CORPORATION OF THE COUNTY OF HURON

ASSET MANAGEMENT PLAN

June 2024

This document is available in alternate formats upon request.

INTRODUCTION

The County of Huron is an upper tier municipal corporation. Huron County, Ontario's West Coast, is located along the shores of Lake Huron. The County has a current population of approximately 64,100 people, 25,335 households and covers an area of 3,416 square kilometers. This rural community is the most agriculturally productive county in Ontario, and is a leader in numerous areas of agricultural technology and innovation.

In order for Council to continue to provide an adequate level of service to their residents, it is essential to have a plan to ensure sustainability of those assets. The County currently builds upon and continually updates its asset management plan in accordance with legislation.

What is new for the 2024 Plan?

- The County's asset management plan has been revisited and updated for:
    - Compliance with ONTARIO REGULATION 588/17 July 1, 2024 deadline for all assets. This includes:
        - Current levels of service, including condition and performance levels for all assets
        - Asset information and lifecycle events and 10 year lifecycle costing
        - Impacts to infrastructure assets based on population growth and employment forecasts
    - Additional assets being added to the Plan, including Library, Information Technology and Forestry.

What are the future plans for the Asset Management Plan?

This plan is an ever-evolving document and will be reviewed and enhanced in the years to come with the timing and enhancements based on the availability of staff resources.

Some specific enhancements will include:

- Compliance with July 1, 2025 deadlines for all County assets with respect to proposed service levels and funding requirements to achieve those proposed levels of service

EXECUTIVE SUMMARY

The infrastructure assets reviewed in this project include:

- 773 kilometers of paved roads and associated storm sewers;
- 81 bridges; 211 large culverts; 1211 small culverts; and an estimated 8,934 entrance way steel culverts.
- 4 public works yards
- Housing Services of 16 apartments (including Countyview) and 88 family units
- Property Services of 13 building structures
- 2 Homes for the Aged
- The County's fleet of vehicles and other heavy machinery and equipment.
- Emergency Services fleet of vehicles.
- Library circulation assets
- Information Technology network infrastructure and computers
- Forestry Tracts

The current estimated replacement value of the County's assets based on current service levels is **$1.66 Billion**. The majority of this falls under the Public Works departments with their infrastructure accounting for approximately 81% of all County assets.

On a per household basis, this represents approximately $65,550 in assets being supported in the County.

Asset expenditures over the **next 10 years** are estimated **$240 million** in current year dollars, and based on a 3% compounded inflation rate, $283 million. Over the next 20 years, expenditures are estimated at $499 million, and inflated at 3% annually to $699.8 million.

Strategies will have to continue to be developed and refined to mitigate the immediate needs and long term needs of the County. Strategies will include, increasing the levy, utilizing reserves, reliance on funding from senior levels of government and utilizing debt. A sample funding strategy is provided at the end of this plan, which will require ongoing levy increases at approximately 2.33% annually for the next 20 years to ensure sustainability.

CLIMATE CHANGE ADAPTATION PLAN

The County has approved a Corporate Climate Change Adaptation Plan in 2020 with many key priority actions items. This document will assist in defining the asset management strategies moving forward. The document is located on the County's website -

https://www.huroncounty.ca/wp-content/uploads/2022/01/Climate-Change-Adaptation-Plan_Update.pdf

Specific goals related to infrastructure include: Determine the impacts of climate change on the County's built infrastructure; Invest in modifications to improve the resiliency of County infrastructure and buildings to the impacts of climate change; Continue to identify and mitigate risks associated with stormwater management and flooding; and, Improve the capacity of the County's natural environment to adapt to future changes.

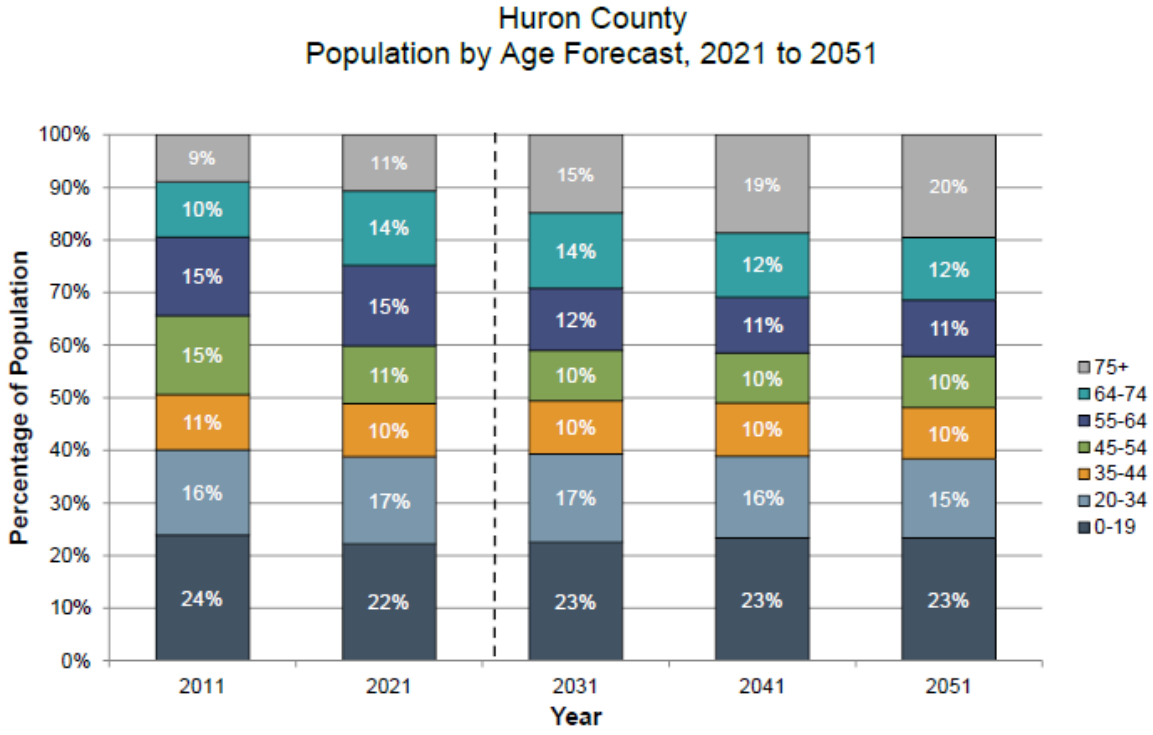
POPULATION GROWTH, HOUSING AND EMPLOYMENT FORECASTS

The County of Huron has had a Population and Housing Projections study completed in 2024 by Watson and Associates Economists. This report provided detailed and analysis of the growth projections for Huron County. Current population as per the 2021 Census is 64,100, and 25,335 households. Some of the summary charts from the report are as follows:

Population Projections (2021 – 2051)

Growth Scenarios	2021 Population	2051 Population	2021 to 2051 Population Growth	Annual Population Growth	Annual Population Growth Rate
Low Scenario	64,100	82,200	18,100	600	0.8%
Medium Scenario	64,100	90,200	26,100	870	1.1%
High Scenario	64,100	98,300	34,200	1140	1.4%

Population by Age Forecast (2021 – 2051)



Household Projections (2021 – 2051)

Location	Total Permanent Housing			Annual Housing Growth	
	2001	2021	2051	2001 to 2021	2021 to 2051
Ashfield-Colborne-Wawanosh	1,940	2,355	3,300	21	32
Bluewater	2,590	3,305	4,700	36	47
Central Huron	2,930	3,270	4,410	17	38
Goderich	3,185	3,665	5,630	24	66
Howick	1,200	1,345	1,850	7	17
Huron East	3,430	3,705	5,170	14	49
Morris-Turnberry	1,170	1,195	1,540	1	12
North Huron	1,995	2,155	2,920	8	26
South Huron	3,955	4,340	6,450	19	70
Huron County	22,395	25,335	35,980	147	355

Based on the above growth projections, Huron County is poised to grow significantly, both with population and households. This growth will have an impact on County asset management planning and County services, of which staff have identified known impacts on future infrastructure in this plan.

