



CITY OF TORONTO

Toronto Water

2012 Recommended Operating Budget and

2012 – 2021 Capital Plan

November 10, 2011

Program Overview



Program Overview



R.C. Harris Water Treatment Plant



Ashbridges Bay Wastewater Treatment Plant

- Serves 3.2 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

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

WASTEWATER - \$19.0 Billion

- 4 wastewater treatment plants
- 5 storage and detention tanks
- 4,400 km of sanitary, 1,300 km of combined and 4,300 km of storm sewers
- 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

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.

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 Strategic Plan 2010-2020

Vision Statement

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

Maintaining and Renewing Infrastructure

- Increased infrastructure renewal and state of good repair supported by multi-year business plan.
- Successive water rate increases have allowed for investment in infrastructure.

Improving Lake and River Water Quality

- Wet Weather Flow Master Plan
 - Don River and Central Waterfront Project
- Basement Flooding Protection

Improving Customer Service

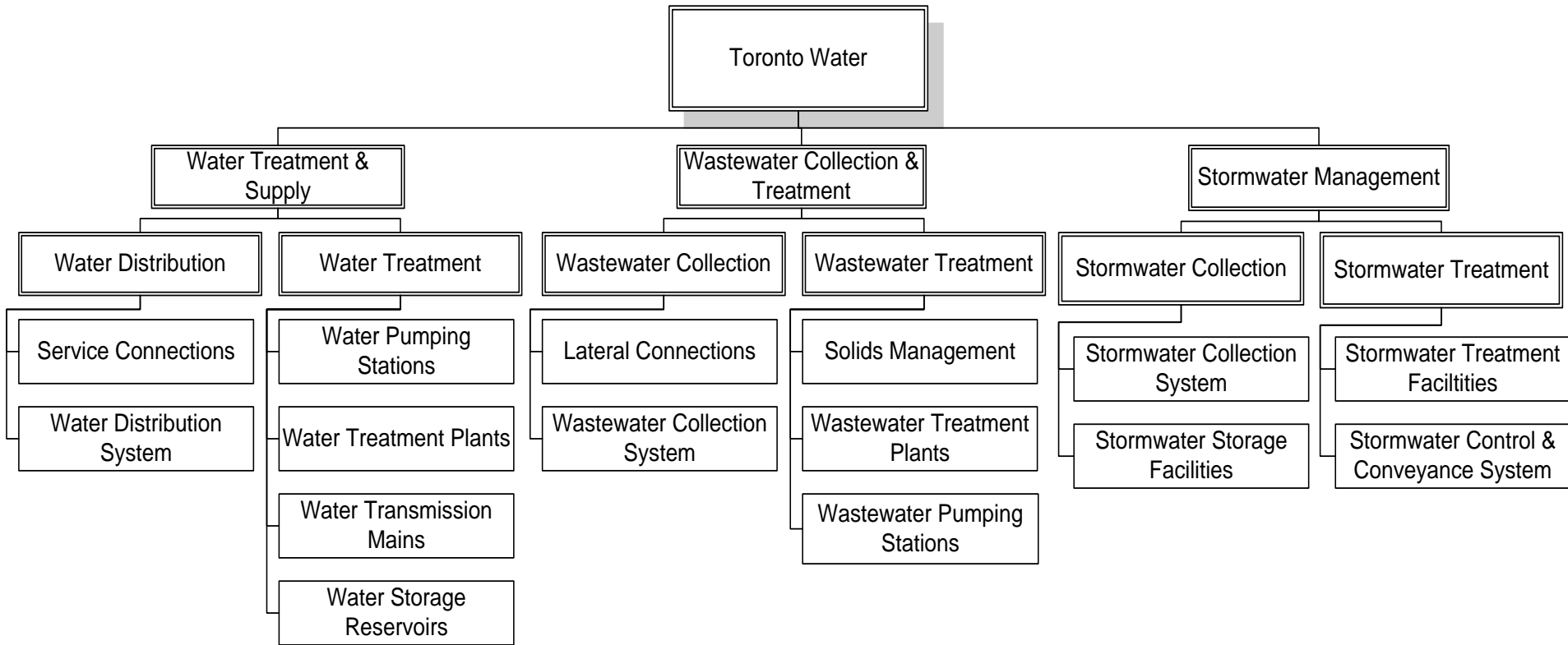
- Toronto Water Meter Program launched in 2010, to date 45,000 water meters have been installed, replaced or retrofitted.

Achieving Financial Sustainability

- Fiscal responsibility, seeking cost savings, maintaining competitive rates, and enhancing equitable revenue streams.



Toronto Water Program Map



Program Improvements

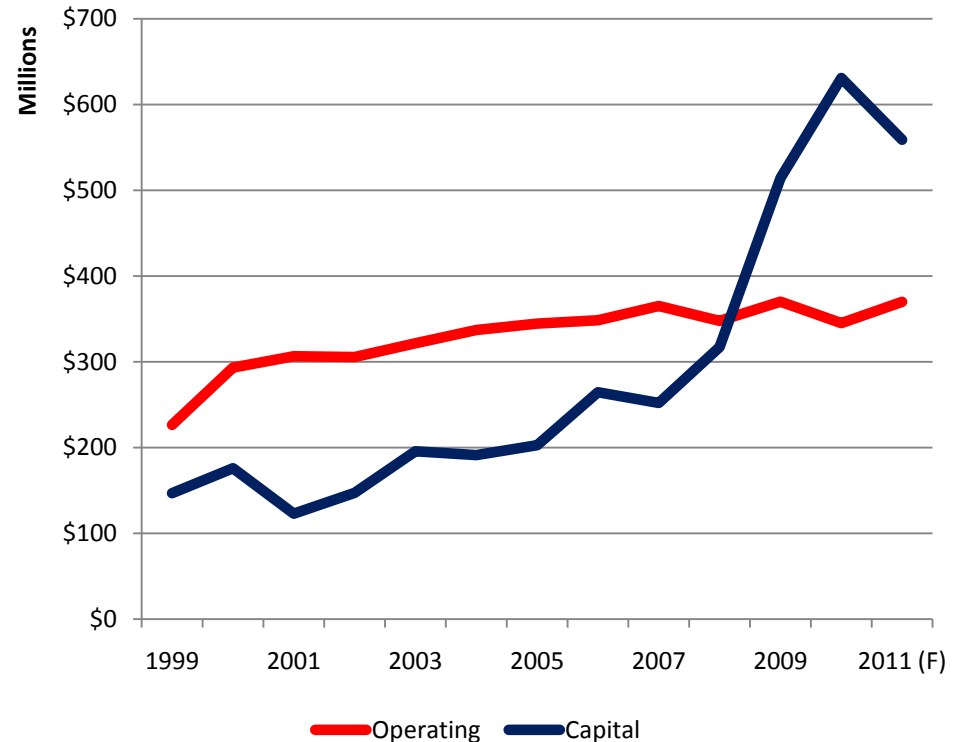
Stable Operating Costs

- 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

Toronto Water
Operating and Capital Expenses Review



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 for January 2013 include a Statutory Standard of Care to be exercised by Council/Senior Managers. Training course organized for Mayor and Councillors November 15.



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).



Program Challenges (cont'd.)



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.

