

# Public Works

## 2007 – 2009 Business Plan & Budget Highlights

## Public Works

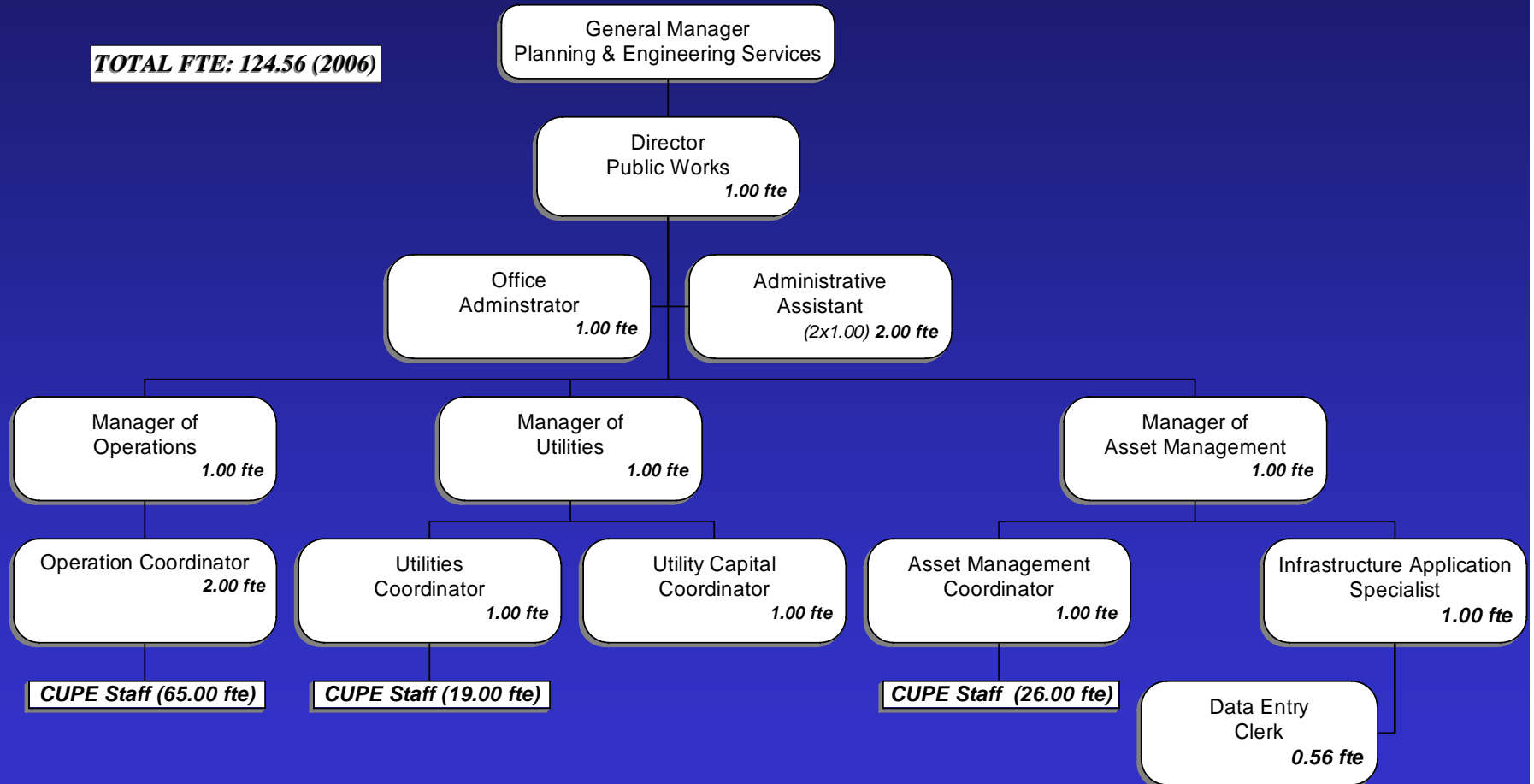
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### Mandate:

- To ensure the City's infrastructure is developed, operated and maintained in a cost effective manner within established service levels and consistent with regulated safety standards

## Public Works

**TOTAL FTE: 124.56 (2006)**



## Public Works

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### Programs/Services:

- Transportation
  - Snow & ice control, roadway maintenance, sign and sidewalk maintenance and repairs
- Parks
  - Turf, playgrounds, sport fields, boulevards, opens spaces maintenance
  - Arena and outdoor ice operation and maintenance
  - Trees shrub beds and soft landscape maintenance
  - Servus Place operational support

## Public Works

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### Programs/Services continued:

- Buildings
  - Facility & building maintenance and management
- Garage operations
  - Fleet maintenance and repairs
  - Fleet purchases and equipment pool management
- Utilities
  - Water, wastewater, storm water and solid waste

## Public Works

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### Key Highlights & Accomplishments:

- Restructuring of the Department
  - New model is addressing succession planning, workload redistribution and future growth
- Shrub bed maintenance
  - All beds are maintained a minimum of twice per year vs. once every 5 years (historically)
- Asphalt patching
  - Improved efficiency by over 300% with the acquisition of an spray injection patcher.

## Public Works

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### Key Highlights & Accomplishments:

- Turf maintenance
  - Development of a proactive approach to improving turf condition through more aerating and fertilizing ( over 50% of parks fertilized vs. less than 10%)
- Street sweeping
  - Increased street sweeping service levels, without impacting budgets (purchase of own street sweeper)
- Equipment maintenance
  - P.M programs started last year has resulted in more uptime of of the fleet as a whole

## Public Works

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### Service Standards/Performance Measures:

	<u>Industry Standard</u>	<u>2006 Actual</u>	<u>2007 Target</u>
Arterial Roadways (snow plowing):	4-12 hrs	<8 hrs	<8hrs
Residential Snow Clearing	0-2/year	modified	1/year
Turf Maintenance	5-10 days	5-9 days	5-10 days
Tree Lifting Cycles	0-10 years	5 years	5 years

## Public Works

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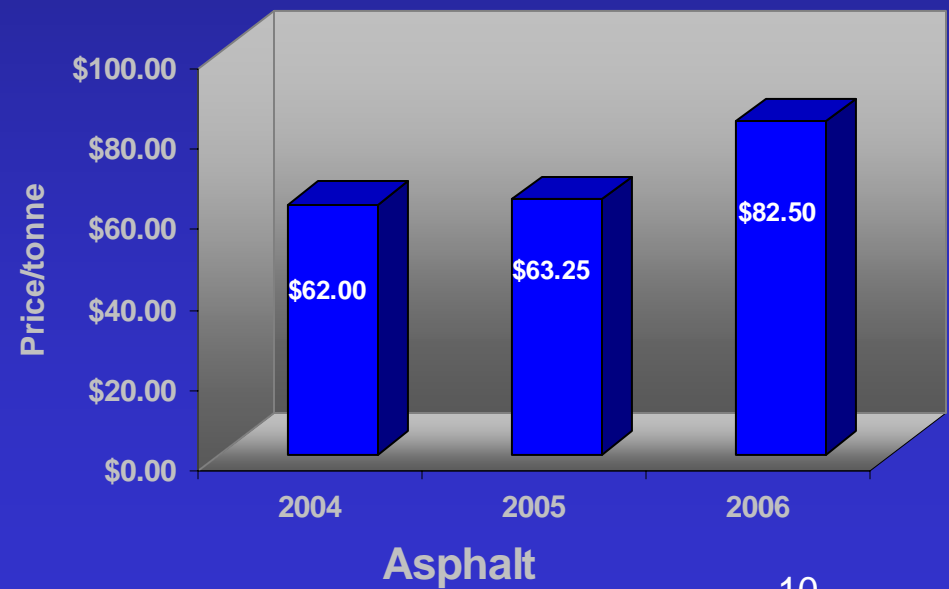
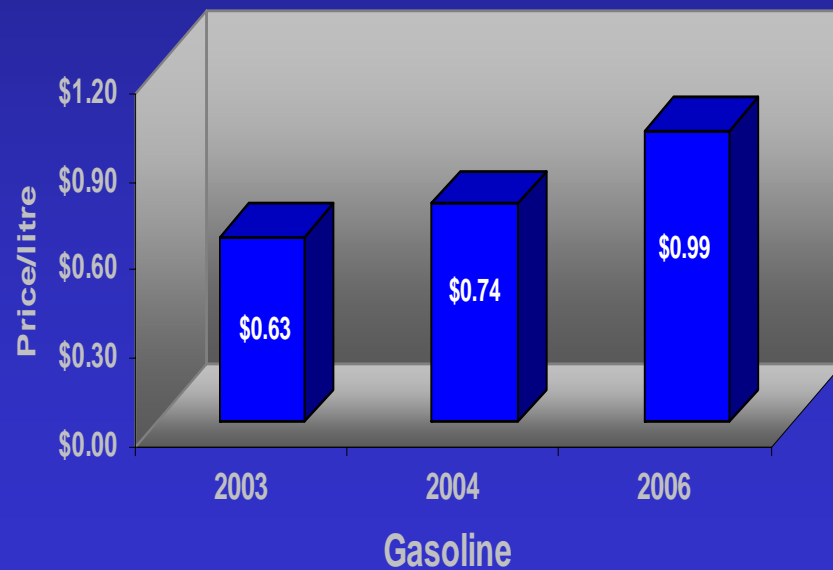
### 2007 Budget Pressures:

