

Studies & Other Capital

(\$000s)

Proposed new capital or increases to capital

Detailed project sheets are provided for all projects where an increase or new capital budget is requested.

Project	Proposed Capital Budget Authority	Previously Approved Budget	Proposed Budget Change	Reason for budget change	Detailed Project Sheet Page #
Finance					
14067 DC Background Study - 2024	100.0	-	100.0	New capital project	18-32
14106 Security Awareness Training (Conditionally Approved 2023)	40.0	-	40.0	New capital project	18-34
14110 Water Rate Study	45.0	-	45.0	New capital project	18-38
	185.0	-	185.0		
Previously Conditionally Approved					
Corporate Services					
13026 Risk Management (Conditionally Approved 2022)	70.0	30.0	40.0	No decision required at this time. Report will be presented to Council in 2023.	18-40
	70.0	30.0	40.0		
Total	2,468.4	780.4	1,688.0		

Studies & Other Capital

(\$000s)

Previously approved capital projects with no change or reduction to budget

This list includes existing capital projects where no increase to the capital budget authority is being requested.

Project	Proposed Capital Budget Authority	Previously Approved Budget	Proposed Budget Change	Reason for budget decrease (if applicable)
Operational Services				
73260 Environmental Monitoring of 2C Lands	212.4	212.4	-	
	212.4	212.4	-	
Planning & Development Services				
42810 Climate Change Adaptation Plan	100.0	100.0	-	
43040 Water Hydraulic Model for the Town	100.0	100.0	-	
42059 Storm Sewer Reserve Fund and Rates Study	150.0	150.0	-	
34562 Active Transportation Master Plan	150.0	150.0	-	
81032 Town Wide Green Development Guidelines	50.0	50.0	-	
81027 Municipal Heritage Register Review and Update	100.0	100.0	-	
	650.0	650.0	-	
Finance				
14077 Community Benefit Charge Study and DC update	50.0	50.0	-	
14073 Information Technology Strategic Plan Implementation - Studies and Other	230.0	230.0	-	
14105 IT Security Penetration Testing	25.0	25.0	-	
14107 Second Generation Asset Management Plan - Phase 2	70.0	70.0	-	
	375.0	375.0	-	
Total	2,115.6	2,115.6	-	

Town of Aurora

Capital Projects

Project	74027 Recreation Needs Assessment for Persons with Disabilities		
Department	Community Services		
Version	Final Approved Budget	Year	2023

Explain the climate impacts of this project.

This project does not impact greenhouse gas emissions or impact climate change adaptation as defined in the Town's consideration guide.

Town of Aurora

Capital Projects

Project	34038 Salt Management Plan Update		
Department	Operational Services		
Version	Final Approved Budget	Year	2023

sidewalks, implementation of a DLA (brine) program and the construction of a new snow disposal facility. Currently these new maintenance practices are not captured within the plan.

Explain the benefits of the project which could include Citizen/Client, compliance, financial, internal, learning & growth or utility benefits.

Project benefits include providing a document to support Town decision making when responding to winter weather events and supporting staff decisions when defending a legal claim. Other benefits include ensuring the Town is in compliance with the recommendations of Environment Canada to develop and maintain a Salt Management Plan. The plan also establishes a guideline and expectation for staff making decisions with regards to winter maintenance to ensure salt application rates are justified and the Town is making a conscious effort to balance service levels, road user safety and potential environmental impacts of road salt. A comprehensive review could also identify additional measures and operation changes the Town could implement to reduce its overall salt usage.

Please provide an explanation of what the outcomes would be if the project was not approved.

The Town would not be in compliance with the recommendations of Environment Canada to maintain an updated Salt Management Plan. The current salt management plan is now out of date and the current practices of the Operation are not clearly and accurately identified within the plan. The current plan could not be used to aid in a defence in the event of a potential claim and could pose additional liability on the Town.

Explain the climate impacts of this project.

No impact to Climate change

Town of Aurora

Capital Projects

Project	41014 Condition Assessment of all Sanitary Pumping Stations & 1 Water Booster Station		
Department	Operational Services		
Version	Final Approved Budget	Year	2023

Please provide an explanation of what the outcomes would be if the project was not approved.

If the Town is not properly assessing the infrastructure and replace inadequate equipment, the drinking water distribution may be affected and the collection and pumping of sewage system may lead to spills, overflows and/or basements backups. Benefits include reinstatement of degraded infrastructure, significant reduction and management of risks associated with failing infrastructure.
Not acting on this project could result in an increased risk to the Corporation.

Explain the climate impacts of this project.

Older equipment may release higher concentration of contaminants into the air.
If emergency generator does not work, the risks of sewage overflow/spills into the environment are higher.
The spill will have negative impacts on the surrounding areas, creeks and aquatic species.

