

Staff Report



To Committee of the Whole
Department Corporate Services, Strategy and Innovation Department
Meeting Date Council and Committee of the Whole Meetings - 11 Feb 2025
Subject Asset Management - Developing Proposed Levels of Service
Report Number SR- 2862
Prepared by Alex Scott

Recommendation

1. That the report from the Corporate Services, Strategy and Innovation Department, dated February 11, 2025 re: Developing Proposed Levels of Service, be received; and
2. That staff be directed to consider the comments received at this Committee of the Whole meeting in developing the draft Proposed Levels of Service to be brought forward for approval at a future Council meeting.

Executive Summary

Purpose of Report

Ontario Municipalities are required to include proposed levels of service within their asset management plans.

Staff are providing a presentation to Council that will provide:

1. A status update on the Township's O.Reg. 588/17 obligations;
2. Information on defining asset levels of service and undertaking a level of service analysis;
3. Current levels of service; and
4. Previous survey results.

Council is asked to provide any input for the development of proposed levels of service. Options for proposed levels of service will be developed by staff and provided to Council for approval in the early summer of 2025.

Report Highlights

- O.Reg. 588/17 requires municipalities to develop proposed levels of service by July 1st, 2025, for inclusion in its Asset Management Plan.
- Seeking any input from Council on the development of proposed levels of service.

Report Details

Background and Analysis

O. Reg 588/17 made under the Infrastructure for Jobs and Prosperity Act, requires that municipalities provide proposed levels of service (LOS) within its asset management plan (AMP) by July 1st, 2025.

The regulation states that for each asset category, the asset management plan shall include the levels of service that the municipality proposes to provide for each of the 10 years following our 2024 AMP.

- For core assets (water, sewer, storm, roads & bridges), the proposed LOS shall be in accordance with the qualitative descriptions and technical metrics included in the regulation. For non-core assets (all other assets), the proposed LOS are determined based on metrics established by the municipality.
- An explanation of why the proposed LOS are appropriate for the municipality shall be provided based on the options for the proposed LOS and the risk associated with those options to the long-term sustainability of the municipality; how the proposed levels of service differ from the current levels of service; whether the proposed LOS are achievable; and the municipality's ability to afford the proposed levels of service.
- The proposed performance of each asset category for each year of the 10-year period, shall be determined in accordance with the performance measures established by the municipality.
- A lifecycle management and financial strategy that sets out the following information with respect to the assets in each category for the 10-year period. The strategy will need to identify the full lifecycle of the assets; options for which lifecycle activities could potentially be undertaken to achieve the proposed LOS; the risk associated with the options; and the lifecycle activities that can be undertaken for the lowest cost to achieve the proposed LOS.

The presentation will discuss how we develop the proposed LOS and seek any direction from Council on the development of the proposed LOS. Options will be developed by staff for future consideration by Council prior to inclusion in the 2025 Asset Management Plan.

Financial Implications

Financial implications related to changes in the levels of service for the Asset Management plan will be identified in a future report.

Communication and Consultation Plan

Staff are reviewing previous surveys and public consultations undertaken as part of the Infrastructure Master Plan, past budget surveys and other community engagements.

In accordance with the Community Engagement Framework, staff are proposing to utilize the Engage Loyalist platform to undertake additional consultation that builds upon the earlier engagements.

Attachments

[Presentation - 2025 Asset Management Plan - Proposed LOS](#)

Approved by

Approved by	Status:
Jenna Campbell, Director of Corporate Services	Approved - 31 Jan 2025
Shelley Stedall, Treasurer	Approved - 04 Feb 2025
Rebecca Murphy, Chief Administrative Officer	Approved - 05 Feb 2025

Asset Management Phase IV Developing Proposed Levels of Service





Introduction

- Asset management ensures infrastructure sustainability and efficiency.
- Establishing appropriate Levels of Service (LOS) is key to meeting community and organizational goals.
- This presentation outlines the framework for defining and implementing Proposed LOS.

Asset Management Plan – O. Reg. 588/17

Phase 1 Asset Management Policy

- Every municipality in Ontario must have a strategic asset management policy approved by Council
- The policy is to be reviewed, and if necessary updated, at least every five years
- Completed and approved by Council by July 1, 2019

Phase 2 Asset Management Plan Core Infrastructure

- Every municipality in Ontario must have approved asset management plans for core infrastructure assets at the **current** levels of service
- Completed and approved by Council by July 1, 2022

Phase 3 Asset Management Plan All Other Infrastructure

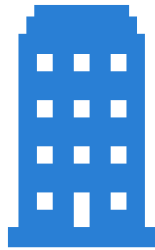
- Every Municipality in Ontario must have approved asset management plans for all other infrastructure (non-core) assets at the current levels of service.
- Requires Council approval and to be made available to the public by July 1, 2024

Phase 4 Proposed Levels of Service by Category

- Every asset management plan must include proposed levels of service for each category of infrastructure assets
- Requires Council approval and to be made available to the public by July 1, 2025

What Are Levels of Service?

- Levels of Service (LOS) define the quality, capacity, and reliability of assets.
- They set measurable performance expectations for service delivery.
- Considers technical feasibility, regulatory requirements, and stakeholder expectations while balancing service, risk, maximum value and affordability.



