

A hand holding a blue pen is marking a technical drawing on a green grid. The drawing includes labels like 'DETAIL - F', 'CUTOUT START FROM HERE', and 'DETAIL - T'. A rolled-up blueprint is visible in the background, showing various technical drawings and text. A metal fitting is also present in the foreground.

Public Meeting Agenda: February 5th

- **Ontario Regulation 588/17 and Asset Management**
- **Service Level Policies**
- **Capital Budget**
- **Financial Strategy**
- **Ontario Regulation 588/17 Policy**
- **Questions**

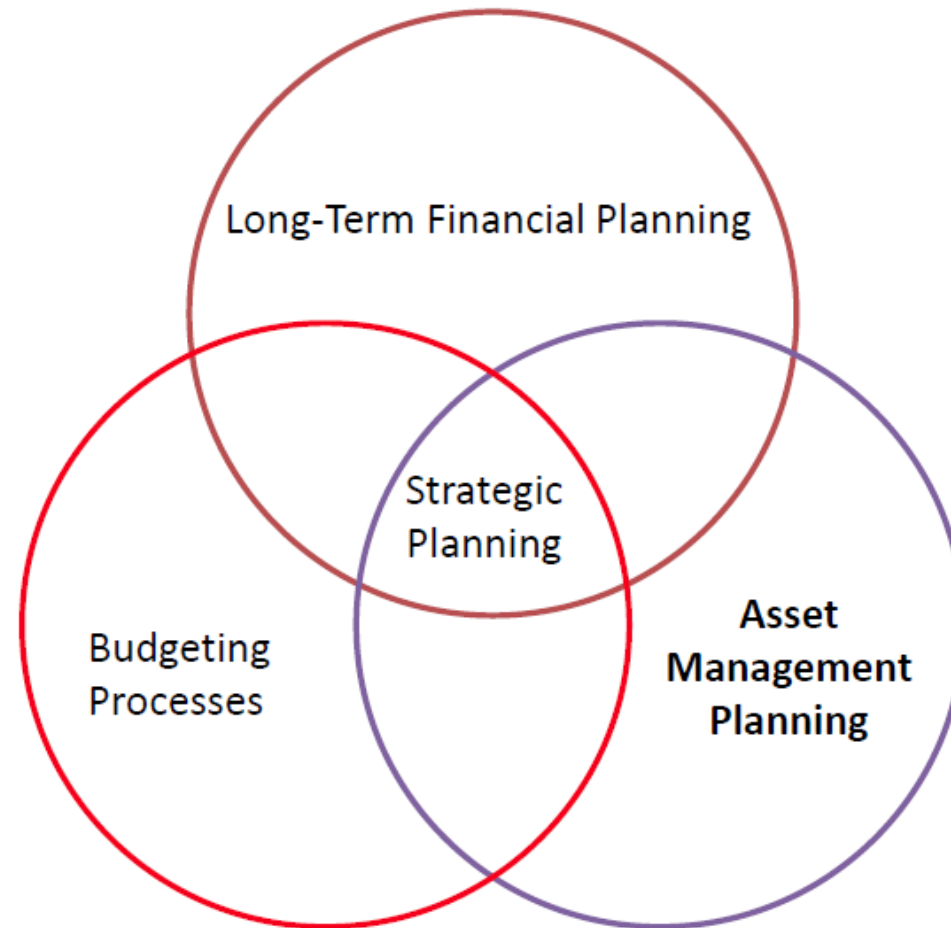
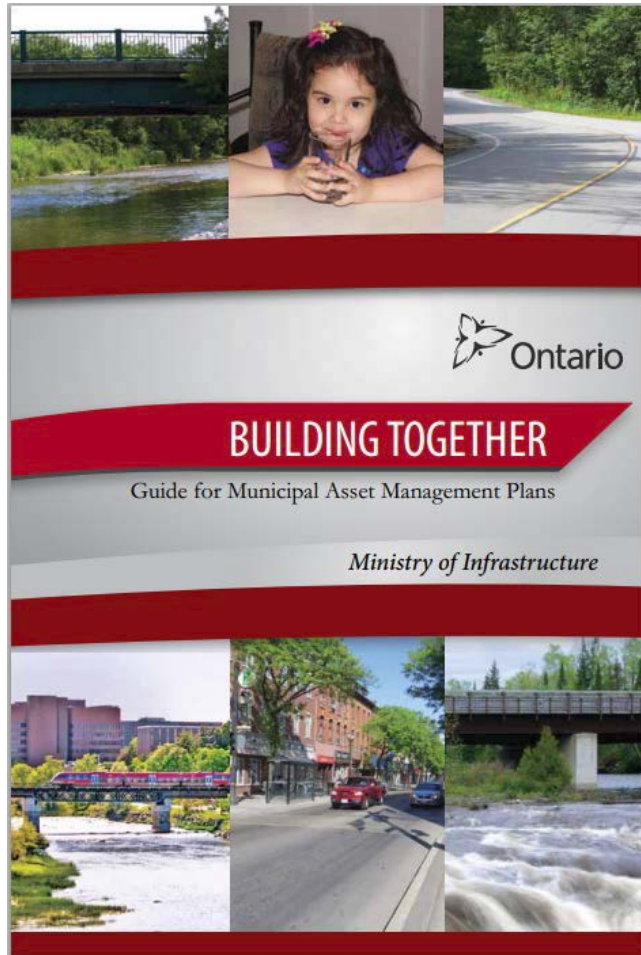
What is Asset Management Overview of O. Reg. 588/17

