

# Water



**Budget Committee  
October 16, 2007**

2008-2017 Capital Budget  
2008 Operating Budget

# Toronto Water



## Overview

- Serves 3.1 million residents and businesses in Toronto, and portions of York and Peel
- Over \$26 billion in infrastructure
- 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 services
- Both operating and capital budgets are supported by user fees for water consumption and sewage treatment.

# Toronto Water



## 2007 Overview

1,634 employees

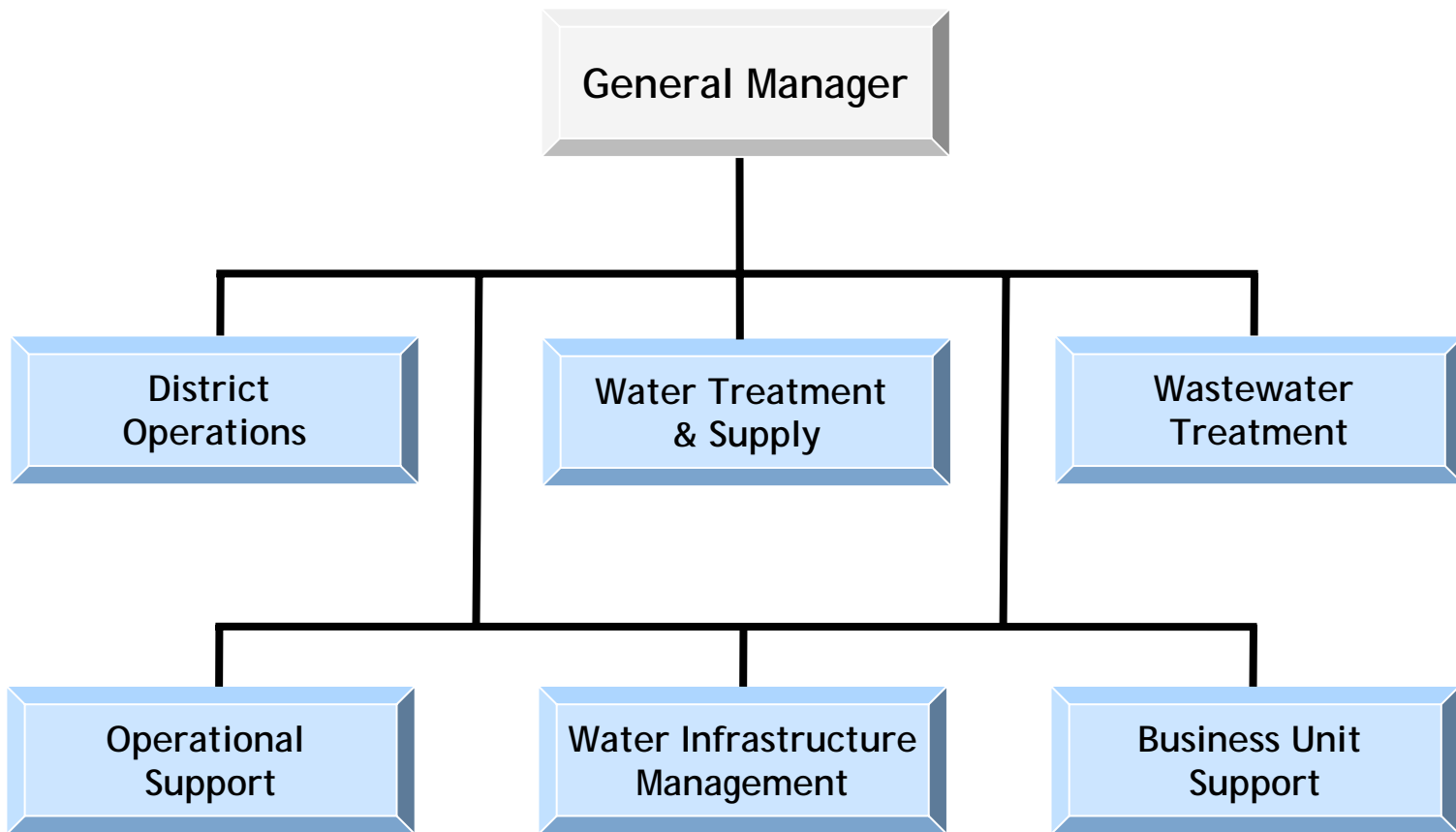
Gross Capital Budget \$410M

Gross Operating Budget \$379M

Annual Revenue \$648M



# Toronto Water Structure



# Inventory of Assets

*Replacement Value of \$26.6 Billion*



## **WATER - \$8.7 Billion**

- 4 water filtration plants
- 10 reservoirs and 4 elevated storage tanks
- 5,015km of distribution watermains and 510km of trunk watermains
- 52,900 valves and 40,460 hydrants
- 470,202 water service connections, plus York Region (population served 400,000)
- 18 water pumping stations

## **WASTEWATER - \$17.9 Billion**

- 4 wastewater treatment plants
- 5 storage and detention tanks
- 4,397km of sanitary, 1,301km of combined and 358km of trunk sewer
- 4,305 km of storm sewers and 546km of roadside ditches
- 463,300 sewer service connections
- 82 wastewater pumping stations
- 371km of watercourses, 43 stormwater management ponds
- 2,300 outfalls & 122,500 catchbasins

# Toronto Water Strategic Direction



- **Multi-Year Toronto Water Business Plan approved by Council February 1, 2005**
- **The strategic directions for 2008 and beyond are:**
  - Deliver excellence in environmental stewardship
  - Achieve ongoing financial vitality and sustainability
  - Enhance service delivery
  - Address renewal needs of our infrastructure
  - Increase total system capacity to meet population increases
  - Be recognized as an employer of choice in the water services industry
  - Implement Climate Change Initiatives

# 2008 Program Issues



- **Water Rate Restructuring:** impacts had to be factored into long-term capital plans
- **Aging Infrastructure:** requires significant long-term investment and significant increases to capital budgets
- **Compliance with Provincial Regulations:** causing increases to both operating and capital budgets
- **Managing Impact of Growing Capital Program:** increased resources are required to plan and manage infrastructure renewal programs and operate and maintain new equipment & facilities
- **Inflationary Pressures:** both the operating and capital budgets are experiencing additional inflationary pressures
- **Climate Change:** support Mayor's goal to reduce greenhouse gas and meet air pollution reduction targets

# Toronto Water Rate Setting Issues



- **Key Assumptions in Rate Setting**
  - Financial stability over long-term
  - No debt; pay-as-you-go principle
  - Maintaining adequate reserve balances
  - Forecasting water consumption



# Toronto Water 2008 Budget Provides



- **Annual Water & Wastewater Services for 2.6 million residents and businesses in Toronto:**
  - Treat & supply 514 billion litres of water
  - Collect & treat 438 billion litres of wastewater
  - Repair 9,500 blocked drains
  - Clean over 114,000 catch basins
  - Repair approximately 1,400 broken watermains



# Toronto Water 2008 Budget Provides



- Over 30,000 rebates for low-flow toilets
- Over 6,000 rebates for high-efficiency washing machines
- Projected to save 50 million litres of water per day by the end of 2008