2012 Recommended Operating Budget

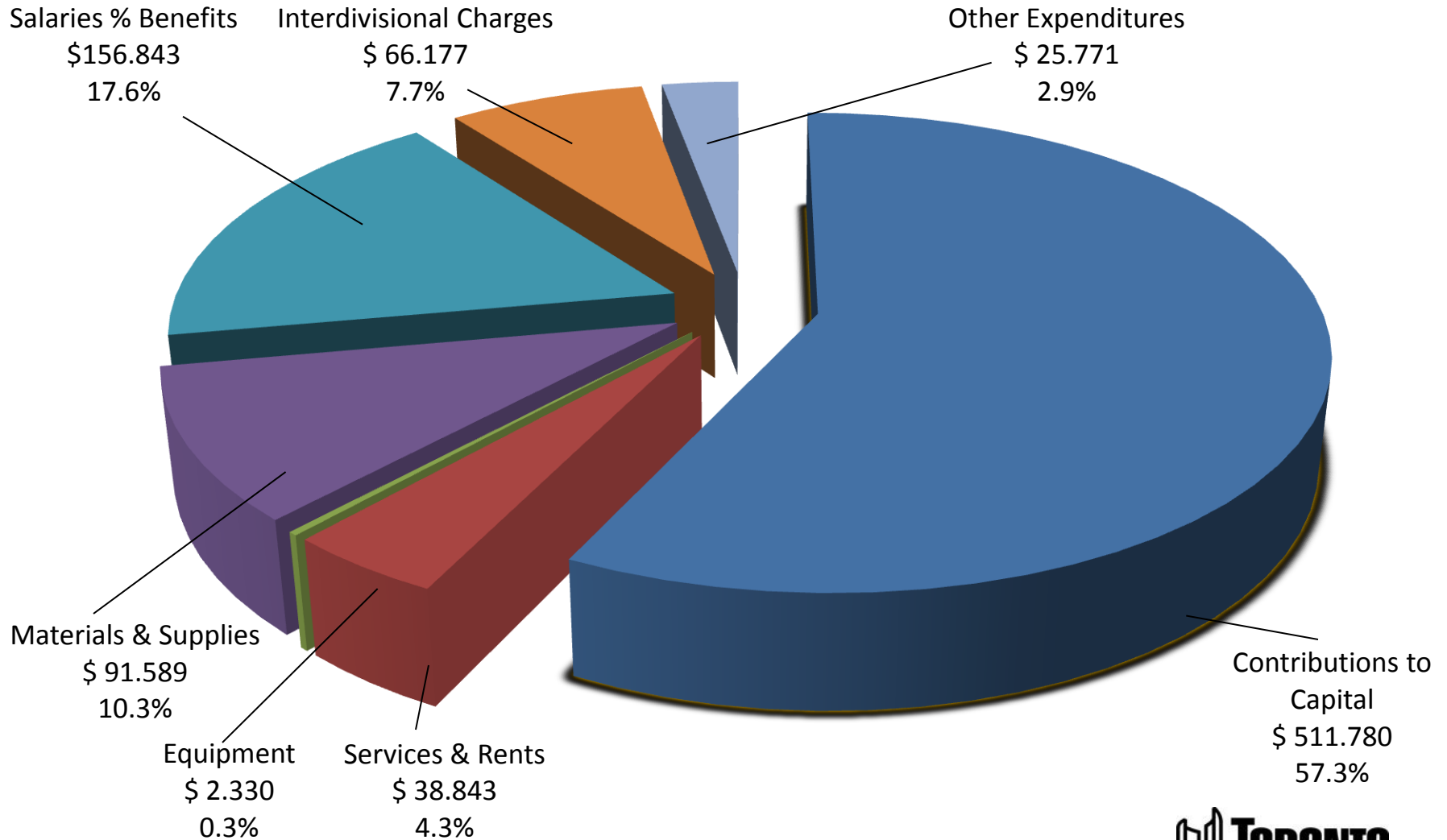


2012 Key Issues – Operating Budget Challenges

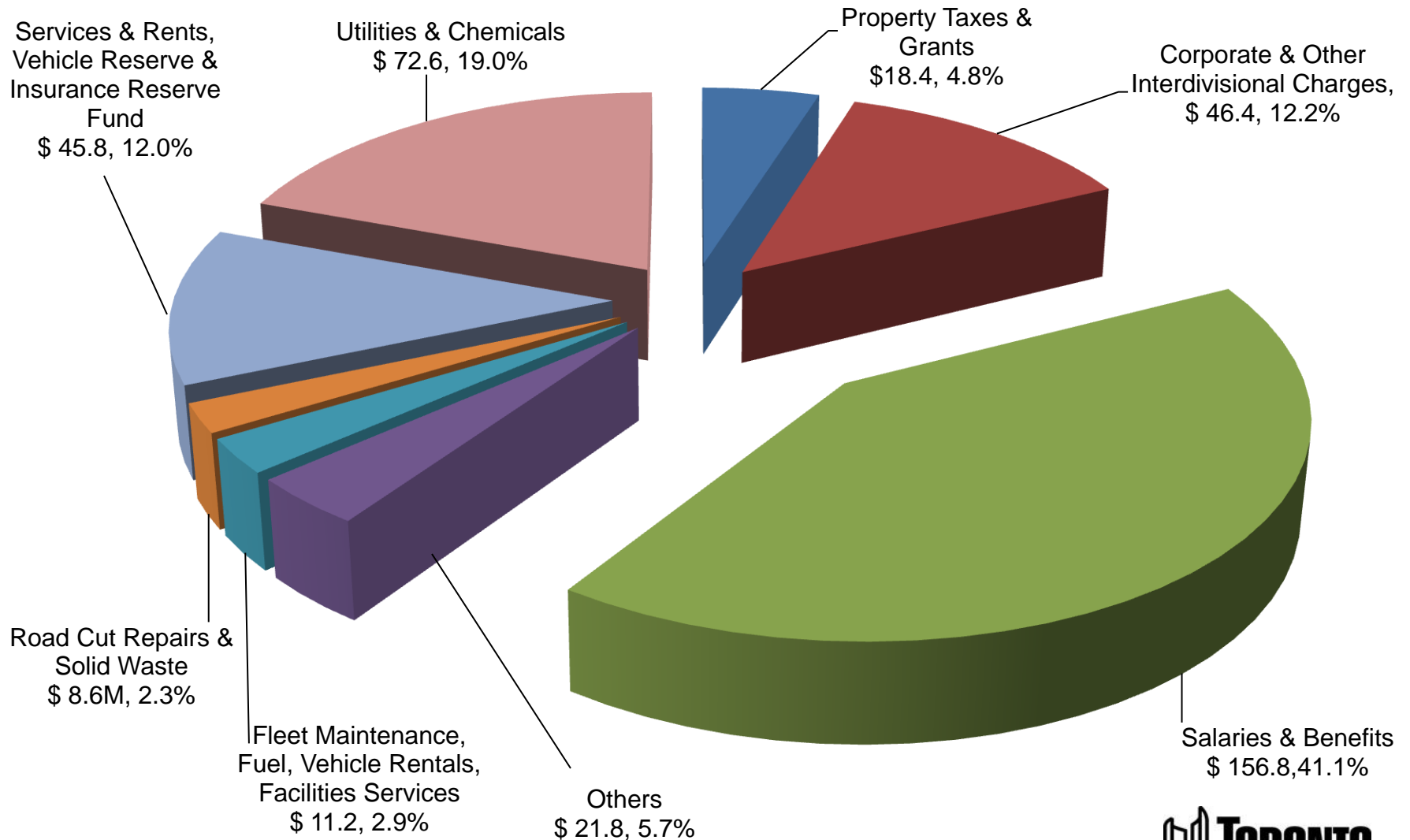
- **Maintaining stable operating costs:** Works Best Practices and District Services Improvement Programs continue to find efficiencies while ensure legislative compliance
- **Increased regulation and legislation:** Allocate appropriate resources and maintain compliance with MOE/MOL to provide safe drinking water, collection/treatment of wastewater and stormwater management services.
- **Managing the continuous increase in costs from internal and external sources:** Personnel costs, internal service providers and inflationary pressures on materials and supplies (electricity, chemicals, parts and machinery).
- **Ongoing service priorities:** Ensuring efficient and effective response time to customer service demands.



2012 Recommended Operating Budget by Expenditure Category \$893.3 Million (Gross)



2011 Recommended Operating Budget by Expenditure Type – Gross Expenditure \$381.6M (\$ millions)



2012 Recommended Base Budget

| | 2011 | | 2012 Recommended Operating Budget | | | Change - 2012 Recommended Operating Budget vs. 2011 Approved Budget | | FY Incremental Outlook | |
|---------------------------|--------------------|-----------------------|-----------------------------------|--------------------------|------------------|---|-------|------------------------|---------|
| | 2011 Appvd. Budget | 2011 Projected Actual | 2012 Rec. Base | 2012 Rec. New / Enhanced | 2012 Rec. Budget | | | 2013 | 2014 |
| | (In \$000s) | \$ | \$ | \$ | \$ | \$ | % | \$ | \$ |
| GROSS EXP. | 389,992.5 | 375,000.3 | 381,553.2 | 0.0 | 381,553.2 | (8,439.3) | (2.2) | 392.6 | 248.0 |
| REVENUE | 820,968.8 | 807,201.8 | 893,150.2 | 182.7 | 893,332.9 | 72,364.1 | 8.8 | 0.0 | 0.0 |
| CAPITAL CONTR. | 430,976.3 | 432,201.5 | 511,597.0 | 182.7 | 511,779.7 | 80,803.4 | 18.7 | (392.6) | (248.0) |
| Approved Positions | 1,723.3 | 1,723.3 | 1,676.3 | 0.0 | 1,676.3 | (47.0) | (2.7) | 0.0 | 0.0 |

2012 Budget Reduction Target

| Target Comparison | 10% Reduction Target | 2012 Rec.'d Reduction | 2012 10% Reduction vs. 2012 Rec'd Reduction | Target % |
|-------------------|----------------------|-----------------------|---|----------|
| 2012 Reductions | (38,999.3) | (21,831.6) | (17,167.7) | 5.6% |

- **Reduction Target:** 2012 reduction target of 10 per cent or \$38.999 million.
- Objective of the reduction target for Toronto Water was to reduce operating costs so that additional money could be diverted into increased capital contribution.

