



City of Cambridge Stormwater Management Funding Study

Council Presentation

December 2, 2021

Introduction

- In 2018 Council directed staff to explore the benefits of alternative stormwater user fees.
- The City retained Wood Environment & Infrastructure Solutions and Watson & Associates Economists Ltd. to undertake a Stormwater Management Funding Study.
- The Study has been completed and is being presented today with the recommendation that funding for the maintenance and operation of the municipal stormwater management system transition from being tax based to a dedicated rate structure.
- Our consultants will provide an overview of the Stormwater Management Funding Study and details of the recommendations and will be available for questions.

Stormwater Management



What is stormwater?

- Rainwater and melted snow that runs off lawns, streets and other land surfaces
- Hard surfaces such as pavement and roofs prevent precipitation from naturally soaking into the ground

Why do we need to “manage” it?

- Prevent the flooding of homes, roads and businesses
- Prevent creek erosion and stop harmful pollutants from entering local bodies of water



The City stormwater management system

- Works to collect, direct, and control stormwater runoff to reduce or eliminate these potential impacts

A fair and equitable funding model would allocate costs of the stormwater system based on the varying amounts of runoff generated by different properties (user-pay principle).

The Current Program



- City owns and manages a large public stormwater management system with an estimated replacement value of \$532 million
- City would like to proactively invest in ongoing maintenance, as opposed to more costly emergency repairs, to address aging infrastructure and the increasing frequency and duration of storm events

Current Stormwater Management Assets

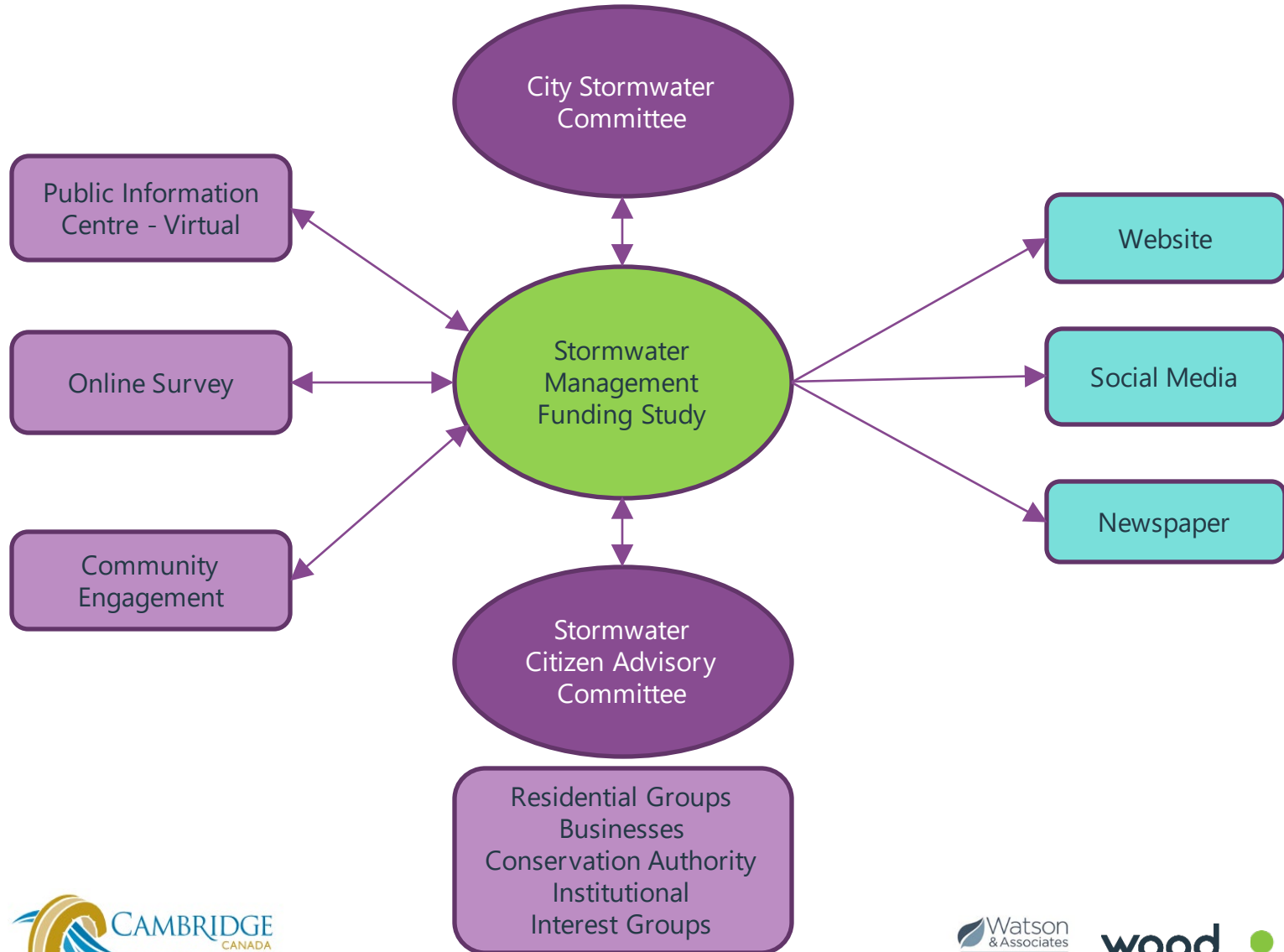
The public portions of the City's stormwater system include:

- Over 371 km of sewers; 155 km of sewer/leads
- Approx. 6,927 manholes
- Over 9,853 catch basins
- 87 stormwater ponds
- 27 oil grit separators
- 1,195 culverts
- 699 storm inlets and outlets
- 3 dams



Note: list is based on 2019 Asset Inventories

Consultation and Public Engagement



Future Program – Areas of Focus (Capital and Operating)

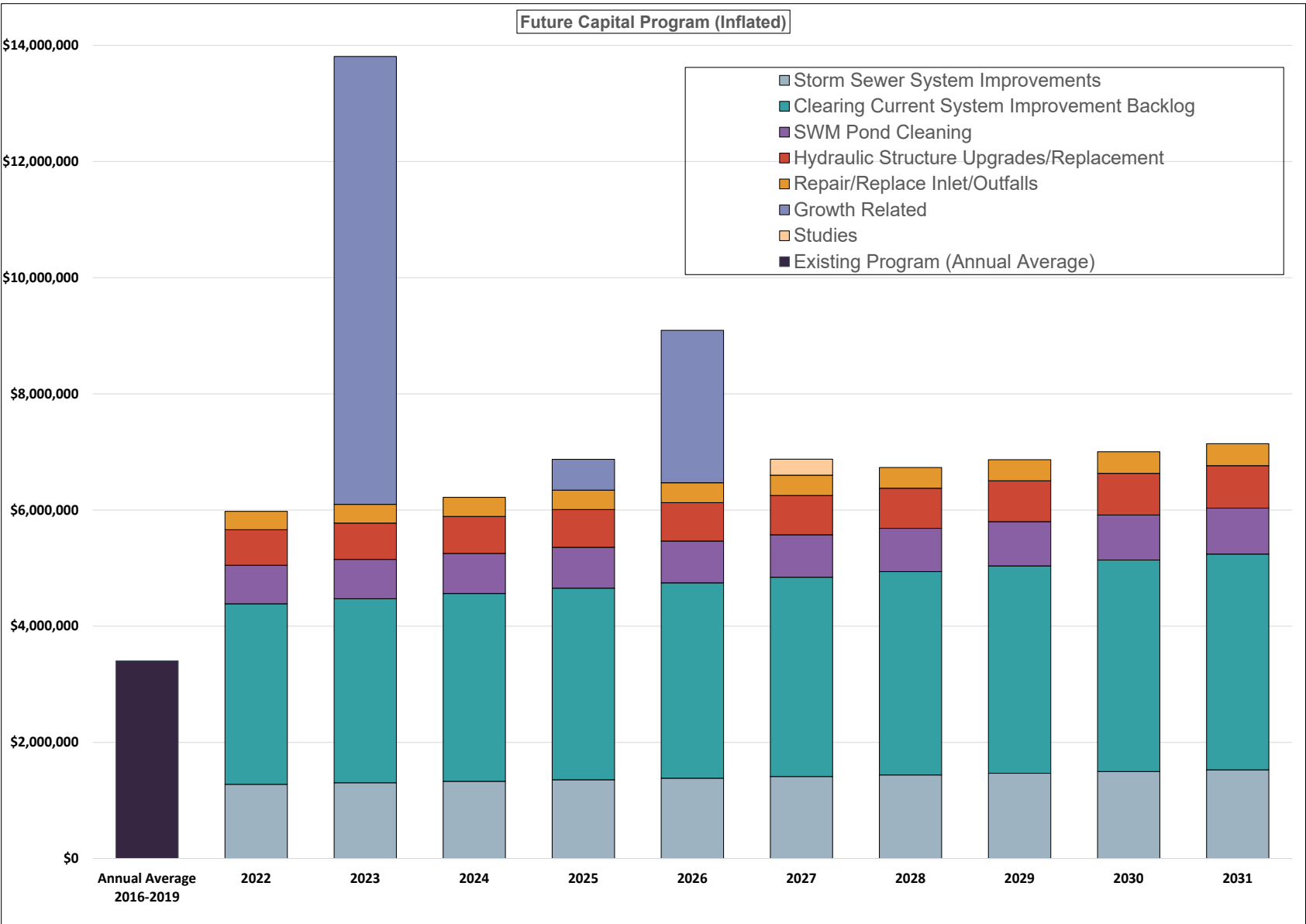
- Addressing the current infrastructure gap by reducing the capital backlog
- Stormwater Pond assessments and cleanouts
- CCTV/Zoom camera inspection – proactive
- Storm sewer repairs
- Catch basin cleaning
- Leaf pickup
- Storm outfall repairs



