

2017 Water & Wastewater Budget

December 7, 2016

Water & Wastewater Budget

1. Budget timetable recap
2. Service Delivery Objectives
3. Budgeted Expenses and Rate Setting
4. Risks and Opportunities

2017 Budget Timetable

Budget	Date
Water and Wastewater Budget; Fees & Charges <ul style="list-style-type: none"><i>Water and Wastewater Budget By-Law and Fees & Charges By-Law</i>	December 7, 2016 <i>January 23, 2017</i>
Library & EDTC Budgets and presentations	January 11, 2017
General Levy Budget & Assessment Analysis Report <ul style="list-style-type: none"><i>General Levy & Capital Budget By-law</i>	January 25, 2017 February 1, 2017 <i>February 27, 2017</i>

Overall Service Objectives

- ✓ Reliable System of Service Delivery
- ✓ Safe Drinking Water
- ✓ Legislated Full Cost Recovery
 - Avoid deferring burden to future generations
- ✓ Quality of Life
 - Protection of natural environment
 - Eliminate basement flooding/sewer backups
 - Cost control

Legislative Responsibilities Municipal Officials

- “Taking Care of Your Drinking Water – A Guide For Members Of Municipal Councils”



- “Standard of Care”
 - Presented September 2016

Water & Wastewater Service Delivery

Corporate & Community Services

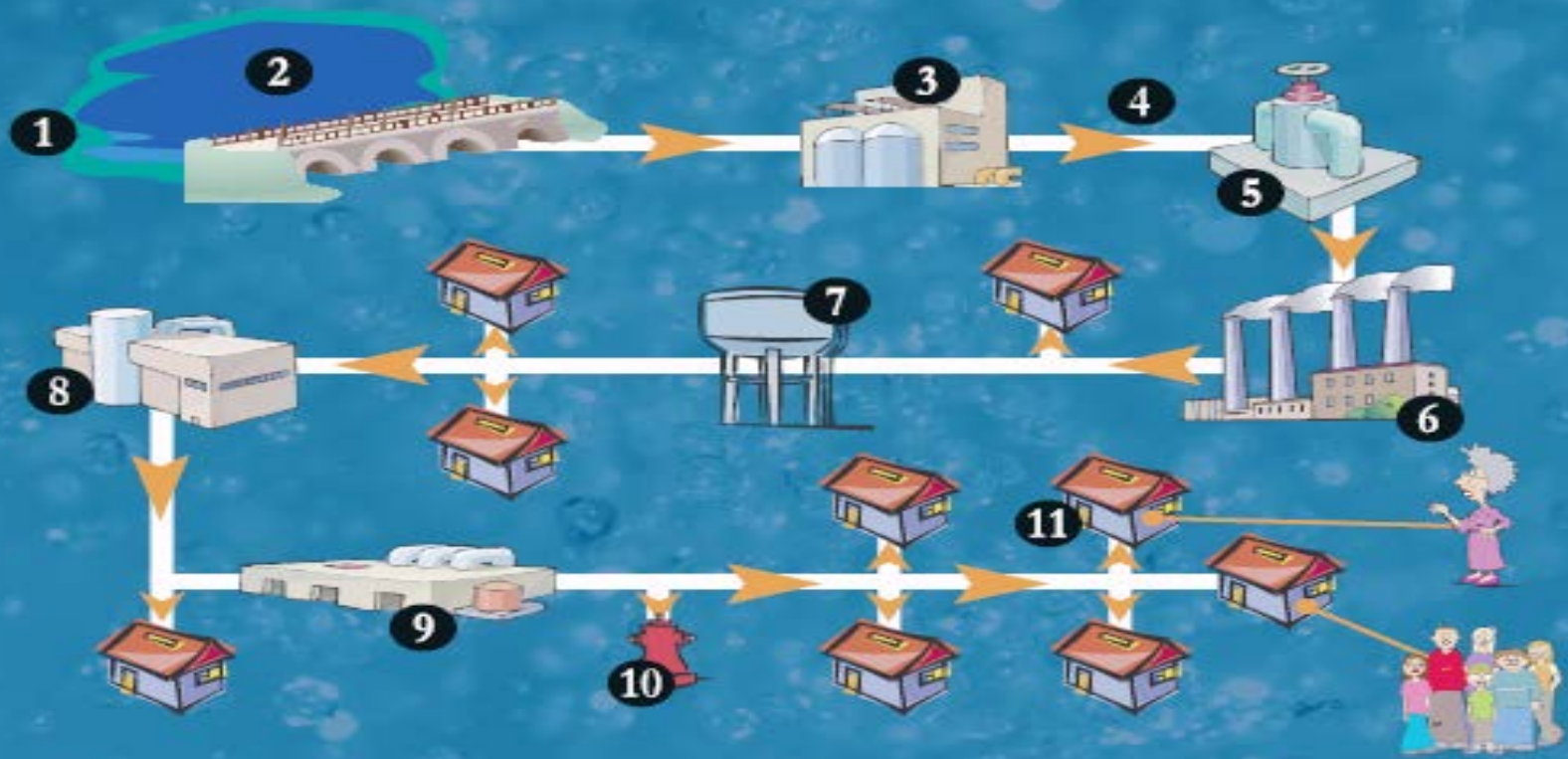
Billing & Collections, Customer service,
Digital services