Employment Projections (2016-2041)

	2016 Participation Rate	2016	2021	2026	2031	2036	2041
Ashfield Colborne Wawanosh	0.627	3400	3434	3474	3503	3503	3486
Bluewater	0.653	4660	4707	4762	4801	4801	4778
Central Huron	0.629	4765	4814	4870	4910	4910	4886
Goderich	0.567	4325	4369	4420	4457	4457	4435
Howick	0.718	2781	2809	2842	2865	2865	2851
Huron East	0.688	6287	6351	6425	6478	6478	6446
Morris-Turnberry	0.735	2570	2596	2626	2648	2648	2635
North Huron	0.645	3181	3213	3251	3278	3278	3262
South Huron	0.622	6280	6344	6418	6471	6471	6439
County of Huron	0.644	38189	38576	39026	39348	39348	39155

ROADS INFRASTRUCTURE

Roads Infrastructure

Scope of the Road Infrastructure

The County of Huron has 33 County Roads with a total of 773 paved kilometers. The road infrastructure assessments are carried out in the Public Works department.

Scope of the Road Network - Number of lane-kilometres of each of arterial roads (1,546 “lane” kms), collector roads and local roads as a proportion of square kilometres of land area of the municipality (3,416 sq km) = 45%

Current Replacement Value

The current replacement value of the County’s road network is $783,354,745 This valuation is an estimate based on 2024 tender results for current road rehabilitation and is applied across the County’s roads. The average age of the road assets is 42 years.

Current replacement value of the roads will require to be updated annually based on current unit prices for road rehabilitation to ensure ongoing sustainability.

The following chart shows the breakdown of the replacement valuation of the road network by rural vs urban roads. The majority of the County road network is rural at 86% of total replacement value.

Class	**Current Replacement Value**	**% of Total**
Rural	$ 674,863,100	86%
Urban	$ 108,491,645	14%
TOTAL	**$ 783,354,745**	**100%**

Condition Assessment

Condition assessment rating was carried out on the Roads asset network, in consultation with Public Works Department using the PCI (paving condition index) to identify the level of service considered acceptable by staff.

Replacements are based on optimal timing for the cost benefit of rehabilitation vs reconstruction, and also proximity of other road segments requiring paving to maximize the economies of scale for paving contracts. The identified range for optimal rehabilitation is a PCI rating of 60-70.

The current PCI rating for the entire road network for 2024 is 82, or in an overall good condition. This is weighted average based on overall replacement value of the road network.

The PCI condition rating relates to the condition of the overall road structures and is a rating out of 100. When the rating is between 0 and 30 the item needs to be reconstructed. The **PCI *(Pavement Condition Index)*** rating is a combination of the RCR ***(Ride Comfort Rating)*** and DMI ***(Distress Manifestation Index)***. The RCR can be gathered through a subjective method (drive through at posted speed). The DMI is calculated by combining the density and severity of all distresses. The PCI rating was reported on a scale from 0 to 100 with 100 being a road in perfect condition.

The rating system is as follows:

Excellent:	90– 100	No evident defects
Good:	70 – 90	Slight decline
Fair:	50– 70	Decline asset apparent
Poor:	30– 50	severe decline or failure

Current Levels of Service

Overall Community Levels of Service statements for the road network, including roads, bridges and culverts are as follows:

Service	Service Objective Statements	Community Levels of Service
Roads	A safe, reliable, efficient road network accessible year round Our municipality will maintain safe, reliable roads.	Roads are kept in good condition
		Roads are comfortable to drive at posted speeds
		Roads blend with the community surroundings
		Roads are adequate to meet traffic demands
		Roads are as safe and accessible as possible throughout the year

Current levels of service with respect to physical condition ratings of the road infrastructure, and general performance ratings, being Operational Functionality, Overall Capacity and Environmental Resiliancy is as follows:

Target Asset Levels of Service (by Asset Class)	Current Asset Levels of Service					
	Asset Class Average	Distribution by Asset Rating				
		Very Good	Good	Fair	Poor	Very Poor
Condition	**Condition**					
Pavement Condition Index = Good	82	43%	45%	10%	2%	

Performance	Performance					
Operational Functionality = Good	76	5%	82%	8%	5%	
Capacity - Good	79	2%	94%	5%	0%	
Environmental Resiliency = Good	80	2%	97%	1%	1%	

The targeted condition rating for Roads is 80 (PCI) and a performance level of Good. The average actual current condition rating for Huron County roads is 82, with the performance level of Good being achieved for most roads.

Performance Ratings are based on the following likelihood of failure:

Very Good:	91 – 100	Lowest chance of failure
Good:	70 – 90	
Fair:	40 – 69	
Poor:	10 – 39	
Very Poor	<10	Highest chance of failure

Current Priority Projects

List of priority Road projects based on rehabilitation schedules to be included in the 2024 Budget:

PriorityProjects		
County Rd. No	**PCI**	**Comments**
County Rd 3	74	$4,200,000 - Includes culvert replacement and paving
County Rd 7	67	$500,000 – Geotech assessment and small culvert replacement ahead of 2025 paving
County Rd 83 Dashwood Reconstruction	63	$4,360,000 – Phase 1 of a 3 year project. Urban reconstruction of Dashwood main street.
Urban Renewal Engineering		$812,000 – engineering costs for future urban reconstructions for Exeter, and Hensall

2025 Projects are expected to be as follows:

- Dashwood Urban Reconstruction – Phase 2
- County Rd 7 – cold in place recycling

2026 Project are expected to be as follows:

- County Rd 17 - cold in place recycling
- County Rd 12 - cold in place recycling
- Hensall Urban Reconstruction

Gas Tax Agreement incremental requirement annual base threshold – $2,232,399.

General Lifecycle of the Asset

The general lifecycle that is set up for the County's PSAB Tangible Capital Asset reporting is listed in the table below. While the estimated useful life of an asset is suitable for accounting purposes, Public Works will base asset replacement and pavement resurfacing on PCI ratings and the actual condition of the road. Actual degradation of the assets will vary based on various factors which may not line up exactly with the estimated useful life.

Asset Estimated Useful Life in Years	
Asset Type	Useful Life
Roads Surface	22
Roads Base	50

Rehabilitation Needs and Sustainable Funding Levels

An estimated $94.8 million is required over the next 10 years for the County's paved roads. These are all standard lifecycle costs associated with road asset components that are at end of life and require rehabilitation to maintain the overall condition and performance of the County road network. The costs listed in the table below are based on 2024 estimates and not indexed for future inflation.

The following table breaks down the replacement costs by period:

Asset	2025-2029	2030-3034	TOTAL
Roads	$35,266,250	$59,495,475	$94,761,725

The road rehabilitation costs will be increasing significantly from 2031 onwards as the roads are nearing the end of their current rehabilitation cycle, and particularly impactful is the declining condition of storm sewers which will require a focus on urban reconstructions. Based on current estimates, the peak years are 2026 with $10.8 million in required rehabilitation, 2031 with $17.6 million, 2032 with $12.5 million, and 2034 with $14.1 million. Falling outside this 10 year forecast, 2035 and 2039 are estimated to require $21 million for each year.

An average of $9.5 million of long term sustainable funding will be require over the next 10 years. Over a 20 year period, this increases to $11.9 million on average annually. These estimates are not indexed.

Current levy funding for all of Public Works assets (roads, bridges, culverts and patrol yards) is $5.1 million in 2024. Additional Federal and Provincial infrastructure funding of $7.9 million is also being received to support required investments in road infrastructure.