- Increase cost for Materials and Supplies
- Increase cost for Contract Services
- Growth of Inventory
- Attraction & Retention of qualified and experienced staff
- Summer and winter casual staffing

## Public Works

### Budget Pressures:

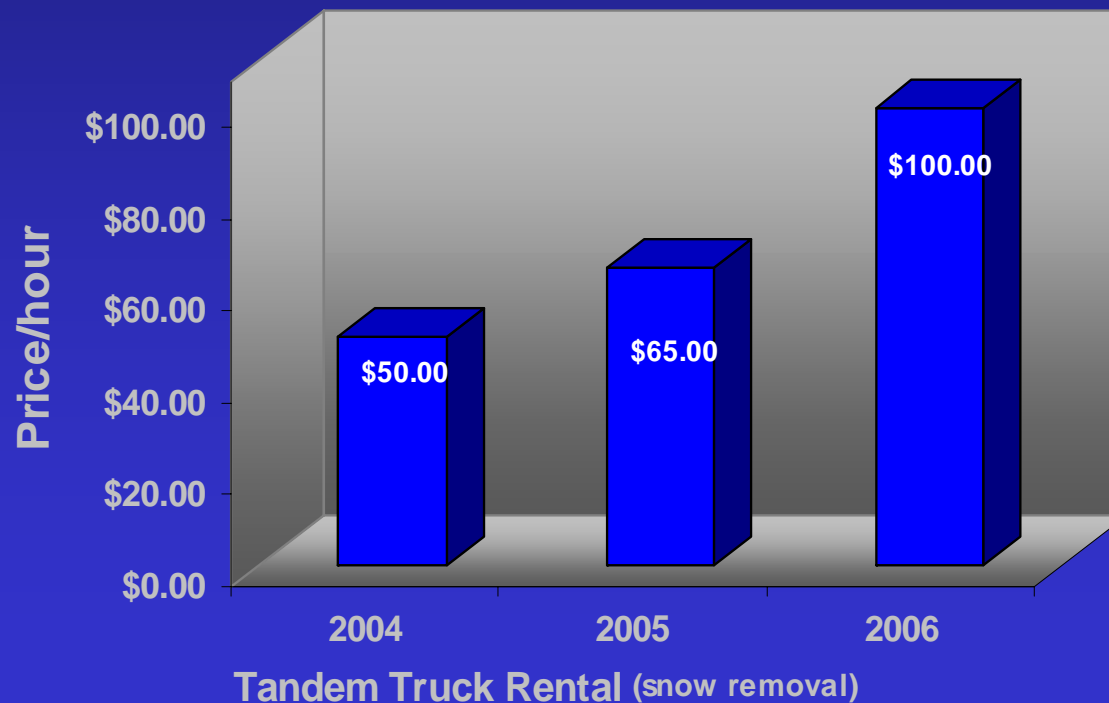
- Materials and Supplies



## Public Works

### Budget Pressures:

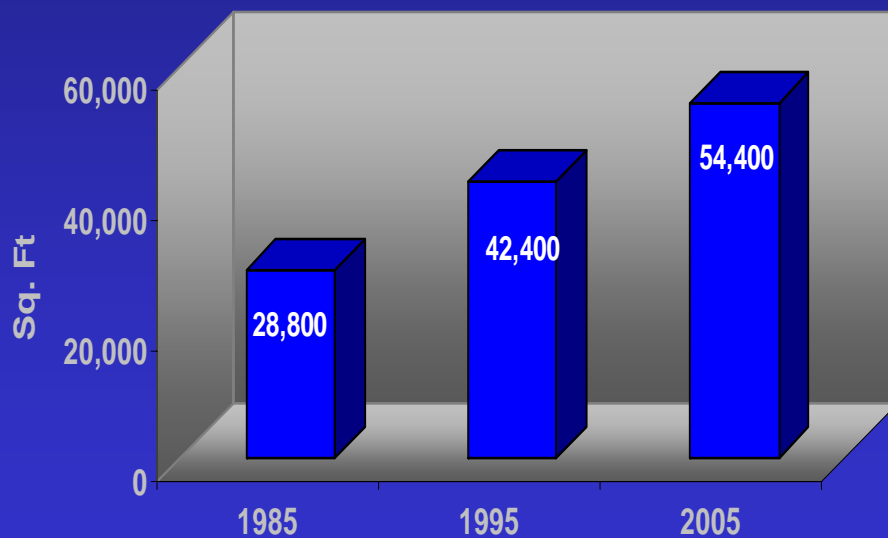
- Contract services costs rising



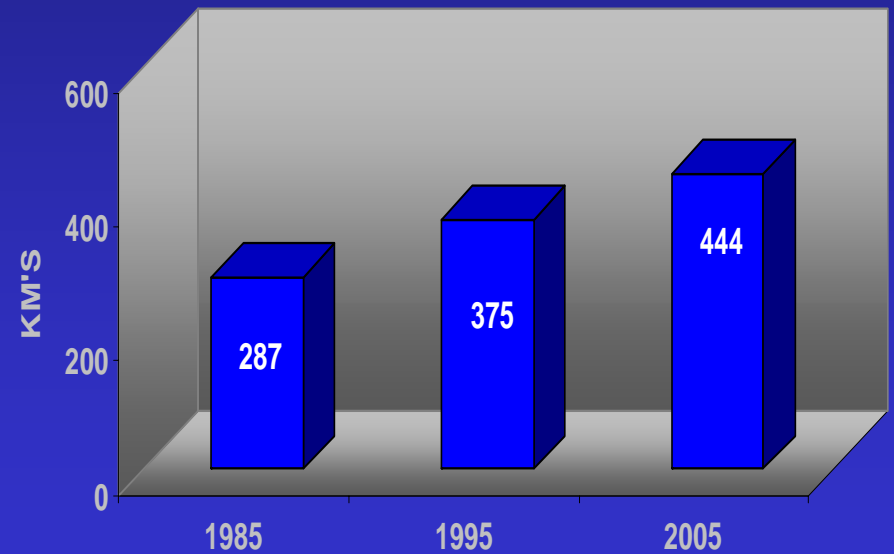
## Public Works

### Budget Pressures:

- Growth in inventory/service demand



Building Maintenance

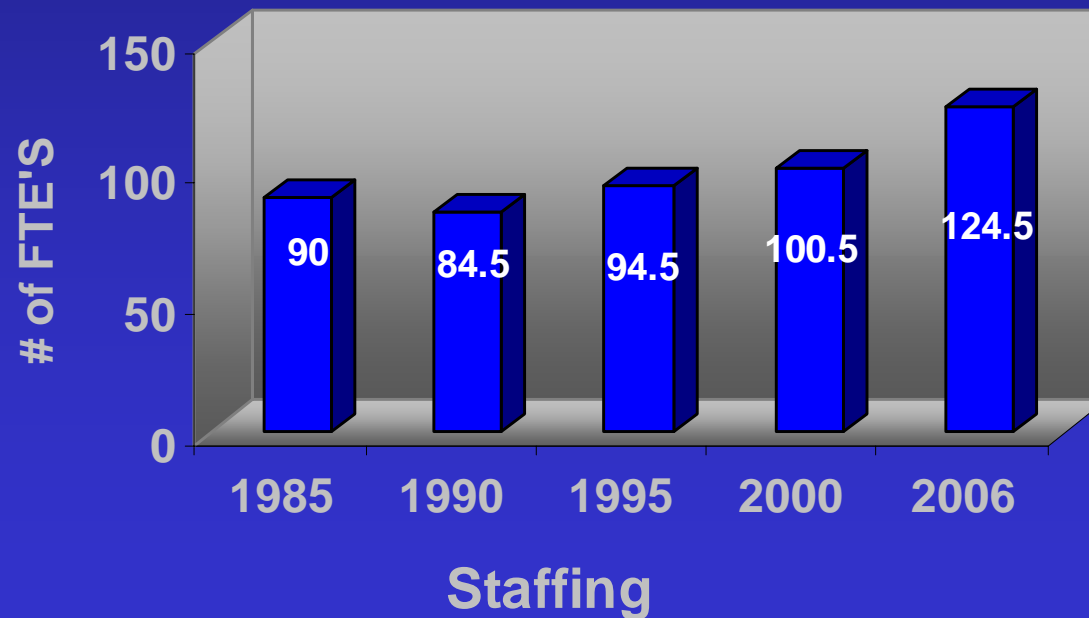


Sidewalk Inventory

## Public Works

### Budget Pressures

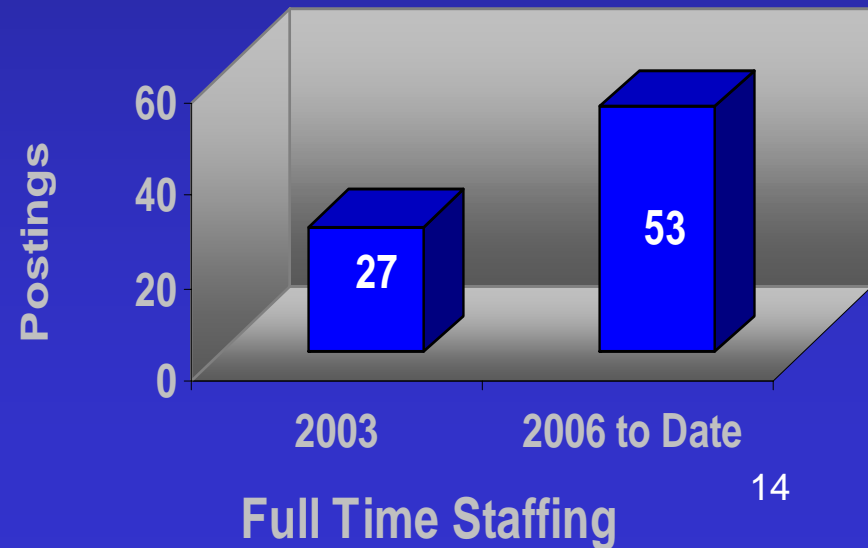
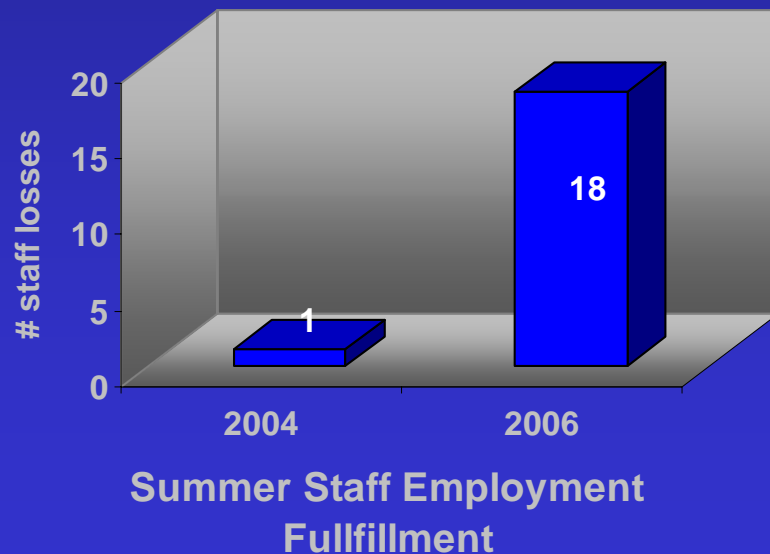
- Staffing challenged to keep up to growth



## Public Works

### Budget Pressures

- Staff Retention and Attraction
- 2006 did not completely fill all summer positions
- 30% of summer positions still vacant in June



## Public Works

### Revenue:

<u>Revenue Item</u>	<u>2006 Budget</u>	<u>2007 Budget</u>	<u>2008 Budget</u>
Grants	265,000	265,000	265,000
Sales & Rentals	205,900	43,000	43,000
Licenses & Permits	20,000	20,000	20,000
Garage Recoveries	2,975,600	3,234,700	3,495,700
Materials & Supplies & Utilities	<u>456,000</u>	<u>456,000</u>	<u>456,000</u>
<b>Total</b>	<b><u>\$3,922,500</u></b>	<b><u>\$4,018,700</u></b>	<b><u>\$4,279,700</u></b>

## Public Works

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### Significant Change in Expenses

- **Facility Management Admin.**            **2007- \$622,400**            **2008- \$59,000**
  - Facility refurbishment Reallocation
- **Roadway Services**                      **2007- \$133,800**            **2008- \$56,000**
  - Asphalt, aggregate, equip. charges & annexation
- **Snow and Ice Removal**                **2007- \$174,400**            **2008- \$172,000**
  - Contract services, salt/sand, equip. charges, snow lease
- **Street Signs**                              **2007- \$97,200**              **2008- \$14,900**
  - Reallocation of salaries and wages, materials
- **Tree Maint. & Installation**            **2007- \$69,400**              **2008- \$75,000**
  - Contract Services, poplar tree program
- **St. Albert Place**                         **2007- (\$283,000)**         **2008- \$12,900**
  - Facility Refurbishment