Infrastructure Services

Engineering, Capital, Operations &
Maintenance, Compliance



TOWN OF FORT ERIE Cost to Deliver



- | | | |
|--------------------------------------|-----------------------------|----------------------------|
| 1. Watershed Management | 5. Pressure Reducing Valves | 9. Re-Chlorination Station |
| 2. Raw Water Quality Monitoring | 6. Industrial Park | 10. Fire Hydrants |
| 3. Rosehill Water Treatment Facility | 7. Reservoirs | 11. Your Home |
| 4. Treated Water Quality Monitoring | 8. Pump Stations | |

The costs to deliver water and sewers services and maintain the piping networks to both Grandma and the Smith family of six are equal. Fixed cost recovery is spread equally among all customers.

Operational Commitments

- **Legislative Compliance**
 - Conformance and Maintenance of Accreditation
- **Reduce 'Non-Revenue' Water Volumes**
 - Capital Investment - Cast Iron Watermain Replacement
 - Completion of Water Meter Exchange program
 - Ongoing focus on Leak Detection, tracking & repair programs
- **Reduce Infiltration to the Sanitary Sewer System**
 - Capital investment – Investigation, repair, replacement, monitoring
 - Exflow Program – Annual Target Areas
- **Leverage Funding Opportunities**
 - Pursue available grants for operating (e.g., Regional CSO) and capital programs (e.g., CWWF, OCIF).

Operational Challenges

- Recruitment of DWQMS coordinator
- Aging workforce (expected retirements)
- Watermain breaks due to weather (down 50% to average in 2016 but 100% over average in 2015)
- Legislative requirements for new water projects
- Anticipated legislation for the sewer system similar to the water system (QMS-based)

Water & Wastewater Budget

Customer Rates are a function of:

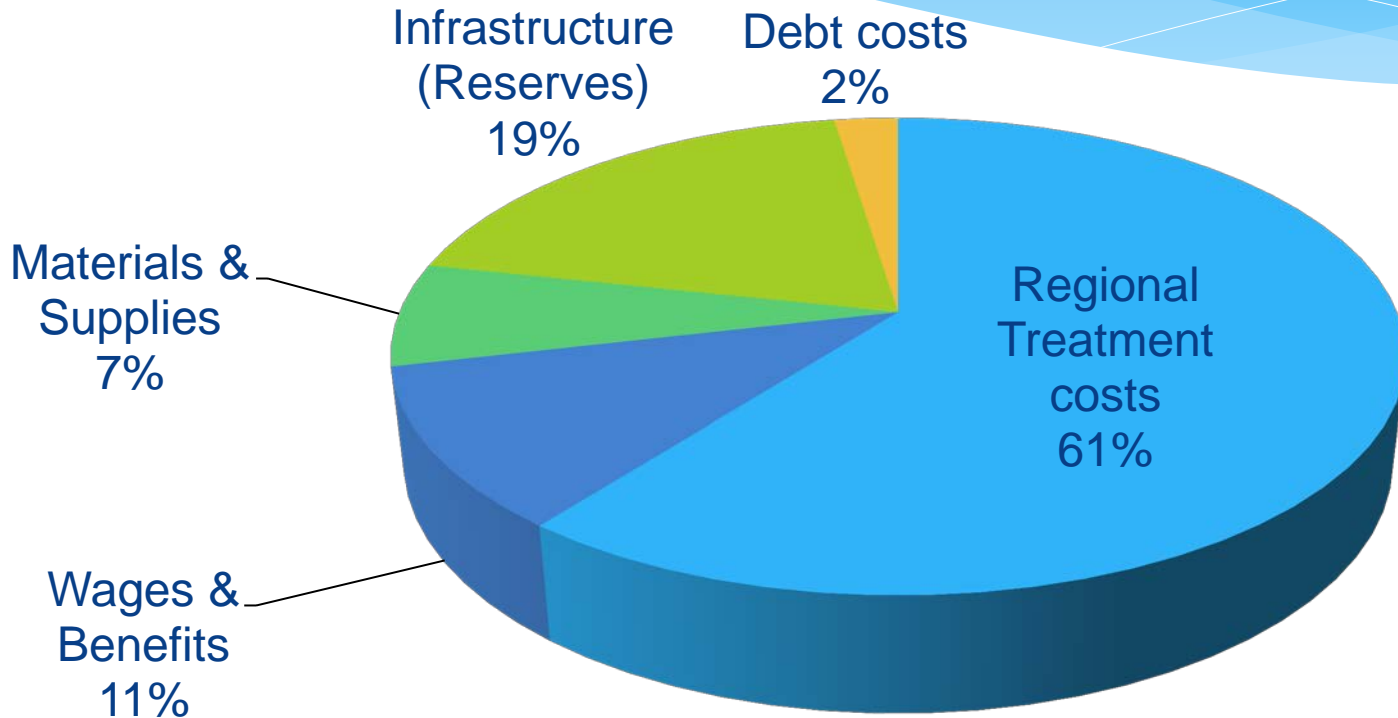
1. Expenses & Other Revenues

- a) Regional treatment costs and volume estimates
- b) Town expenses (i.e., operations, maintenance and billing) and other revenues
- c) Supplementary budget

2. Rate Setting

- a) Customer volumes
- b) Town's billing methodology

2017 Total Budgeted Expenses



Total: \$18,093,346

1 a) Regional Treatment Costs

Increase in budget of \$253,211 or 1.47%

61% of Town's budget:

- Region's budget approved November 17:
 - Combined net budget increase of 0.8% (Water budget increase of 0.0% and Wastewater increase of 1.3%)
- Town's share of water volume up 3.09%.
- Town's share of wastewater volume up 6.74%.
- 2018 to 2022 forecasts include a 2% increase.

1 a) Regional Treatment Costs

No change in Regional billing formulas:

- **Water** charge
 - 75% variable & 25% fixed
- **Wastewater** charge
 - 100% fixed apportioned on prior 3 year average volumes.
 - 2017 reconciliation adjustment for 2015 actual flows is a charge of **\$620,560** as volumes were higher than estimated.
 - 2018 estimate is a charge of **\$500,000** based on 2016 actual flows.

1 b) Town Expenses & Other Revenues

Increase in budget of \$113,771 or 0.67%

- Decreased revenue from Regional grants.
- Increased wages & benefits.
- Increased overhead costs (e.g., insurance).
- Reduction in debt charges. No repurposing of matured debt as capital contributions.
- Increased materials & services, including a focus on non-revenue water & extraneous wastewater flows.

1 b) Town Expenses & Other Revenues

- Maintain the Water Emergency Relief Fund (WERF) at **\$15,000** for low income families.
- Maintain the Seniors Utility Relief Fund (SURF) at **\$21,000** for low income seniors.

1 c) Supplementary Budget

Increase in budget of \$240,567 or 1.40%

- Addition of W&WW Supervisor, phased-in at **\$76,000**.
- Increase costs by **\$164,567** through reduced Sewer Rate Stabilization Reserve allocation, due to decrease in reconciliation charge.
- No change in capital contributions or repurposed debt.
- No change to annual Water Rate Stabilization Reserve & Sewer Rate Stabilization Reserve contributions.