Corporate



Community



Technical



Importance of Defining LOS

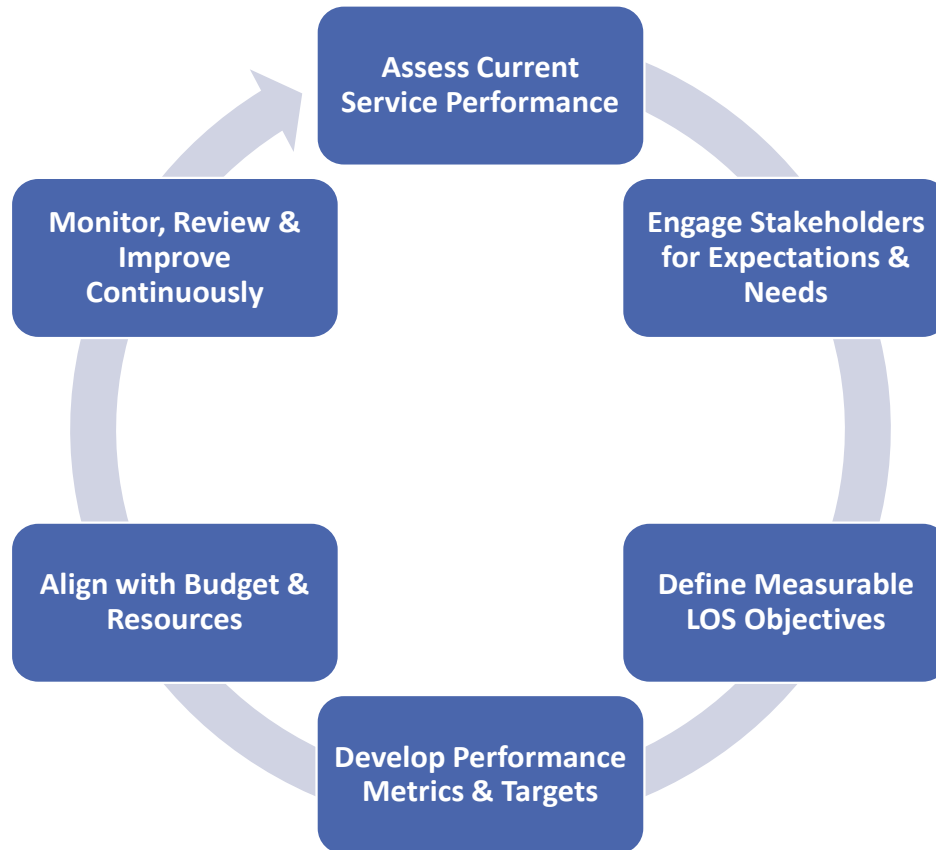
- Aligns infrastructure performance with community needs.
- Supports financial planning and risk management.
- Enhances accountability and decision-making.
- Ensures regulatory compliance and environmental sustainability.



Key Components of LOS

1. **Customer Outcomes:** Availability, reliability, responsiveness, safety.
2. **Technical Performance:** Capacity, efficiency, condition, compliance.
3. **Financial Sustainability:** Affordability, funding strategies, lifecycle costs.
4. **Regulatory & Environmental Compliance:** Standards, policies, sustainability targets.

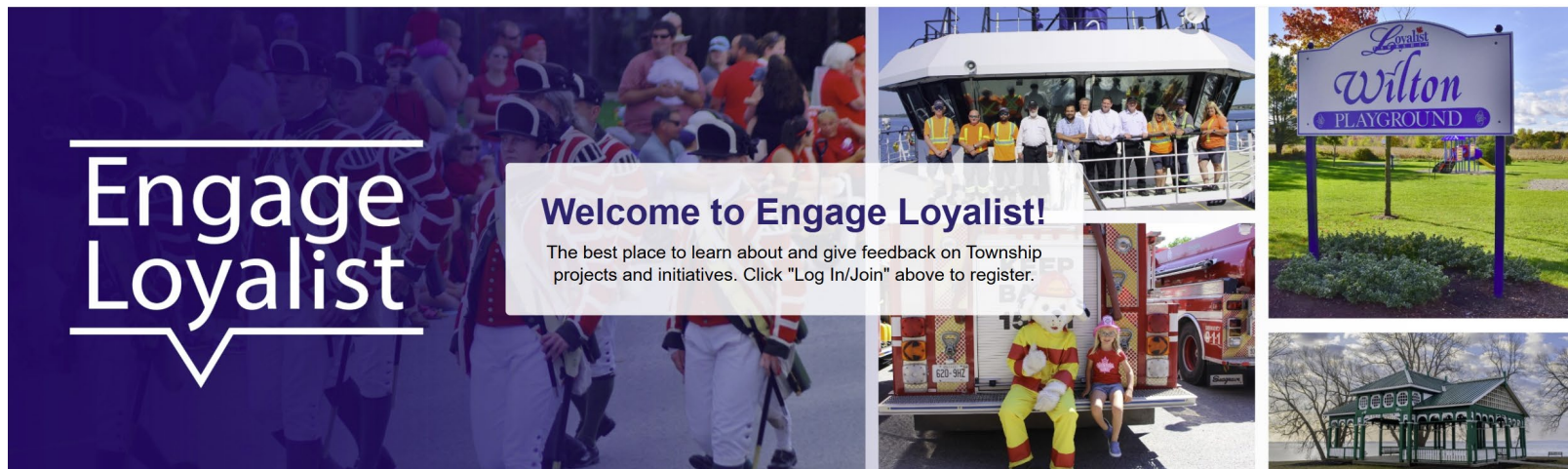
Establishing LOS Framework



Asset Management is a cycle of continuous improvement

Stakeholder Engagement in LOS Development

- Identify key stakeholders (community, government, businesses, employees).
- Balance expectations with financial and operational realities.
- Use the **Engage Loyalist** platform to seek additional community input for the development of proposed LOS



Setting SMART LOS Objectives

- **Specific:** Clearly define service expectations.
- **Measurable:** Use quantifiable indicators.
- **Achievable:** Set realistic goals.
- **Relevant:** Align with strategic priorities.
- **Time-bound:** Establish review timelines.

Example of a SMART goal: Within the next 12 months, reduce the unplanned downtime of our critical infrastructure assets by 15% by implementing a predictive maintenance program. This program will include monthly performance monitoring, quarterly review meetings, and targeted investments in advanced diagnostic tools, ultimately improving service reliability and customer satisfaction.