This falls far short for the upcoming capital requirement needs and consequently will require additional increases in the County levy to sustain the County's assets. A financial strategy is included at the end of this plan, which encompasses all of the County's assets.

Operating Costs to Maintain Current Service Levels

Road and roadside maintenance and repair costs, including labour costs, are approximately $2.96 million annually. This does not include any costs for drainage as we do not have visibility to the upcoming municipal drain requirements as that falls to the lower tier municipalities.

10 Year Life Cycle Costing

The following table shows the estimated annual operating and capital expenditures over the next 10 years, inflated annually by 3%.

10 YEAR LIFECYCLE COSTING				
		Average Years 1-5	**Average Years 6-10**	**Total Average Years 1-10**
ROADS	Capital	$ 7,596,118	$ 15,128,583	$ 11,362,351
	Operating	$ 3,147,982	$ 3,649,374	$ 3,398,678
	Total	**$ 10,744,100**	**$ 18,777,957**	**$ 14,761,028**

Over the next 10 years, the total average annual cost of Road capital and operating expenses is expected to increase, from $10.3 million in 2025 to $22.8 million in 2034. This is due to inflation, plus the significant capital rehabilitation needs of our road network in the 2030's. Average costs adjusted for inflation over the next 10 years is $14.7 million. Significant increases in the County levy will be required to meet the required expenditures.

Growth Impacts on Infrastructure

Traffic on County Road 83 is increasing significantly requiring some additional safety measures and some additional patrols and snow plowing if traffic volumes require it to be upgraded. A round about is being planned to be constructed at an estimated cost of $2.5 million. Additional plowing on County Rd 83 will require an additional plow at a cost of $400,000, plus at minimum 2 additional seasonal full time winter staff.

Key Performance Indicators

Key Indicator:
Pavement Condition Index (PCI), Ride Comfort Rating (RCR), and Distress Manifestation Index (DMI)

Issue:
As roads age, they begin to deteriorate due to exposure to environmental elements such as UV damage, freeze/thaw cycles, vehicle load stresses, and oxidization. As the roads age, they become more brittle and less flexible, creating shrinkage cracks, visual defects, wheel rutting, and potholes.
Allowing the road surface to deteriorate allows the elements to seep into the road base, shortening the life of the road base. The road base is much more expensive to repair.

Potential Impact:
Potential impacts of deteriorating roads include safety hazards, increased number of accidents, increased maintenance costs, load restrictions, poor drainage, increased liability, and increased costs of repairs. Wear and tear on vehicles and reduced fuel economy contributing to greenhouse gas emissions.

Current Controls:
Twice weekly, patrols are carried out to monitor road conditions. If issues are detected, they are repaired immediately, or seasonally, after the Project Manager, Roads inspects and perform test to determine PCI, DMI and RCR. Roads have a fairly predictable life span of 18 – 22 years, and during this time, PCI evaluation is completed every 1-2 years, or more often as needs arise.

Preventative Maintenance is also carried out, and if key indicators such as repetitive occurrences of pothole repairs, or crack sealing, can indicate an underlying issue that is further investigated by staff and/or an engineering consultant.

Roads are built and maintained to established standards, such as Ontario Provincial Standards, Transportation Association of Canada Standards, the Ontario Traffic Manuals, Canadian Highway & Bridge Design Code, and Ontario Structure Inspection Manual. Regular inspections are carried out to meet established thresholds. **The established target PCI threshold is 80%.**

Legislation is also in place as a legal framework for road and bridge maintenance. The Public Works department ensures that these requirements are met, such as road construction and maintenance conditions to meet Minimum Maintenance Standards (MMS), as well as the Highway Traffic Act.

In addition to this, requests are received on a regular basis from tax payers, businesses, and agricultural entities for such services as seasonal road maintenance, roadside tree trimming, grass cutting, weed spraying, and garbage and debris clean-up. These requests are integrated into the regular preventative maintenance schedule to accommodate the needs of our constituents.

Action plan:
Continue with preventative maintenance and inspection. As asphalt has a fairly predictable life cycle due to the impacts of environmental elements, preventative maintenance and rehabilitation is planned and budgeted accordingly.

BRIDGE and CULVERTS > 2.5 meters
INFRASTRUCTURE

Bridge and Large Culvert Infrastructure

Scope of the Bridge and Large Culvert Infrastructure

The County of Huron has a total of 81 bridges and 211 large culverts. All asset field assessments are carried out in the Public Works department by internal staff and external engineering firms. These two assets are being grouped together as both types of structures require similar structural inspections, review, analysis, and design efforts. The County's percentage of ownership varies from 33% to 100% at each of these sites depending on geographic location within the County. Partners may include lower tier municipalities within the County, lower tier municipalities in adjacent Counties, or adjacent Counties themselves.

The County's bridges and large culverts support all types of traffic, including heavy transport vehicles, farm vehicles, motor vehicles, emergency vehicles, pedestrians and cyclists. There are no bridges or large culverts in the County that have loading or dimensional restrictions.

Current Replacement Value

The current replacement value of the County's bridge and large culvert assets is estimated at $391 million. This value is based on engineering estimates through the OSIM inspections on all the large structures over 2.5 metres. The average age of the bridges is 58 years old and large culverts is 55 years old.

The following table lists the total estimated replacement value of the County's bridges and large culvert structures:

Asset	Current Replacement Value	% of Total	Quantity
Bridges	$ 282,206,575	72%	81
Large Culverts	$ 108,903,993	28%	211
TOTAL	**$ 391,110,567**	**100%**	**292**

Condition Assessment

County structures spanning 2.5 metres or greater are inspected biennially by a trained Bridge Inspector or licensed Engineer. The inspection shall be performed in accordance with the Ontario Structure Inspection Manual (OSIM) and archives basic inventory data like bridge type, deck length, deck width, skew etc. It also lists any material and structural defects on individual bridge elements with associated quantities, costs, and timelines for repair. These

quantities, costs, and timelines change with each inspection and are what staff use to cost and predict future rehabilitation or replacement.

All bridges in Ontario are rated on a scale from 0-100. This numerical value is known as the Bridge Condition Index (BCI) value. The formula below is how a BCI is calculated for a bridge.

BCI = Current Value / Replacement Value x 100

Where:

Replacement Value = Sum of Element replacement value = Sum of (Element Unit Cost x Element Quantity)

Current Value = Sum of Current Element Value = Sum of (Element Unit Cost x (1.0*E +0.75*G + 0.4*F + 0.0*P)

Where:

E – quantity of element in excellent condition state
G – quantity of element in good condition state
F – quantity of element in fair condition state
P – quantity of element in poor condition state

Simply stated, the BCI is a ratio of current value over replacement value with current value being determined by the condition state of key bridge elements.

The rating system reflects comments and quantities documented in the OSIM form. The Ministry of Transportation Ontario (MTO) has established BCI ranges corresponding to single word descriptors to represent bridge condition. The descriptors and ranges are as follows:

Bridge Condition based on Bridge Condition Index (BCI)	
Condition	BCI Range
Excellent	80 – 100
Good	70 – 80
Fair	60 – 70
Poor	0 – 60

The County has an average BCI value of 70 for its bridges and 65 for the large culverts and is considered fair to good by MTO standards.

