Increase	\$66.9	--
<b>Total Budgeted Pressures:</b>	<b>\$75.5</b>	
<b>Unbudgeted Pressures</b>		
a) Ashbridges Bay Wastewater Treatment Plant Outfall		\$312.8
b) Wastewater Treatment Plants - Digester Cleaning and Repairs	\$ 62.3	TBD
c) Wet Weather Flow Master Plan		
i) Don River & Central Waterfront Project	\$ 39.0	\$681.5
ii) Basement Flooding Protection Program	\$ 95.0	TBD
iii) Etobicoke Waterfront Stormwater Control	--	\$ 88.0
iv) Waterfront Landforms	\$ 563.2	TBD
d) Water Treatment and Supply – Standby Power	\$ 9.0	\$ 86.5
e) Growth related projects		
i) Waterfront Development – Sanitary Sewer Master Servicing Plan	--	TBD
ii) Lawrence Heights	\$ 31.3	\$ 25.7
iii) Downsview Park	\$ 8.0	--
f) Metrolinx/TTC Transit Project – Sewer & Watermain Infrastructure Upgrades	\$ 62.0	TBD
g) TRCA Priority Lakefront Erosion Control Projects	\$ 35.0	TBD
<b>Total Unbudgeted Pressures:</b>	<b>\$385.4</b>	<b>\$1,192.9</b>



# 10-year Capital Plan Comparison (\$000s)



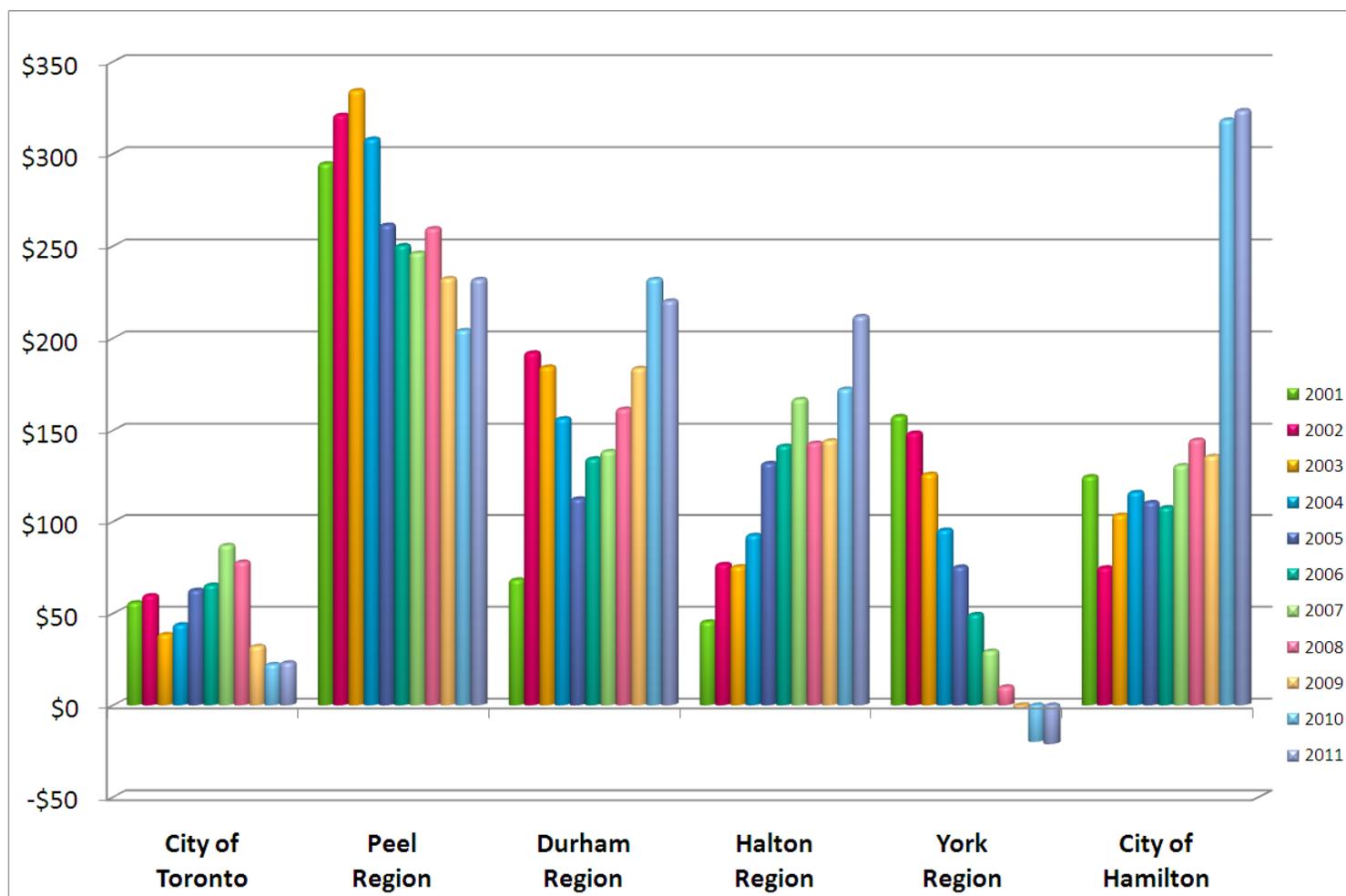
# State of Good Repair Funding & Backlog