In December 2017, the Province passed an asset management planning regulation under the Infrastructure for the Jobs and Prosperity Act, 2015.

This presentation provides an overview of:

- **Municipal asset management planning in Ontario;**
- **Development of the Regulation, including incorporation of municipal feedback; and**
- **Regulatory requirements.**

What is Asset Management ?



Creation of an Asset Registry

- An evaluation of all assets taking into account descriptors such as:
- age,
- condition,
- remaining life,
- replacement value or remediation cost,
- Probability of failure and
- consequence of failure.

Asset Classes in Puslinch

- Roads
 - Gravel Roads
 - Surface Treated
 - Hard Surface Roads
- Bridges
- Culverts
- Sidewalks
- Storm Sewers
- Storm Water Management Ponds
- Regulatory/Warnings Signs
- Street Lights
 - Standard Street Lights
 - Decorative Street Lights
 - Floodlights
- Public Works, Building Department, Parks and Recreation
 - Licensed Vehicles
 - Unlicensed Vehicles
- Street Trees
- Buildings and Facilities
 - Municipal Complex
 - Puslinch Community Centre
 - Optimist Recreation Centre
 - Fire Hall
 - Various Storage Buildings
 - Public Work Unlicensed Vehicles
- Parks and Recreation
 - Lights
 - Park Equipment
 - Bleachers
 - Fencing
 - Sports Fields
 - etc.
- Fire Assets
 - Vehicles, Tires
 - Fire Equipment
 - Fire Reservoirs

Service Level Policies

- Roads are the largest Capital Expenditure
- Road rehabilitation/replacement is determined by Life Cycle and a Pavement Condition Index (PCI) PCI is a range of 1 -100
- These standards are used throughout Ontario by municipalities and supported by the Ontario Good Roads (OGRA)
- Usually hard surface roads are remediated when their condition is considered “poor”
- UEM Recommended Service Level Policies for All Asset Classes
- Service Level Policies impact of the creation of a capital plan

UEM Proposed Level of Service Policy: Bridges and Culverts

To inspect according to the Ontario structure inspection manual and Ontario Regulation 104/97. This inspection shall occur every two years and shall adjust the BCI based on the recommendations of the qualified engineer. The inspection report shall include all repairs that exceed the capital threshold in the capital budget to the schedule recommended by the qualified engineer.

The asset registry must be updated at least once per year to reflect whether the asset was inspected or not. For those not inspected, the BCI will be maintained based upon the requirements of the Ontario Regulation 104/97.

UEM Proposed Level of Service Policy: Buildings and Facilities

Buildings and Facilities owned by the Township of Puslinch should be inspected by a qualified structural engineer on a routine basis however not more than 5 years apart to determine necessary improvements, repairs or replacements. In addition to the qualified structural engineer an additional qualified engineer shall be retained to address electrical, HVAC and mechanical components. The cost of any needed improvements shall be integrated into the capital plan by way of updates to the asset registry.

In addition to the inspections by such qualified engineer's a qualified company or individual shall undertake an Arc-Flash study every 5 years and infrared scanning of all electrical equipment to determine the adequacy of such equipment.

The asset registry must be updated at least once per year to reflect the current condition whether the asset be inspected or not (those not inspected will be updated based on lifecycle standards).