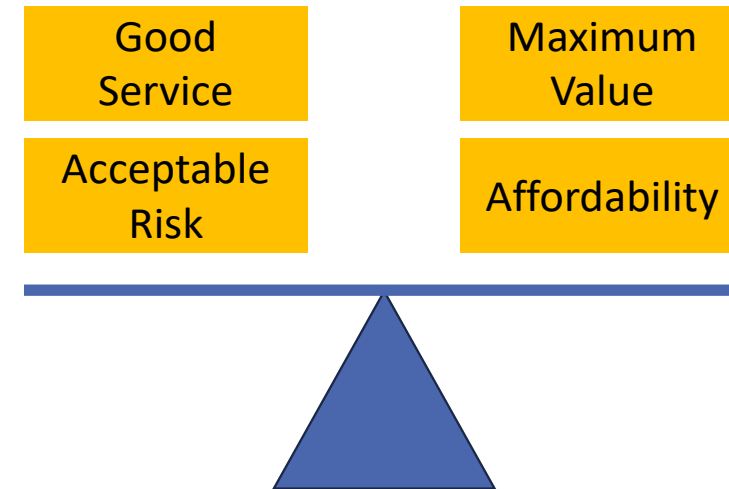


Performance Metrics for LOS

- **Reliability:** Downtime, failure rates, response time.
- **Quality:** Customer satisfaction, compliance levels.
- **Cost Efficiency:** Cost per unit of service, maintenance costs.
- **Environmental Impact:** Carbon footprint, waste reduction, energy efficiency.

Budgeting & Resource Allocation

- Desired level of service vs available funding.
- Prioritize investments based on risk and criticality.
- Optimize asset lifecycle costs.
- Funding Gap.





Risk

- O.Reg 588/17 Risk Assessment Requirements
- Identification and Prioritization of Risk
- Preventative Maintenance and Early Intervention
- Data-Driven Decision Making
- Resource Allocation and Contingency Planning
- Stakeholder Confidence and Compliance



Continuous Improvement & Adaptation

- Implement monitoring tools and key performance indicators (KPIs).
- Regularly review performance against targets.
- Updating data and condition assessments.
- Adjust strategies based on evolving needs and feedback.

Asset Management Plan – O. Reg. 588/17

Ontario Regulation **588/17: Asset Management Planning for Municipal Infrastructure** requires municipalities to establish **proposed levels of service** as part of their asset management planning. Specifically, it mandates that municipalities:

- Define Proposed Levels of Service
- Use Quantitative & Qualitative Measures
- Consider Lifecycle Costs & Risk Management
- Align with Current & Expected Future Needs
- Incorporate Financial Strategy
- Meet Compliance Deadlines

Loyalist Township Current Levels of Service



Levels of Service

- Community and Technical LOS for Core Assets defined in O.Reg 588/17
- Municipality defined LOS for Non-Core Assets
- Corporate and Expanded Community LOS.



Loyalist's Asset Categories

Category	Number of Assets
Buildings	240
Core Sewer System	1,994
Core Water System	7,338
Fleet	82
Land Improvements	469
Machinery, Furniture, and Equipment	199
Natural Assets	9
OSIM Bridges and Culverts	31
Road Network	2,073
Storm Network	3,737

Current Levels of Service

Road Network (Core)

Community Levels of Service			Technical Levels of Service	
Scope	Description, which may include maps, of the road network in the municipality and its level of connectivity	See map in Appendix B.1	Lane-kilometers of Township Arterial Roads (MMS Road Classes 1 and 2) per land area (k/km2)	0.00 km/km2
			Lane-kilometers of Township Collector Roads (MMS Road Classes 3 and 4) per land area (k/km2)	0.50 km/km2
			Lane-kilometers of Township local roads (MMS Road Classes 5 and 6) per land area (k/km2)	1.00 km/km2 (+0.02)
Quality	Description or images that illustrate the different levels of road class pavement condition	The Township completed a Road Needs Study in 2015 in coordination with a third-party consultant. Every road section received a surface condition rating and a physical condition rating Surface Condition rating criteria segregates roads into four categories: 1-35 physical condition (poor to very poor to failed) - reconstruction of major rehabilitation is required immediately 36-55 physical condition (fair) - 1 to 5 year needs 56-70 physical condition (good) - 6 to 10 year needs 71-100 physical condition (excellent) - adequate, only maintenance & preservation scheduled. The Township has translated the above criteria to input condition assessments with Citywide's deterioration curve model. Condition ratings are as follows: 80-100 Very Good physical condition 60-79 Good physical condition 40-59 Fair physical condition 20-39 Poor physical condition 0-19 Very Poor physical condition	For paved roads in the municipality, the average pavement condition index value.	HCB Roads 76% (+2%) LCB Roads 82% (+12%)
			For unpaved roads in the municipality, the average surface condition (e.g., excellent, good, fair, or poor)	Good (Poor)
Performance			Capital re-investment rate	1.47% (-0.27%)

Current Levels of Service

Bridges (Core)

Community Levels of Service			Technical Levels of Service	
Scope	Description of the traffic that is supported by municipal bridges (e.g., heavy transport vehicles, motor vehicles, emergency vehicles, pedestrians, cyclists)	Bridges provide reliable access to the road network for vehicles and/or pedestrians	Percentage of bridges in the Township with loading restrictions	6.7% (+3.7%)
Quality	Description or images of the condition of bridges & OSIM culverts and how this would affect the use of the bridges & culverts	See map in Appendix B.2	The average condition index value for OSIM structures in the Township	72%
Performance			Capital re-investment rate	0.74%

Current Levels of Service

Storm Network (Core)