2012 Budget Reduction Target Summary

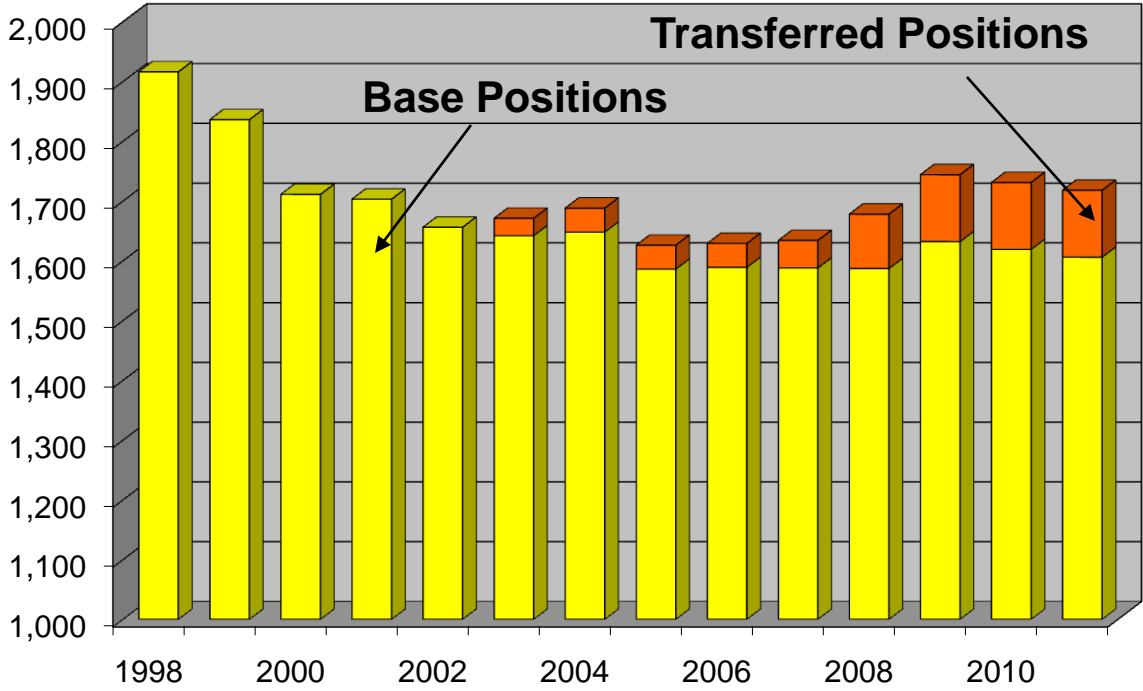
- **Total 2012 Reduction:** Recommended reduction is \$21.83 million or 5.6 per cent as follows:

| Description | Gross Expenditure | Capital Contribution | 2012 Target % |
|------------------------------|-------------------|----------------------|---------------|
| Base Expenditure Changes | (3,918.4) | 4,218.4 | 1.1% |
| Base Revenue Changes | -- | 2,286.1 | 0.6% |
| Service Efficiencies | (13,686.0) | 13,637.0 | 3.5% |
| Revenue Adjustments | -- | 1,690.1 | 0.4% |
| Total Service Changes | (17,604.4) | 21,831.6 | 5.6% |

2012 Recommended Service Change Summary

| Description | 2012 Recommended Service Changes | | | | Net Incremental Impact | | | |
|---|----------------------------------|-------------------|----------------------|-----------------------------------|---------------------------|---------------------------|-------------|--------|
| | Position Changes | Gross Expense | Capital Contribution | % of 2012 Budget Reduction Target | 2013 Capital Contribution | 2014 Capital Contribution | | |
| | # | \$ | \$ | % | \$ | \$ | # Pos. | # Pos. |
| Base Changes: | | | | | | | | |
| Base Expenditure Changes | | | | | | | | |
| Annualized Impact of the 2011 Approved Drain Grants Reduction | | (2,185.6) | 2,185.6 | 0.6% | | | | |
| In-Year Organizational & Salary Adjustments | | (368.0) | 368.0 | 0.1% | | | | |
| Absorb Econ. Factors (non-labour) within base budget | | (601.2) | 601.2 | 0.2% | | | | |
| Line by Line Review Reductions | | (763.6) | 1,063.6 | 0.3% | | | | |
| Base Expenditure Changes | | (3,918.4) | 4,218.4 | 1.1% | | | | |
| Base Revenue Changes | | | | | | | | |
| Annualized Impact of the 2011 Approved Utility Account Ownership Update Fee | | | 286.1 | 0.1% | | | | |
| Industrial Waste Revenue Increase | | | 2,000.0 | 0.5% | | | | |
| Base Revenue Changes | | | 2,286.1 | 0.6% | | | | |
| Sub-Total Base Budget Changes | | (3,918.4) | 6,504.5 | 1.7% | | | | |
| Service Efficiencies | | | | | | | | |
| Water Treatment & Supply - Service Efficiencies | (1.0) | (1,569.3) | 1,569.3 | 0.4% | 200.0 | | | |
| Wastewater Treatment - Service Efficiencies | (5.0) | (3,717.1) | 3,717.1 | 1.0% | 90.7 | | | |
| District Operations - Service Efficiencies | (2.0) | (2,019.4) | 2,019.4 | 0.5% | 529.1 | | | |
| Water Infrastructure Management - Service Efficiencies | (4.5) | (546.6) | 546.6 | 0.1% | | | | |
| Business Operations Management - Service Efficiencies | (12.0) | (1,062.6) | 1,013.6 | 0.3% | 189.8 | | | |
| Operational Support - Service Efficiencies | (20.5) | (3,284.3) | 3,284.3 | 0.8% | 50.0 | | 50.0 | |
| Program Support - Service Efficiencies | | (1,246.0) | 1,246.0 | 0.3% | | | | |
| Core Service Review - Paid Duty Savings | | (120.0) | 120.0 | 0.0% | | | | |
| Sub-Total Service Efficiencies | (45.0) | (13,565.3) | 13,516.3 | 3.1% | 1,059.6 | | 50.0 | |
| Revenue Adjustments: | | | | | | | | |
| Revised Service Level Agreement for Lab Service with Solid Waste | | | 144.0 | 0.0% | | | | |
| User Fee Increases | | | 1,363.4 | 0.3% | | | | |
| New User Fees | | | 182.7 | 0.0% | | | | |
| Sub-Total Revenue Adjustments | | | 1,690.1 | 0.4% | | | | |
| Minor Service Impact: | | | | | | | | |
| ABTP - Labourer Reductions | (2.0) | (120.7) | 120.7 | 0.0% | | | | |
| Sub-Total Minor Service Impacts | (2.0) | (120.7) | 120.7 | 0.0% | | | | |
| Total Service Changes | (47.0) | (17,604.4) | 21,831.6 | 5.6% | 1,059.6 | | 50.0 | |

Staffing Trends – Approved Positions



| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Base Positions | 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 |
| Transfers | 0 | 0 | 0 | 0 | 0 | 29 | 40 | 40 | 40 | 46 | 91 | 112 | 112 | 112 | 115 |
| Total Positions | 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 | 1,676 |

How were savings accomplished over the years ?

- **Works Best Practices 1996-2010**
 - Reduction of 532 positions by end of 2004 – annual savings \$35M
 - Reduction of 12 positions in 2010 – a further annual savings of \$1M
- **District Service Improvements Project 2004 to present**
 - Reduction of 86 positions – annual savings of over \$5M
 - Restructured emergency service contract – efficiency savings \$2.70M
 - 300 District Operations positions restructured resulting in harmonized service delivery/job classification
- **Operating Budget Reductions**
 - 2010: reduction of 13 positions – total budget reduction (0.5%)
 - 2011: reduction of 26 positions – total budget reduction (7.6%)
 - 2012: recommending reduction of 47 positions – total budget reduction (5.6%)

2012 Recommended Capital Budget



2012 Program Challenges

Capital Financing Reserve

- Accelerated capital spending in 2009, 2010 and 2011 (approximately \$250 million) coupled with reduced levels of water consumption have depleted capital financing reserves.

State of Good Repair Backlog

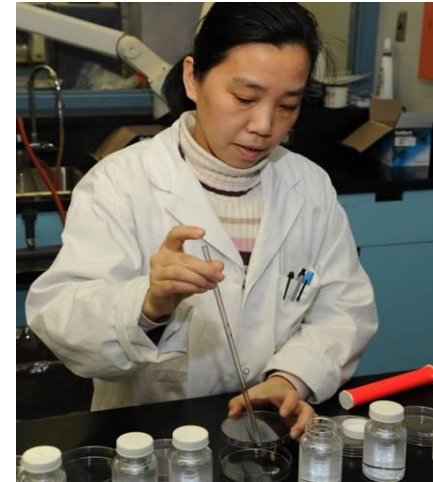
- The 2011 year-end renewal backlog is estimated at \$1.673 billion reflecting 6 per cent of asset value.

Extreme Weather Events

- Significant investment required to manage basement flooding and Wet Weather Flow projects.

Recent and Emerging Regulations

- Full financial implications arising from new and emerging regulations is still not fully known at this time. but could be significant.