# Toronto Water 2008 Budget Provides



## *Support for the Mayor's Mandate*

- Clean, beautify and improve access and stewardship of Toronto's ravines
- Help clean Lake Ontario to make Toronto's beaches more swimmable
- Disconnect 2,500 downspouts
- Distribute 500 rainbarrels
- Improved coordination between Divisions for ravine clean up
- Reallocation of resources for better outfall and beach monitoring programs



## Wet Weather Flow Master Plan

- Combined Sewer Overflow and Storm Sewer Discharge Controls
- Rainwater Harvesting and Green Roofs Pilot Projects
- Stream Restorations
- Tree Planting
- Source Water Land Acquisition

# Toronto Water 2008 Budget Provides



## *Support for Climate Change Initiatives*

- **Water Efficiency Plan (WEP)**
  - Designed to reduce peak day demand and average day demand consumption. Reduced water use leads to a decrease in electricity and chemical used at water treatment plants.
- **Water Metering Pilot**
  - Installation of wireless meters in 15,000 homes in and near downtown as part of a two-year pilot project. Metered properties typically will use less water per capita.
- **Energy Efficiency Measures**
  - Completion of facility energy audits
  - Replacement of older pumps & motors with high efficiency units
  - Implementation of Real Time Energy Monitoring and Water Pumping Strategy

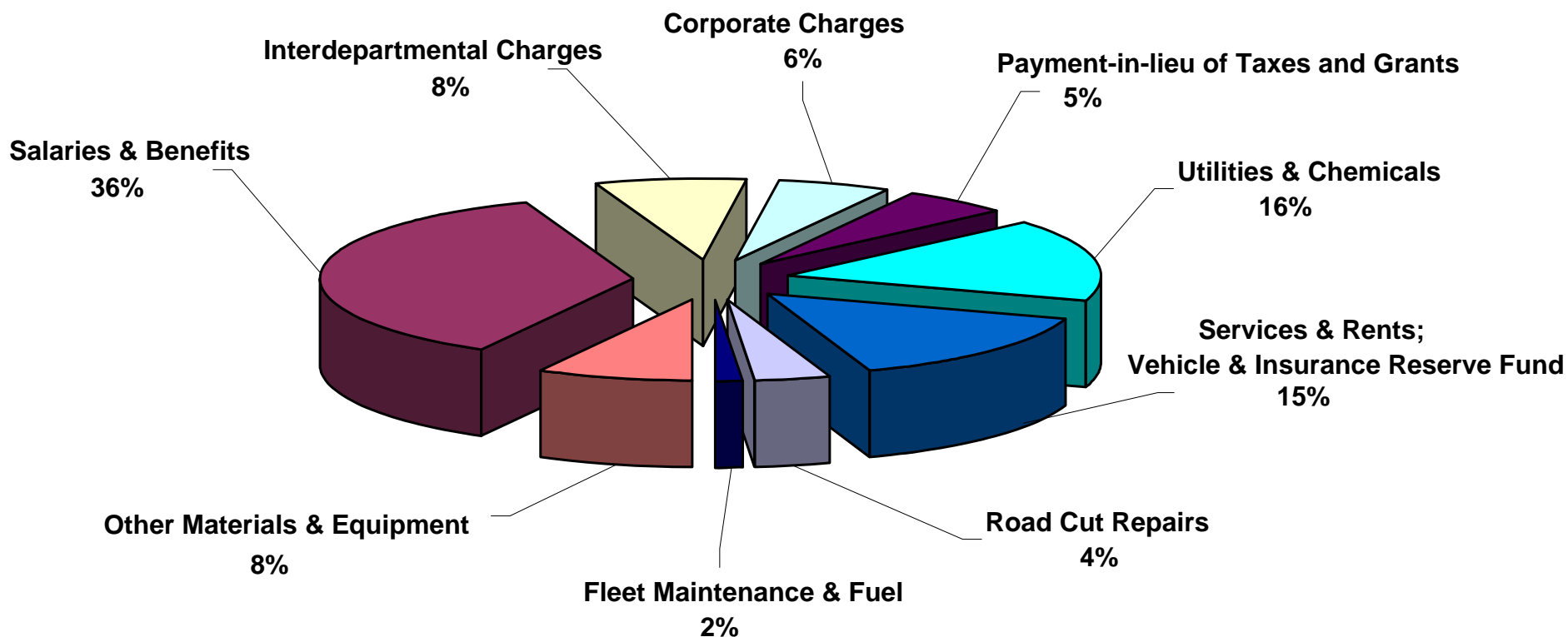




# **2008 Operating Budget**

2008

# Operating Cash Flow \$375 Million



# 2008 Operating Budget Challenges



- **Managing the continuous economic increases from internal and external sources:** personnel costs, internal service providers and inflationary pressures on materials and supplies (chlorine, powdered activated carbon)
- **Managing the impact of increased regulations and legislation:** increased resources are required to maintain legislative compliance (additional staff for confined space, lead testing and asbestos management)

# 2007 – 2008

## Base Budget Comparison

<b>BASE BUDGET COMPARISON (\$000s)</b>				
	2007 Approved Budget	2008 Budget Submission	\$ Increase (Decrease)	% Incr. (Decr.)
Gross Operating Expenditures	379,337.7	379,337.7		0.0%
<b>Base Budget Adjustments</b>		<b>8,987.2</b>		
<b>Services Efficiencies</b>		<b>(1,901.8)</b>		
Sub-total		386,423.1	7,085.4	1.9%
<b>New &amp; Enhanced Services</b>		<b>2,175.2</b>		
Sub-total		388,598.3	9,260.6	2.4%
<b>Transfers to Capital Budget</b>		<b>(13,391.0)</b>		
Gross Operating Expenditures	379,337.7	375,207.3	(4,130.4)	-1.1%