Community Levels of Service			Technical Levels of Service	
Scope	Description, which may include maps, of the user groups or areas of the municipality that are protected from flooding, including the extent of protection provided by the municipal stormwater system	Rural properties outside of floodplains are protected from flooding.	Percentage of properties in municipality resilient to a 100-year storm	The percentage of properties resilient to a 100-year storm is not available at the time of this report. All stormwater systems that are within sub-divisions that were constructed after 1970 are protected from the 100-year storm. Some areas of old Odessa are 'drainage supported only' as opposed to formal minor storm sewer serviced.
		See maps in Appendix B.3.		
Performance			Capital re-investment rate	0.44%

Current Levels of Service

Water System (Core)

Community Levels of Service			Technical Levels of Service	
Scope	Description, which may include maps, of the user groups or areas of the municipality that are connected to the municipal water system	The Township operates two separate drinking water systems. The Bath Drinking water system consists of one drinking water plant, one elevated storage tank, and approximately 19 km of distribution water mains and services the village of Bath and Correctional Services Canada. The Fairfield drinking water system consists of one drinking water plant in Amherstview, one booster station, one on-ground storage reservoir, two elevated storage tanks, and approximately 67 km of water mains and services Amherstview, Odessa, Harewood, Brooklands, the Taylor Kidd Industrial Park, and the Loyalist East Business Park and Taylor Kidd Industrial Park.	Percentage of properties connected to the municipal water system	71.0% (-2%)
	Description, which may include maps, of the user groups or areas of the municipality that have fire flow.		Percentage of properties where fire flow is available	99.65%
Quality	Description of boil water advisories and service interruptions	Three water main breaks occurred in 2023 and were repaired within the same day, therefore, extended service disruptions were avoided. Water service interruptions may also occur due to maintenance activities or reconstruction projects. Staff attended to these interruptions in a timely manner, when possible.	Number of connection days per year where a boil water advisory notice is in place compared to the total number of properties connected to the municipal water system	0.000 (-0.018)
			Number of connection days per year where water is not available due to water main breaks compared to the total number of properties connected to the municipal water system	0.000
Performance			Capital Reinvestment Rate	0.9% (-0.4%)

Current Levels of Service

Sewer System (Core) 1/2

Community Levels of Service			Technical Levels of Service	
Scope	Description, which may include maps, of the user groups or areas of the municipality that are connected to the municipal wastewater system	The Township's sanitary sewer system consists of two sewage treatment plants and their associated collection system: The Bath Sewage collection system consists of works for the collection and transmission of sewage, consisting of approximately 17.6 km of separated sewers, four pumping stations, and 1.7 km of force main. These eventually discharge into the Bath Sewage Treatment plant. The Loyalist East Sewage Collection system consists of works for the collection and transmission of sewage, consisting of approximately 44.6 km of separated sewers, four sewage pumping stations, and 11.7 km of force mains. These works eventually discharge into the Amherstview Water Pollution Control Plant. See maps in Appendix B.6.	Percentage of properties connected to the municipal wastewater system	69.0% (-2.0%)

Current Levels of Service

Sewer System (Core) 2/2

Community Levels of Service			Technical Levels of Service	
Reliability	Description of the frequency and volume of overflows in combined sewers in the municipal wastewater system that occurs in habitable areas or beaches	The Township does not own any combined sewers.	Number of events per year where combined sewer flow in the municipal wastewater system exceeds system capacity compared to the total number of properties connected to the municipal wastewater system	0.0
	Description of how combined sewers in the municipal wastewater system are designed with overflow structures in place which allow overflow during storm events to prevent backups into homes	The Township does not own any combined sewers.	Number of connection days per year having wastewater backups compared to the total number of properties connected to the municipal wastewater system	0.0000
	Description of how stormwater can get into sanitary sewers in the municipal wastewater system, causing sewage to overflow into streets or backup into homes	The Township has separated sewers. Stormwater can enter sanitary sewers due to cracks in sanitary mains or through indirect connections (e.g., weeping tiles). Sewer mains are inspected regularly and repaired if leakages are observed. There were no sewer main backups reported in 2023.	Number of effluent violations per year due to wastewater discharge compared to the total number of properties connected to the municipal wastewater system	0.0004
	Description of how sanitary sewers in the municipal wastewater system are designed to be resilient to stormwater infiltration	The Township follows a series of design standards that integrate servicing requirements and land use considerations when constructing or replacing sanitary sewers. These standards have been determined with consideration of the minimization of sewage overflows and backups.		
	Description of the effluent that is discharged from sewage treatment plants in the municipal wastewater system	Effluent refers to water pollution that is discharged from a wastewater treatment plant and may include suspended solids, total phosphorous, biological oxygen demand, total ammonia nitrogen, and E. coli. The Environmental Compliance Approval (ECA) identifies the effluent criteria for municipal wastewater treatment plants. In 2023 two exceedances of the limit for E. coli occurred at the AWPCP due to low flows and wildlife activity in the wetland. All final effluent limits were met for BSTP.		
Performance			Capital Reinvestment Rate	1.00%

Current Levels of Service

Buildings (Non-Core)

Community Levels of Service			Technical Levels of Service	
Scope	Description, which may include maps of municipally owned buildings.	See maps in Appendix B.4		
Safety			% of facilities where annual internal inspections have been completed	100%
Quality			% of facility assets that are in fair or better condition (Age or Condition Based)	84%
Usage			Number of bookings at Recreational Facilities	12238
Performance			Capital re-investment rate	0.63%

Current Levels of Service

Machinery, Furniture, and Equipment (Non-Core)

Community Levels of Service			Technical Levels of Service	
Quality			% of equipment in fair or better condition	74%
			% of essential equipment where regulatory inspections have been completed	100%
Environmental Stewardship	Vehicles and Equipment have minimal impact on the environment	The Township's Climate Action Plan includes the following goals: CAP goal #17		
Performance			% of facilities where annual internal inspections of IT networking equipment have been completed	100%
			Capital re-investment rate	1.59%