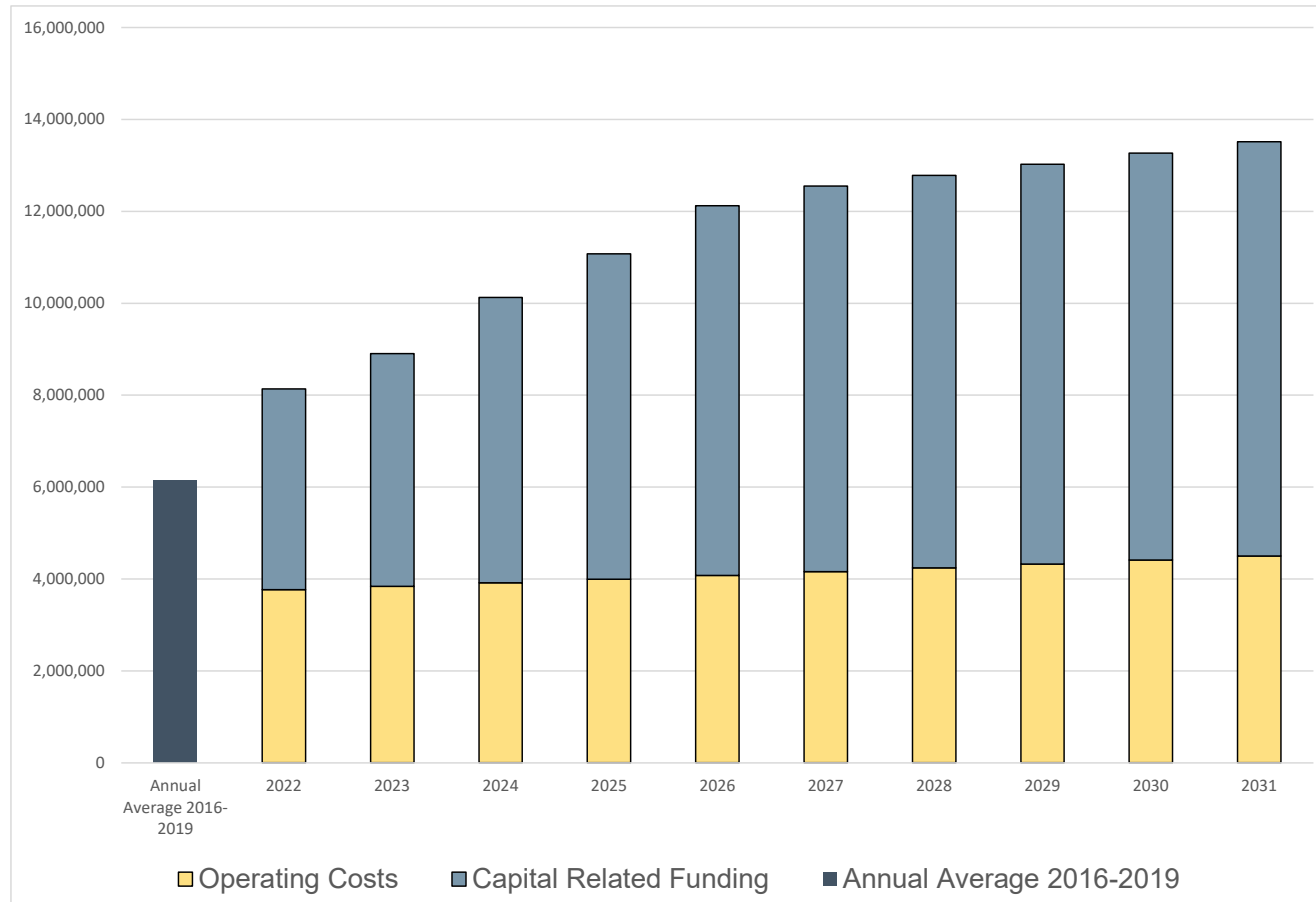
Future Program – Level of Service Options