# Incremental Operating Impact of Capital

Program Costs, Revenues and Net (\$000s)	2013 Rec. Budget	2014 Plan	2015 Plan	2016 Plan	2017 Plan	2018 Plan	2019 Plan	2020 Plan	20201 Plan	2022 Plan	2013-2022 Total
<b>2013 Recommended Capital Budget</b>											
Program Gross Expenditure	5,562.0	2,432.0	247.0	147.0	5,220.0	5,530.0					19,138.0
Program Revenue	(113.0)										(113.0)
Program Costs (Net)	5,675.0	2,432.0	247.0	147.0	5,220.0	5,530.0	-	-	-	-	19,251.0
Approved Positions	2.0		3.0								5.0
<b>Recommended 10-Year Capital Plan</b>											
Program Gross Expenditure			100.0	100.0	100.0		53.0				353.0
Program Revenue											-
Program Costs (Net)	-	-	100.0	100.0	100.0	-	53.0	-	-	-	353.0
Approved Positions			1.0	1.0	1.0						3.0
<b>Total</b>											
Program Gross Expenditure	5,562.0	2,432.0	347.0	247.0	5,320.0	5,530.0	53.0	-	-	-	19,491.0
Program Revenue	(113.0)	-	-	-	-	-	-	-	-	-	(113.0)
Program Cost (Net)	5,675.0	2,432.0	347.0	247.0	5,320.0	5,530.0	53.0	-	-	-	19,604.0
Approved Positions	2.0	-	4.0	1.0	1.0	-	-	-	-	-	8.0