Current Levels of Service

Fleet (Non-Core)

Community Levels of Service			Technical Levels of Service	
Quality			% of equipment in fair or better condition	74%
			% of vehicles where regulatory inspections have been completed	100%
Environmental Stewardship	Vehicles and Equipment have minimal impact on the environment	The Township's Climate Action Plan includes the following goals: CAP goal #16 CAP goal #17 CAP goal #18	% of vehicles that are zero-emission vehicles	0%
Performance			Capital re-investment rate	3.17%

Current Levels of Service

Land Improvements (Non-Core)

Community Levels of Service			Technical Levels of Service	
Safety			% of play structures where regulatory inspections have been completed	100%
			% of play structures in compliance with CSA Standards	65%
			% of sport fields where inspections have been completed	50%
			% of walkway & trail assets inspected annually	100%
Quality			% of play structures in fair or better condition	73%
			% of sport fields in fair or better condition	N/A
Quantity			Asphalt Walkways	6.4 km
			Gravel Walkway	4.1 km
			Earth/Grass Walkways	0.6 km
Usage			Number of Sport fields bookings	839
Performance			Capital re-investment rate	1.28%

Past Surveys & Other Engagements



Total Responses

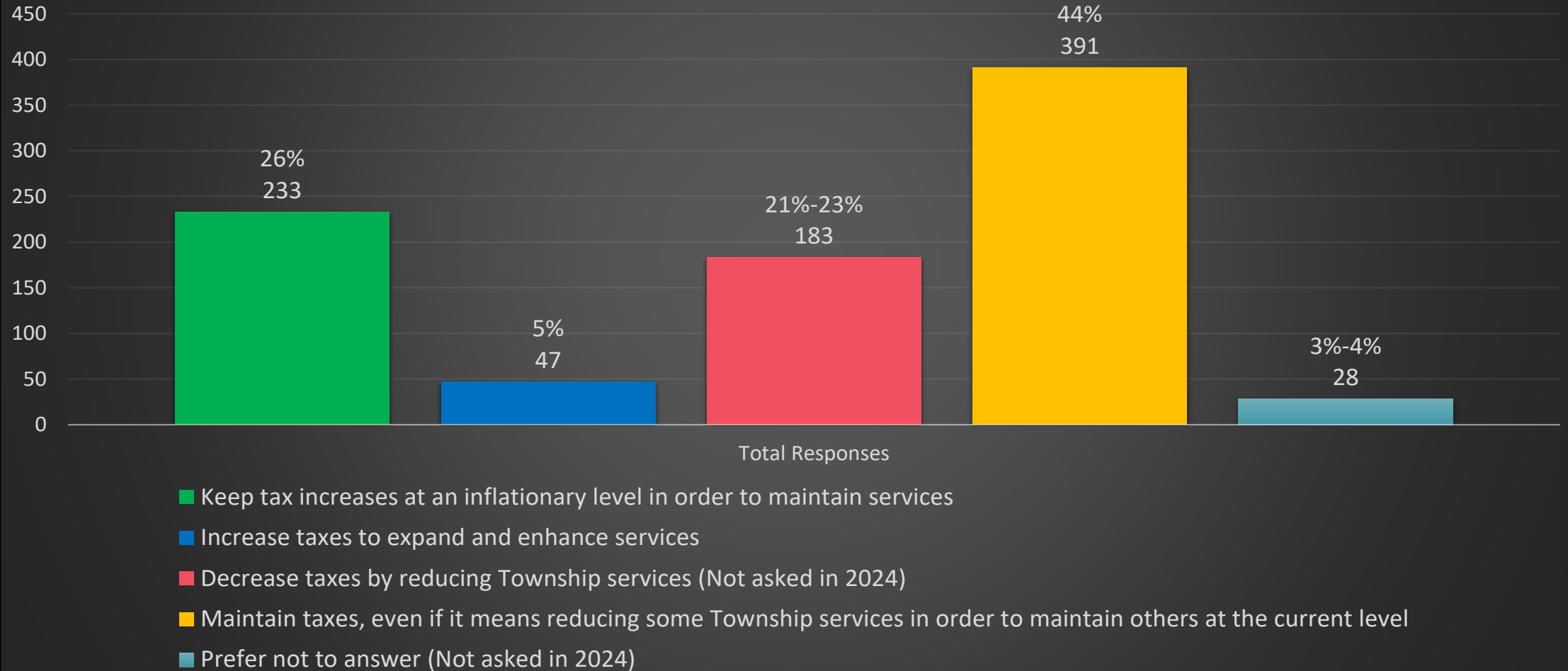
2022 - 378

2023 - 240

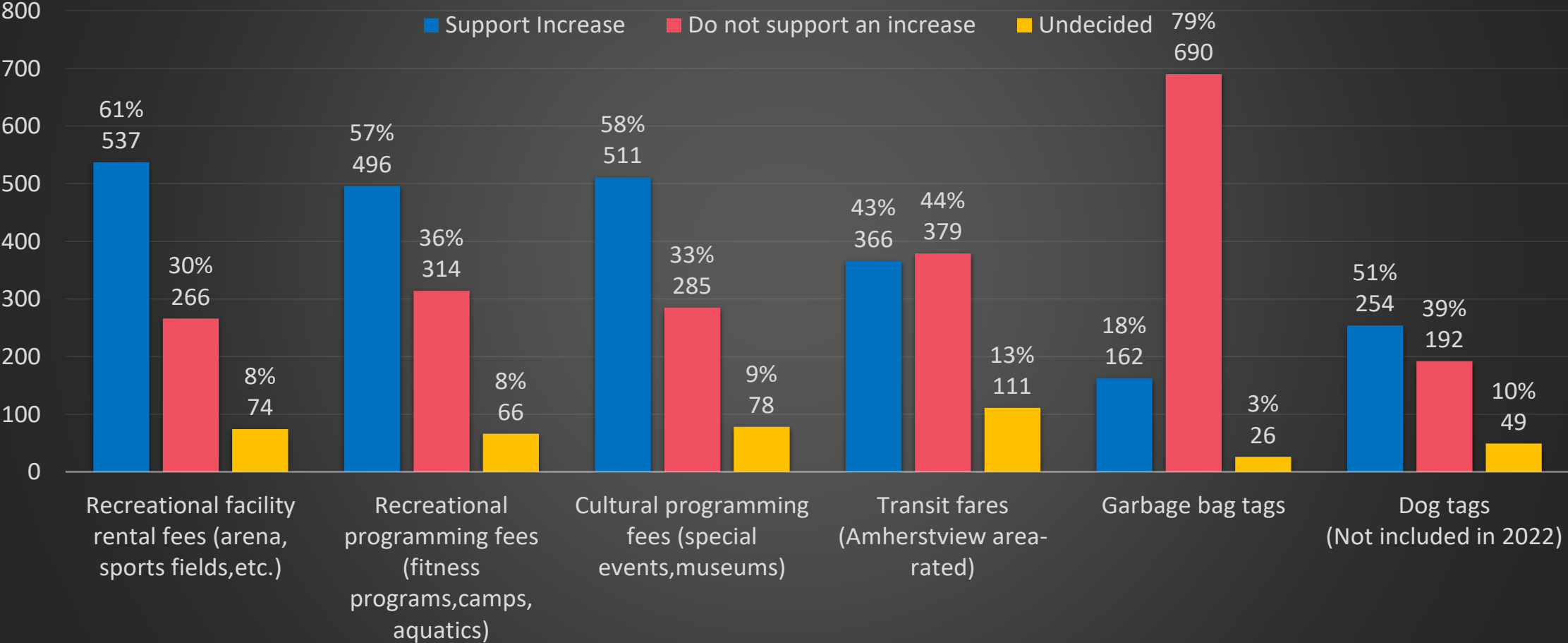
2024 - 194

2025 - 70

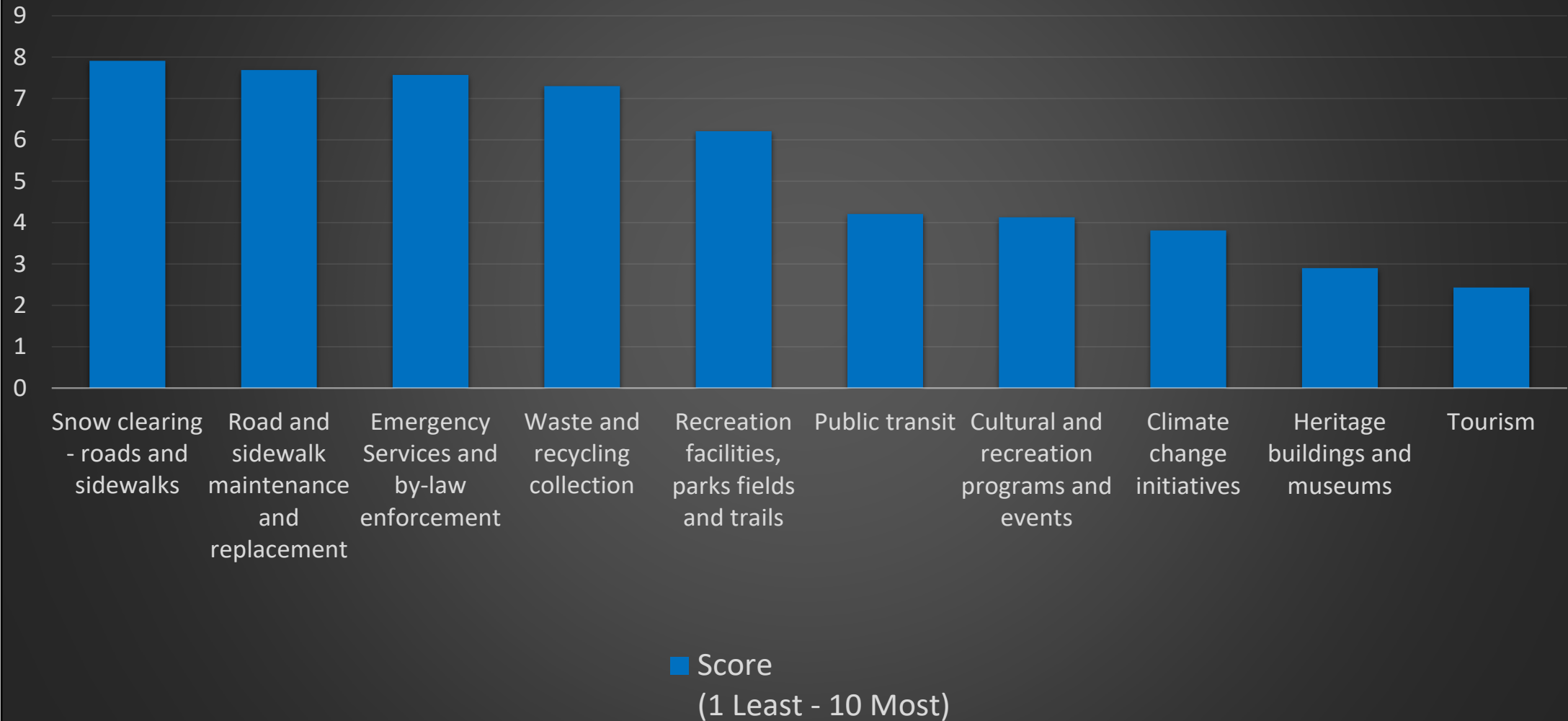
2022-2025 Budget Surveys
Options for Balancing the Budget
Percentage of Responses