Program Challenges – Future Year Issues

Recommended Reductions in 2011-2020 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)

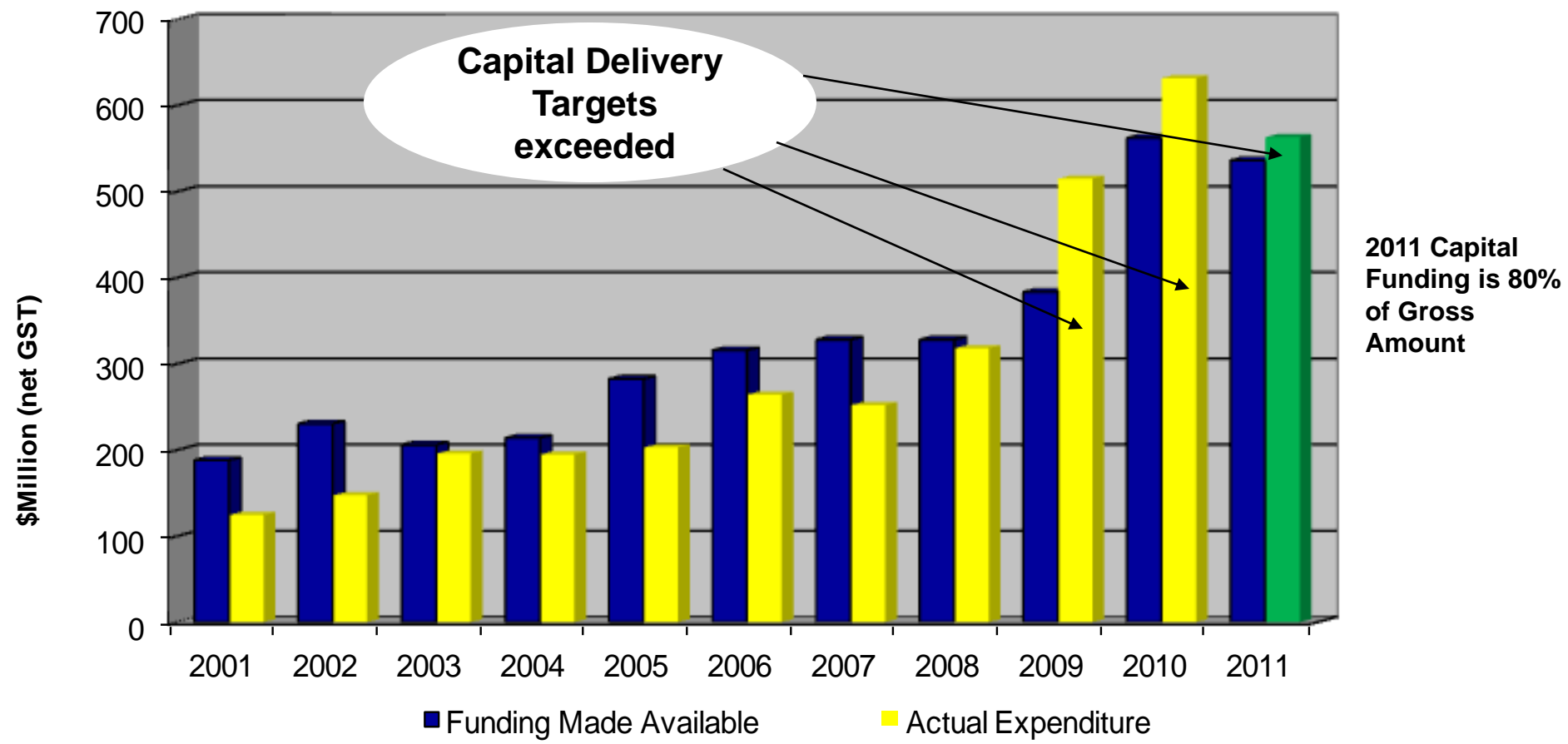
Significant Unfunded Pressures

- Additional \$200-300 million in unfunded capital pressures
- Wet Weather Flow Master Plan \$1.2 billion+

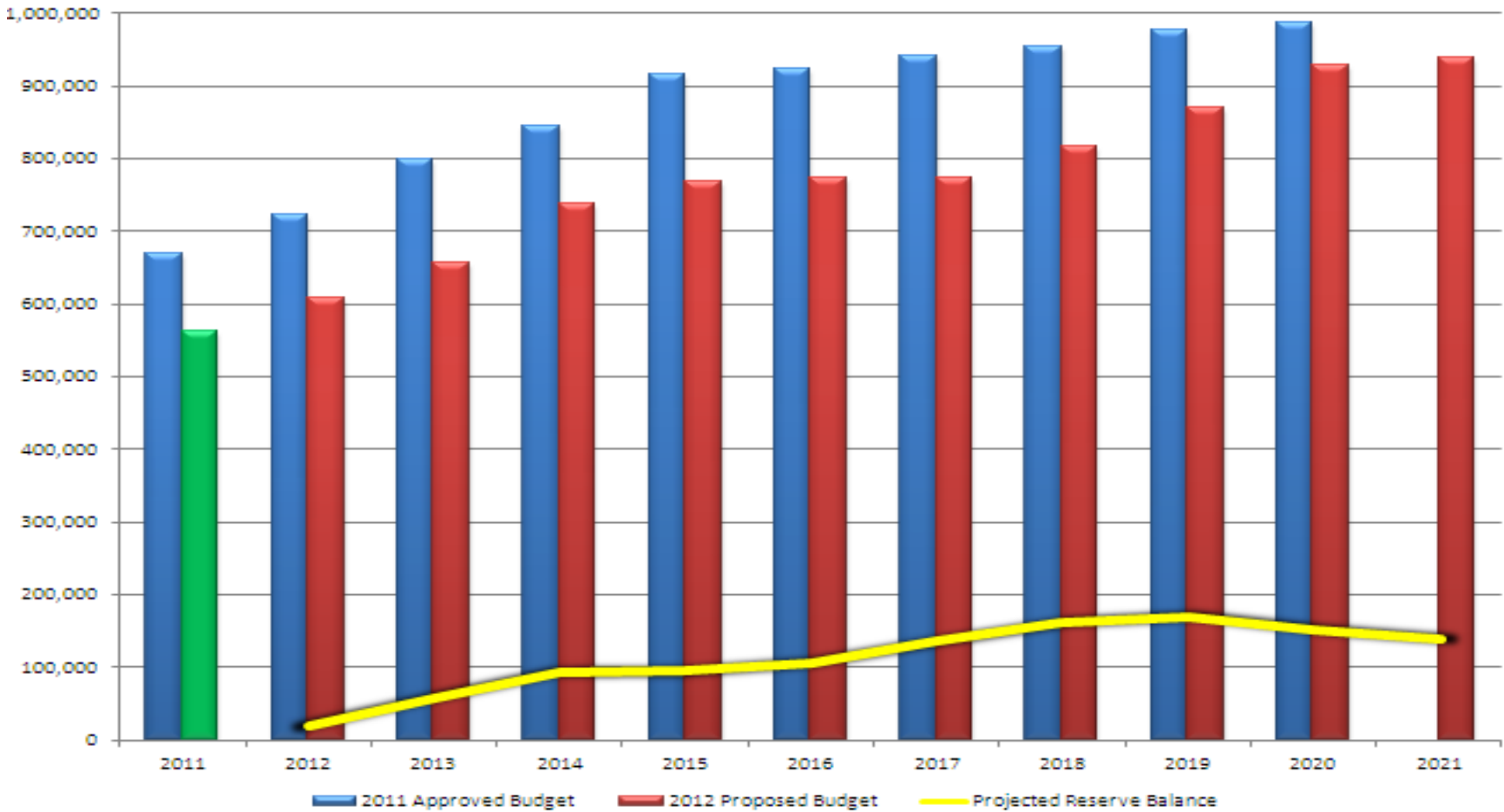
Significant Unbudgeted Pressures

- Lawrence Heights Redevelopment \$ 70 million
- Transit Project/Utility Relocation Costs \$ 31 million
- Island Tunnel (future costs) \$ 6 million
- Waterfront Master Service Plan \$ 70 million
- UV Disinfection Life Cycle Costs (ABTP) \$ 34 million
- Wet Weather Flow Master Plan
 - Scarborough Waterfront \$ 50 million
 - Etobicoke Waterfront \$100 million
 - Don River/Inner Harbour \$980 million
- TRCA Lakefront Erosion
 - Guildwood Inn \$ 10 million

1999-2011 Capital Budget Expenditure Rates (\$millions)