## Public Works

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### Significant Change in Expenses:

- **Personnel Costs**            2007- \$567,000 (9.7%)    2008- \$276,500 (4.3%)
  - Higher % in 2007 due to new positions for Servus Place
- **Contract & Gen. Serv.**   2007- \$328,600 (14.9%)   2008- \$159,300 (6.2%)
  - Snow removal, facility refurbishment, trees, garage, annexation
- **Other expenditures**        2007- \$238,000 (11.7%)   2008- \$182,900 (8.0%)
  - Equip. charge, capital replacement
- **Trsf. to/fr Ops/Capital**   2007- (\$402,700) (-81.7%)   2008 \$73,500 (8.2%)
  - Transfer equip. reserve, Servus Place recoveries

## Public Works

### Expenditures Overview:

<u>Expense Item</u>	<u>2006 Budget</u>	<u>2007 Budget</u>	<u>2008 Budget</u>
Salaries & Ben.	5,822,500	6,389,500	6,666,000
Contracted Serv.	2,204,800	2,533,400	2,692,700
Transfer To/From Ops	491,700	89,000	162,500
Other Expenditures	2,037,400	2,275,400	2,458,300
Materials & Supplies & Utilities	<u>2,424,800</u>	<u>2,482,200</u>	<u>2,660,400</u>
<b>Total</b>	<b><u>\$12,981,200</u></b>	<b><u>\$13,769,500</u></b>	<b><u>\$14,639,900</u></b>

# Public Works

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Operating and Capital Business Cases

## Public Works

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### Operating Business Cases – 2007

- **None**
  - Re-organization of the department, operational changes, and the purchase of new equipment has allowed public works to absorb recent growth requirements
  - Finalization of the P.W. Long Term Business Plan in 2007 will assist in determining future operational business cases

### Operating Business Cases – 2008

- **None**

## Public Works

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### Operating Business Cases 2009

- **Public Works Laborer Positions**      **2 FTE**      **\$87,200**  
Service & Operational Excellence (SOE)
- **Seasonal Administrative Support.**      **\$13,700**  
Service & Operational Excellence (SOE)
- **Parks Laborer Position**      **1 FTE**      **\$40,200**  
Service & Operational Excellence (SOE)

## Public Works

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### 2007 Capital Business Cases- Funded

- **Former PW Yard Remediation** **\$100,000** 2007  
*(Sound Stewardship of the Environment)* **\$100,000** 2008
- Commitment to Alberta Environment to:
  - Initiate remediation
  - Continue Monitoring