- **Current:** maintain the current LOS, annual cost approx. \$5.1 million.
- **Basic:** maintain the current LOS; or refocus existing resources or add funds as a first step in enhancement to respond to service needs, annual cost approx. \$6.9 million.
- **Medium:** addition of staff/contractor/materials to increase capability to address service needs in a moderate approach, annual cost approx. \$10.2 million.
- **High:** addition of staff/contractor/materials to address service needs as the highest priority in an aggressive approach, annual cost approx. \$15.5 million.
- **Preferred:** a blend of the basic and medium level of service was chosen as the preferred program at an approx. cost of \$8.1 million annually (excluding growth related costs).

Forecasted Cost of Services – Capital (Inflated)



Recommended Stormwater Operating Forecast (inflated)



Note: Forecast assumes full phase in of recommended program beginning in 2022 for demonstration purposes, this will need to be confirmed through an implementation phase.

Current Funding Recovery Model and Funding Recovery Alternatives Available

Current Funding Recovery Model

Property Taxes

Development Charges

Developing Landowner Dedications

Funding Recovery Alternatives Available

Property Taxes

Flat Rates

Land Area

Utility Rate

Runoff Coefficient

Impervious Area

Development Charges

Developing Landowner Dedications

Funding Models Assessed

Option 1:

- Rates calculated based on the size of the property.

Option 2 (Preferred):

- Rates calculated based on the size of a property multiplied by average runoff coefficient.

For both options, rates were varied by property type and size:

- Agriculture – Flat rate per acre/hectare
- Residential: Tiered flat rates
 - Small sized properties
 - Medium sized properties
 - Large sized properties
- Non-Residential:
 - Small and Medium sized properties - flat rate
 - Large sized properties – rate per acre/hectare