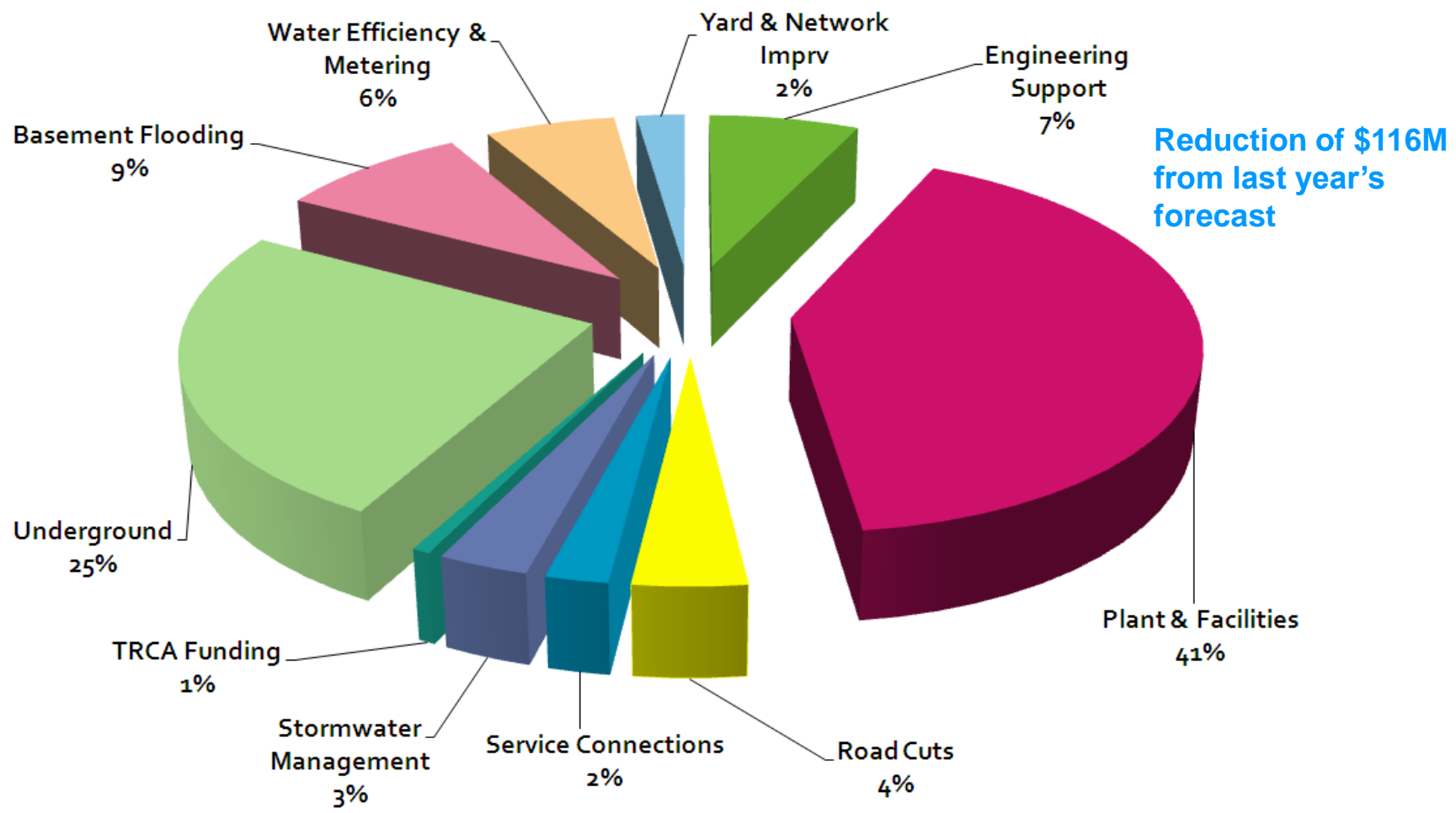
10-year Capital Plan Comparison (\$000s)



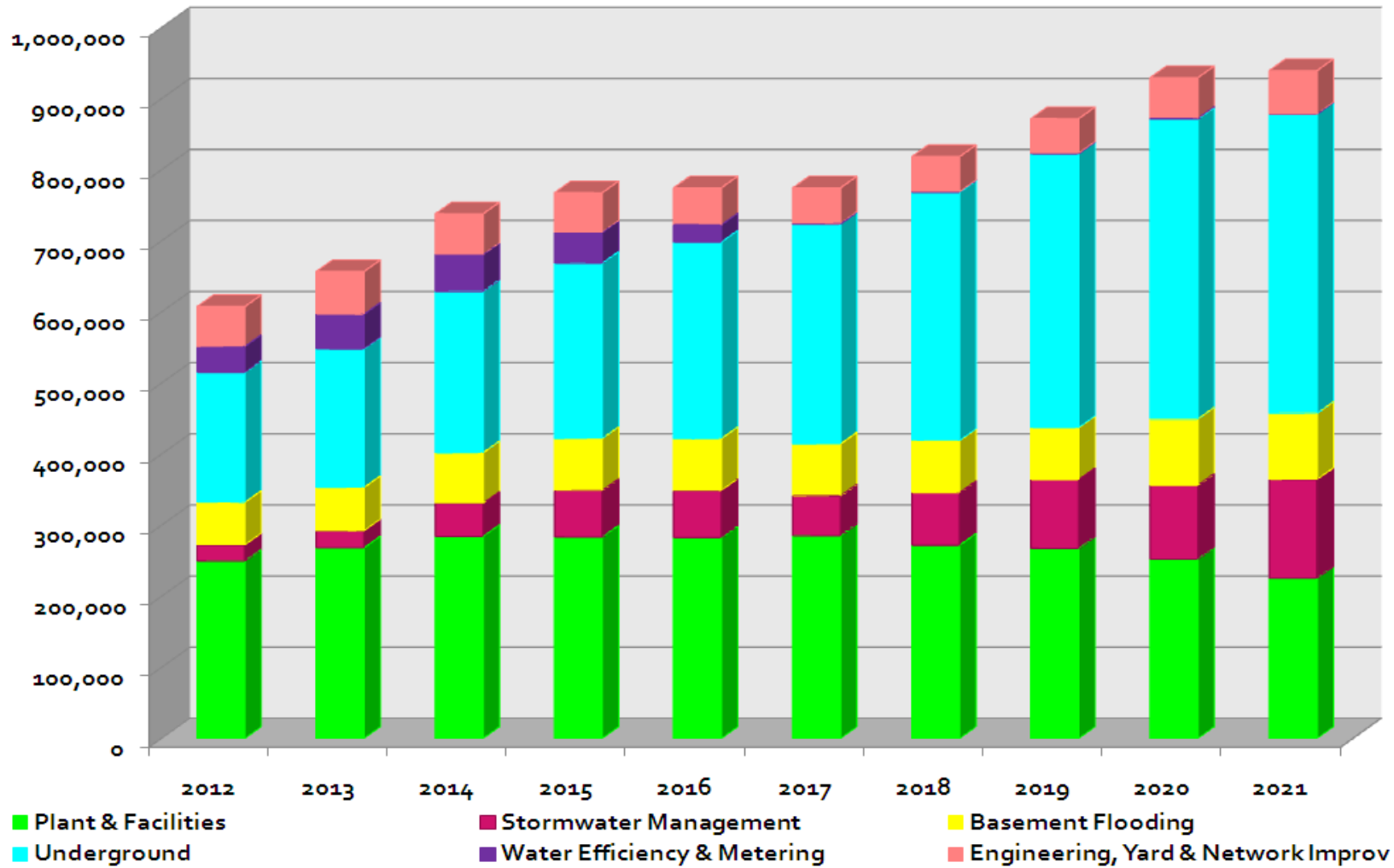
Summary of Project Changes 2012-2020 (\$000s)

| Key Projects | Total Project Cost | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2012-2020 | 2021 | Revised Total Project Cost (incl. 2021) |
|------------------------------|--------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------------|--------------------|----------------|---|
| Wet Weather Flow Master plan | 991,958 | (6,321) | (17,382) | (22,475) | (15,210) | (78,260) | (91,260) | (76,280) | (62,120) | (66,770) | (436,078) | 138,743 | 694,623 |
| Storage & Pumping Facilities | 442,552 | (1,136) | (16,028) | (7,764) | (10,865) | (13,475) | (37,825) | (62,675) | (97,825) | (123,175) | (370,768) | 15,175 | 86,959 |
| Watermain Renewal | 1,303,178 | (46,995) | (42,908) | (43,848) | (38,000) | (35,500) | (36,500) | (36,500) | (31,500) | (31,500) | (343,250) | 170,920 | 1,130,848 |
| Transmission Watermains | 673,399 | (34,842) | (68,112) | (40,391) | (52,419) | (39,651) | (54,541) | (43,083) | (1,455) | 26,020 | (308,474) | 55,975 | 420,900 |
| Basement Flooding | 777,600 | (15,704) | (24,752) | (23,350) | (17,000) | (8,500) | (7,000) | (17,000) | (17,000) | 3,000 | (127,306) | 93,000 | 743,294 |
| Wastewater Treatment Plants | 1,862,021 | (2,128) | 9,143 | 5,597 | (24,036) | (11,301) | 23,010 | 31,740 | 42,601 | 46,557 | 121,182 | 197,534 | 2,180,737 |
| Sewer Renewal | 464,265 | (3,956) | 3,192 | 1,917 | 7,133 | 15,000 | 23,000 | 32,000 | 34,000 | 34,000 | 146,286 | 106,000 | 716,551 |
| Linear Engineering & Support | 453,620 | (1,616) | 17,884 | 24,749 | 29,839 | 19,639 | 27,691 | 30,428 | 33,577 | 36,790 | 218,980 | 89,070 | 761,670 |
| Net Other Changes | 1,100,162 | (3,247) | (3,843) | (2,219) | (28,688) | 3,795 | (14,294) | 5,543 | (5,823) | 18,166 | (30,610) | 73,030 | 1,142,582 |
| Total Change | 8,068,755 | (115,945) | (142,806) | (107,784) | (149,246) | (148,253) | (167,719) | (135,827) | (105,545) | (56,912) | (1,130,038) | 939,446 | 7,878,163 |