# Water and Wastewater Reserve Balances (per capita comparison)



# 2013 Water Rate



# Assumptions for 2013

---

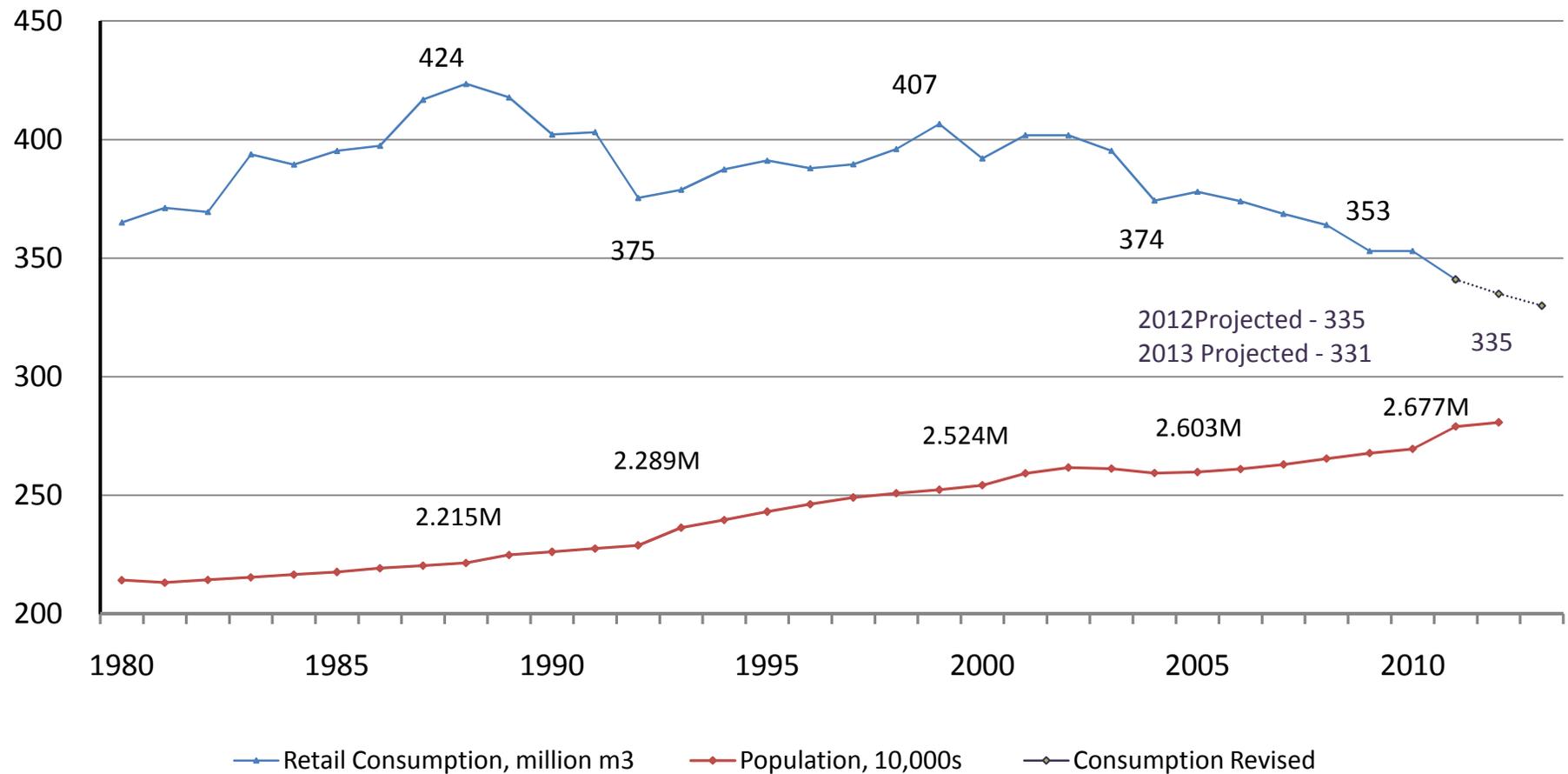
## Continuous Declining Consumption

- 2012 Forecast – 0.7% below 2011 actual  
(\$14 million revenue impact)
- 2013-2015 – 1.5% decrease per year