UEM Proposed Level of Service Policy: Fire Equipment

The service level policy for Fire Equipment shall be in accordance with the related NFPA standards: 1911, 1962, 1932, 1855, 1858, 1852, 1851 and 1971.

The asset registry must be updated at least once per year to reflect the current condition whether the condition be inspected or not (those not inspected will be updated based on lifecycle standards).

UEM Proposed Level of Service Policy: Fire Reservoirs

The Fire Department shall on an annual basis inspect all fire reservoirs owned by the Township in accordance with the Ontario Fire Code 213/07 and NFPA Standard 25 to ensure that such fire reservoirs can be easily accessible and that any components above the roof of the reservoir are in good condition. Such reservoirs shall not be obstructed by vegetation of any form such as plants, bushes and trees.

The Fire Department shall inspect the reservoirs every 5 years to ensure the integrity of the reservoir.

The asset registry must be updated at least once per year to reflect the current condition whether the asset be inspected or not (those not inspected will be updated based on lifecycle standards)

UEM Proposed Level of Service Policy: Fleet - Works, Building Department, Parks & Fire Department

Fleet shall be maintained in conformance with licensing practices of the Province of Ontario including the Ministry of Transportation and shall include a daily visual inspection of any licensed vehicle before the vehicle leaves the fleet storage facility of the Township. Inspection of fire and rescue services vehicles shall also be based on relevant NFPA standards.

Further to the proposed service level policy described above. It is recommended by UEM that the Township retain their current service level policy.

The asset registry must be updated at least once per year to reflect the current condition whether the asset be inspected or not (those not inspected will be updated based on lifecycle standards)

UEM Proposed Level of Service Policy: Gravel Roads

The Service level for gravel roads is the Minimum Maintenance Standard for Gravel Roads. Repair will include grading and if required an application of additional granular material. Other alternatives should be considered such as surface treatment including asphalt and/or reconstruction if all of the following criteria are met:

- Full regrading is completed more than 6 times during each of two consecutive non-winter periods. The non-winter period is from May 1st to November 1st; and
- an inspection of the gravel base has been completed by a qualified engineer and confirms that the road base can support a hard top surface, without additional construction required; and
- the average daily traffic volume exceeds 400 vehicles; and
- the Township has approved funding for the project.

For all gravel roads that have been fully graded following the half load season, the PCI will be assumed to be 90.

The asset registry must be updated at least once per year to reflect whether the asset was inspected or not.

UEM Proposed Level of Service Policy: Hard Surface Roads

Class 3 roads be rehabilitated or reconstructed at a PCI of 65

Class 4 roads be rehabilitated or reconstructed at a PCI of 60

Class 5 roads be rehabilitated or reconstructed at a PCI of 60

The pavement condition index should be renewed in 2021 and should be renewed every 5 years thereafter. A traffic volume study should be undertaken every 5 years beginning in 2020.

The asset registry must be updated at least once per year to reflect the current condition whether the condition be inspected or not (those not inspected will be updated based on lifecycle standards).

UEM Proposed Level of Service Policy: Regulatory Signs/Warning Signs

The Township shall retain a qualified company/individual that shall test the retro reflectivity of each sign once per calendar year with each inspection taking place no more than 16 months from the previous inspection. In conformance with the retro reflectivity specified in the Ontario Traffic Manual and when not meeting such requirements the Township shall replace the sign. Further, the Township shall conform with the requirement for class 3,4 and 5 highways as per the Ontario Regulation 239/02: MINIMUM MAINTENANCE STANDARDS FOR MUNICIPAL HIGHWAYS.

The standard for the frequency of inspecting regulatory signs or warning signs to verify that they meet the retro-reflectivity requirements of the Ontario Traffic Manual is once per calendar year, with each inspection taking place not more than 16 months from the previous inspection. O. Reg. 23/10, s. 8; O. Reg. 47/13, s. 12 (1); O. Reg. 366/18, s. 13.

Class of Highway	Time
1	7 days
2	14 days
3	21 days
4	30 days
5	30 days

If a regulatory sign or warning sign is illegible, improperly oriented, obscured or missing, the standard is to repair or replace the sign within the time set out in the Table to this section after becoming aware of the fact. O. Reg. 23/10, s. 8; O. Reg. 366/18, s. 13.