## Public Works

### 2007 Capital Business Cases - Funded

- City Facility  
(Safe & Clean)
  - Meet needs
  - Year 1



Photograph 31 - St. Albert (Safe & Clean Water)



**\$93,000** 2007

**\$93,000** 2008

## Public Works

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### 2007 Capital Business Cases - Funded

- **SAP Refurbishment** **\$500,000** 2007  
*(Effective Infrastructure Management)* **\$500,000** 2008
  - Planned reinvestment in SAP to deal with Structural Issues
  - Year 1 of a 3 year program
  
- **Automated Vehicle Location System** **\$35,000**  
*(Fiscal Responsibility and Leadership Excellence)*
  - Use of GPS on City Vehicles & Equipment
  - Recording of salt and sand applications (Envir. Canada)
  - Mapping of operations such as plowing and sanding

## Public Works

### 2007 Capital Business Cases - Funded

- **Regulatory and Street Sign Upgrades** **\$25,000** 2007  
*(Effective Infrastructure Management)* **\$25,000** 2008

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city to meet  
ards

## Public Works

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### 2007 Capital Business Cases- Funded

- **Equipment Replacement Plan** **\$2,111,000** 2007  
*(Effective Infrastructure Management)* **\$1,042,000** 2008
  - Planned reinvestment in vehicles and equipment.
  
- **Energy Savings Program** **\$500,000** 2007  
*(Fiscal Responsibility and Leadership Excellence)* **\$400,000** 2008
  - As per Energy Audit recommendations
  - Year 2 & 3 of a three year program

## Public Works

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### 2007 Capital Business Cases - Unfunded

- **Top Dresser** **\$ 25,000**  
*(Effective Infrastructure Management)*
  - Allows for in-house refurbishment of sports fields, parks and green spaces.

## Public Works

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### 2008 Capital Business Cases - Funded

- **Kinex/Akinsdale Arenas** **\$292,000**  
*(Service & Operational Excellence)*
  - Improvements required as per building audit
  
- **Replace and Expand Fuel Storage per ISO** **\$200,000**  
*(Environmental Stewardship)*
  - \$400,000 shared cost with Transit

## **Public Works**

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### **2008 Capital Business Cases - Unfunded**

- **Outdoor Rink Building Replacement** **\$30,000**  
*(Service & Operational Excellence)*
  - Improvements required as buildings age
  - 4<sup>th</sup> year of a five year program

## Public Works

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### 2009 Capital Business Cases

- **Tandem Truck** **\$123,000**  
*(Service & Operational Excellence)*  
– Addition to Fleet
  
- **Outdoor Rink Building Replacement** **\$15,000**  
*(Service & Operational Excellence)*  
– Year 5 of 5 year program

# Public Works

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## Discussion

# Utilities

2007 – 2009

Business Plan & Budget  
Highlights

## Utility Operations

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### Mandate:

To ensure that the City's infrastructure is developed, operated and maintained in a cost effective manner within established service levels and consistent with regulated safety standards

## Utility Operations

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### Programs/Services:

- Water
  - Storage and distribution operation and maintenance
- Wastewater
  - Collection system operation and maintenance
- Stormwater
  - Collection system operation and maintenance
- Solid Waste
  - Waste collection & disposal, recycling & compost

## Utility Operations

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### Key Highlights & Accomplishments:

- Staffing
  - Hiring/internal development of certified staff to meet Alberta Environments License to Operate.  
(staff certified at levels 1 to 4)
- Water Supply
  - No major system disruptions and sound management of supply during record breaking heat temperatures this summer
- Customer Service
  - Continued 24/7 response to water and waste water customer problems

## Utility Operations

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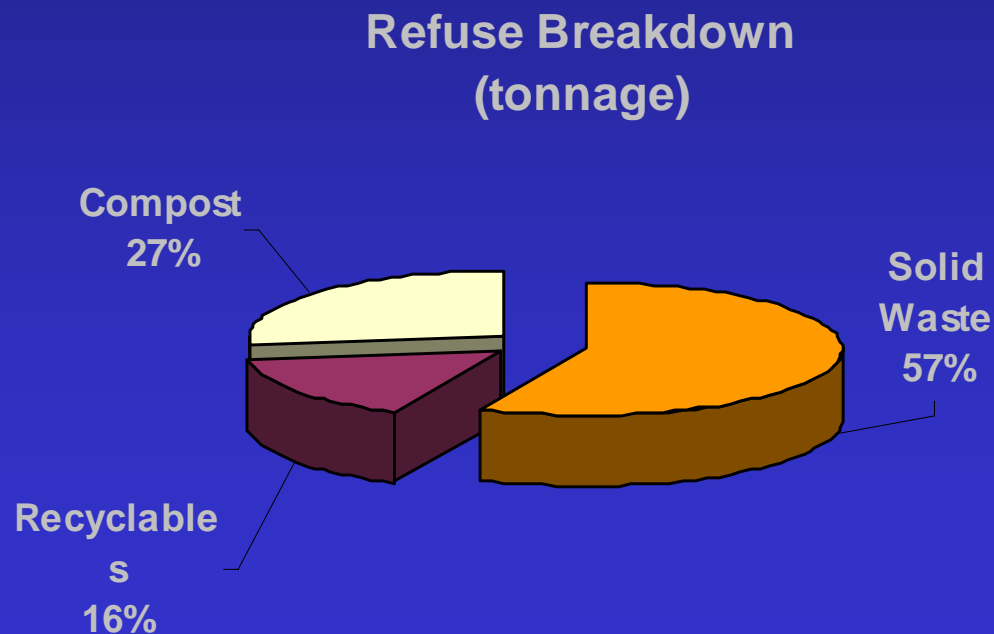
### Key Highlights & Accomplishments:

- Solid Waste
  - Continue to be below per capita standards for solid waste disposal
- Water Conservation
  - Successful implementation of the rain barrel program
- Capital projects
  - Successful completion and commissioning of the Lacombe Park Reservoir and Pumphouse.

## Utility Operations

### Key Highlights & Accomplishments:

- Increase in the amount of waste diverted from the Landfill in 2005



## Utility Operations

### Service Standards/Performance Measures:

	<u>Industry Standard</u>	<u>2006 Actual</u>	<u>2007 Target</u>
Water Supply Disruptions:	None	None	None
Timely Environmental Reporting	90-100%	100%	100%
Utility Work Orders	7-10 days	1 day	1 day
Refuse & Programs Satisfaction	N/A	83%	90%

(Collection, recycling, Compost)

## Utility Operations

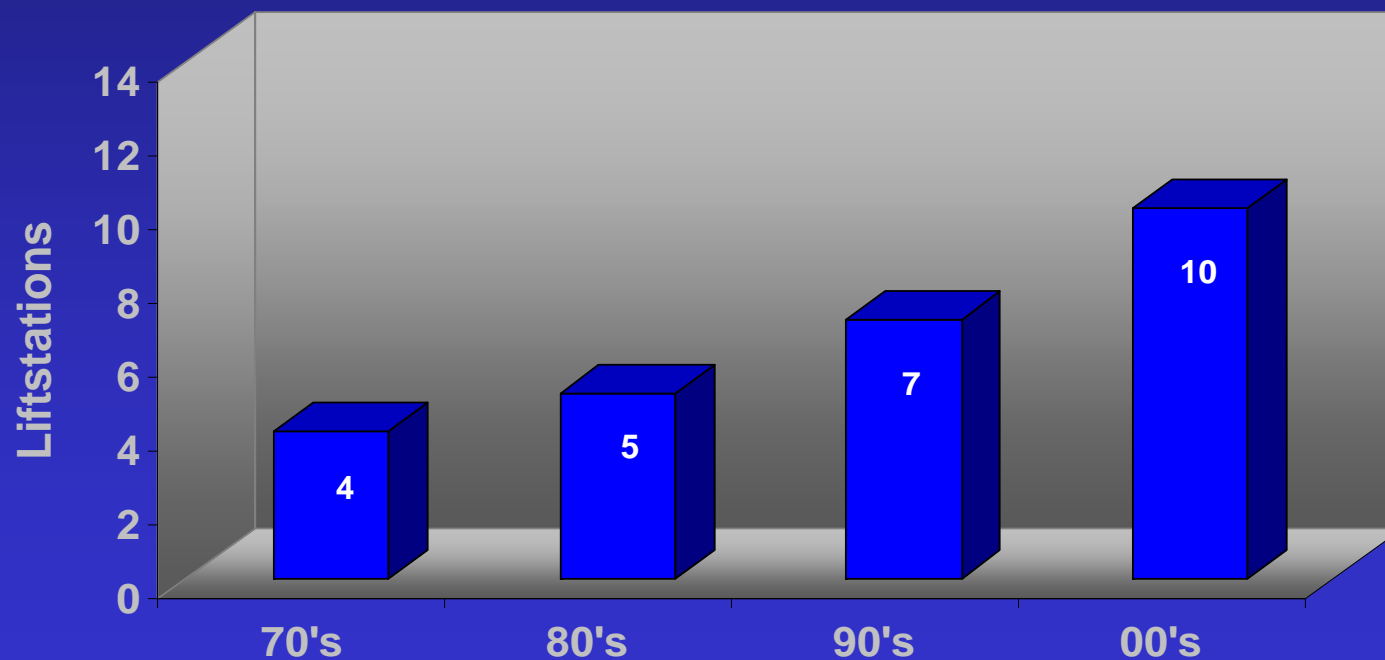
### 2007/8 Budget Pressures:

- Infrastructure growth
- Aging infrastructure
- Cost increases for Materials and Supplies
- Cost increases for Contract Services
- Supply and commodity cost increases
- Solid Waste Disposal (long term)

## Utility Operations

### Budget Pressures:

- Growth in inventory/service demand
- 4 new Liftstations projected

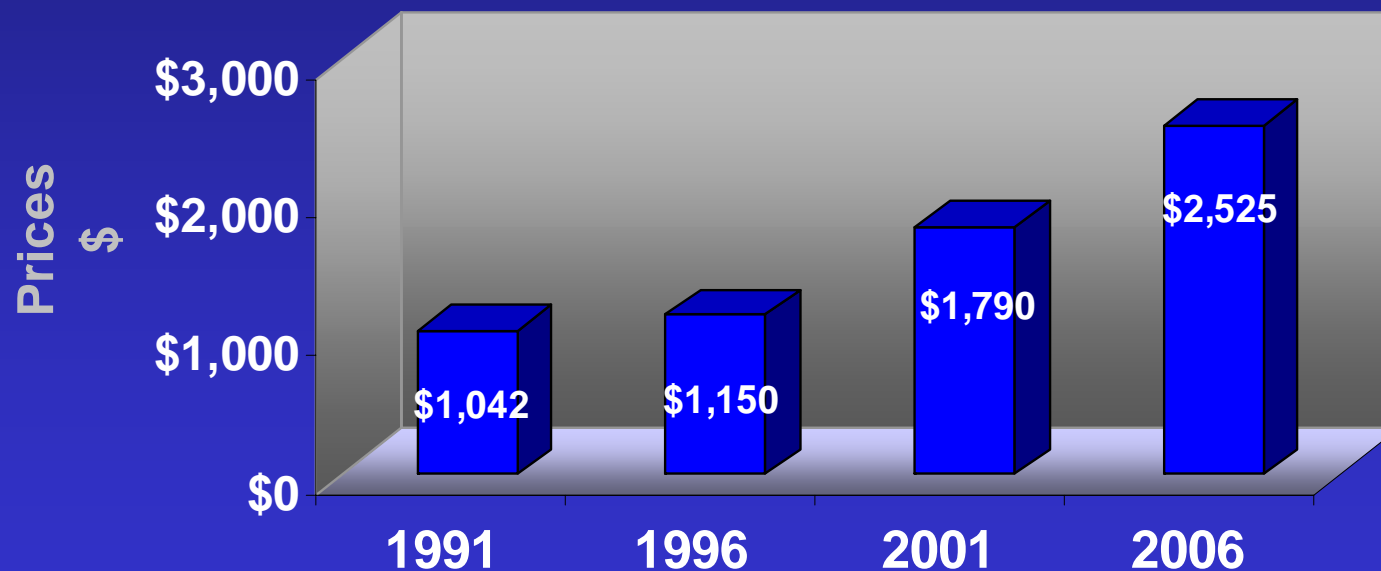


### Liftstation Inventory

## Utility Operations

### Budget Pressures:

- Infrastructure costs rising

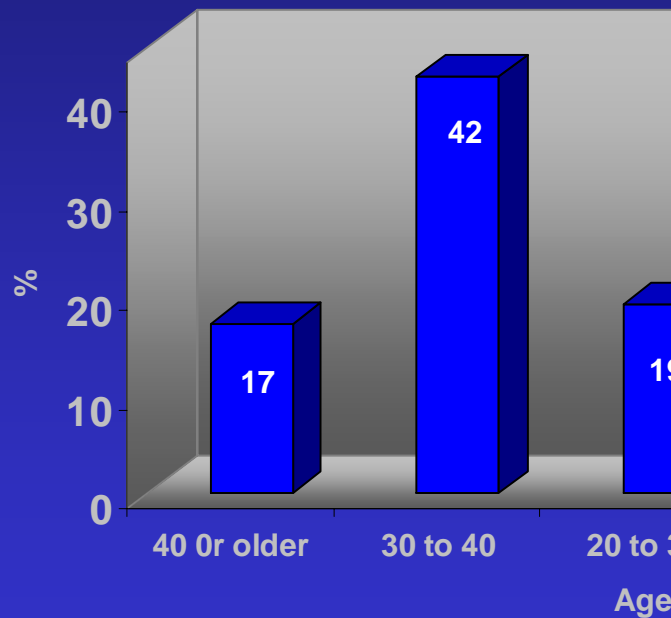


Hydrant Assembly Prices

## Utility Operations

2006 Budget Pressures:

- Ageing Infrastructure



Infrastructure



## Utility Operations

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### Revenue Overview:

<u>Expense Item</u>	<u>2006 Budget</u>	<u>2007 Budget</u>	<u>2008 Budget</u>
Sales and User Fees	17,623,300	18,981,900	20,482,800
Penalties	62,000	62,000	62,000
Local Improvements	159,100	140,900	18,200
Allowances/Other	<u>29,200</u>	<u>32,100</u>	<u>33,900</u>
<b>Total</b>	<b><u>\$17,873,600</u></b>	<b><u>\$19,216,900</u></b>	<b><u>\$20,596,900</u></b>

## Utility Operations

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### Significant change in Expense:

- **Salaries Wages & Benefits**      2007- \$169,700      2008- \$130,200
  - Salary & wage adjustments, grid movement
- **Contract & General Serv.**      2007- \$193,400      2008- \$204,000
  - Administration fees, water, wastewater, solid waste
  -
- **Purchase from Other Gov't**      2007- \$1,023,500      2008- \$546,000
  - Epcor, Capital Region Wastewater Commission
  -
- **Materials, Goods, Supplies & Util.**      2007- \$77,900      2008- \$32,800
  - Water Meters, W&WW materials, energy costs,

## Utility Operations

### Expenditures Overview:

<u>Expense Item</u>	<u>2006 Budget</u>	<u>2007 Budget</u>	<u>2008 Budget</u>
Salaries & Ben.	2,593,800	2,763,500	2,893,700
Contracted Serv.	4,208,300	4,401,700	4,605,700
Purchases	6,580,000	7,603,500	8,149,500
Goods & Supplies	687,800	765,700	798,500
Other Expenditures	871,100	698,400	708,400
Business Cases		75,000	53,800
Transfers to/From	<u>2,932,600</u>	<u>2,909,100</u>	<u>3,387,300</u>
<b>Total</b>	<b><u>\$17,873,600</u></b>	<b><u>\$19,216,90</u></b>	<b><u>\$20,596,900</u></b>

# Utility Operations

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Operating and Capital Business Cases

## Utility Operations

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### Operating Business Cases - 2007

“CCTV Program” 2.0 FTE Net \$0.00  
Wastewater & Storm Utility  
Effective Infrastructure Management (EIM)

- Additional staffing will:
  - Allow the City to operate its own CCTV program
  - Complete timely inspections for City programs
  - Reduce liability by identifying problems more timely
  - Provide emergency service
  - Reduce Capital costs