Town of Aurora

Capital Projects

Project	73288 LED Sports Light Conversion		
Department	Operational Services		
Version	Final Approved Budget	Year	2023

Explain the climate impacts of this project.

Reduced CO2 emissions as LED's require less power, therefore less power plants. The also do not contain contain any hazardous materials like mercury utilized in traditional bulbs, disposal cleaner.

Town of Aurora

Capital Projects

Project	73332 Urban Forestry Study - 2022/23		
Department	Operational Services		
Version	Final Approved Budget	Year	2023

Explain the climate impacts of this project.

Study will provide a mapping on the urban forest and how the Corporation can mitigate potential climatic impacts through forestry management practices.

Town of Aurora

Capital Projects

Project	41012 Wastewater Hydraulic Model		
Department	Planning & Development Services		
Version	Final Approved Budget	Year	2023

Explain the benefits of the project which could include Citizen/Client, compliance, financial, internal, learning & growth or utility benefits.

The update to the wastewater hydraulic model will help ensure that:

- the network modeled reflects the actual conveyance capacity of the system and provides accurate data when needed;
- helps to identify the system upgrades that maybe required to maintain adequate servicing and flow in the system.
- allows the Town to process more efficiently the development applications and assess capacity of the Town's wastewater system for servicing needs and community's growth.

Please provide an explanation of what the outcomes would be if the project was not approved.

If the project is not approved, the Town will have an outdated wastewater hydraulic model that does not provide accurate information when assessing the actual conveyance capacity of the system.

Explain the climate impacts of this project.

The project supports the recommendations of the Climate Change Adaptation Plan (CCAP). The highest rated moderate risk to the wastewater network relate to increasing precipitation and flooding during extreme events. Actions for the wastewater system focus on understanding the capacity and vulnerability of the wastewater network to manage risks related to heavy precipitation and severe weather events that may damage components and overload system capacity or cause indirect issues like power outages. An up-to-date wastewater hydraulic model offers accurate information on the system's capacity and its possible vulnerabilities.

Town of Aurora

Capital Projects

Project	42811 Energy Conservation Demand Management Plan (ECDMP) - 2023		
Department	Planning & Development Services		
Version	Final Approved Budget	Year	2023

The ECDMP also supports the Town's commitment under the Partners for Climate Protection (PCP) in reaching Corporate Milestones 1-3 and reaching Council-approved emissions targets under the CEP.

A project list, operational optimization strategies and a list of action items for Facilities, Operations, Water/Wastewater and other areas will be produced and support the Town's budget approval process once approved by Council.

Explain the benefits of the project which could include Citizen/Client, compliance, financial, internal, learning & growth or utility benefits.

- Efficient Town's operations will mitigate cost pressures and reduce greenhouse gas emissions.
- Actively pursuing greenhouse gas (GHG) emission reduction will create a strong and safe corporation with sustainability in mind, a corporation that actively manages and recycles products and materials, runs on renewable energy and performs effectively and efficiently with least possible negative effects on the ecosystem.

Please provide an explanation of what the outcomes would be if the project was not approved.

The ECDMP update is a requirement under the Energy Act (1998) and the Green Energy Act (2009). It fulfills the requirements of the Ontario Regulation 508/18.
The ECDMP update is a legislative requirement. The update report has to be posted on the Town's web page every 5 years.

Explain the climate impacts of this project.

The ECDMP will create a roadmap to achieving the Town's corporate greenhouse gas emission targets, which is a minimum of 80% by 2050 compared to 2018. Outcomes from the plan support divisional efforts to reducing GHG emissions by providing municipal best practices, energy conservation measures for each division, and support budget cycle activities for the next five-years.

This project supports the Community Energy Plan by aligning municipal operations' emission reduction targets with the rest of the community.

This project does not impact the Town's ability to adapt to a changing climate.

Town of Aurora

Capital Projects

Project	42813 Energy Retrofit Program Business Case		
Department	Planning & Development Services		
Version	Final Approved Budget	Year	2023

Explain the benefits of the project which could include Citizen/Client, compliance, financial, internal, learning & growth or utility benefits.

Energy-efficiency retrofits, especially deep retrofits, allow homeowners to conduct a thorough audit and upgrade to the energy consuming systems within their home. The benefits to retrofit programs include the following:

- reduce residents' and business owners operational/maintenance requirements (furnaces, HVAC systems, and heat pumps);
- reduce overall energy consumption within residential and commercial buildings;
- create a more pleasant interior environment for home and business owners;
- increase the value and productivity of residential and commercial space; and
- reduce greenhouse gas emissions.

Please provide an explanation of what the outcomes would be if the project was not approved.

The Residential and Commercial Existing Building Retrofit Program is one of the action items proposed under the Council-approved CEP. Disapproving this energy retrofit program opportunity would prevent the Town of Aurora to build adaptive capacity relating to energy efficient methodologies, as a collective, and therefore hinder the capability for the town to push to meet carbon neutrality objectives and goals stated in the CEP.