The asset registry must be updated at least once per year to reflect the current condition whether the condition be inspected or not (those not inspected will be updated based on lifecycle standards).

UEM Proposed Level of Service Policy: Sidewalks

In accordance with Ontario. Regulation. 239/02: MINIMUM MAINTENANCE STANDARDS FOR MUNICIPAL HIGHWAYS, the standard for the frequency of inspecting sidewalks is once per year with each inspection occurring no more than 16 months from the previous inspection. Any discontinuity that exceeds 2cm shall be treated or repaired within 14 days of the inspection.

Under winter conditions sidewalks must be inspected within 48 hours of the end of snow accumulation to ensure that there is less than 8cm of snow accumulated on the sidewalk and to reduce to the level of 8cm within the same 48-hour period. The same time period of 48 hours shall apply when ice forms on a sidewalk and shall require either removal or a treatment such as sand, salt or a combination of both to the sidewalk within the same 48-hour period.

The asset registry must be updated at least once per year to reflect the current condition whether the asset be inspected or not (those not inspected will be updated based on lifecycle standards).

UEM Proposed Level of Service Policy: Storm Water Management Ponds

Inspection of storm water management ponds should occur on average four times per year during the first two years of operation and then at least annually.

The asset registry must be updated at least once per year to reflect the current condition whether the asset be inspected or not (those not inspected will be updated based on lifecycle standards).

UEM Proposed Level of Service Policy: Storm Water Management Systems

In reference to catch basin cleaning, as a general rule should be done annually but the frequency should be adjusted based upon the volume of material removed.

Inspection of storm water management systems should occur on average four times per year during the first two years of operation and then at least annually.

The asset registry must be updated at least once per year to reflect the current condition whether the asset be inspected or not (those not inspected will be updated based on lifecycle standards).

UEM Proposed Level of Service Policy: Street Trees

This service level policy includes all trees that have been assumed by the Township through a development agreement. Subsequent to planting a tree the agency or company planting trees shall be responsible with all maintenance including pruning and replacement if necessary. After acceptance by the Township, the tree shall be inspected after 10 years and shall be inspected every 5 years thereafter to determine any required maintenance.

The Township will hire an arborist or potentially the services of the University of Guelph to visually inspect only the trees planted in the subdivisions within the Township.

It is recognized that there are numerous trees on public lands and road rights of way that may impact the safety of the public and maintenance activities. The Township overtime should document the location of such Trees their condition and required maintenance.

The asset registry must be updated at least once per year to reflect the current condition whether the condition be inspected or not (those not inspected will be updated based on lifecycle standards)