The distribution of the BCI condition scale is as follows:

Structure Condition Rating		
BCI Scale	**# of Structures**	**% of Total**
Bridges		

Excellent	4	5%
Good	44	54%
Fair	32	40%
Poor	1	1%
Total Bridges – Avg 70 BCI	**81**	**100%**
Large Culverts		
Excellent	12	6%
Good	64	30%
Fair	114	54%
Poor	21	10%
Total Large Culverts – Avg 65 BCI	**211**	**100%**

Current Levels of Service

Overall Community Levels of Service statements for the road network, including roads, bridges and culverts are as follows:

Service	Service Objective Statements	Community Levels of Service
Roads	A safe, reliable, efficient road network accessible year round Our municipality will maintain safe, reliable roads.	Roads are kept in good condition
		Roads are comfortable to drive at posted speeds
		Roads blend with the community surroundings
		Roads are adequate to meet traffic demands
		Roads are as safe and accessible as possible throughout the year

Current levels of service with respect to physical condition ratings of the bridge and large culvert infrastructure, and general performance ratings, being Operational Functionality, Overall Capacity and Environmental Resiliancy is as follows:

BRIDGES

Target Asset Levels of Service (by Asset Class)	**Current Asset Levels of Service**						
	Asset Class Average	**Distribution by Asset Rating**					
		Very Good	**Good**	**Fair**	**Poor**	**Very Poor**

Condition	Condition					
Bridge Condition Index = Good	70	5%	54%	40%	1%	
Performance	**Performance**					
Operational Functionality = Good	79	11%	77%	12%	0%	
Capacity - Good	80	1%	99%	0%	0%	
Environmental Resiliency = Good	80	5%	93%	2%	0%	

LARGE CULVERTS

Target Asset Levels of Service (by Asset Class)	**Current Asset Levels of Service**					
	Asset Class Average	**Distribution by Asset Rating**				
		Very Good	**Good**	**Fair**	**Poor**	**Very Poor**
Condition	**Condition**					
Bridge Condition Index = Good	65	6%	30%	54%	10%	
Performance	**Performance**					
Operational Functionality = Good	79	0%	96%	4%	0%	
Capacity - Good	80	0%	100%	0%	0%	
Environmental Resiliency = Good	79	5%	87%	8%	0%	

The targeted condition rating for bridges and large culverts is 70 which is considered good, and performance levels of good.

The actual average condition rating for bridges is 70, with the performance level of good being achieved for the bridge class as a whole. The average condition rating for the large culverts is 65 which is considered fair, with the performance levels of good being achieved for the class average.

Overall, the County bridges and large culverts are performing well and meeting the current needs of the County residents.

Performance Ratings are based on the following likelihood of failure:

Very Good:	91 – 100	Lowest chance of failure
Good:	70 – 90	
Fair:	40 – 69	
Poor:	10 – 39	

Very Poor	<10	Highest chance of failure

Current Priority Projects

Priority projects for 2024 include:
- Rehabilitation of Lower Maitland Bridge
- Rehabilitation of Fitch's Bridge
- Rehabilitation of Boundary Bridge 11
- Replacement of Culvert 15-22.1

Priority project for 2025 are expected to be:
- Rehabilitation of Boundary Bridge 14
- Rehabilitation of Hoggs Bridge
- Rehabilitation of Bannockburn Bridge
- Rehabilitation of large Culverts - 25-10.8, 14-14.3, and 31-32.1

Priority project for 2026 are expected to be:
- Rehabilitation of Beckers Bridge
- Rehabilitation of Farish Bridge
- Rehabilitation of large Culverts: 31-06.3, 84-09.0, and 20-28.0

General Lifecycle of the Asset

According to the Canadian Highway Bridge Design Code (CHBDC) all new structures shall have an expected service life of 75 years. A structure is not expected to reach the ESL if regular maintenance and rehabilitation is not completed. The amount of maintenance and capital investment required to achieve the ESL will vary depending on structure type, quality of materials, traffic volumes, environmental conditions, adequate annual maintenance, drainage, how often the structure is rehabilitated and/or size of capital investments made. Some bridges may be able to reach the ESL with minimal interference while others require substantial investment or early replacement based on the factors outlined above.

Rehabilitation Needs and Sustainable Funding Levels

An estimated $53.2 million is required over the next 10 years for the County's bridges and large culverts. These are all standard lifecycle costs associated with bridge and large culvert asset components that are at end of life and require rehabilitation to maintain the overall condition and performance of the County large structures. The costs listed in the table below are based on 2024 estimates and not indexed for future inflation.

The following table breaks down the replacement costs by period:

Asset	**2025-2029**	**2030-3034**	**TOTAL**
Bridges	$ 14,584,267	$ 21,408,000	$ 35,992,267
Large Culverts	$ 9,741,000	$ 7,443,000	$ 17,184,000
TOTAL	**$ 24,325,267**	**$ 28,851,000**	**$ 53,176,267**

The asset rehabilitation costs will be increasing significantly from 2031 onwards as there are a greater number of bridges that require rehabilitation. Based on current estimates, the peak years are 2031-2034. Falling just outside this 10 year forecast, years 2036 and 2037 are estimated to require $12.3 and $10 million respectively. This will be a significant pressure for the County to fund.

An average of $5.3 million of long term sustainable funding will be require over the next 10 years. Over a 20 year period, this increases to $6 million on average annually. These estimates are not indexed for inflation.

Current levy funding for all of Public Works assets (roads, bridges, culverts and patrol yards) is $5.1 million in 2024. Additional Federal and Provincial infrastructure funding of $7.9 million is also being received to support required investments in road infrastructure.

This falls far short for the upcoming capital requirement needs and consequently will require additional increases in the County levy to sustain the County's assets. A financial strategy is included at the end of this plan, which encompasses all of the County's assets.

Operating Costs to Maintain Current Service Levels

Bridge and culvert maintenance and repair costs, including labour, are approximately $296,000 annually.

10 Year Life Cycle Costing

The following table shows the estimate operating and capital expenditures over the next 10 years, inflated annually by 3%.

10 YEAR LIFECYCLE COSTING				
		Average Years 1-5	Average Years 6-10	Total Average Years 1-10
Bridges/ Large Culverts	Capital	$ 5,235,319	$ 7,372,137	$ 6,303,728
	Operating	$ 312,502	$ 362,275	$ 337,388
	Total	$ 5,547,821	$ 7,734,412	$ 6,641,116

Over the next 10 years, the total average cost of Bridge and Large Culvert capital and operating expenses is expected to increase, from $7.5 million in 2025 to $10.5 million in 2034. This is due to inflation, plus the significant capital rehabilitation needs of our bridge and large culvert network in the 2030's. Average costs adjusted for inflation over the next 10 years is

$6.6 million. Significant increases in the County levy will be required to meet the required expenditures.

Growth Impacts on Current Infrastructure

There are no expected growth impacts to the existing bridge and large culvert infrastructure.

Climate Risk Assessment for Bridges and Large Culverts

The County has had a Climate Risk Assessment of Watercourse Crossing in Huron County completed in 2024. This study, completed by WSP, assessed the impacts of climate change on the large county structures. The summary of the detailed analysis is below, and these risks will be factored into the future rehabilitation needs of the County structures.