Explain the climate impacts of this project.

The Residential and Commercial Existing Building Retrofit Program will create a roadmap, for residents and business owners, to achieving the Town's Community greenhouse gas emission targets, which is a minimum of 80% by 2050 compared to 2018. Outcomes from the plan support a targeted retrofit participation rate of approximately 3% of residential buildings, or 535 units. As stated in the CEP, the program projects the following participation rates by 2050:

- Retrofit 80% of the remaining residential building stock that existed in 2018.
- A 20-30% increase in efficiency for younger, more efficient buildings.

As stated in the CEP, the program projects the following energy use, energy costs, and greenhouse gas emission reduction potentials:

Energy Cost: \$2.6 million saved per year by 2030. \$4.3 million saved per year by 2050.

Emissions: 18,900 tCO₂e reduced per year by 2030. 25,500 tCO₂e reduced per year by 2050.

Town of Aurora

Capital Projects

Project	42819 Natural Capital Asset Management Planning for Municipal Infrastructure		
Department	Planning & Development Services		
Version	Final Approved Budget	Year	2023

living systems, they do not depreciate in value like other built infrastructure that degrades over time. Instead, green infrastructure can gain value and function more effectively as plant communities mature. This means that these assets need to be managed differently than traditional built infrastructure with an emphasis on maintaining and preserving natural and green spaces in a healthy state, particularly in key areas like riparian buffers and low-lying areas that will receive the greatest benefits for avoided flood damage.

Explain the benefits of the project which could include Citizen/Client, compliance, financial, internal, learning & growth or utility benefits.

The study will:

- Provide current economic values for Town's natural capital assets;
- Include stewardship plans and maintenance best practices to enhance and protect these valuable features;
- Fall in line with the Asset Management Planning for Municipal Infrastructure, O. Reg. 588/17.

Please provide an explanation of what the outcomes would be if the project was not approved.

If the funding for this study is not approved, the Town would not know the current value of its natural capital assets and will not be able to maintain them according to the best management practices and stewardship plans. It is also the risk of letting these valuable natural capital assets degrade in value if the Town does not approve and implement the best planning and management maintenance practices. In addition, if this project is not approved, the Town will not fulfill the provincial requirement under Ontario Regulation 588/17.

Incorporating municipally owned green infrastructure into asset management planning is a provincial requirement under O.Reg. 588/17, effective July 2025 should the assets meet the capitalization threshold for financial reporting. It is recommended that the Town take a holistic approach to understand the value of green infrastructure present in the community and how it could be managed and expanded to provide the maximum benefits to the community. For natural assets, the Town should consider funding protection and restoration initiatives rather than the construction and rehabilitation work that is needed for built infrastructure. This is collaborative work that should be conducted with the input from the LSRCA, The Regional Municipality of York, and other local stakeholders as required.

Explain the climate impacts of this project.

The Town of Aurora supports a variety of environmental and climate change plans, including a climate emergency for the purposes of deepening its commitment to protecting our ecosystem.

The most common infrastructure function provided by green infrastructure is stormwater management as soils and vegetation can absorb and slow rainwater runoff from nearby roads and buildings. Beyond helping to manage stormwater runoff and flooding, green infrastructure can reduce risks related to extreme heat and the urban heat island effect as trees and vegetation provide shading and evaporative cooling that can significantly reduce local air temperatures. Trees and other vegetation can moderate temperatures in both the summer and winter, lowering building energy demand for nearby buildings or buildings with green roofs. In this way, the passive services provided by green infrastructure go beyond improving community resilience and can help reduce GHG emissions associated with heating and cooling as well as emissions associated with the manufacturing and construction of other infrastructure like piped storm sewers. Further, this type of living infrastructure absorbs atmospheric carbon dioxide, storing it in soils and plant biomass.

Town of Aurora

Capital Projects

Project	43064 Water Hydraulic Model - Upgrade		
Department	Planning & Development Services		
Version	Final Approved Budget	Year	2023

- Changes due to configuration of GIS IDs/attributes to sections of the old watermains in the network.

Explain the benefits of the project which could include Citizen/Client, compliance, financial, internal, learning & growth or utility benefits.

The update to the water distribution hydraulic model will help ensure that:

- the network modeled reflects the actual conveyance capacity of the system and provides accurate data when needed;
- helps to identify the system upgrades that maybe required to maintain adequate servicing pressure and flow in the system
- allows the Town to process more efficiently the development applications and assess capacity of the Town's water distribution system for servicing needs and community's growth.

Please provide an explanation of what the outcomes would be if the project was not approved.

If the project is not approved, the Town will have an outdated water hydraulic model that does not provide accurate information when assessing the actual conveyance capacity of the system and the pressure and flow in the water system.