1 c) Supplementary Budget Capital Infrastructure

- Capital Budget was presented to Council November 16, 2016.
- Master Servicing Plans identify priority replacement
 - Water Distribution System Master Plan Update
 - Underway, to be completed early 2017
 - Wastewater Master Plan
 - To be commenced early 2017
 - AMP: plans above will estimate annual Life Cycle Costs

1 c) Supplementary Budget Capital Infrastructure

Infrastructure Reserve Funding: no proposed 2017 change

- Repurposed debt opportunity in 2018

	Allocation To Reserves 2016	Allocation to Reserves 2017	Target contribution
Water Infrastructure	\$1,848,054	\$1,848,054	\$2,510,133
Wastewater Infrastructure	1,444,931	1,444,931	2,204,315
TOTAL	\$3,292,985	\$3,292,985	\$4,714,448
% of Target	70%	70%	

1 c) Supplementary Budget

- Rate Stabilization Reserves are key to mitigating annual increases due to:
 - Unknown Regional budget increases.
 - Unknown proportionate share changes.
 - Unknown future treated volumes (e.g., 2018 adjustment expected to continue as a \$500,000 charge).

1) Expenses & Other Revenue 16/17 Change Summary

	\$ Increase/ (Decrease)	% Increase/ (Decrease)
2016 Rate Revenue	17,191,834	
Net Revenue decreases	20,000	0.12
Net Expense increases	93,771	0.55
Regional Treatment Costs	253,211	1.47
Supplemental – reserve allocations	240,567	1.40
2017 Budget increase	\$607,549	3.53%
2017 Rate Revenue	\$17,799,383	

2) Rate Setting

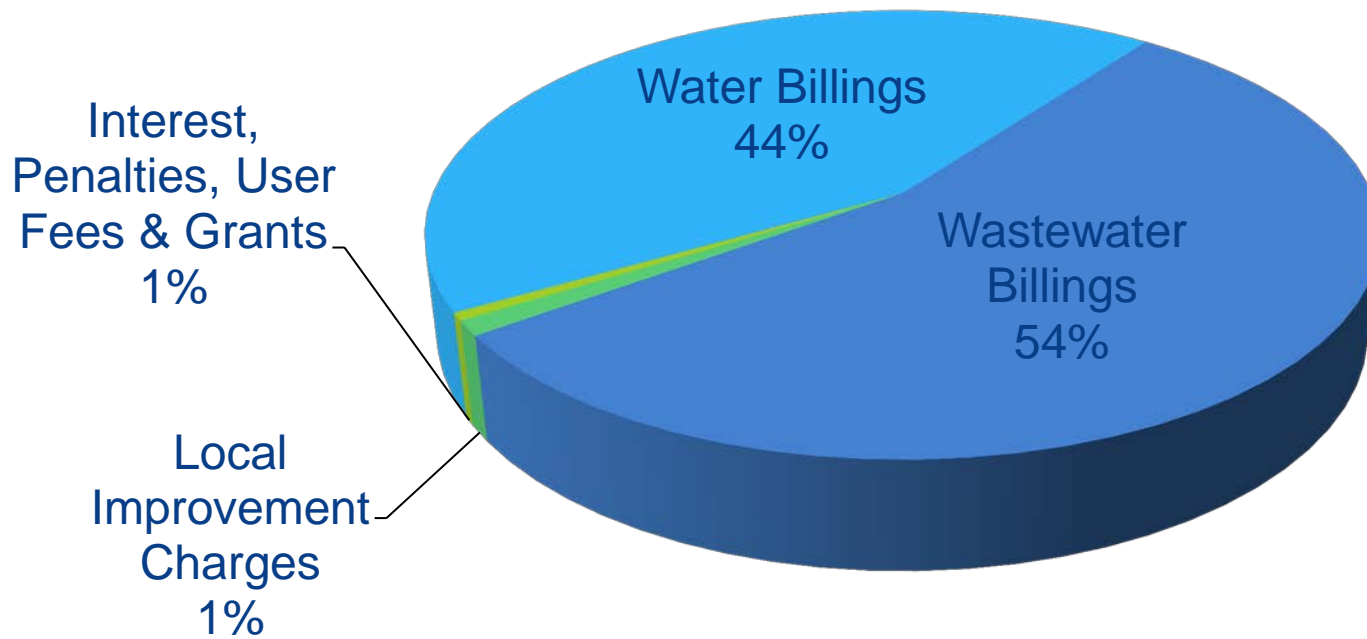
a) Customer Consumption volumes

- Opportunity to address given slight increase of overall costs.
- Significant adjustments to water & wastewater volumes from 2016 projections.

b) Town's billing methodology

- Base charge vs. volumetric charge.
- Municipal trends.