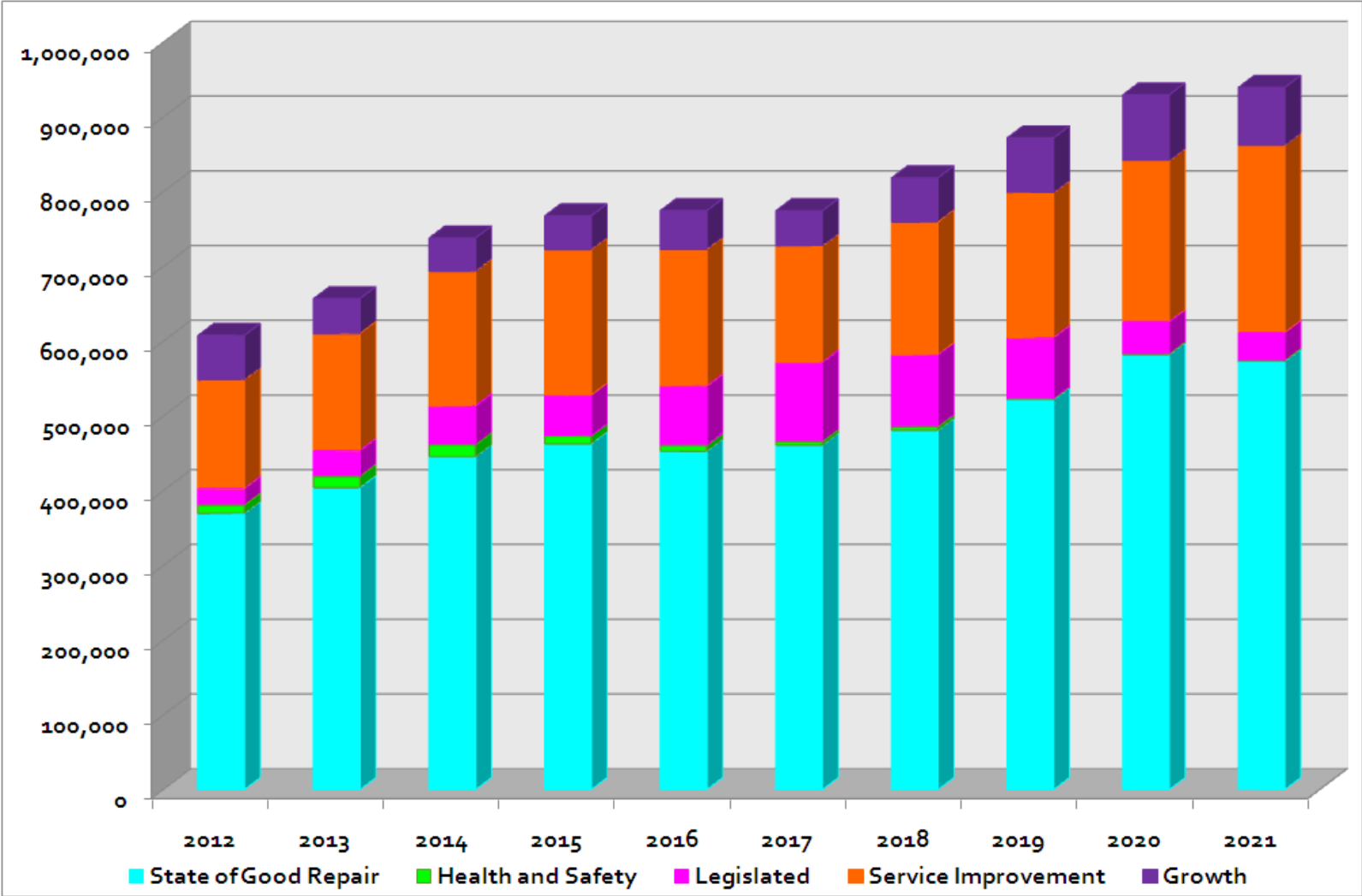
2012 Capital Budget \$607 Million (Gross)



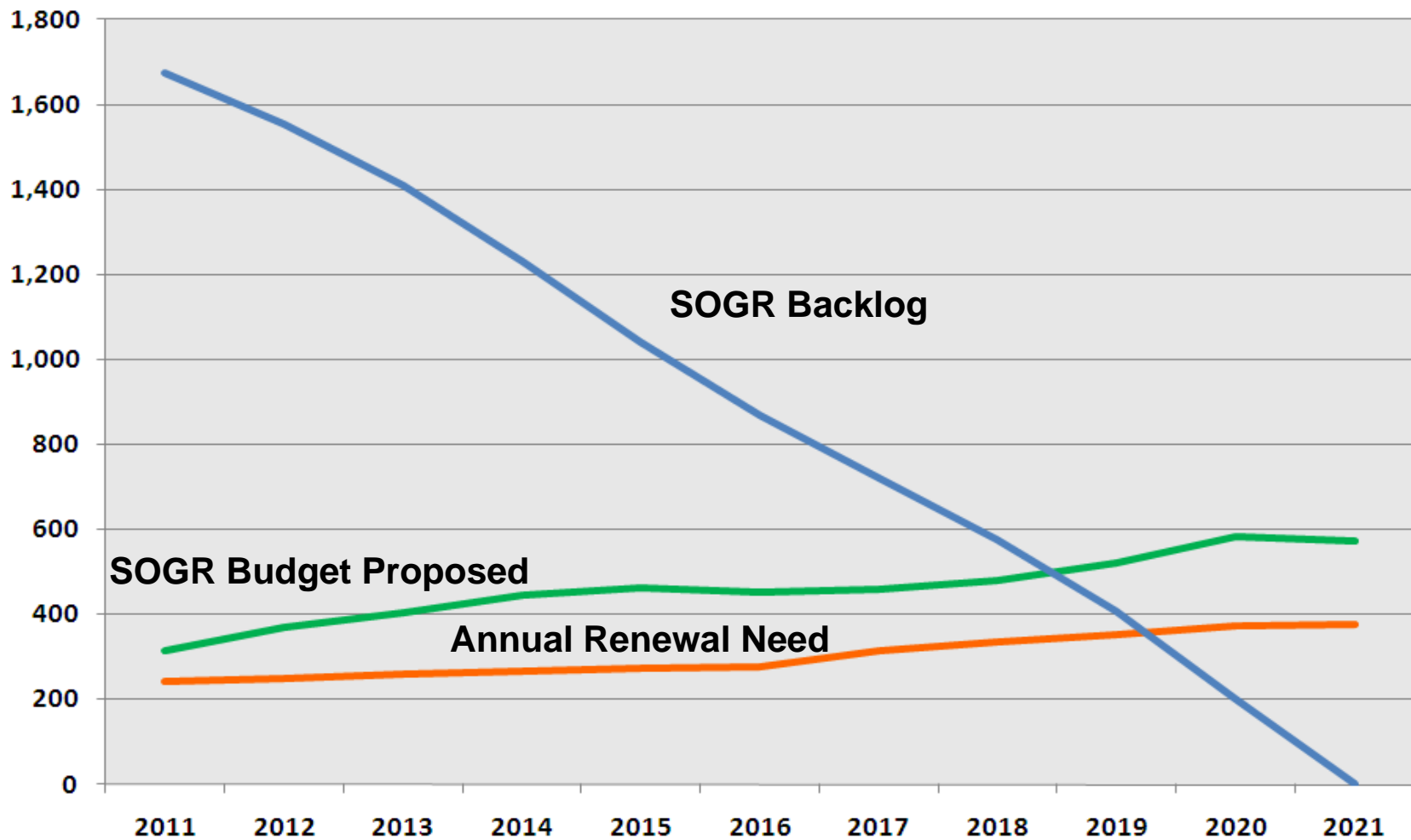
2012-2021 Capital Plan by Asset Class (\$000s)