Figures do not include capital contribution



# 2008 Operating Budget Changes



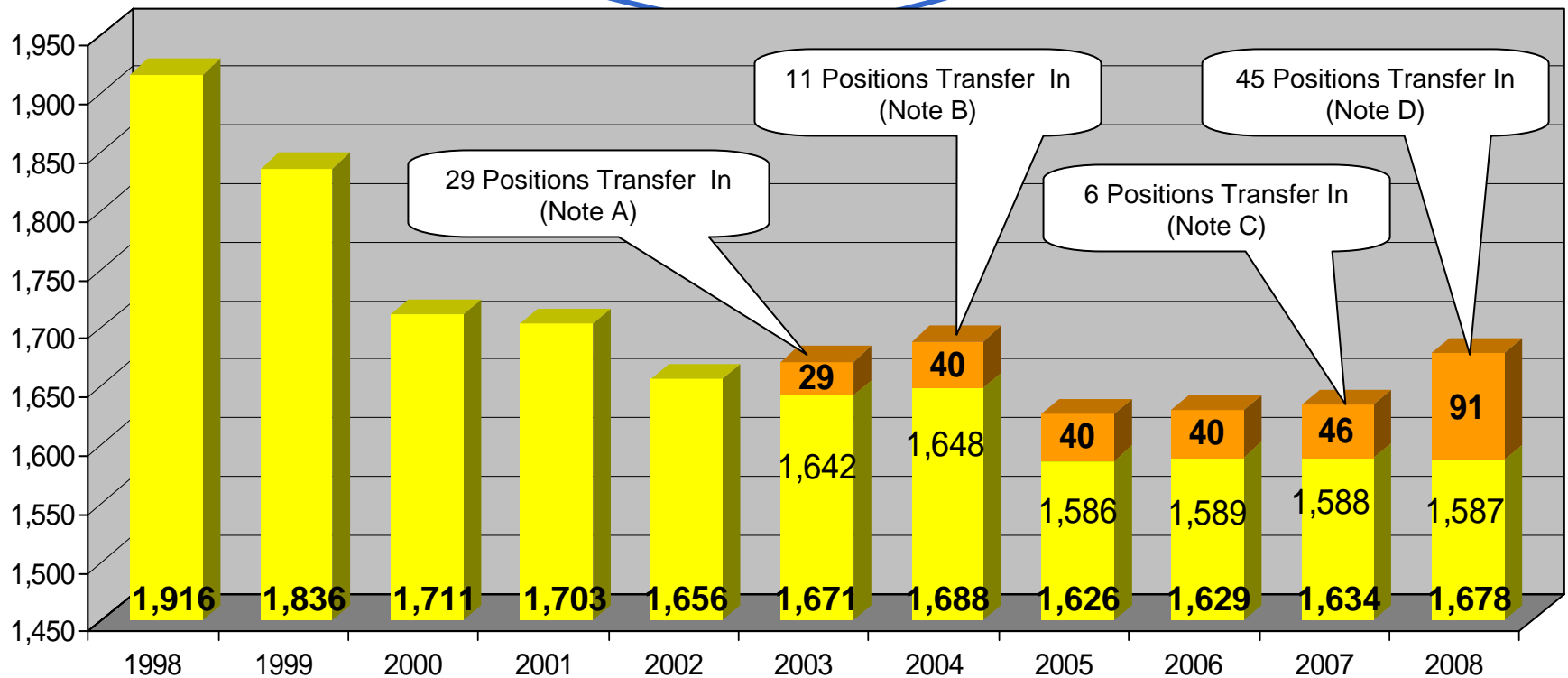
- **Base Budget Adjustments: \$9.0 M**
  - Economic Factors: \$7.5 M
  - Prior Year Impacts: \$1.9 M
  - Hydro - 1.8% reduction in water treatment: (\$2.1 M)
  - Hydro - 23% increase, Humber TP co-gen.: \$2.3 M
  - Miscellaneous decreases: (\$0.6 M)
- **Program Budget Reallocation from Operating to Capital Budget (\$13.4 M)**
  - New Service Connection Program

# 2008 Operating Budget Changes (cont'd.)

- **Service Efficiencies: (\$1.9 M)**
  - 26 reduced positions
- **New & Enhanced Services: \$2.2 M**
  - 25 new positions: \$1.8 M
  - 4 positions transferred from SWM:  
(gross \$0.3 M, net \$0)

# Staffing Trends

## Approved Positions 1998-2008



Note A: 23 positions transferred from Transportation (Catch Basin & Road Cut Repairs), 6 positions transferred from Technical Services (Water Efficiency Plan)

Note B: 8 positions transferred from Technical Services (Downspout Disconnection), 3 positions transferred from Transportation (Catch Basin & Road Cut Repairs)

Note C: 6 positions transferred from Technical Services (TIADS)

Note D: 40 positions transferred from PPFA, 4 transferred from Solid Waste, 1 transferred from HR

# Toronto Water Efficiencies and Savings

- **Works Best Practices Program - began in 1996 and continued until 2004**
  - Staff levels reduced by 532 positions saving \$35 million annually (accounting for inflation).
  - Savings achieved by introducing new technologies, practices and organizational design.
  - While maintaining a high quality of service have improved efficiency and effectiveness of water and wastewater treatment facilities.
- **District Service Improvements Project - began in 2004 and continues**
  - To date, annual savings of over \$5 million and reduced staffing levels by 84 positions.
  - Standardized practices and procedures across all District Yards.
  - Restructured emergency service contracts for efficiency and provided City with \$2.79 million in savings (27% decrease).



# Toronto Water Efficiencies and Savings (cont'd.)

## *Moving forward...*

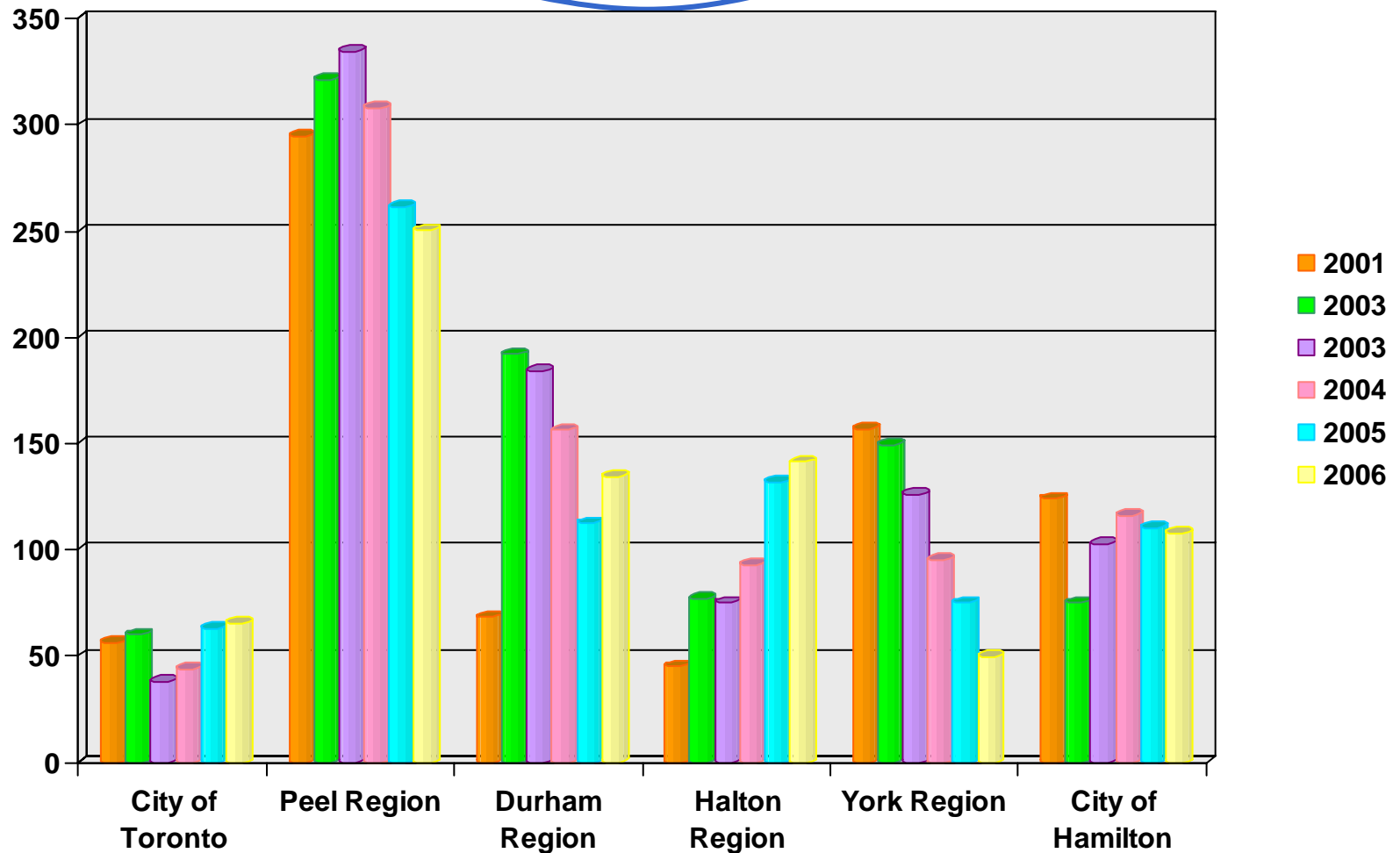
- Complete restructuring of over 300 positions in District Operations (leads to harmonized service delivery and job classification).
- Consolidating Wastewater and Water Quality Laboratories from two sites to one providing savings of up to \$500,000.
- Preparing standardized contract management manuals, administrative practices, payroll and attendance management procedures.