The risk levels are defined as:

Risks Levels where Risk (R) = Probability (P)) x Impact Severity (S)			
Negligible Risk	R = 1 or 2	Negligible	Risk events do not require further consideration
Low Risk	R = 3 or 4	Low	Controls likely not required
Special Case	R = 5	Special Case	An extreme climatic event having a low probability of occurring, but which would cause very serious damage if it occurred. For example, a tornado or extreme rainfall that corresponds to a 1 in 100 years event, or; A climatic event which occurs frequently but has a negligible impact after an individual occurrence, however its repetitive frequency can cause premature wear of the physical components. For example, an increase in freeze-thaw cycles
Moderate Risk	R = 6, 8 or 9	Moderate	Some medium-term controls required to reduce risks to lower levels
Significant Risk	R = 10, 12, 15 or 16	Significant Risk	High priority control measures required (To be considered, planned, and addressed in the near future)
Major Risk	R = 20 or 25	Major Risk	Immediate controls and action required

The summary results based on the detailed risk assessments and review is as follows:

RISK	BRIDGES		CULVERTS	
	COUNT	PERCENTAGE	COUNT	PERCENTAGE
Negligible Risk	0	0%	0	0%
Low Risk	0	0%	0	0%
Special Case	9	11%	11	5%
Moderate	37	46%	198	94%
Significant	35	43%	1	0.5%
Major Risk	0	0%	0	0%

The highest rated priority structures when applying climate change risk assessment is:

PRIORITY	BRIDGE	MAXIMUM RISK SCORE	PRIORITY	CULVERT	MAXIMUM RISK SCORE
1	83-25.0	15	1	81-00.6	11
2	04-08.4	15	2	81-05.2	9
3	04-25.6	15	3	83-03.5	9
4	86-52.5	15	4	83-23.4	9
5	10-16.2	14	5	84-12.1	9

Key Performance Indicators

Key Indicator:
Bridge Condition Index (BCI)

Issue:
As bridges age, they begin to deteriorate due to exposure to environmental elements such as extended water exposure, freeze/thaw cycles, vehicle load stresses, and corrosion/oxidization. Cumulative damage leads to more expensive repairs and rehabilitation if not properly maintained.

Potential Impact:

Potential impacts of deteriorating bridges include road/bridge closures, load restrictions, safety hazards, and increased number of accidents, increased maintenance costs, increased exposure to liability, and increased costs of repairs.

Current Controls:
Annual bridge cleaning and inspection is carried out on each County bridge. The bridges are pressure washed, and assessed for loose concrete. Inspections include examinations of the parapet walls, railings, expansion joints and seals, caulking, guide rail components, catch basins and drainage, bridge bearings, and various other bridge components.

Annual maintenance is carried out by Public Works personnel on small components that can be completed to bring the bridge back to standards, including caulking and patching to ensure that all components are functioning correctly. Preventative maintenance such as tree trimming around the bridge to ensure moisture evaporates from sun exposure, reducing moisture damage.

If repairs are not able to be completed in the current year, they are added to the list of maintenance and rehabilitation projects in the following year or the multi-year plan, and budgeted for accordingly.

Bridges are built and maintained to established standards, such as Ontario Provincial Standards, Transportation Association of Canada Standards, Ontario Traffic Manuals, Canadian Highway & Bridge Design Code, and Ontario Structure Inspection Manual. Regular inspections are carried out to meet established thresholds. The Ontario Structure Inspection Manual (OSIM) inspections are carried out every two years through external engineering firms, and bridges are rated for their conditions.

Culverts with 2.5m-6m spans are built and maintained to established standards, such as Canadian Highway and Bridge Design Code, and inspected per the Ontario Structure Inspection Manual. Regular inspections are carried out to meet established thresholds. The BCI threshold is 50. Ontario Structure Inspection Manual (OSIM) inspections are carried out every two years through external engineering firms, and the culverts are rated for their conditions.

In addition to this, comments and requests are received on a regular basis from tax payers, businesses, and agricultural entities for such issues as bridge repair traffic restrictions, project delays, and detour routes. These comments and requests are integrated into future plans for bridge projects and maintenance activities to accommodate the needs of our constituents.

Action plan:
Continue with preventative maintenance and inspection. Annual inspections and preventative maintenance are key to ensure that small issues are rectified before they develop into major problems that are much more costly to correct. Regular rehabilitation is normally required every 18-22 years, and rehabilitation is planned and budgeted accordingly.

MINOR CULVERTS (<2.5 meters and driveway) INFRASTRUCTURE

Minor Culvert (<2.5 meters) and Driveway Culvert Infrastructure

Scope of the Small Culvert Infrastructure

The County of Huron has: 1211 Culverts less than 2.5 meters (CULVERT<2.5m) and approximately 8,934 driveway culverts. These minor structures continue to be updated and inventoried as time permits.

All asset field assessments are carried out in the Public Works department by internal staff. The results of the detailed inventory assessment of the targeted structures are summarized below. Culverts <2.5 m have been separated from the culverts > 2.5 m due to the fact that they are inspected by County staff rather than by external engineering firms.

It is important to note that more work will be required to access the full number of driveway culverts across the County road network. This work will be ongoing into 2025. The figure in the table below is an estimate estimated by the GIS department, consisting of both rural and urban entrances.

Minor Culvert Inventory	
Structure	Quantity
Culverts <2.5 meter	1,211
Driveway culverts	8,934

Current Replacement Value

Current replacement costs of the small culverts<2.5 m is estimated at $80.6 million and $33 million for the driveway culverts/entranceways. The average age of the small culverts and driveway entrances is approximately 42 years old, inline with the overall road network.

Asset	**Current Replacement Value**	**% of Total**	**Quantity**
Small Culverts	$ 80,648,100	71%	1,211
Driveway Entrances	$ 33,576,000	29%	8,394
TOTAL	**$ 114,224,100**	**100%**	**9,605**

Condition Assessment

Only culverts >2.5m are rated by engineers, culverts <2.5m are inspected by staff on a semi-regular basis. These personnel are trained in culvert inspection by the OGRA, and there is at least one certified employee on each patrol.

The average condition assessments for the small culverts estimated at a value of 68, which is considered fair overall.

Structure Condition Rating		
	# of Structures	**% of Total**
Small Culverts		
Excellent	43	4%
Good	194	16%
Fair	972	80%
Poor	2	0%
Total Small Culverts – Avg 68	**1211**	**100%**

Driveway entrances are currently not assessed, but would also seen as fair condition as an overall portfolio.

Current Levels of Service

Overall Community Levels of Service statements for the road network, including roads, bridges and culverts are as follows:

Service	Service Objective Statements	Community Levels of Service
Roads	A safe, reliable, efficient road network accessible year round Our municipality will maintain safe, reliable roads.	Roads are kept in good condition
		Roads are comfortable to drive at posted speeds
		Roads blend with the community surroundings
		Roads are adequate to meet traffic demands
		Roads are as safe and accessible as possible throughout the year

Current levels of service with respect to physical condition ratings for the small culvert infrastructure, and general performance ratings, being Operational Functionality, Overall Capacity and Environmental Resiliancy is as follows:

Target Asset Levels of Service (by Asset Class)	Current Asset Levels of Service						
	Asset Class Average	Distribution by Asset Rating					
		Very Good	Good	Fair	Poor	Very Poor
Condition	**Condition**						
Condition Index = Good	68	4%	16%	80%	0%	
Performance	**Performance**						
Operational Functionality = Good	76	0%	86%	11%	3%	
Capacity - Good	79	0%	99%	1%	0%	
Environmental Resiliency = Good	80	0%	100%	0%	0%	

The targeted condition rating for small culverts is 70 which is considered good, and performance levels of good.

The actual average condition rating for small culverts is 68, with the performance levels of good being achieved for the small culvert class as a whole.

Overall, the County's small culverts are performing well and meeting the current needs of the County residents.

Performance Ratings are based on the following likelihood of failure:

Very Good:	91 – 100	Lowest chance of failure
Good:	70 – 90	
Fair:	40 – 69	
Poor:	10 – 39	
Very Poor	<10	Highest chance of failure

Current Priority Projects

Small culvert replacements on County Roads 3 and 7, ahead of repaving. As road segments are due for rehabilitation, small culverts are generally replaced as required.

General Lifecycle of the Asset

The general lifecycle that is set up for the County's PSAB Tangible Capital Asset reporting is listed in the table below. While the estimated useful life of an asset is suitable for accounting purposes, Public Works will base asset replacement on the actual condition of the structure. Actual degradation of the assets will vary based on various factors which may not line up exactly with the estimated useful life.