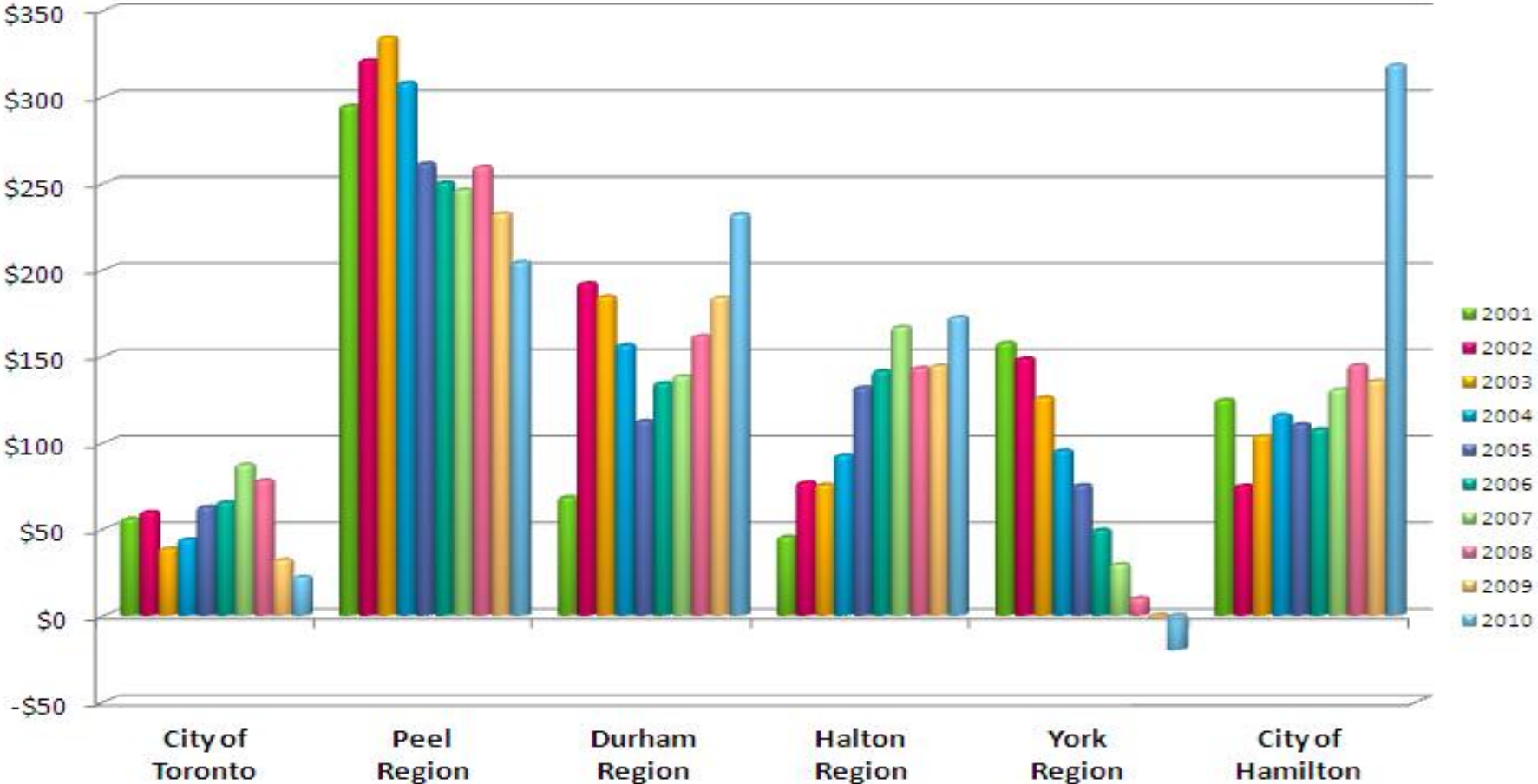
2012-2021 Capital Plan by Category (000s)



State of Good Repair Funding & Backlog



Water & Wastewater Reserve Balances (per Capita Comparison)



Summary of Major Capital Projects



Dufferin Reservoir



Entrance Shaft-Coxwell Sanitary Trunk Sewer Bypass

2012 Objectives & Milestones

- Increased infrastructure renewal funding that will reduce backlog by \$118 million to \$1.555 billion by end of 2012
- \$60 million in basement flooding protection
- \$110 million local sewer and watermain replacement and rehabilitation
- **Completion of major capital projects**
 - Coxwell Sanitary Trunk Sewer By-pass
 - Avenue Road Trunk Watermain
 - Horgan Water Treatment Plant Expansion
 - Ashbridges Bay WWTP Primary Treatment and Odour Control (D-Building)

Summary of Major Capital Projects



Ashbridges Bay Wastewater Treatment Plant – D Bldg .



Highland Creek Wastewater Treatment Plant - Headhouse

New & Future Major Projects

- **Initiation of new projects in 2012**
 - Gerrard Street Trunk Watermain – replaces old cast iron main and meets future water demands
 - Ashbridges Bay WWTP Primary Treatment and Odour Control (P Building) – mitigates impacts to local community
 - Highland Creek WWTP Major Biosolids Treatment Upgrade – upgrades old equipment to prepare for beneficial use of biosolids
- **Future major capital projects**
 - Humber WWTP Odour Control (2013) – mitigates impacts to local community
 - Don & Waterfront Trunk/CSO Construction (2014) – Phase 1 of the project will twin the Coxwell Sanitary Sewer

2012 Water Rate



Assumptions for 2012

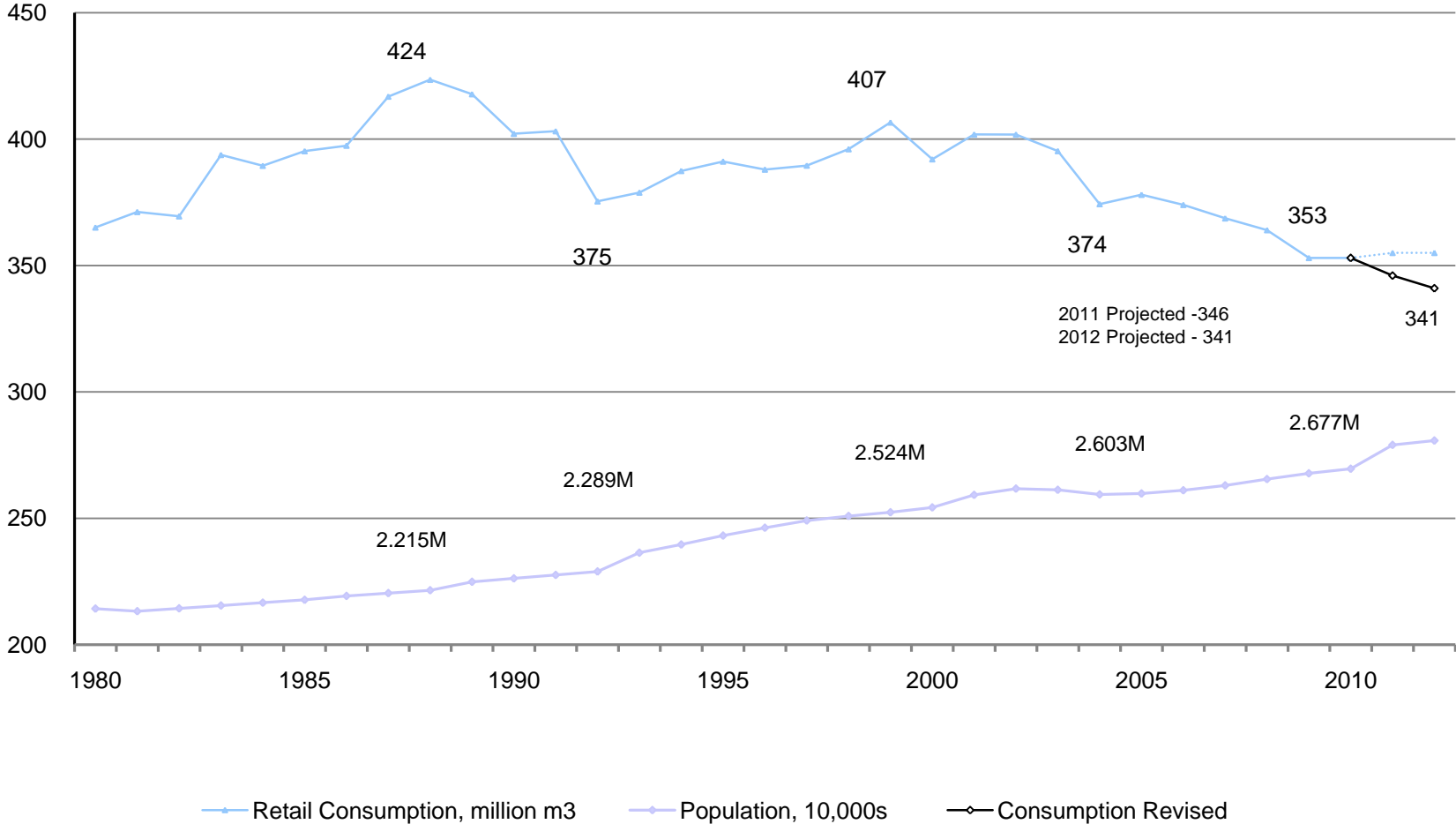
Declining Consumption

- 2011 Forecast – 1.5% below 2010 actual
(\$15 million revenue impact)
- 2012-2014 – 1.5% decrease per year