Assessment of Exemption Alternatives

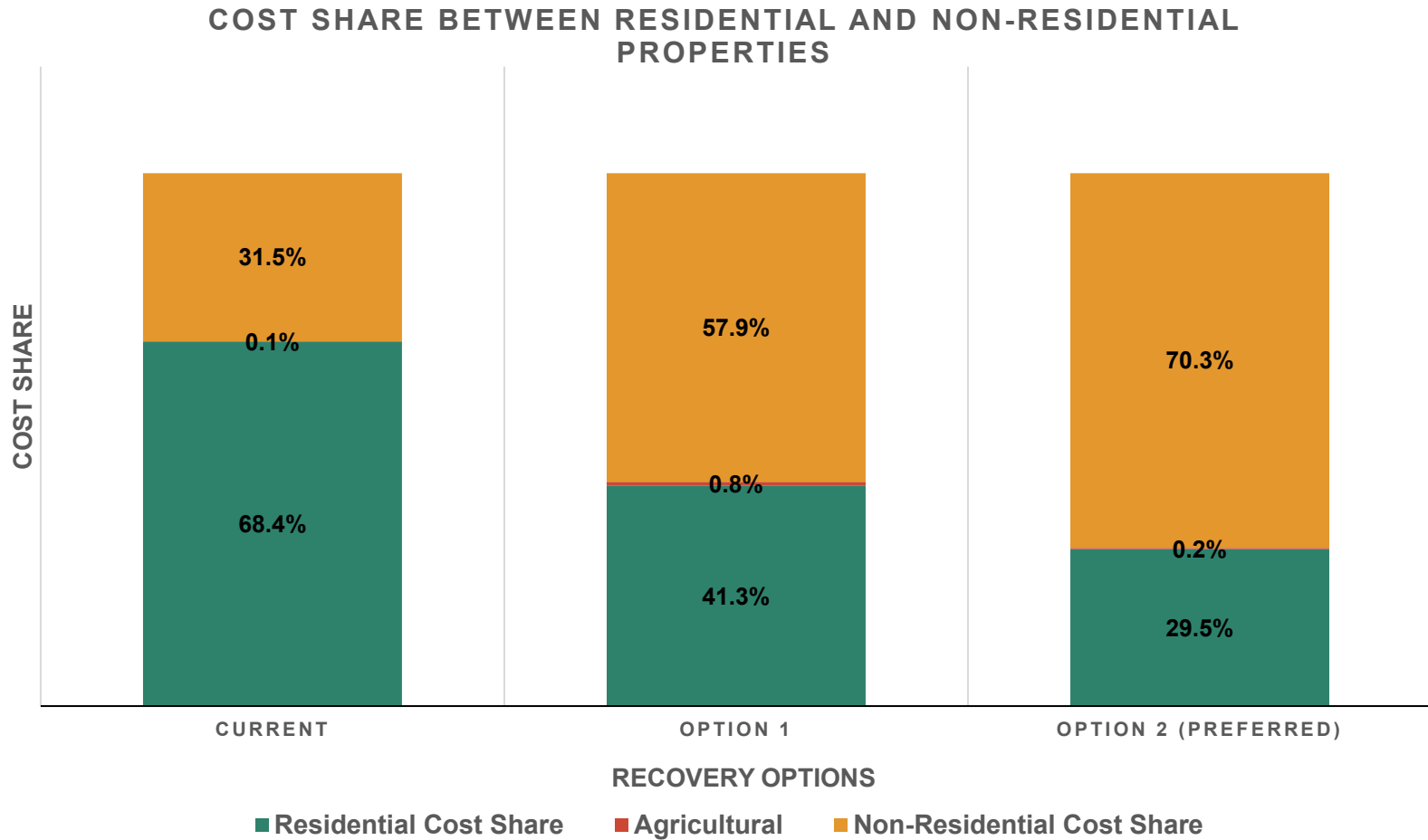
For both funding recovery models (Option 1 & 2), two alternatives were assessed based on potential properties to be exempt from a dedicated stormwater charge.

Property Code Description	Alternative 1	Alternative 2
Institutional		
Schools - elementary, secondary, post secondary, and other educational institutions	Yes	Yes
Other institutional residence (e.g. convents)	Yes	No
Hospital, private or public	Yes	No
Nursing home	Yes	No
Provincial correctional facility	Yes	No
Special & Exempt		
Place of worship	Yes	No
Cemetery	Yes	No
Recreational sport club - non-commercial (excludes golf clubs and ski resorts)	Yes	No
Non-commercial sports complex	Yes	No
Museum and/or art gallery	Yes	No
Library and literary institutions	Yes	No
Assembly hall, community hall	Yes	No
Transit garage	Yes	No
Public transportation - other	Yes	No
Military base or camp (CFB)	Yes	No

Property Code Description	Alternative 1	Alternative 2
Government		
Post Office or depot	Yes	No
Conservation Authority Land	Yes	No
Municipal park (excludes Provincial parks, Federal parks, campgrounds)	Yes	No
Non-buildable land (walkways, buffer/berm, storm water management pond, etc.)	Yes	No
Land designated and zoned for open space	Yes	No
Common land	Yes	No
Fire Hall	Yes	No
Ambulance Station	Yes	No
Police Station	Yes	No

The preferred exemption alternative is Alternative 2 however properties to be exempt from a dedicated stormwater charge would be reviewed and confirmed during the development of an implementation plan