## Utility Operations

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### Operating Business Cases - 2007

“Environmental Management System” \$75,000

(Split between all four Utilities)

*Sound Stewardship of the Environment (SSE)*

- This new program will:
  - Encourage short and long term planning
  - Clarify policy and procedures
  - Focus efforts on continuous improvement

## Utility Operations

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### Operating Business Cases - 2008

- “Infrastructure Tech. Specialist” 1.0 FTE \$ 53,800

#### Water Utility

Effective Infrastructure Management (EIM)

Additional staffing will:

- Maximize the use and benefits of Public Works software, including Hansen, GIS, Arc GIS, Scada
- Existing software is product and department specific
- Provide a higher level of support than what is offered corporately

## Utility Operations

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### Operating Business Cases - 2009

- None

## Utility Operations

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### 2007 Utilities Capital Bus. Cases:

#### Water

- **Sturgeon Heights Pumphouse** **\$250,000**  
*(Effective Infrastructure Management)*
  - Second year of required upgrades to aging pump house
  - A report is currently underway that will address any deficiencies in this facility. The highest priority items will be addressed

## Utility Operations

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### 2007 Utilities Capital Bus. Cases:

#### Water

- **Water System Infrastructure. Rehab.** **\$100,000** 2007  
(*Sound Stewardship of the Environment*) **\$200,000** 2008
  - Required rehab. as per Infrastructure Study

## Utility Operations

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### 2007 Utilities Capital Bus. Cases:

#### Water

- **Mobile Crane (for one ton)** **\$27,000**  
*(Safe and Caring)*
  - Allow handling of materials in a safe and efficient manner
- **Oakmont Water Supply Line** **\$500,000** 2007  
*(Service and Operational Excellence)* **\$5,000,000** 2008
  - Alleviate capacity limitations

## Utility Operations

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### 2007 Utilities Capital Bus. Cases: Wastewater

- **Wastewater Rehabilitation** **\$173,000** 2007  
*(Effective Infrastructure Management)* **\$181,000** 2008
  - CCTV inspection, roof leader, & flow monitoring
  - Can be reduced \$60,000 in 2007 & **\$90,000** 2008 with approval of Operating Business Case
- **Wastewater Main Replacement** **\$ 150,000** 2007  
*(Service and Operational Excellence)* **\$ 800,000** 2008
  - Repair/replacement of existing mainlines
  - BC in for in-house CCTV could find higher priority sites

## Utility Operations

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### 2007 Utilities Capital Bus. Cases:

#### Wastewater

- **Wastewater North Interceptor** **\$4,000,000** 2007  
*(Managed Urban Growth and Form)* **\$1,000,000** 2008
  - Continued program to advance trunk sewer
  - Limited capacity in the west basins
  - Will work with developer to examine cost sharing / deduction measures
- **W/W Household Service Replacement** **\$156,000** 2007  
*(Service and Operational Excellence)* **\$161,000** 2008
  - Join partnership with residents for replacement of problem or deteriorated sewer services

## Utility Operations

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### 2007 Utilities Capital Bus. Cases: Stormwater

- **Storm Grit Interceptors** **\$ 100,000** 2007  
*(Effective Infrastructure Management)* **\$ 50,000** 2008
  - Water quality improvement (Sturgeon River)
  - Conduct monitoring
- **Stormwater Infrastructure Rehab** **\$500,000** annual  
*(Effective Infrastructure Management)*
  - Addresses rehabilitation needs of SWM system

## Utility Operations

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### 2007 Utilities Capital Bus. Cases: Solid Waste

- **Former Landfill Site Remediation** **\$1,000,000** 2007  
*(Sound Stewardship of the Environment)* **\$1,000,000** 2008

## Utility Operations

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### 2008 Utilities Capital Bus. Cases:

#### Water

- **Water Scada/radio Upgrade** **\$100,000**  
*(Effective Infrastructure Management)*
  - Upgrading/updating of the Utility operating system

## Utility Operations

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### 2008 Utilities Capital Bus. Cases:

#### Wastewater

- **Wastewater Lift Station Rehab** **\$400,000** 2008  
*(Service and Operational Excellence)* **\$3,100,000** 2009
  - Required upgrades to aging lift stations
  - Highest priority lift will be completed in 2007
- **Wastewater Scada/Radio Upgrade** **\$100,000** 2008  
*(Effective Infrastructure Management)*
  - Upgrading/dating of the Utility operating system

## Utility Operations

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### 2008 Utilities Capital Bus. Cases: Solid Waste

- **Compost Storage Site** **\$ 600,000**  
(*Sound Stewardship of the Environment*)
  - Join snow storage/compost transfer site facility

## Utility Operations

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### 2008 Utilities Capital Bus. Cases:

#### Unfunded Projects

- **Wastewater – Boudreau Force Main** **\$7,500,000**  
*(Managed Urban Growth and Form)*
- **Wastewater – Hwy 2 Lift Stn. A** **\$1,000,000**  
*(Managed Urban Growth and Form)*
- **South Campbell Storm Facility** **\$2,000,000**  
*(Safe and Caring)*
- -Reduction of flood risk in the Campbell Bus. Park

## Utility Operations

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### 2009 Utility Capital Bus. Cases:

- Water Meter Radio Read Pilot \$ 100,000
- Oakmont Pump Upgrade \$1,000,000
- Hwy. 2 Water Reservoir Land \$ 500,000
- Landfill Replacement \$ 100,000

# Utility Operations

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## Discussion

# Utility Financing 2007 – 2009

## Business Plan & Budget Highlights

# Utility Financing

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## Introduction:

- Many utility organizations are dealing with increased costs due to:
  - Replacement of aging infrastructure
  - Improving/maintaining environmental standards
- Historically, consumers did not pay for much of the costs of utility infrastructure.
  - Initial costs were paid by developers through land sales
- Federal and Provincial funding is required

# Utility Financing

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## Utility Fiscal Policies:

- Self-sustaining utility fund
- Replacement of existing infrastructure before growth
- No new debt