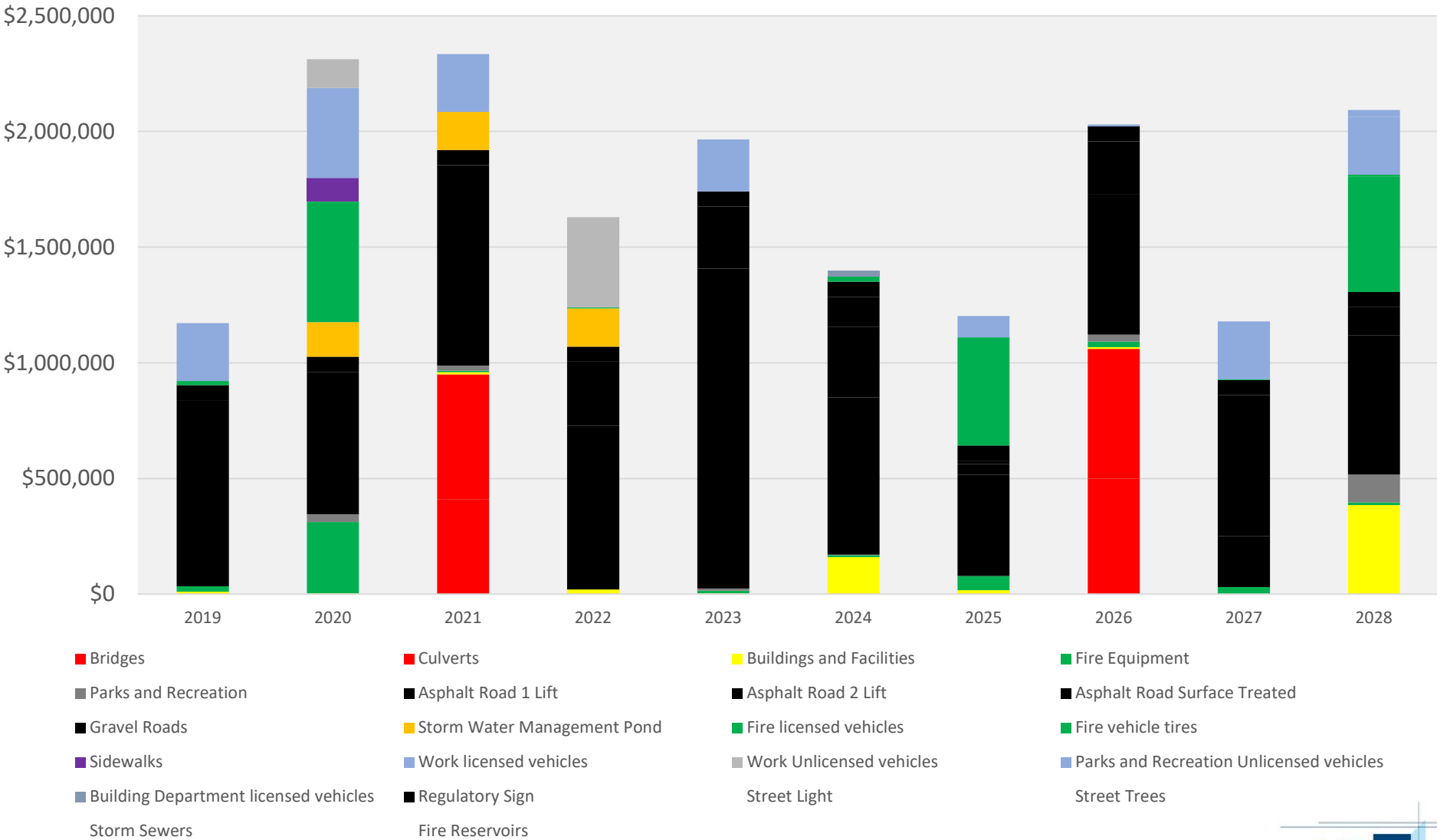
UEM Proposed Level of Service Policy: Street lights and Poles

All luminaires shall be inspected once per calendar year with each inspection taking place not more than 16 months from the last inspection. The standard of repair should be as outlined in Section 10 of Ontario Regulation 239/02: MINIMUM MAINTENANCE STANDARDS FOR MUNICIPAL HIGHWAYS. The same standard of inspection shall apply to luminaire arms and poles and supporting luminaires that are owned by the Township.

The technology with streetlighting is evolutionary at the present time in Puslinch. The Township is in the process of modifying their streetlighting to LED fixtures while maintaining existing fixtures and poles. After the completion of the conversion to LED fixtures, the policy should be to replace fixtures in a cyclical manner every 20 years. Poles should be inspected by staff every 5 years to determine the need to replace based on a pole life of 30 years.

The asset registry must be updated at least once per year to reflect the current condition whether the asset be inspected or not (those not inspected will be updated based on lifecycle standards).

Township of Puslinch: 10 Year Capital Needs to support Existing Infrastructure



Financial Strategy

Ontario Regulation 588/17 requires that for the proposed level of service, a municipality prepare a 10 year financial strategy that:

- **identifies the costs of undertaking the lifecycle activities**
- **identifies the annual funding projected to be available**
- **explains the financing options examined**
- **identifies any funding shortfall and explains how the funding shortfall and the associated risks will be addressed**

Financial Strategy

It has been assumed there are no “significant operating costs” (no significant increase in operating costs)

Financial Strategies Options are based on a combination of Pay-As-You-Go and Debt Financing (when necessary), with consideration given to reserve targets and municipal debt capacity.