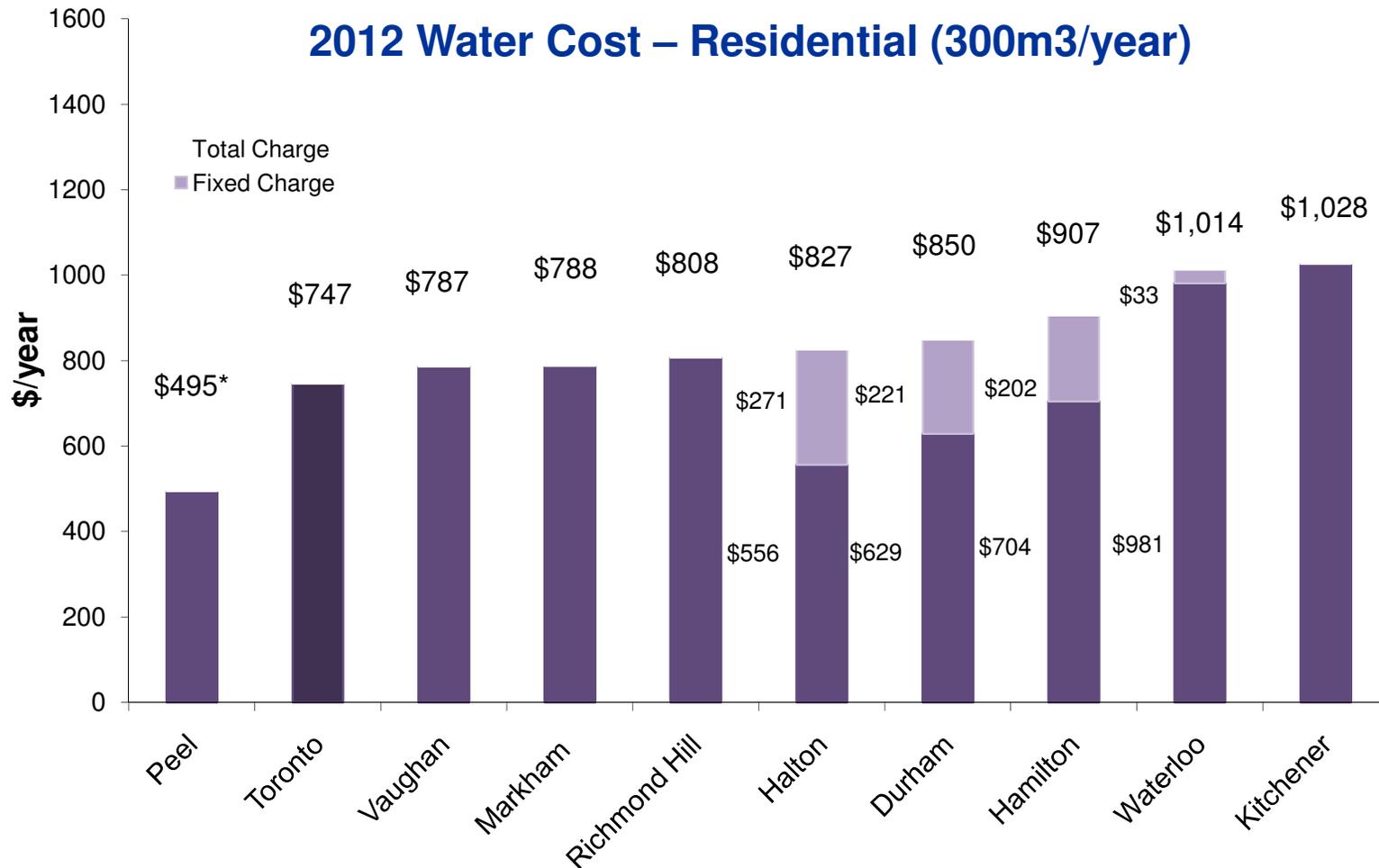
## Capital Expenditure Rate Forecast

- 2012: 76%
- 2013 and forward: 85%

# Population and Water Consumption



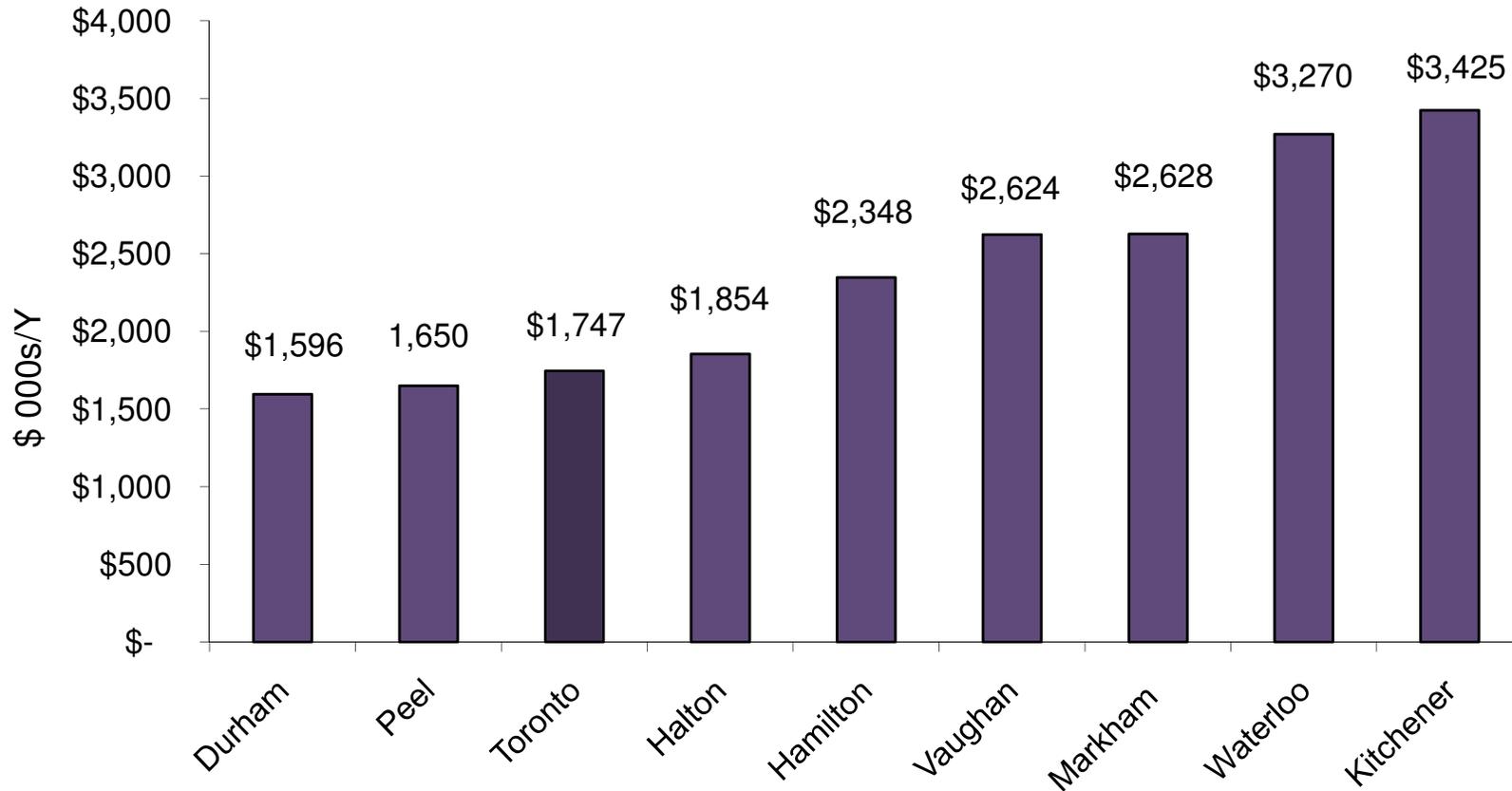
# How Does Toronto Compare?



\* Note: Peel stormwater funded by property tax

# How Does Toronto Compare?

## 2012 Water Cost – Large Industrial (1,000,000 m<sup>3</sup>/year)



# 2013 Water Rate Increase Impact

Type of Property	Consumption	2012 Cost	Projected 2013 Cost	2013 Rate Increase Impact	
<b>Residential</b>	300	\$747	\$814	\$67	9.0%
<b>Industrial</b>	1,000,000	\$1,747,271	\$1,904,525	\$157,254	9.0%
<b>Commercial</b>	1,000,000	\$2,489,700	\$2,713,700	\$224,000	9.0%

- Daily cost for all residential water, wastewater and stormwater services only **\$2.23** per day.
- An increase of: **18¢** per household per day.

# Projected Water Rate Increase

2013 Projection	2012	2013	2014	2015*	2016	2017	2018	2019*	2020	2021	2022
<b>Block 1 Rate Increase</b>	9%	9%	9%	3.6%	3%	3%	3%	3.6%	3%	3%	3%
<b>Block 2 Rate Increase</b>	9%	9%	9%	3.6%	3%	3%	3%	3.6%	3%	3%	3%
<b>Water Rate Revenue</b>	\$815.8	\$874.3	\$943.4	\$958.4	\$992.5	\$1,021.8	\$1,051.9	\$1,083.0	\$1,121.5	\$1,154.6	\$1,188.7
<b>Revenue Increase</b>	8.1%	7.2%	7.9%	1.6%	3.6%	3.0%	3.0%	2.9%	3.6%	3.0%	3.0%
<b>Reserve Closing Balance</b>	\$103.31	\$121.43	\$127.22	\$100.07	\$68.85	\$42.64	\$56.39	\$54.03	\$57.08	\$45.45	\$60.79
*Year 2015 and 2019 are post-election years and rate increase is applied on March 1st for 10 months only											