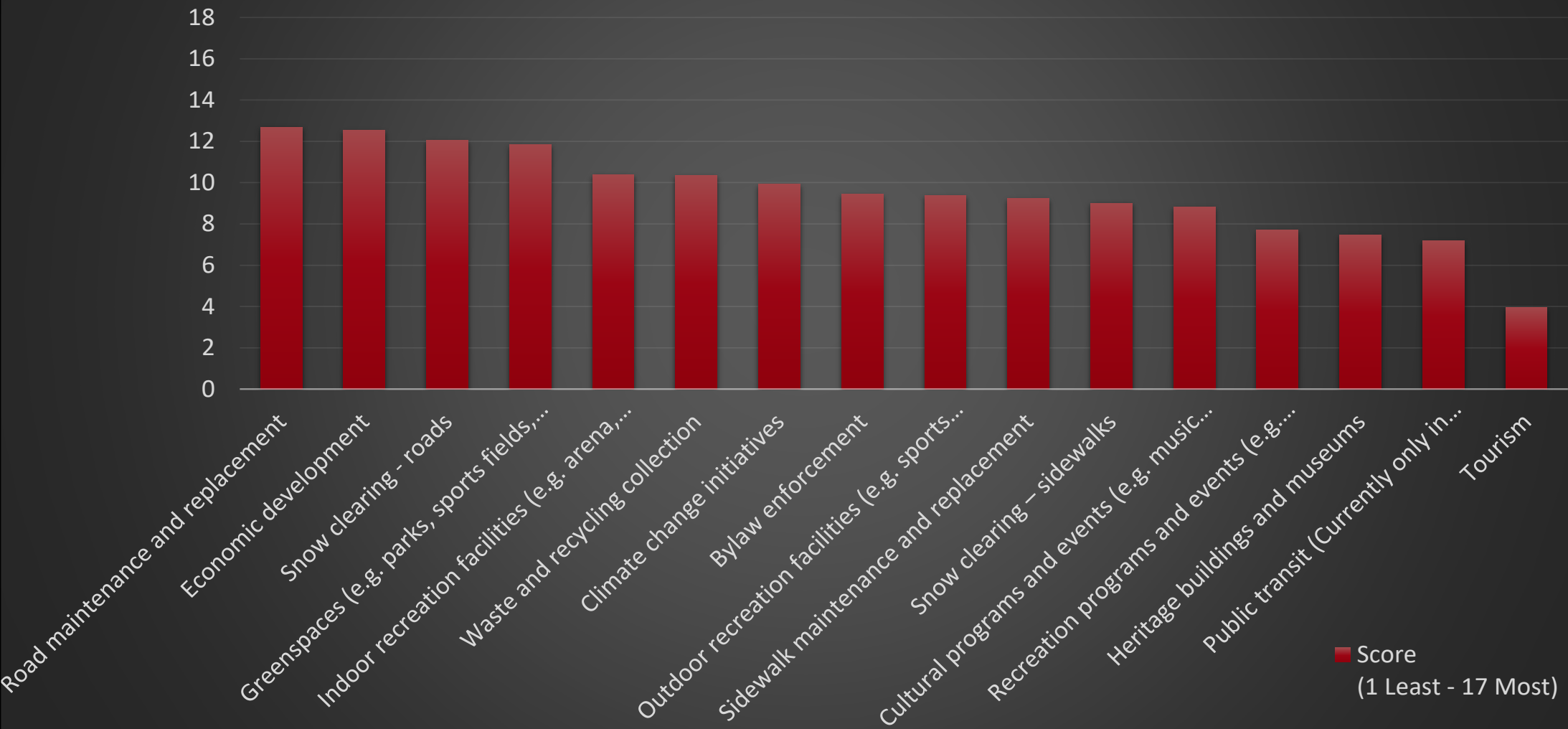
2022-2025 Budget Surveys
Support Increase in User Fees with Reduction in Taxes
Percentage of Responses