Financial Strategy

Financial Strategy Options considered three different levels of current funding (capital levy) increases:

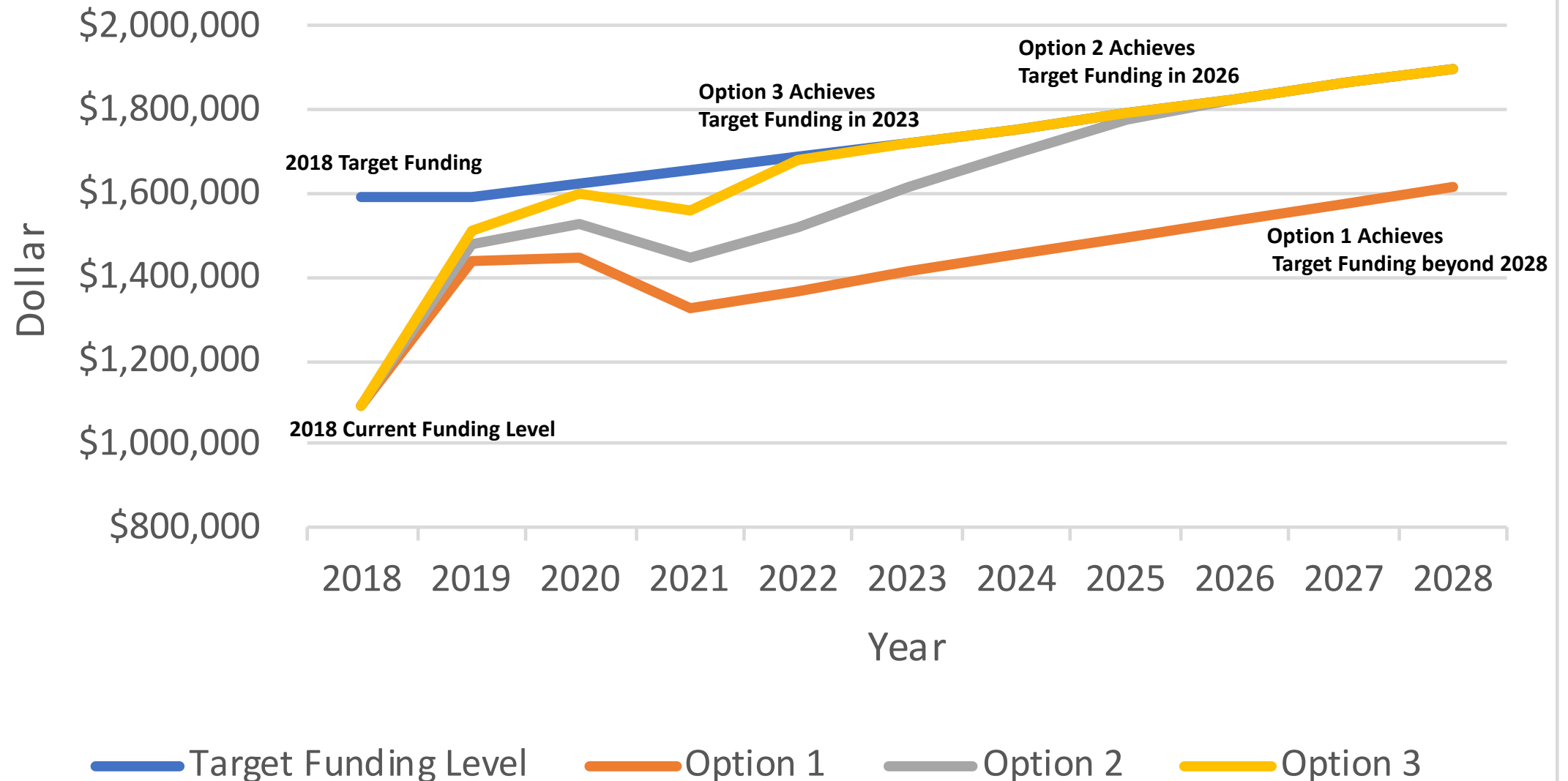
- **Option 1 – Capital Levy Increase equivalent to a 1% Tax Impact on the Typical Single Family Detached Dwelling**
- **Option 2 – Capital Levy Increase equivalent to a 2% Tax Impact on the Typical Single Family Detached Dwelling**
- **Option 3 – Capital Levy Increase equivalent to a 3% Tax Impact on the Typical Single Family Detached Dwelling (Recommended)**

All Financial Strategy Options incorporated Financial Policy considerations regarding annual reserve funding levels, reserve balance targets, and municipal debt capacity.