# **2008 Capital Budget**

# Water & Wastewater Reserve Balances

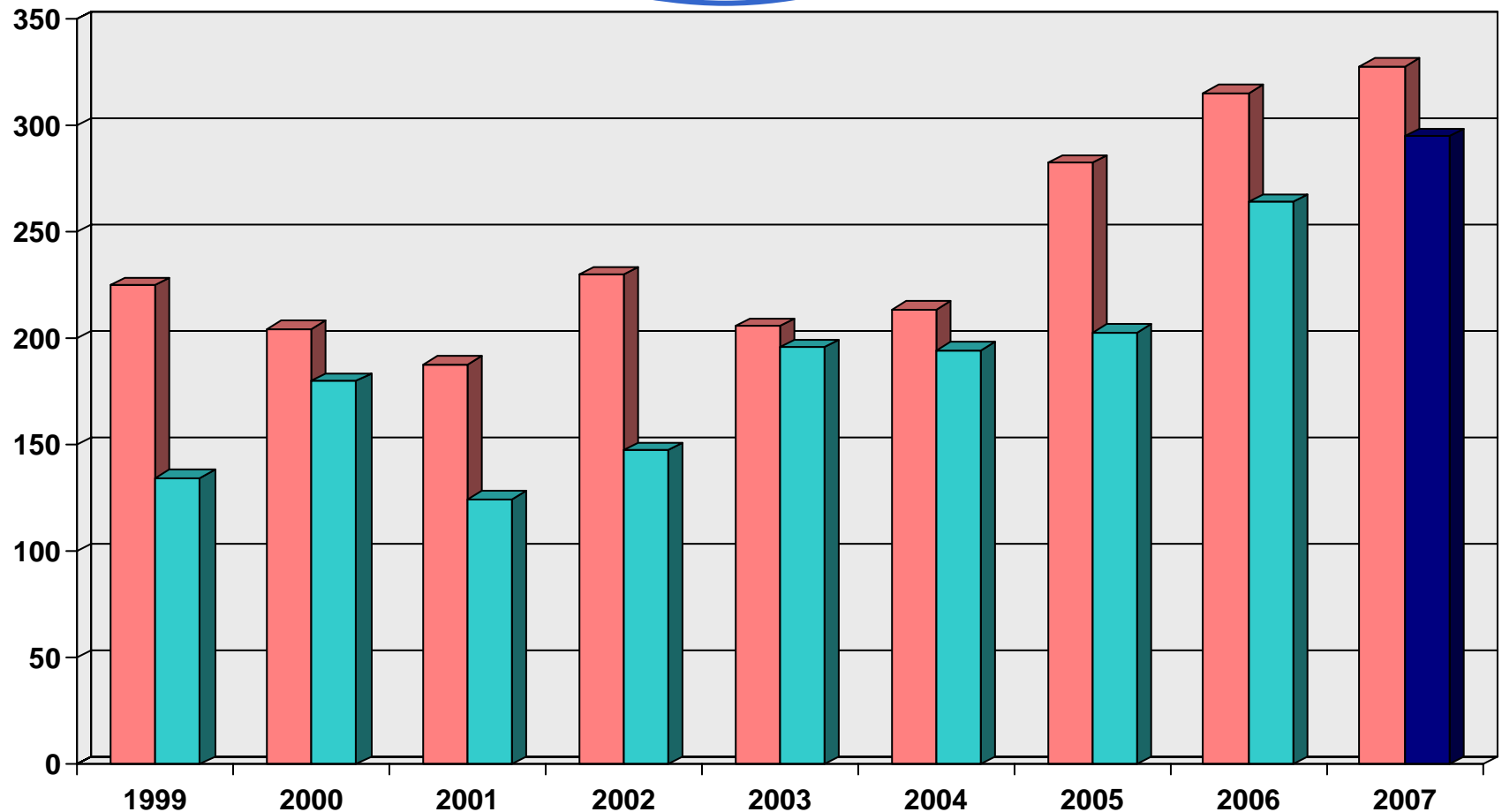
## per Capita Comparison



1999-2007

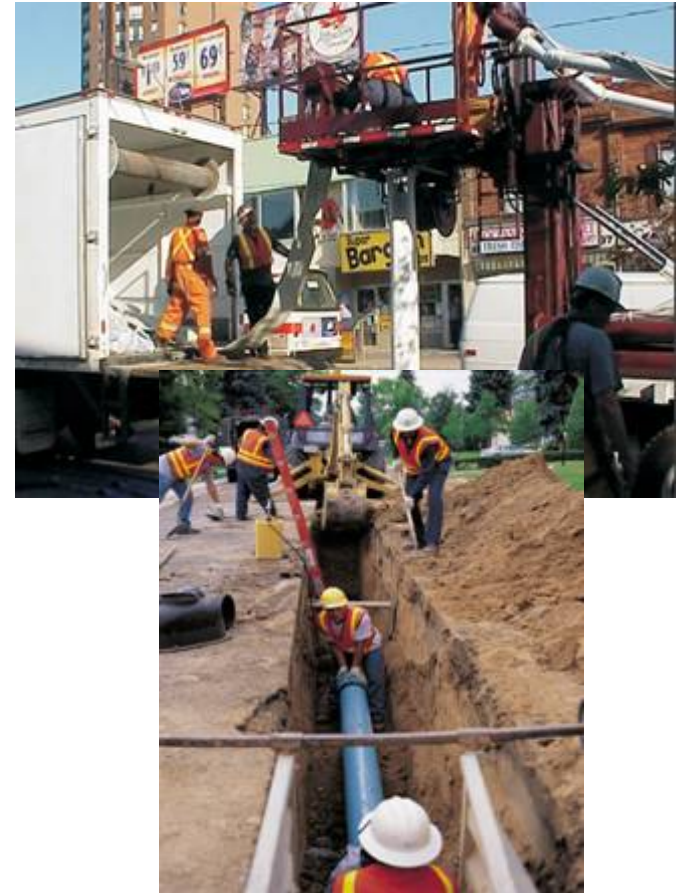
# Capital Budget Expenditure Rates

(\$Millions)