2025 Budget Survey Ranking of Services 70 Responses



2024 Budget Survey
Ranking of Services
162 Responses

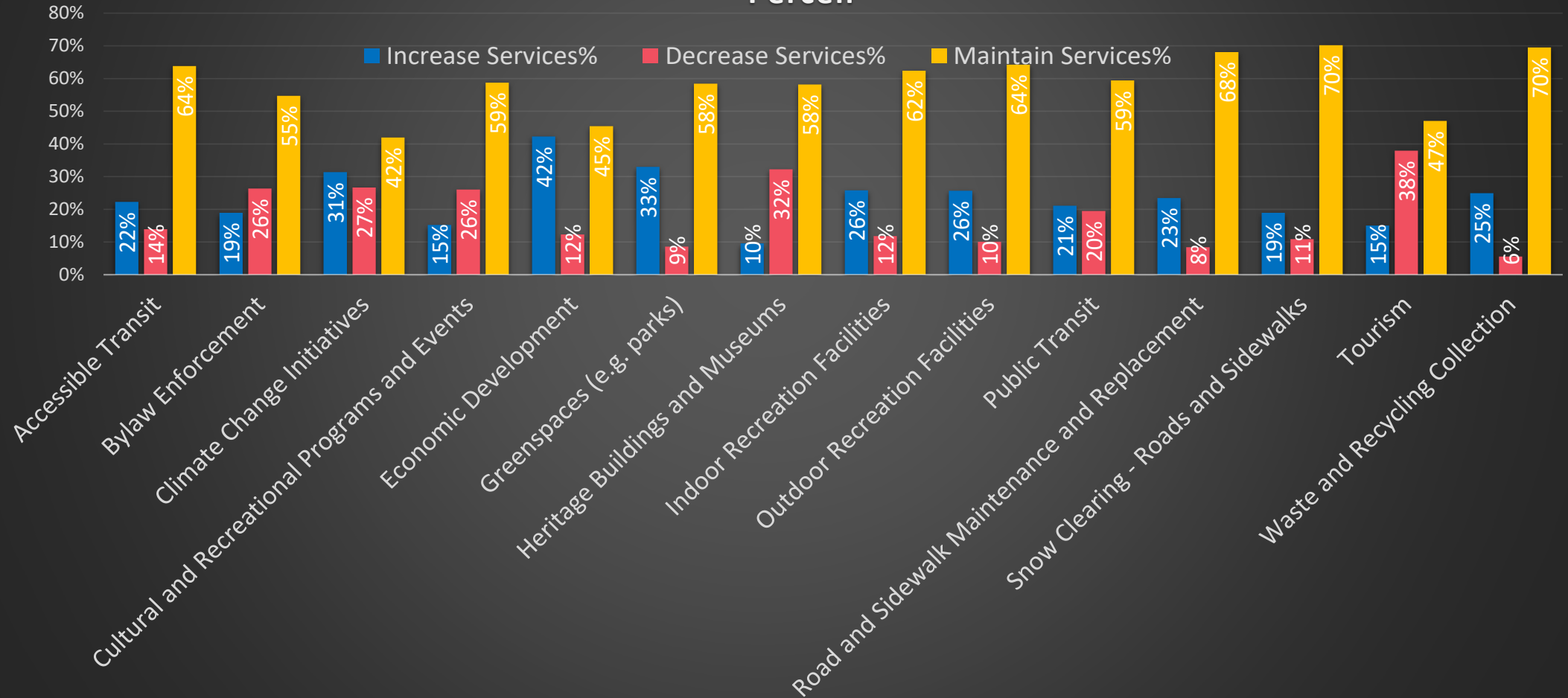


■ Score
(1 Least - 17 Most)

2022-2025 Budget Surveys

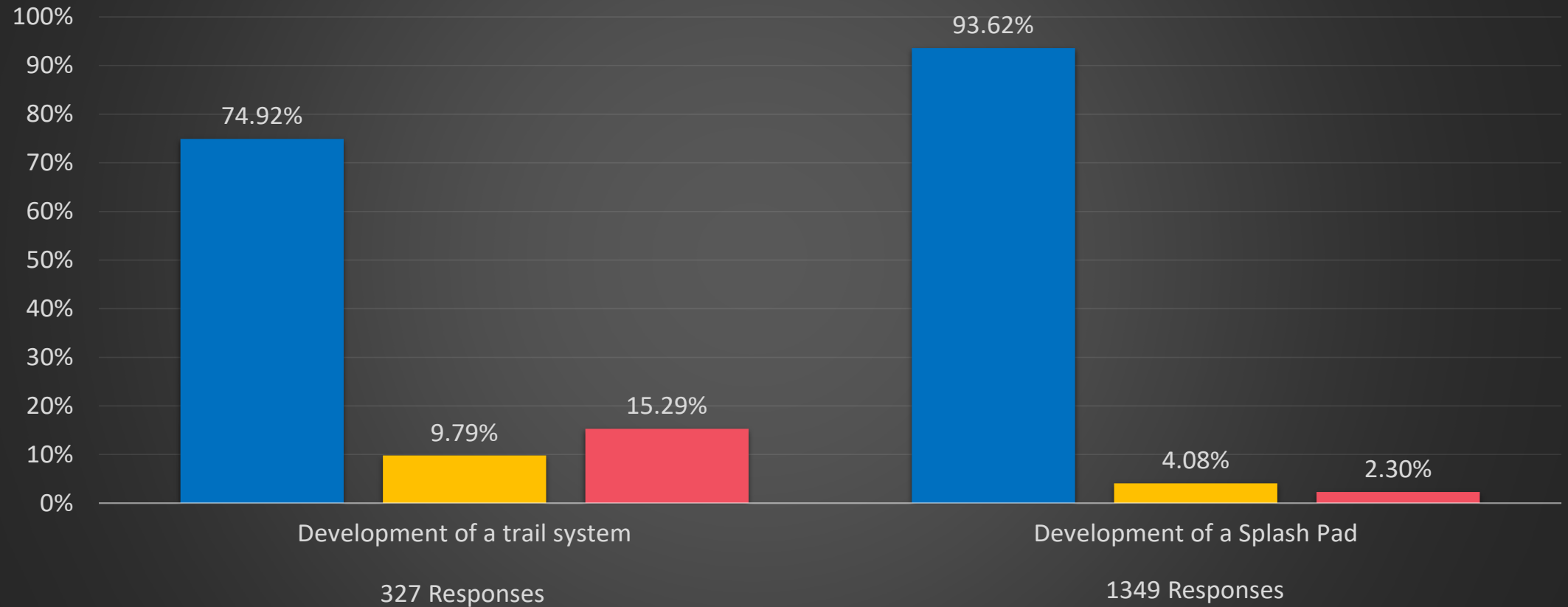
Thinking about the importance of services and programs that are provided to you and to the community, please tell us if the Township should increase, decrease or maintain its investment in the following programs and services:

Percen



Percentage of Responses Other Surveys

■ Yes ■ No ■ Maybe



Other Public Engagements

Strategic Plan

Arts, Culture,
Heritage

Information
Technology

Waste
Management

Parks and
Recreation

Fire

Urban Forest
Plan

Urban &
Rural Transit

Conclusion & Next Steps

- Establishing clear LOS ensures efficient, sustainable asset management.
- Regular engagement, measurement, and adaptation are critical.
- Next steps:
 - Confirm any new or revised corporate or expanded community LOS
 - Seek additional community input utilizing the Engage Loyalist site
 - Staff to develop options with financial implications for Council's consideration
 - Define proposed LOS for Loyalist Township
 - Complete the 2025 Asset Management Plan

Questions & Discussion