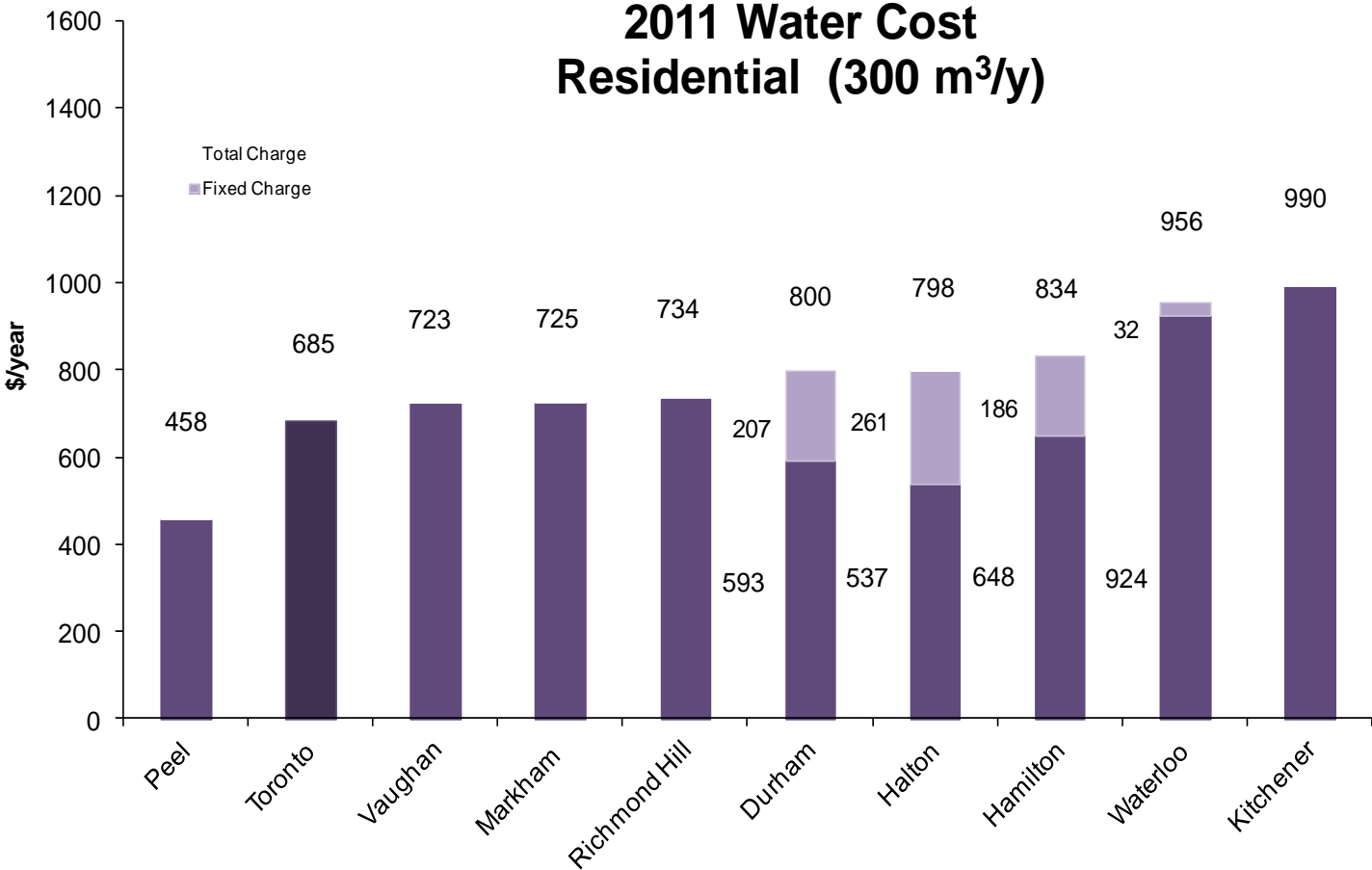
Capital Expenditure Rate Forecast

- 2011: 82%
- 2012 and forward: 85%

Population and Water Consumption



How Does Toronto Compare?



How Does Toronto Compare?

2011 Water Cost
Large Industrial (1,000,000 m³/Y)



2012 Water Rate Increase Impact

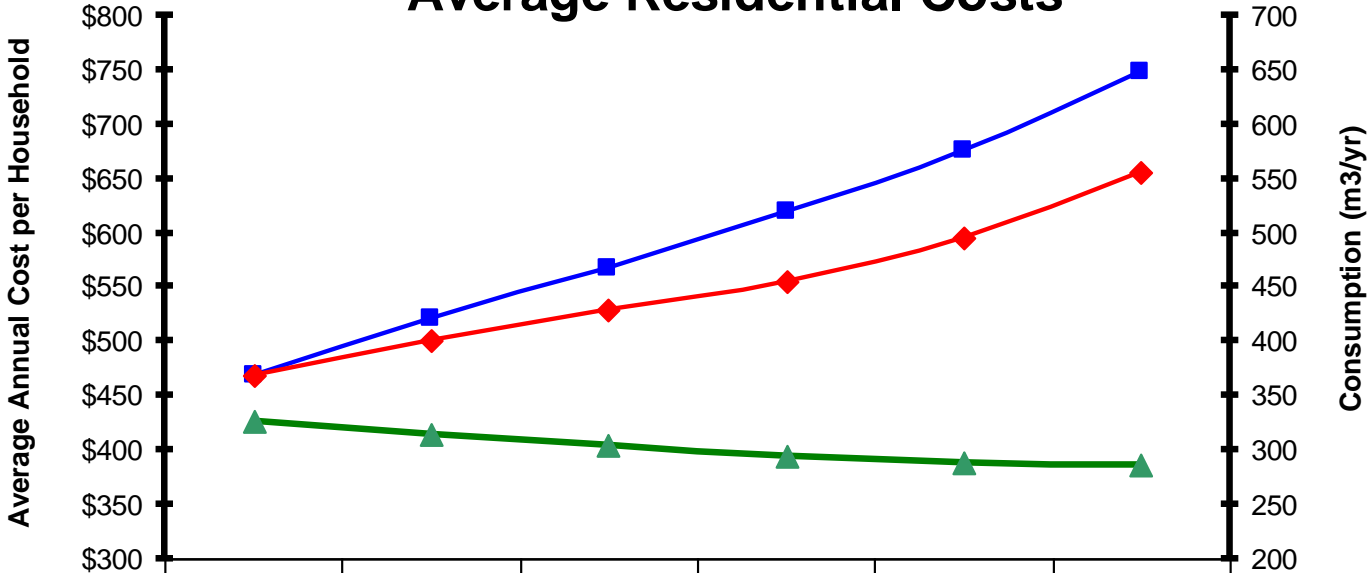
| Type of Property | Consumption | 2011 Full Annualized Cost * | Projected 2012 Cost | 2012 Rate Increase Impact | |
|------------------|-------------|-----------------------------|---------------------|---------------------------|-------|
| | | | | m ³ /y | \$/y |
| Residential | 300 | \$685 | \$747 | \$62 | 9.00% |
| Industrial | 100,000 | \$164,009 | \$178,769 | \$14,761 | 9.00% |
| | 1,000,000 | \$1,603,082 | \$1,747,359 | \$144,277 | 9.00% |

* Rate increase implemented March 1, 2011, represents full 12 months annualized cost

- Daily cost for all residential water, wastewater and stormwater services only **\$2.04** per day.
- An increase of: **17¢** per household per day.

Impact of Rate Increases

Average Residential Costs



| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|-------|-------|-------|-------|-------|-------|
| ■ Average Residential Costs with Approved Rate Increases at 2006 Consumption Levels | \$469 | \$520 | \$568 | \$619 | \$675 | \$748 |
| ◆ Actual Residential Costs with Approved Rate Increases at Actual Consumption Levels | \$469 | \$500 | \$528 | \$556 | \$596 | \$656 |
| ▲ Average Annual Household Consumption (m3/yr) | 327 | 315 | 304 | 294 | 289 | 287 |

Projected Water Rate Increase

| 2012 PROJECTIONS | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|------------------------------------|----------|----------|----------|----------|----------|------------|------------|------------|------------|------------|------------|
| Block 1 Rate Increase | 10.80% | 9.00% | 9.00% | 9.00% | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% |
| Block 2 Rate Increase | 8.58% | 9.00% | 9.00% | 9.00% | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% |
| <i>Reduction over Block 1 Rate</i> | 30% | 30% | 30% | 30% | 30% | 30% | 30% | 30% | 30% | 30% | 30% |
| WATER RATE REVENUE INCREASE | 10.80% | 9.00% | 9.00% | 9.00% | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% |
| Water Rate Revenue | \$781.17 | \$829.77 | \$897.71 | \$972.79 | \$983.98 | \$1,018.12 | \$1,048.30 | \$1,079.38 | \$1,105.94 | \$1,144.33 | \$1,178.26 |
| RESERVE Closing Balance | \$0.29 | \$19.94 | \$52.93 | \$83.29 | \$77.81 | \$85.32 | \$110.16 | \$132.85 | \$137.61 | \$113.28 | \$96.56 |