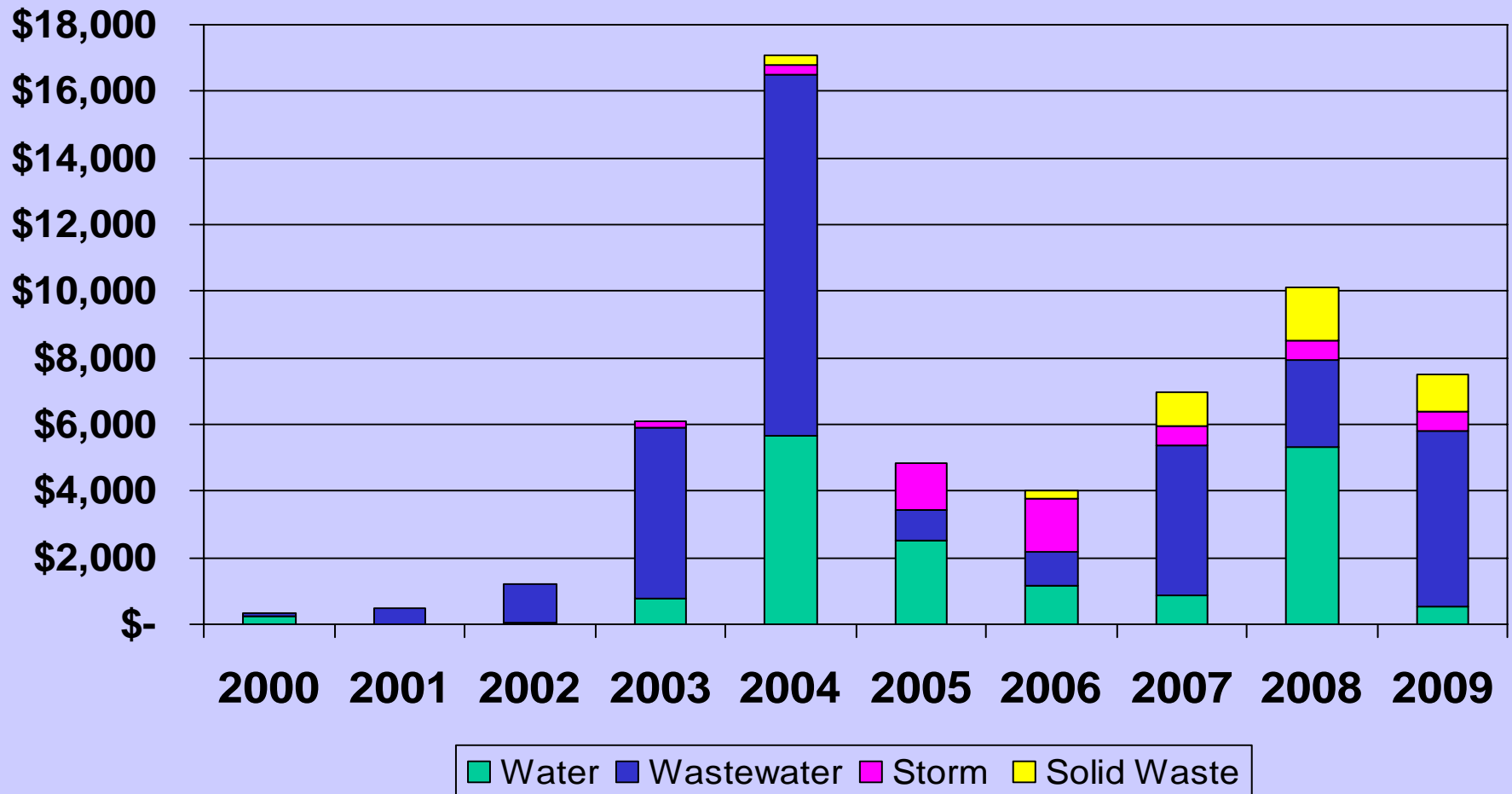
# Utility Financing

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## Utility Rate Setting Model:

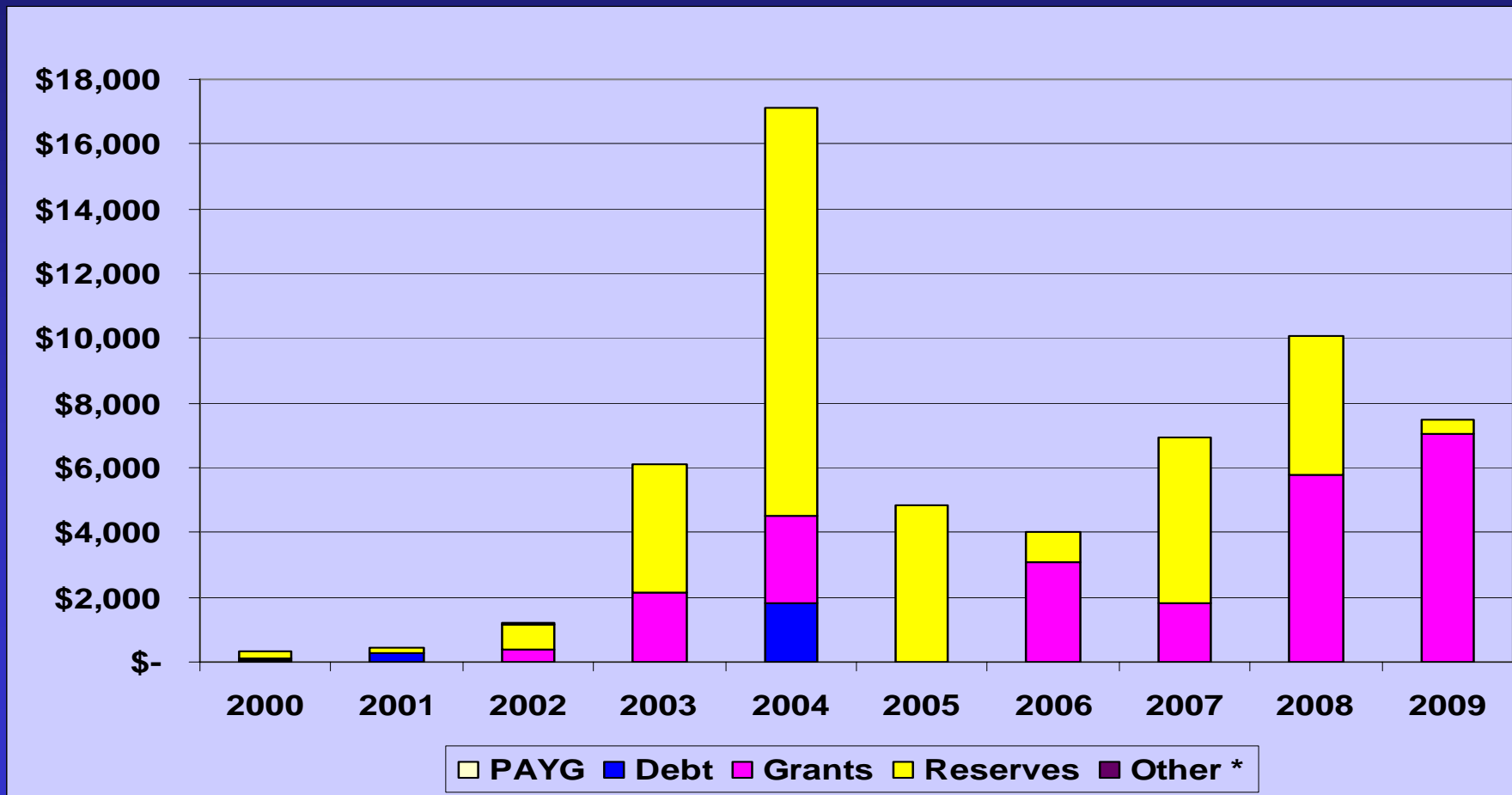
- Based on 100 year utility life cycle
- Includes:
  - Operating and capital costs
  - Developer levies, grants, and utility fees
  - Capital projects, debt, and reserve balances

# Utility Capital Expenditures (in thousands)



# Utility Capital Financing

(in thousands)



# Utility Financing

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## Financing Strategy:

- No new debt
- Rates
  - Minimize rates (maximum increase 6.5% per year)
  - Updated 10 year Capital Plan identified increased costs
  - Not all projects are “funded” in the 6.5%
- Grants
  - Using AMIP, NDCC and applied for CAMRIF

# Utility Financing

## Allocation of Grants:

(in millions)

	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>Total</u>
ICAP	2.7					2.7
NDCC*	0.5	0.5	0.7	0.8	1.7	4.2
AMIP*	3.7	3.7	3.7	3.7	3.7	18.6
CAMRIF				1.0	1.0	2.0
*program only 2005 - 2009	6.9	4.2	4.4	5.6	6.4	27.5

# Utility Financing

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## Gas Tax Allocation:

- Based on share of infrastructure costs
  - 50% Municipal
  - 50% Utilities
- Allocating 50% of gas tax to utilities from 2005 - 2009