2017 Total Budgeted Revenues



2 a) Consumption Volumes - Water

- **2016: Volume of 2.88 million m³ in rate calc:**
 - Decreased 106,103 m³ or 3.55% in 2016 over 2015 volumes.
 - Lower than projected 2016 actual by 5.5% due to dry summer.
- **2017: Volume of 2.82 million m³ in rate calc:**
 - Decreased 57,655 m³ or 2.0% over 2016 volumes.
 - Narrow gap with additional 2017 volume reduction.
 - Below 5-yr average by 2.4%.

2 a) Treated Volumes - Wastewater

- **2016: Volume of 2.57 million m³ in rate calc:**
 - Decreased 73,955 m³ or 2.8% in 2016 over 2015 volumes.
 - Approximates projected 2016 actual.
- **2017: Volume of 2.52 million m³ in rate calc:**
 - Decrease 51,346 m³ or 2.0% over 2016 volumes.
 - Narrow gap with additional 2017 volume reduction.
 - Below 5-yr average by 0.5%.

2 b) Town's Billing Methodology

- Balancing act between base & volumetric
- Priority has been on mitigating revenue shortfalls due to decline in volumes
- Making progress toward objective of:
 - Charging proportionately less to base. Volumetric weighting gives homeowner more control over cost.
 - Decreasing risk of revenue shortfalls through better consumption estimates.

2 b) Base charge

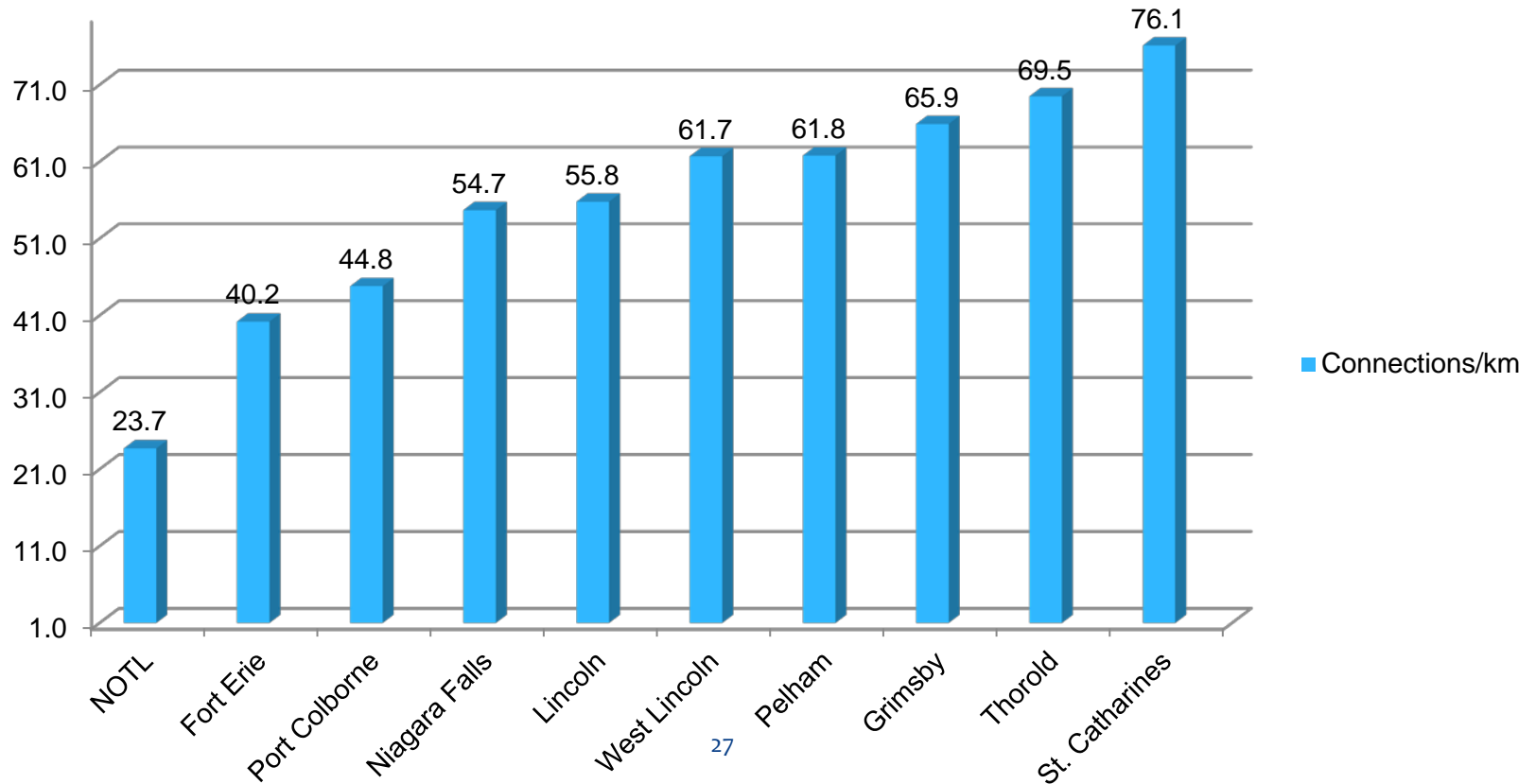
Base charge for **stability and sufficiency**:

- 2017 combined monthly base from \$65.42 to \$66.08.
- A 1.0% increase.

Niagara base average is 43% of monthly bill

- 2016 was 60%; 2017 is 58%.
- Fort Erie is the highest in Niagara.
- 5-yr forecasted decrease to 54%.

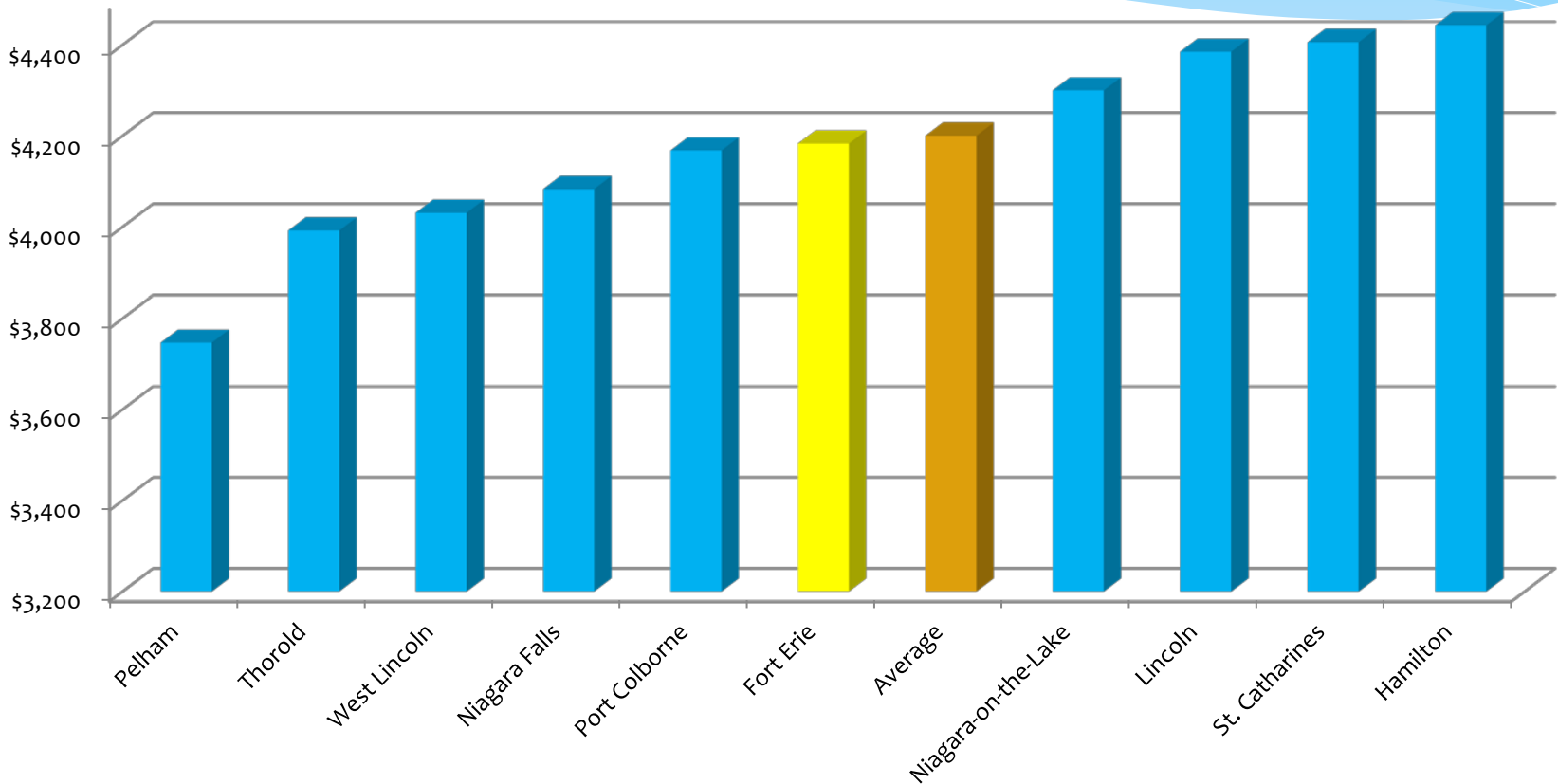
2 b) Base charge - challenge



2) Rate Setting

Municipal Burden (Niagara/Hamilton)

2015



2b) Volumetric rate

Volumetric Rates for **control & conservation**:

- **\$2.721/m³** 2016 current combined rate
- **\$2.947/m³** 2017 proposed combined rate

Niagara combined volumetric rate for 2016:

- Average of **\$2.911/m³**, min of **\$2.206/m³**, max of **\$4.592/m³**.
- TOFE 2017 of **\$2.947/m³** near 2016 avg.

2) Rate Setting - Water

- Water Base Charge

- = ((Region costs + net Town costs) x 52%) / volume / #accounts / 12 months
- = (((\$3,529,030 + \$4,343,443) x 52%) / 2.82Mm³ / 14k / 12
- = \$25.02/mos

- Water Unit Charge:

- = (Total costs - Base charge revenue) / volume
- = (\$7,782,473 - \$4,058,624) / 2.82Mm³
- = \$1.350/m³

2) Rate Setting - Wastewater

- Wastewater Base Charge
 - = ((Region costs + net Town costs) x 59%) / volume / #accounts / 12 months
 - = (((\$7,419,559 + \$2,507,351) x 59%) / 2.52Mm³ / 12k / 12
 - = \$41.06/mos
- Wastewater Unit Charge:
 - = (Total costs - Base charge revenue) / volume
 - = (\$9,926,910 - \$5,908,721) / 2.52Mm³
 - = \$1.597/m³

2) Rate Comparison – Based on avg household (16m³)

	2016	2017	% increase	\$ increase
Water/month	\$45.92	\$46.62	1.52%	\$0.70
Wastewater/month	\$63.03	\$66.61	5.68%	\$3.58