# 2008 Capital Budget Issues

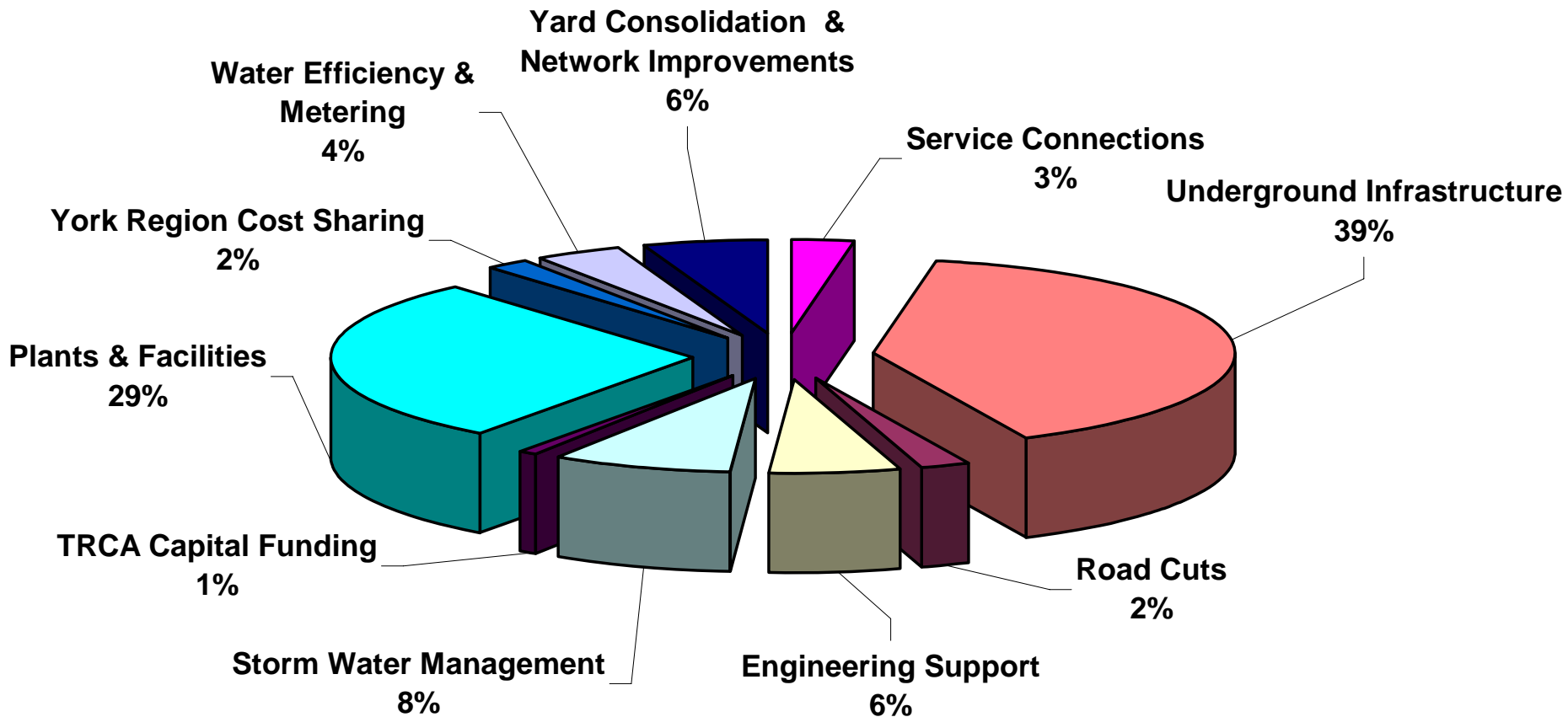
- **Considerable increase in cost of major capital works**
  - Higher unit rates for steel, aggregates, etc.
  - More expensive construction techniques to minimize community impact (e.g. tunnelling)
- **Need to maintain Capital Reserve in event of catastrophic infrastructure failure**