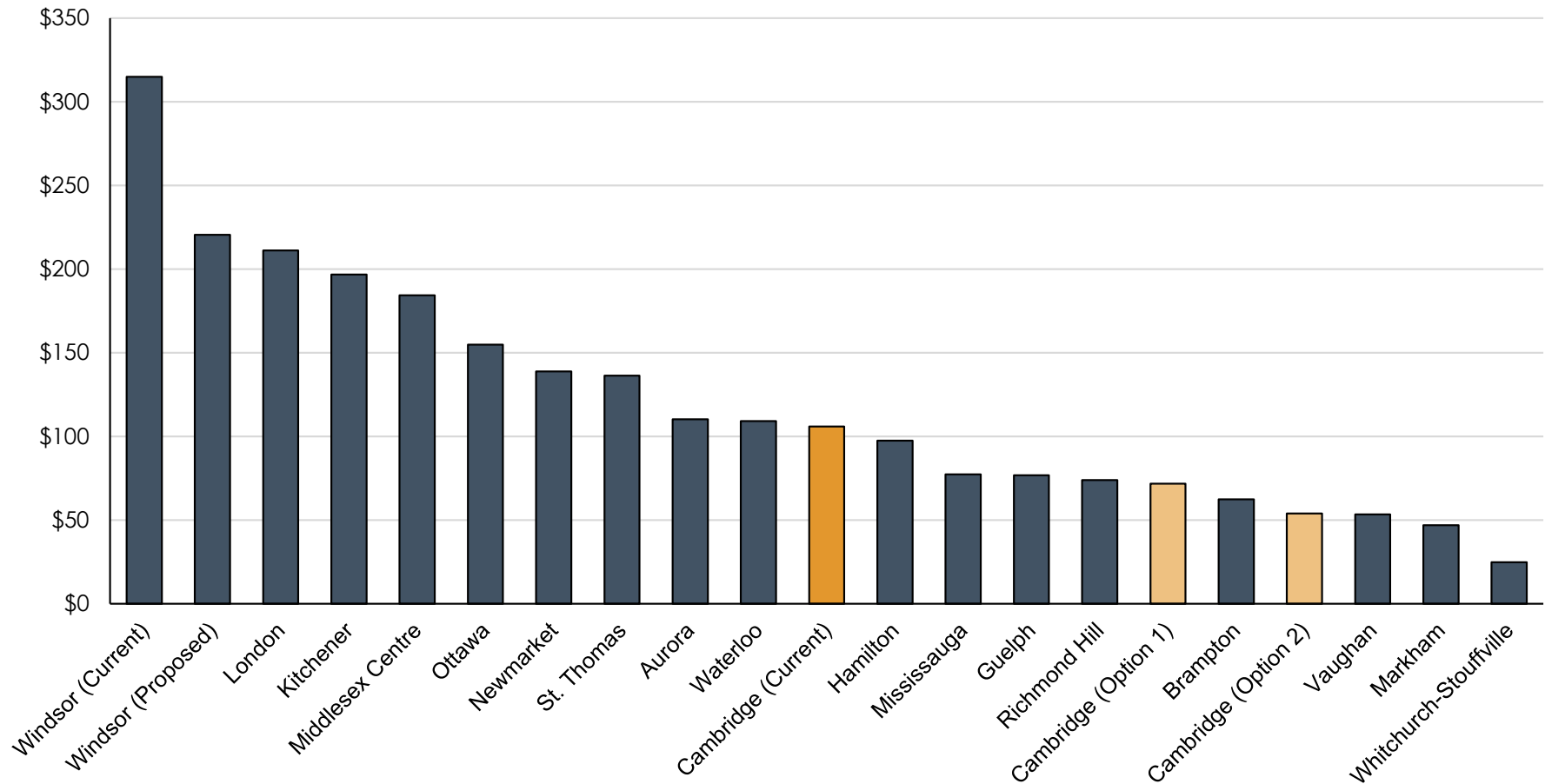
Stormwater Services Cost Share between Residential and Non-residential Properties