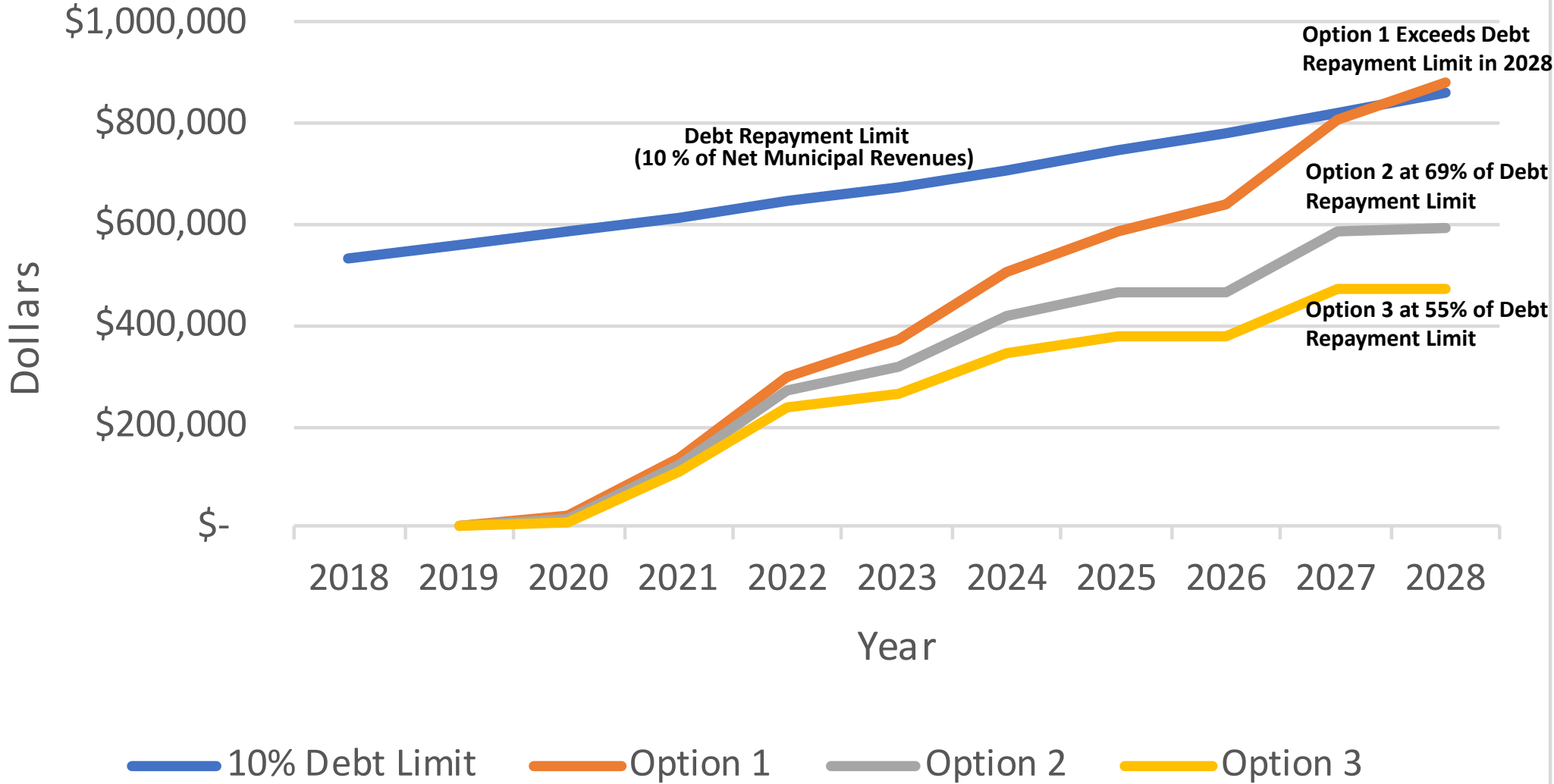
Financial Strategy

Financial Policy Considerations	
AMP Target Funding Levels	Target Level of AMP Funding to Equal 2% of Capital Asset Replacement Values
AMP Discretionary Reserve Target Balances	Discretionary AMP Reserve Balance to Range between 10% - 20% of 10 year inflated capital plan expenditures
Debt Capacity Restrictions	Debt Servicing as a percent of own source revenues to not exceed 10%

Total AMP Funding Level Comparison



Debt Capacity Comparison



Recommended Financial Strategy Option

Option 3 (Capital Levy Increase to be Equivalent to a 3% Tax Impact on the Typical Single Family Detached Dwelling)

- **Achieves the Target AMP Funding Level by 2023**
- **Results in the least debt required to fund the proposed capital plan**
- **Best positions the Township to address AMP activities beyond 2028**

Questions ?