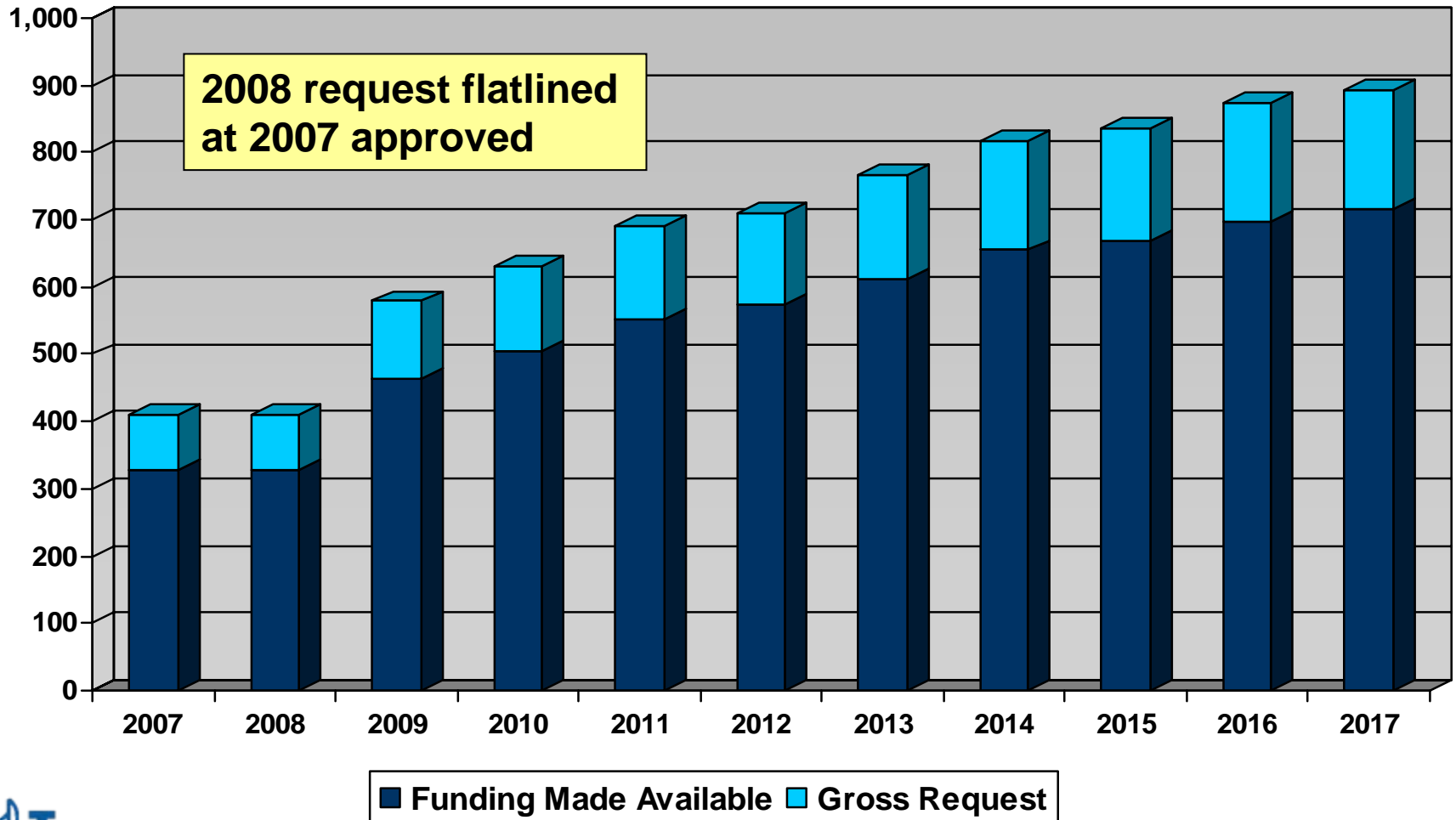
2008

# Capital Cash Flow \$410 Million



# Capital Budget

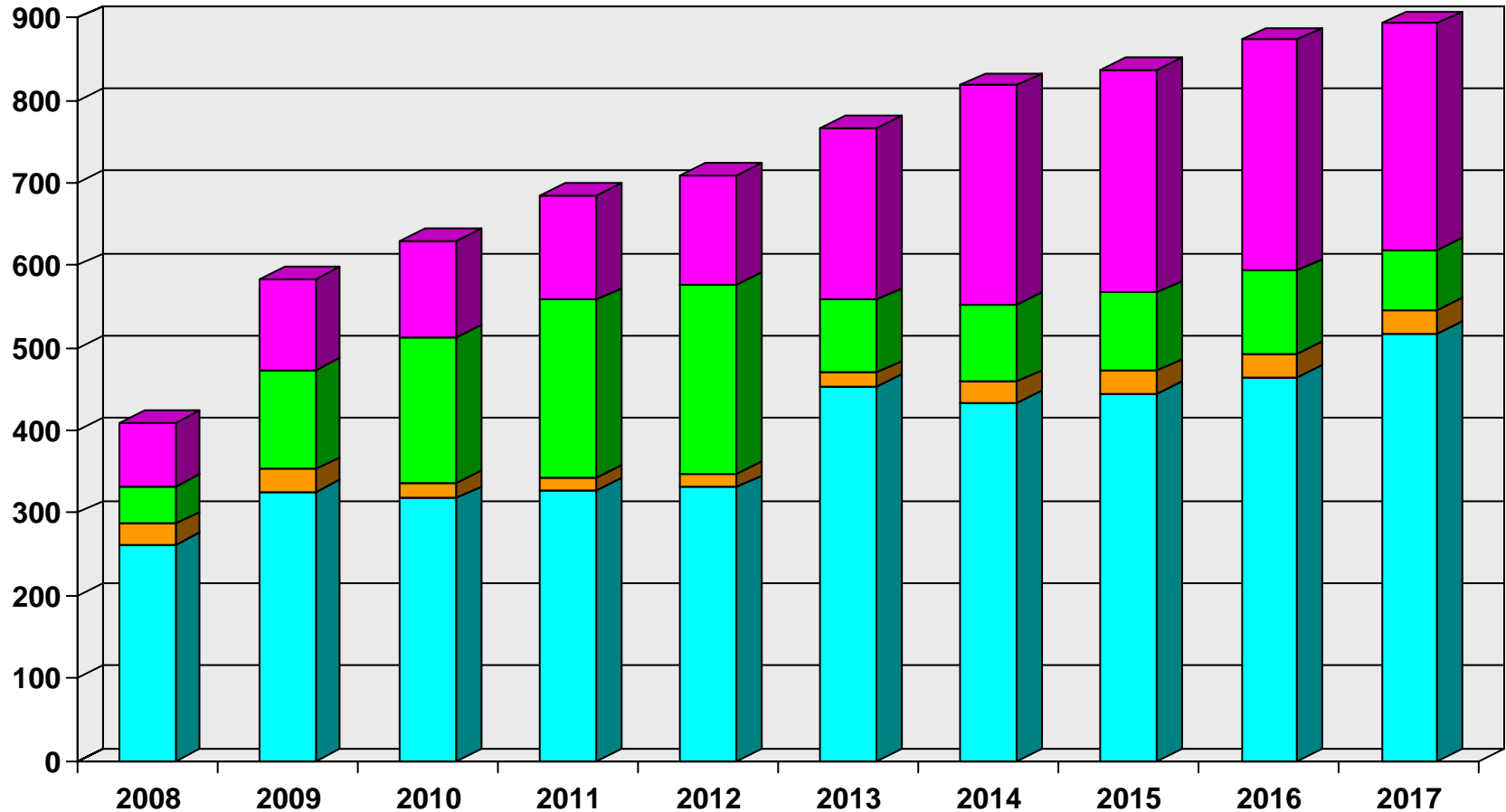
(\$Millions)