# Utility Financing

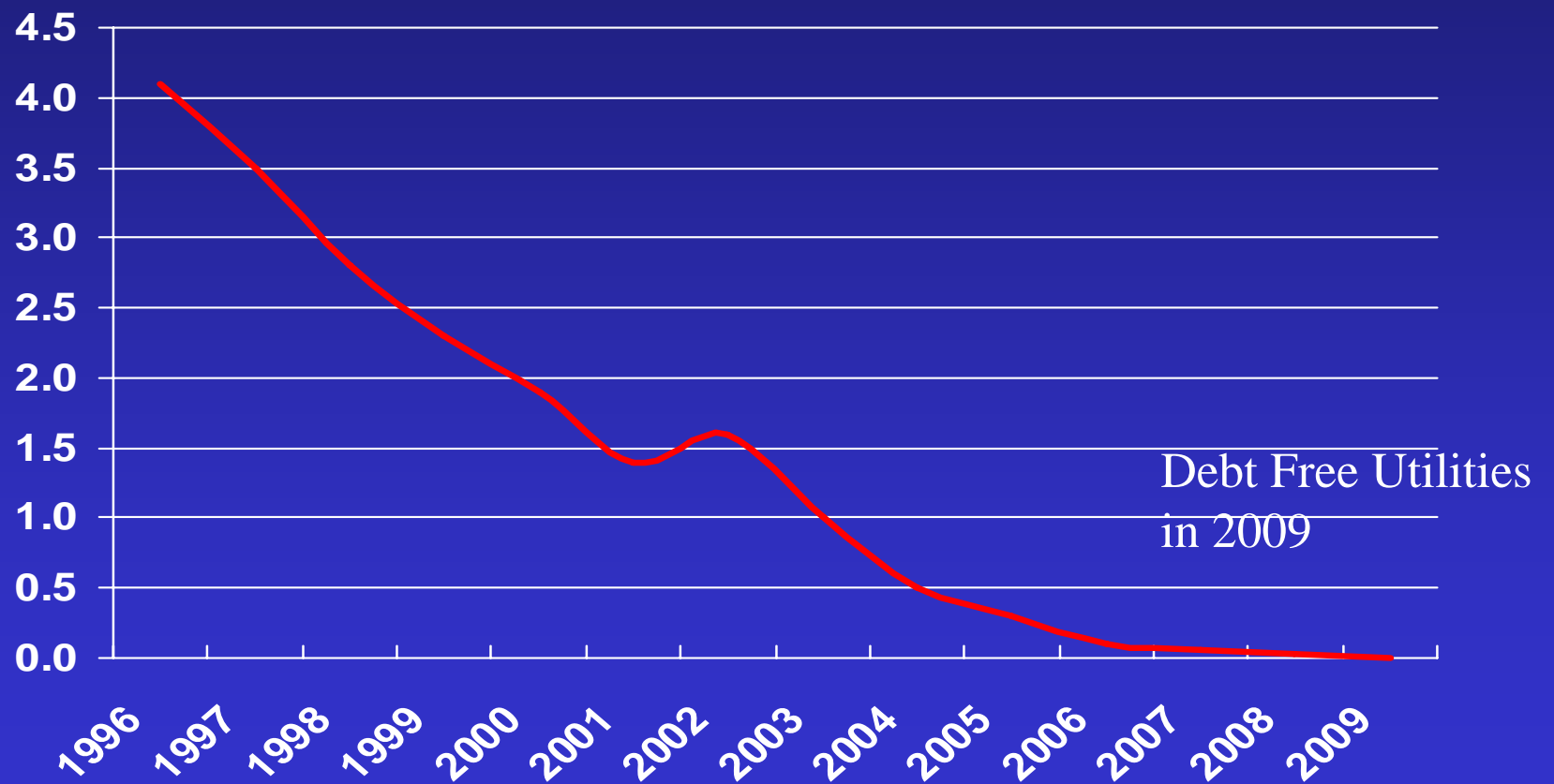
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## Infrastructure Grant Allocation:

- Based on share of infrastructure costs
  - 65% Municipal
  - 35% Utilities
- Allocating 35% of infrastructure grant to utilities from 2005 - 2009

# Utility Financing

## Outstanding Utility Debt:



# Utility Financing

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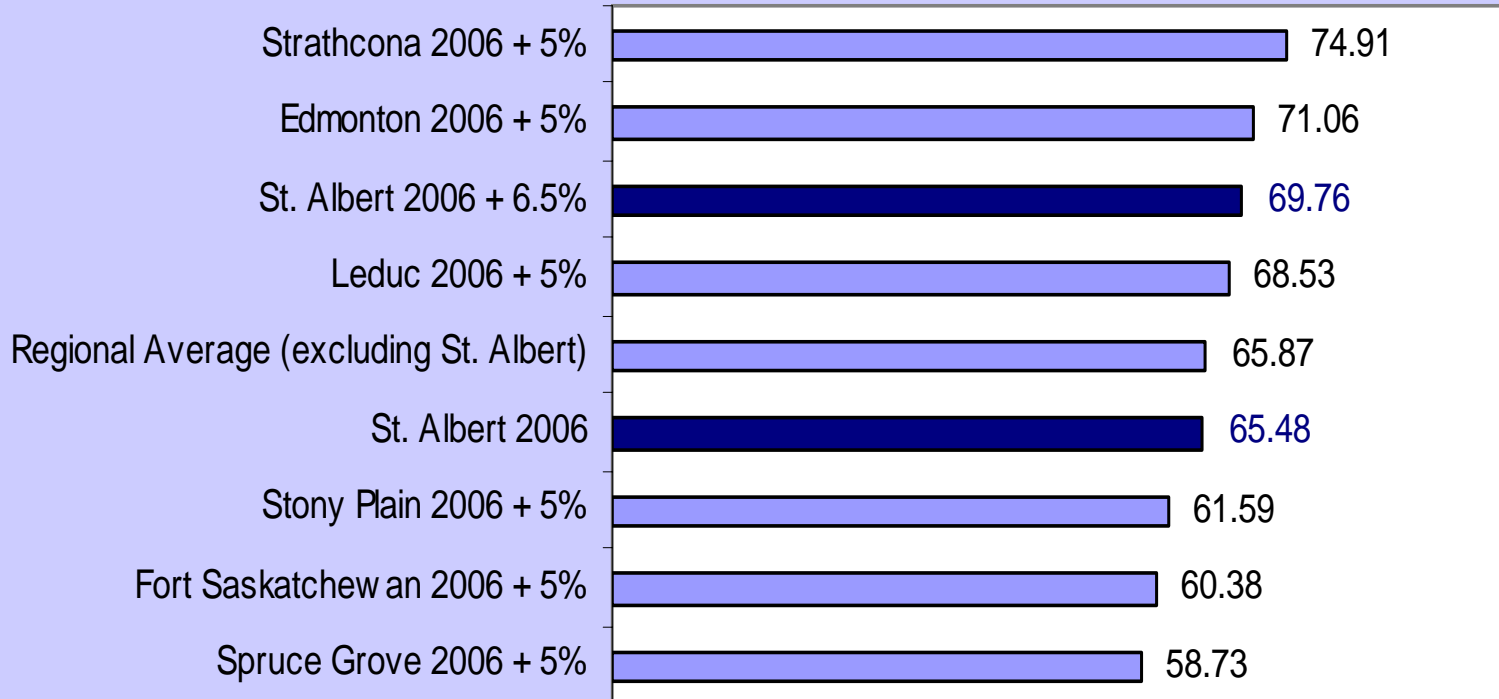
## Typical Residential Rates:

(Assumes consumption of 20 cu. m. and 2 bags/1 can)

	2006	2007	2008
	Approved	Proposed	Proposed
Water	24.25	25.72	27.16
Wastewater	25.88	27.34	28.90
Storm	5.30	6.05	7.00
Solid Waste	10.05	10.65	11.25
<hr/>			
<i>Average Monthly Bill</i>	65.48	69.76	74.31

# Utility Financing

2007 Estimated Regional Residential Utility Rates\*



\*For all utilities based on average water use of 20 m<sup>3</sup> and 1 can/ 2 bag option for waste

# Utility Financing

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## Residential Variable Rates:

	2006	2007	2008
	Approved	Proposed	Proposed
Water <sup>1</sup>	.864	.936	1.008
Wastewater <sup>1</sup>	.869	.942	1.020
Storm	n/a	n/a	n/a
Solid Waste <sup>2</sup>	6.40	7.00	7.60
	<u>41.03</u>	<u>44.56</u>	<u>48.16</u>

<sup>1</sup>Based on water use of 20m<sup>3</sup>

<sup>2</sup>Based on 1 can/2 bag option

# Utility Financing

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## Residential Flat Rates:

	2006	2007	2008
	Approved	Proposed	Proposed
Water	7.00	7.00	7.00
Wastewater	8.50	8.50	8.50
Storm <sup>1</sup>	5.30	6.05	7.00
Solid Waste	3.65	3.65	3.65
	<u>24.45</u>	<u>25.20</u>	<u>26.15</u>

<sup>1</sup>Based on Residential –  
Single/Side-by-Side

# Utility Financing

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## Typical Commercial Rates:

(Assumes medium consumption of 200 cu. m.)

	2006	2007	2008
	Approved	Proposed	Proposed
Water	179.80	194.20	208.60
Wastewater	182.30	196.90	212.50
Storm	14.25	16.55	19.15
	<u>376.35</u>	<u>407.65</u>	<u>440.25</u>

# Utility Financing

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Supplier Rates from EPCOR and ACRWC:

	2006	2007	2008
	Approved	Proposed	Proposed
EPCOR	.51	.55	.59
ACRWC <sup>1</sup>	.58	.61	.64
Total	1.09	1.16	1.23
Change per year		.07	.07

<sup>1</sup>Alberta Capital Region Wastewater  
Commission

# Utility Financing

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## Discussion