Explain the climate impacts of this project.

The project supports the recommendations of the Climate Change Adaptation Plan (CCAP). The highest rated moderate risk to the water network relate to increasing precipitation and flooding during extreme events. Actions for the water system focus on understanding the capacity and vulnerability of the water network to manage risks related to heavy precipitation and severe weather events that may damage compomnents and overload system capacity. An up-to-date hydraulic model offers accurate information on theystem capacity and its possible vulnerabilities.

Town of Aurora

Capital Projects

Project	81001 Official Plan Review/Conformity to Places to Grow		
Department	Planning & Development Services		
Version	Final Approved Budget	Year	2023

Please provide an explanation of what the outcomes would be if the project was not approved.

The Town of Aurora would not be in conformity with the Region and the Province for planning, housing and employment projections.

Explain the climate impacts of this project.

This project provides policy direction on Green Development Standards as well as climate mitigation and adaptation policies.

Town of Aurora

Capital Projects

Project	81029 Zoning By Law Update		
Department	Planning & Development Services		
Version	Final Approved Budget	Year	2023

Explain the climate impacts of this project.

The climate impacts of this project is to improve the enforcement of green development standards and current environmental protection provisions within the updated Official Plan.

Town of Aurora

Capital Projects

Project	81030 Economic Development Strategic Plan		
Department	Planning & Development Services		
Version	Final Approved Budget	Year	2023

Explain the climate impacts of this project.

A living document that provides the municipality with a strong direction and actionable initiatives to drive the local economic growth.

Town of Aurora

Capital Projects

Project	14067 DC Background Study - 2024		
Department	Financial Services		
Version	Final Approved Budget	Year	2023

alternatively select levels of service would need to be reduced.

Explain the climate impacts of this project.

Development Charge revenue supports many of the Town's eligible growth driven requirements. These requirements may include the maintenance of existing levels of services as they relate to the management of the Town's client impacts.

Town of Aurora

Capital Projects

Project	14106 Security Awareness Training (Conditionally Approved 2023)		
Department	Financial Services		
Version	Final Approved Budget	Year	2023

Explain the climate impacts of this project.

By providing this training by virtual delivery, we will reduce the need to print classroom materials.

Town of Aurora

Capital Projects

Project	14110 Water Rate Study		
Department	Financial Services		
Version	Final Approved Budget	Year	2023

Please provide an explanation of what the outcomes would be if the project was not approved.

This project will mitigate the risk of under collecting for the fixed costs of water and wastewater which include reserve contributions for asset management. Currently the reserve over/under contributions are subject to changes in the volume of metered water billed; for example, in rainy years the Town does not collect enough revenue to contribute to reserve. Further, the development of a responsible rate increase strategy will be much more difficult in the absence of this study. Also, if this study is not undertaken, the Town's existing water and wastewater cost recovery rate structure will remain unchanged, resulting in the potential inequitable sharing of the cost burden across the Town's various water rate payers.

Explain the climate impacts of this project.

Climate change has and will continue to have significant impacts on the Town's existing and future levels of service. Climate change continues to subject the Town's existing water and wastewater levels of service and service delivery costs to upward pressure. As infrastructure continues to be upgraded in preparation for the repercussions of climate change, the Town's resultant asset management costs will continue to grow significantly placing greater pressure on these service's rates. The significant current and future costs reinforce the Town's need to revisit the rate structure through which it is recovering these costs from its water rate payers.

Town of Aurora

Capital Projects

Project	13026 Risk Management (Conditionally Approved 2022)		
Department	Corporate Services		
Version	Final Approved Budget	Year	2023

Please provide an explanation of what the outcomes would be if the project was not approved.

By not implementing a new and updated procedures and processes, the Town may experience: economic losses through an increase in claims; operational inefficiency; an increase in liability to third parties; increased incidents of personal injury; loss of Town assets.

	LTD	LTD	2022	Remaining	Capital	Budget	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
	Budget	Actuals 2021	YTD Actuals	Budget	Spending Commitment	Change	Forecast										
13026 Risk Management (Conditionally Approved 2022)	30,000	227,831	-214,602	-197,831	70,000	40,000	-214,602	56,771									
13027 Job Hazard Assessments	30,000	4,528	4,528	30,000	30,000		15,000	15,000									
Total 03 Studies & Other	338,170	310,572	-89,545	27,598	378,170	40,000	-59,302	126,900			20,300		21,000			50,500	
Total	338,170	310,572	-89,545	27,598	378,170	40,000	-59,302	126,900			20,300		21,000			50,500	
Total Capital Projects	2,895,945	1,508,391	420,171	1,387,554	4,583,945	1,688,000	700,143	2,094,535	487,376	82,000	198,100	150,100	538,600	358,100	463,700	446,000	85,000