2008-2017

# Toronto Water Capital Plan

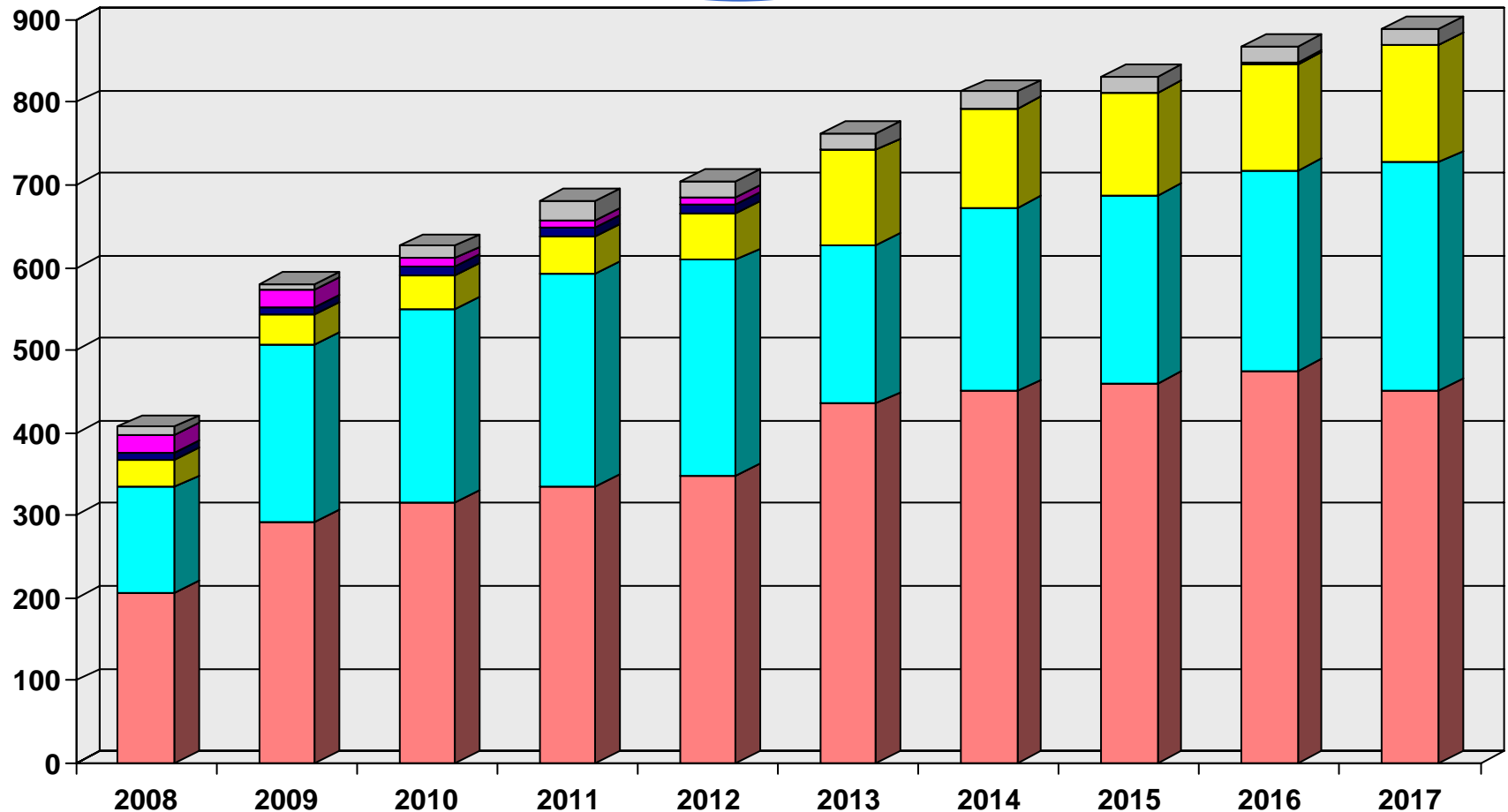
By Category (\$Millions)



2008-2017

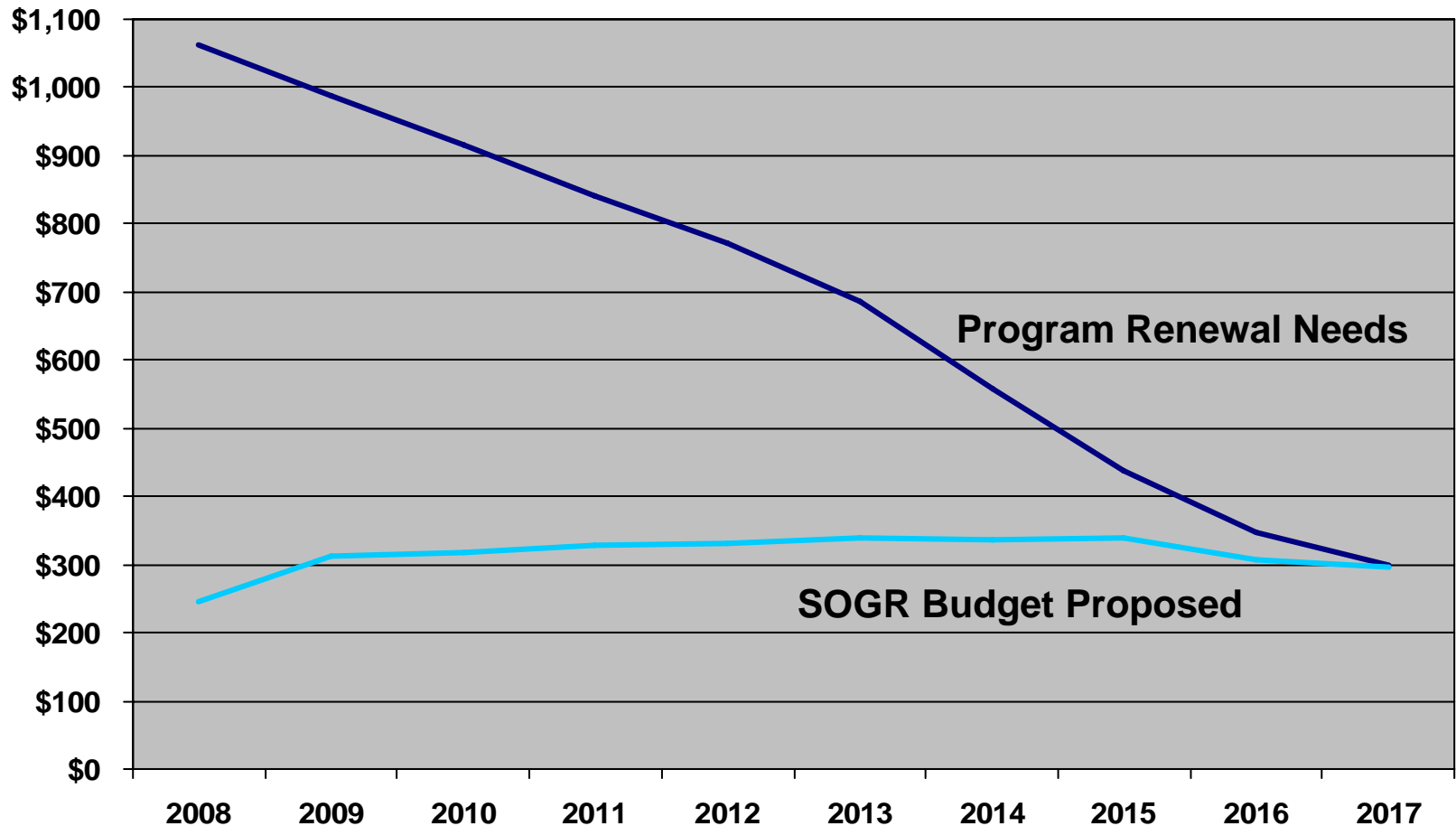
# Capital Forecast By Asset Class

(\$Millions)