Asset Useful Life in Years	
Asset Type	Useful Life
CULVERT<2.5m	75
Driveway Culverts	75

Rehabilitation Needs and Sustainable Funding Levels

An estimated $3 million is required over the next 10 years for the County's small culverts. Driveway culvert replacements is currently not estimated as that analysis is pending. These are all standard lifecycle costs associated with small culvert asset components that are at end of life and require rehabilitation to maintain the overall condition and performance of the County small structures. The costs listed in the table below are based on 2024 estimates and not indexed for future inflation.

The following table breaks down the replacement costs by period:

Asset	**2025-2029**	**2030-3034**	**TOTAL**
Small Culverts	$ 1,500,000	$ 1,500,000	$ 3,000,000
Driveway Entrances	$ 625,000	$ 625,000	$ 1,250,000
TOTAL	**$ 2,125,000**	**$ 2,125,000**	**$ 4,250,000**

The asset rehabilitation costs are fairly stable for the small culverts and driveway entrances over the next 10 years.

Current levy funding for all of Public Works assets (roads, bridges, culverts and patrol yards) is $5.1 million in 2024. Additional Federal and Provincial infrastructure funding of $7.9 million is also being received to support required investments in road infrastructure.

This falls far short for the upcoming capital requirement needs and consequently will require additional increases in the County levy to sustain the County's assets. A financial strategy is included at the end of this plan, which encompasses all of the County's assets.

Operating Costs to Maintain Current Service Levels

We currently do not have sufficient information to be able to assess the operating expenditures for small culverts and driveway entrances as they are aggregated with the bridges and large culverts years in our accounting system. New entrances are currently paid for by the landowner.

10 Year Lifecycle Costing

10 YEAR LIFECYCLE COSTING				
		Average Years 1-5	Average Years 6-10	Total Average Years 1-10
Small Culverts and Driveway Entrances	Capital	$ 326,305	$ 380,363	$ 353,334
	Operating	$ -	$ -	$ -
	Total	$ 326,305	$ 380,363	$ 353,334

Over the next 10 years, the total average cost of small culvert capital and operating expenses is expected to increase, from $300,000 in 2025 to $380,000 in 2034. This is due to inflation.

Growth Impacts on Infrastructure

There are no expected growth impacts to the existing small culvert asset infrastructure. Additional driveway entrances on County roads due to population growth will require additional driveway entrances to be installed.

Key Performance Indicators

Key Indicator:
To be developed.

Issue:
As the culverts age, they begin to deteriorate due to exposure to environmental elements such as extended salt and water exposure, freeze/thaw cycles, and corrosion/oxidization. As concrete culverts age and defects appear, the structures have more potential for expensive repairs and rehabilitation if not properly maintained.

Potential Impact:
Potential impacts of deteriorating culverts include road closures, load restrictions, safety hazards, accidents, increased maintenance costs, liability, and increased costs of repairs.

Current Controls:

Small culverts with 1m-2.5m spans are inspected by staff on an as-needed basis. Maintenance can be carried out by Public Works staff on small components that can be completed to bring the culvert back to design standards.

In addition to this, comments and requests are received on a regular basis from tax payers, businesses, and agricultural entities for such issues as structure repair work, traffic restrictions, project delays, and detour routes. These comments and requests are integrated into future plans for culvert projects and maintenance activities to accommodate the needs of our constituents.

Action plan:
Continue with preventative maintenance and enhance the inspection program. Annual inspections and preventative maintenance are key to ensure that small issues are rectified before they develop into major problems that are much more costly to correct. Regular rehabilitation is normally required every 18-22 years, and rehabilitation is planned and budgeted accordingly

PUBLIC WORKS PATROL YARD INFRASTRUCTURE

Public Works Patrol Yard Infrastructure

Scope of the Patrol Yard Infrastructure

The County of Huron has: 4 Public Works patrol yards. Within the patrol yards include salt and sand storage buildings, office/maintenance buildings. The assets are located at various locations across the County. They are as follows:

PW Patrol Yards
AUBURN WORKS YARD
WINGHAM WORKS YARD
WROXETER WORKS YARD
ZURICH WORKS YARD

Current Replacement Value

The estimated replacement value for the Public Works Patrol Yard assets is approximately $40.1 million. This estimate is based on current pricing for the Wingham Patrol Yard rebuilds in 2023 and 2024. The average age of the patrol yards is 22 years old.

PW Patrol Yard Replacement Value		
Yard	**Value**	**% of Total**
AUBURN WORKS YARD	$ 13,440,000	33%
WINGHAM WORKS YARD	$ 11,196,000	28%
WROXETER WORKS YARD	$ 6,323,000	16%
ZURICH WORKS YARD	$ 9,180,000	23%
TOTAL	**$ 40,139,000**	100%

Condition Assessment

Condition assessment rating was carried out on the Patrol Yards in consultation with Public Works Department and building condition assessments completed in 2019. The overall result is that the County's Patrol Yards are in good condition overall. There are a few structures across the various yards that do require some more immediate rehabilitation work.

Facility Condition Index ratings are based the following:
Excellent <1%
Good – 1-5%
Fair – 5-10%

Poor – 10-30%
Very Poor - >30%

The results of the detailed condition assessment of the targeted assets are summarized below in the table. Facility Condition Indices are weighted based on square footage in order to summarize the various buildings at the yards.

PW Patrol Yard Condition Assessments		
Yard	**2024 Facility Condition Index**	**Condition Rating**
AUBURN WORKS YARD	2.76	Good
WINGHAM WORKS YARD	1.08	Excellent
WROXETER WORKS YARD	2.90	Good
ZURICH WORKS YARD	1.80	Good
TOTAL	**2.11**	**Good**

Current Levels of Service

The current service objectives for the County of Huron Patrol Yards is as follows:

Service	**Program Service Objectives**	**Community Levels of Service**
Public Works - Patrol Yards	Municipal buildings will be functionable, safe, accessible, comfortable and welcoming to the public and staff.	- Buildings/site are kept in good condition - Buildings are safe, accessible and easy to navigate. - Parking space is adequate and well maintained - The internal building environment is comfortable - Building design and technology are energy efficient - Buildings have sufficient capacity to meet service needs - All buildings have adequate security.

Overall Condition and Performance ratings for the Patrol Yards are as follows:

Target Asset Levels of Service (by Asset Class)	Current Asset Levels of Service					
	Asset Class Average	Distribution by Asset Rating				
		Very Good	Good	Fair	Poor	Very Poor
Condition	**Condition**					
Facility Condition Index = Good	2.11	0%	100%	0%	0%	
Performance	**Performance**					
Operational Functionality = Good	82	25%	50%	25%		
Capacity - Good	80	25%	50%	25%		
Operational Resiliency = Good	95	100%				
Environmental Resiliency = Good	82		100%			

Overall the asset class average is on target for overall condition ratings, and performing well overall as a class with its performance measures. There are some issues with operational functionality and capacity at the Zurich and Wroxeter Yards.

Performance Ratings are based on the following likelihood of failure:

Very Good:	91 – 100	Lowest chance of failure
Good:	70 – 90	
Fair:	40 – 69	
Poor:	10 – 39	
Very Poor	<10	Highest chance of failure

Current Priority Projects

Priority projects for 2024 include the rebuilding of the office and equipment storage facility at the Wingham Patrol Yard. Total cost is approximately $6,300,000. An additional $61,000 is required for furniture and fixtures.

Future requirements are at the Wroxeter Patrol Yard with an addition of a storage facility and replacing the fuel tanks/system, along with addressing sewer issues at the Auburn yard.