* Costs associated with agricultural properties are 1% or less in each option

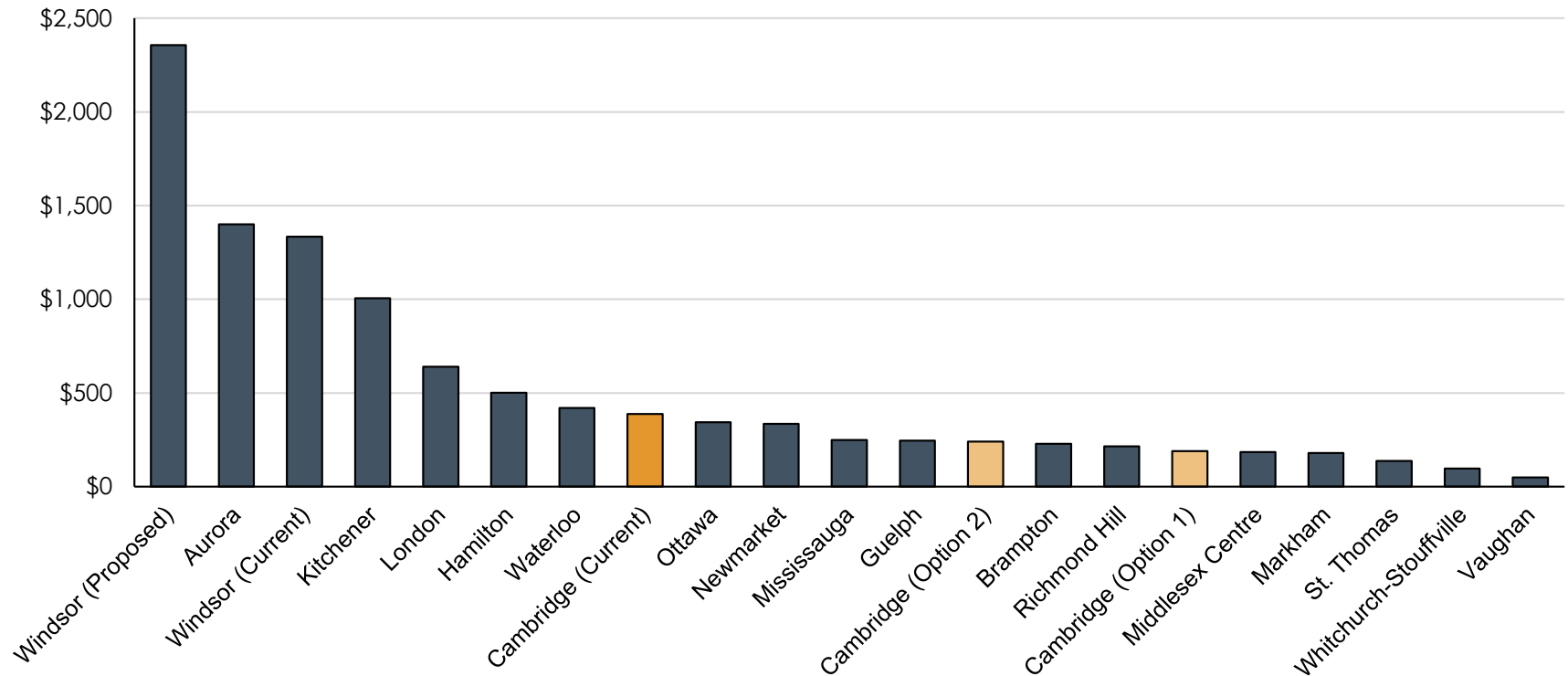
Annual Stormwater Bill Average for a Single Detached House