# Addressing State of Good Repairs

## 2008 Backlog Analysis (\$Millions)

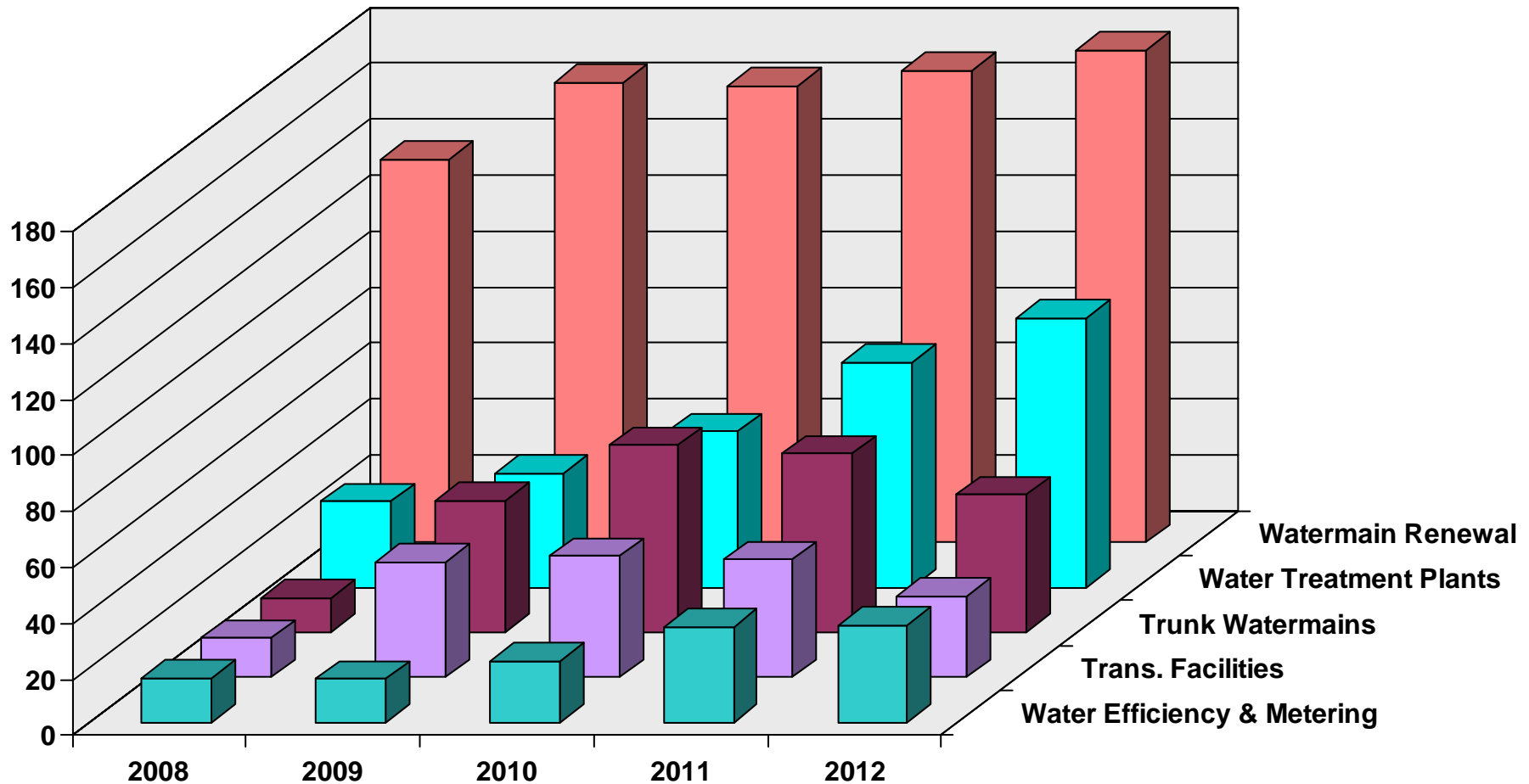




2008-2012

# Capital Plan Water Infrastructure

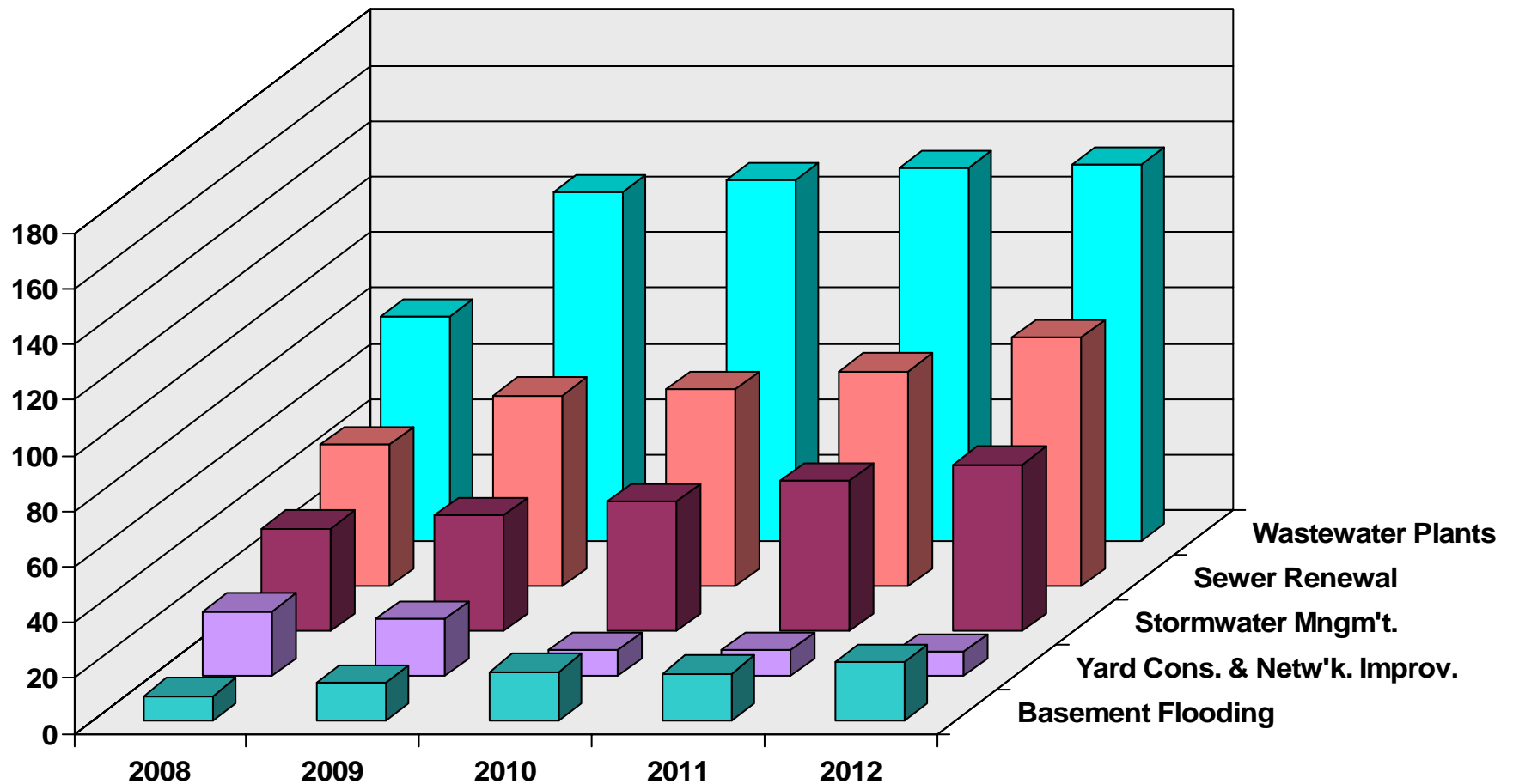
(\$Millions)



2008-2012

# Capital Plan Wastewater Infrastructure

(\$Millions)



# Water