General Lifecycle of the Asset

The estimated life of the Patrol Yards are as follows, however, ongoing maintenance and lifecycle replacements can extend the overall life of the assets:

Asset Useful Life in Years	
Asset Type	Useful Life
Building works 30yr	30
Building works 60yr	60
Building Equipment	5
Building Exterior	20
Building Interior	20
Building Mechanical	20
Building Electrical	20
Building Site	22

Rehabilitation Needs and Sustainable Funding Levels

An estimated $ 2.75 million is required over the next 10 years for the Public Works Patrol Yards. The majority of these costs are related to the Wroxeter Yard with an addition to the materials storage building for equipment storage and the replacement of the fuel pumps and tanks. The costs below are based on current 2024 estimates and not adjusted for future inflationary pressures.

PW Patrol Yard Replacement Needs		
Yard	**2025-2029**	**2030-3034**
AUBURN WORKS YARD	$ 400,000	$ 300,000
WINGHAM WORKS YARD	$ 25,000	$ 25,000
WROXETER WORKS YARD	$ 1,650,000	$ 200,000
ZURICH WORKS YARD	$ 75,000	$ 75,000
TOTAL	**$ 2,150,000**	**$ 600,000**

The funding levels are sustainable over the long term, with required reserve usage in the short term to address the requirements for the Wroxeter Yard. General building lifecycle costs are required over the long term to maintain the quality of the facilities at each yard.

Operating Costs to Maintain Current Service Levels

Building maintenance costs are estimated to average $33,000 annually, based on current 2024 levels. Over a 10 year period, with annual inflation at 3%, this is expected to rise to $39,000.

10 Year Life Cycle Costing

The operating and capital costs over the next 10 years is estimated at:

10 YEAR LIFECYCLE COSTING				
		Average Years 1-5	Average Years 6-10	Total Average Years 1-10
PW PATROL YARDS	Capital	$447,940	$152,145	$300,043
	Operating	$31,341	$36,334	$33,838
	Total	$479,281	$188,479	$333,880

Over the next 10 years, the total average cost of operating the Public Works Patrol Yards is estimated at $333,880. It is front loaded to 2025 due to a building storage addition at the Wroxeter Yard.

The required investment in Patrol Yard capital is included in the overall financing strategy presented in this report.

Growth Impacts of Infrastructure

Current rehabilitation of Wingham patrol yard to meet current needs and realignment of some Public Works services.

Key Performance Indicators

Key Indicator:
Building condition

Issue:
As buildings age, they are subject to deterioration due to exposure to climate, and through usage.

Potential Impact:
If a building declines into poor condition, there may be health and safety issues. Failure to respond to issues may lead to increased damage and more expensive repairs. The building condition will worsen at an accelerated pace if preventative maintenance steps are not taken.

Current Controls:
Inspections are carried out semi-annually. Issues identified are rectified, with smaller repairs being performed by County personnel, while larger issues are addressed by third party providers as needed. Any larger items or items that are coming to the end of their life cycle are often identified several years in advance, such as roofing replacement, and budgeted and

scheduled accordingly.

Action plan:
Continue to carry out semi-annual inspections and perform preventative maintenance as required.

PUBLIC WORKS FLEET

Public Works Fleet

Scope of the Public Works Fleet

The County of Huron has approximately 125 vehicles and pieces of equipment managed within the Pubic Works Fleet network. All asset field assessments are carried out in the Public Works department. The results of the detailed inventory assessment of the targeted structures are summarized below.

Fleet Inventory	Quantity
Tandem Trucks, Tractors, Forklifts etc	15
Dump Truck, Graders, Backhoes, Large Loaders	28
Trucks, Vans	40
Equipment	25
Generators	7
Trailers	10
TOTAL	**125**

Current Replacement Value

The estimated replacement value for the Public Works Fleet assets is approximately $19.2 million. The average age of the Public Works Fleet is 8 years old.

Fleet Inventory	Replacement Cost	% of Total
Tandem Trucks, Tractors, Forklifts etc	$ 7,903,000	41%
Dump Truck, Graders, Backhoes, Large Loaders	$ 5,956,000	31%
Trucks, Vans	$ 2,857,000	15%
Equipment	$ 1,995,500	10%
Generators	$ 299,000	2%
Trailers	$ 183,000	1%
TOTAL	**$ 19,193,500**	**100%**

Condition Assessment

Condition assessment rating was carried out on the Fleet asset network, in consultation with Public Works Department, to identify the level of service considered acceptable by staff. The overall result is that the County's Fleet is in a Fair condition. The results of the detailed condition assessment of the targeted assets are summarized below in the table.

Fleet Inventory	Average Condition Rating	
Tandem Trucks, Tractors, Forklifts etc	75	Good
Dump Truck, Graders, Backhoes, Large Loaders	63	Fair
Trucks, Vans	77	Good
Equipment	58	Fair
Generators	61	Fair
Trailers	65	Fair
TOTAL	**69**	**Fair**

The following table highlights the number of the Fleet vehicles and equipment within each condition rating category.

	CONDITION RATING				
Fleet Inventory	**Excellent**	**Fair**	**Good**	**Poor**	**Total**
Dump Truck, Graders, Backhoes, Large Loaders	2	4	5	4	15
Equipment	4	3	7	11	25
Generator		2	3	2	7
Tandem Trucks, Tractors, Forklifts etc	9	4	10	5	28
Trailers	2	3	2	3	10
Trucks, Vans	10	8	17	5	40
Total	**27**	**24**	**44**	**30**	**125**

The condition rating relates to the age and usage of the overall vehicles or devices group and is a rating out of 100. When the rating is between 30 and 50 the item needs to be replaced. The rating system is as follows:

Excellent:	91 – 100	No evident defects
Good:	70 – 90	Slight decline
Fair:	51 – 69	Decline asset apparent
Poor:	30 – 50	Severe decline or failure

Current Levels of Service

The current service objectives for the County of Huron Fleet program is as follows:

Service	Program Service Objectives	Community Levels of Service
Public Works Fleet	Fleet vehicles and equipment will be safe, efficient and reliable	- PW Fleet is kept in good condition, and meets required standards - PW Fleet is efficient, reliable and cost effective - PW Fleet has sufficient capacity to meet service needs - PW Fleet reduces climate impacts where possible - PW Fleet is safe, comfortable and accessible

Overall Condition and Performance ratings for the Fleet program are as follows:

Target Asset Levels of Service (by Asset Class)	Current Asset Levels of Service					
	Asset Class Average	Distribution by Asset Rating				
		Very Good	Good	Fair	Poor	Very Poor
Condition	**Condition**					
Vehicle Condition = Good	69	22%	35%	19%	24%	
Performance	**Performance**					
Operational Functionality = Good	82	25%	75%			
Capacity - Good	80		100%			
Operational Resiliency = Good	57		63%	13%	25%	
Environmental Resiliency = Good	73		63%	38%		

Overall the asset class average is slightly under target for overall condition ratings, however performing well overall as a class with its performance measures. There are some issues with operational resiliency as with some fleet vehicle do not have back up capacity and mechanical failures may result in a stop in service and require sourcing from a 3rd party.

Current Priority Projects

The current fleet vehicles and equipment to be purchased in 2024 are:

Fleet Item	**Cost**
Grader (2002)	$ 800,000
Dodgeram Pickup (2012)	$ 68,000
Ford Ext Cab Pickup (2017)	$ 68,000
Chev Silverado Pickup (2021)	$ 68,000
Promaster City Van (2017)	$ 60,000
John Deere Zero Turn Mower	$ 35,000
Slip in Bed Sander	$ 14,000
2024 Centerline Crash Truck with attenuator mounted on rear	$ 175,000
Grader mounted Gravel Reclaimer	$ 25,000
Tandem Plow Truck	$ 400,000
Tandem Plow Truck	$ 400,000
Tandem Plow Truck	$ 400,000
Homes Van	$ 200,000
Welder Generator	$ 60,000
Roadside Mower	$ 24,000
Roadside Mower	$ 24,000
Roadside Mower	$ 24,000
Rotary Broom	$ 25,000
Rotary Broom	$ 25,000
Rotary Broom	$ 25,000
2023 New Holland Tractor - Loader Arms	$ 18,000
2023 New Holland Tractor - Loader Arms	$ 18,000
Remote Control Flag Man	$ 70,000
Vacuum Trailer	$ 295,000
Total	**$ 3,321,000**

For 2025, the expected replacement items are 2 – Loaders, 1 – Centreline Marker, 1 Backhoe, 1 Roadside Mower and 3 – Tandem Trucks. The total cost is $3.35 million.