Monthly total	\$108.95	\$113.23	3.93%	\$4.28
Annual total	\$1,307	\$1,359	3.93%	\$52

Average household cost of \$3.72 per day.

2) Rate Comparison – other household consumption

	\$ per litre	Cost multiplier
Pepsi	\$0.98	333 x
Gasoline	\$0.95	322 x
Bottled water (24 x 500ml case)	\$0.25	85 x
Town water (incl. wastewater)	\$0.0029	n/a

2) Rate History & Forecast – Based on avg household (16m³)

2017	2016	2015	2014	2013	2012
3.93%	4.74%	2.06%	0.00%	3.28%	4.41%

Forecast for 2018-2022 is approx 1.75% / year

Risks and Opportunities

Risks

- **Weather:** impacts consumption trends & maintenance costs.
- **Volumetric vs. base rate:** revenue risk from volume variances.
- **Wastewater treatment adjustment:** impact on rate reserve.
- **Consumer shifts:** impacts from changes to large consumers.
- **Legislative compliance:** DWQMS extended to wastewater.
- **Provincial comparisons:** relatively high Residential rate & low Commercial and Industrial rates.
- **Reserves:** < provincial average. Targeting improvements.

Risks and Opportunities

Opportunities

- **Infrastructure funding:** 1% rate increase provides \$195,000 in additional capital reserve contributions.
- **Grant funding:** applying for government programs where possible (e.g., Regional CSO, CWWF, OCIF).
- **Meter change out program:** reduced meter reading costs, improved customer service, greater accuracy.
- **Financial sustainability:** indicators better than BMA averages
 - Asset consumption ratio: 29% & 28% < Avg 33% & 34%
 - Debt charge % of revenue: 0.6% & 2.0% < Avg 2.6% & 4.4%

QUESTIONS