Based on a property less than or equal to 0.2 acres or \$365,000 Assessment



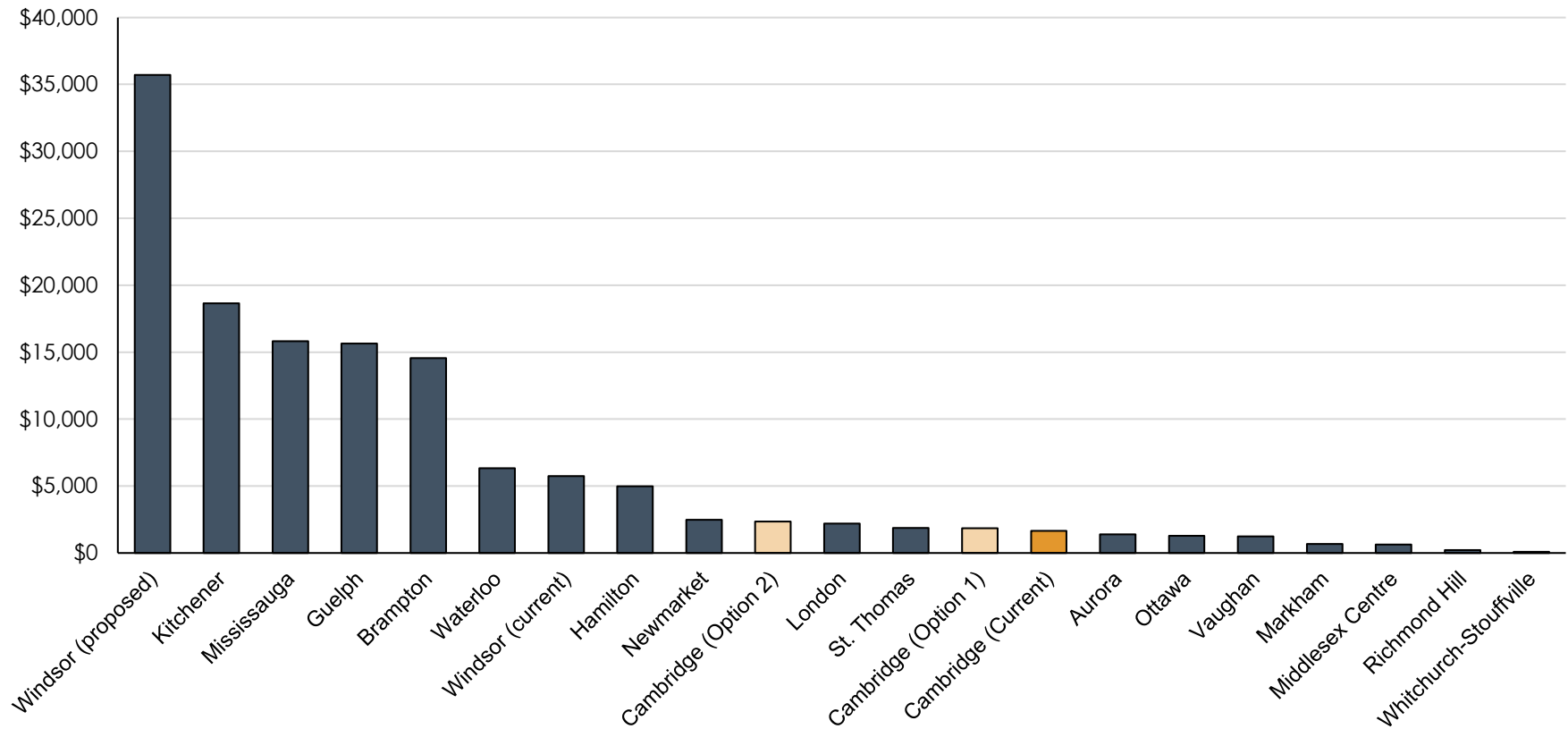
Annual Stormwater Bill Average for a Small/Medium Non-residential Properties with less than 1 acre

Based on a commercial property with 0.32 acre or \$540,000 Assessment



Annual Stormwater Bill Average for a Large Non-residential Properties Greater than 1 acre

Based on a property 3.08 acres or \$2,299,000 Assessment



Summary of Recommendations

- Council endorse the transition of stormwater funding from the tax base to a dedicated rate structure;
- Council direct staff to initiate an Implementation Study for the transition to a dedicated rate structure, pending approval of the 2022 capital budget; and
- Council endorse the further review of property exemptions and a credit program as part of the Implementation Study.

Next Steps

- Endorsement by Council to transition stormwater management from a tax base funding model to a dedicated rate-based funding model
- Initiation of Implementation Study in 2022 to:
 - Review and finalize all data and calculations
 - Formalize rates, exemptions, credits &/or incentive policies
 - Establish a billing system
 - Development of required policies and by-laws
- Schedule regular Council involvement throughout the Implementation Study

www.engagewr.ca/stormwater-management-funding-study