General Lifecycle of the Asset

The general lifecycle that is set up for the County's PSAB Tangible Capital Asset reporting is one of a 5, 10 or 15 year class. The actual replacement cycle may vary for each type of equipment/vehicle for anywhere from 3 to 30 years, and is managed based on usage, actual condition and needs.

Replacement Needs and Sustainable Funding Levels

The current cycle replacement of the County's Fleet vehicle and equipment assets is estimated at $19 million. These are based on current 2024 costs.

	Asset Lifecycle Replacement	
Fleet Inventory	**2025-2029**	**2030-2034**
Dump Truck, Graders, Backhoes, Large Loaders	$ 4,244,000	$ -
Equipment	$ 791,700	$ 1,024,400
Generators	$ 115,000	$ 66,000
Tandem Trucks, Tractors, Forklifts etc	$ 4,312,500	$ 4,165,000
Trailers	$ 96,000	$ 34,500
Trucks, Vans	$ 2,201,000	$ 1,972,000
Total	**$ 11,760,200**	**$ 7,261,900**

The Fleet program is intended to be self-funding with annual fleet usage costs being charged out to the Highways programs. The charge out rate is to cover both operating and future replacement capital costs. The estimated fleet reserve for 2025 is $5.7 million and is used to provide cash flow for annual replacement over the life.

Based on current figures, the Fleet reserve levels are estimated to be sufficient until around 2040. Rates will have to be adjusted annually as costs increase to ensure sufficient reserves are available to be self-sustaining with no additional impact on the County levy.

Operating Costs to Maintain Current Service Levels

Fleet vehicle maintenance costs are estimated to average $1.49 million annually, based on current 2024 levels. Over a 10 year period, with annual inflation at 3%, this is expected to rise to $1.82 million. Charge out rates will have to be adjusted annually in-line with operating cost pressures.

10 Year Life Cycle Costing

The average annual cost to operate the current Fleet program at current levels is $3.8 million annually over the next 10 years.

10 YEAR LIFECYCLE COSTING				
		Average Years 1-5	Average Years 6-10	Total Average Years 1-10
Fleet	Capital	$ 2,552,798	$ 1,837,915	$ 2,195,357
	Operating	$ 1,487,571	$ 1,724,503	$ 1,606,037
	Total	$ 4,040,369	$ 3,562,418	$ 3,801,394

Note: Fleet maintenance cost figures currently include fuel related expenses in addition to maintenance

Growth Impacts on Fleet Equipment

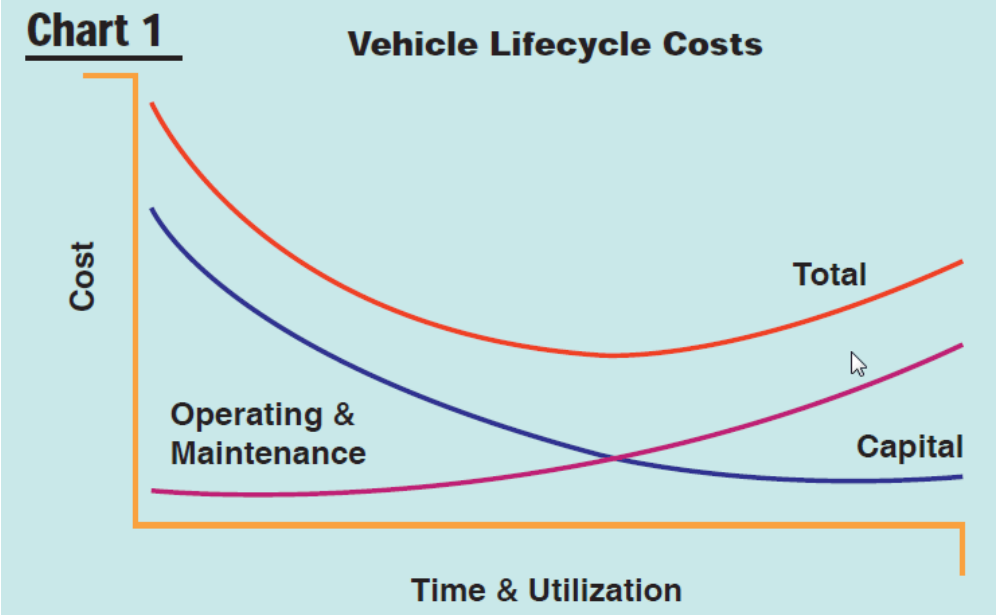
Increased traffic volume on County Road 83 – Exeter to Grand Bend, has increased where it may increase the class of the road from a Class 2 road to a Class 1 road. This will require an increase in winter maintenance patrols, plus a quicker response time for snow accumulation.

If this occurs, it will require an increase to winter staff, plus an extra tandem for snow plowing. Current replacement costs for a tandem truck are $400,000.

Key Performance Indicators

While fleet preventative maintenance is important, effective equipment management should go well beyond fixing a break down. A program is in place that preserves the value of equipment investments, minimizes the incidents of unscheduled repairs, and collect, analyzes, and reports necessary data so that informed and intelligent asset management decisions can be made.

Reliable vehicles and equipment in good working order are essential to ensure roads are maintained in a timely and professional manner. When to replace a vehicle is one of the most significant decisions facing fleet managers. Without a viable and comprehensive replacement program, management is not able to replace equipment when needed at the optimum replacement time as illustrated below in Chart 1.



Over time, vehicle capital costs decline, while vehicle operating costs increase. The combination of these two cost functions produces a U-shaped total cost curve. Ideally, vehicles should be replaced around the time that annual operating costs begin to outweigh annual capital costs – that is, when the total cost curve begins to turn upward. As illustrated by the graph, deferring replacement of vehicles and equipment beyond a certain point actually causes total vehicle costs to rise, making a fleet more costly to own and operate.

A fleet replacement plan can accomplish the following:

1. Less equipment downtime and lower operating/maintenance costs by eliminating high cost intensive vehicles.
2. An assurance that vehicles are rotated out in a planned schedule.
3. Modernize the fleet for peak performance in both technical and employee safety areas.
4. Allows you to document future year funding requirements.

We project that by using our equipment replacement schedule and asset plan that it will bring credibility to the replacement process for prioritizing vehicle replacement funds.

PROPERTY SERVICES

Property Services

Scope of the Property Services Infrastructure

The County of Huron has: 2 historical buildings, 3 office buildings, 2 storage buildings, 4 ambulance buildings, 1 transformer building, and 1 pump house building. These assets are managed by the Property Services department.

Property Services	
Building Type	**Quantity**
Historical Buildings	2
Office Buildings	3
Transformer Building	1
Storage Buildings	2
Ambulance Stations	4
Pump House	1
TOTAL	**13**

Current Replacement Value

The estimated replacement value for the Property Services assets is $96.9 million, based on current estimates of cost per square foot. Costs have increased significantly since pre-COVID. The average age of the Property Services assets is 43 years old.

Property Services Replacement Value		
Building Type	**Replacement Value**	**% of Total**
Historical Buildings	$40,973,800	42%
Office Buildings	$46,601,200	48%
Transformer Building	$50,000	0%
Storage Buildings	$711,250	1%
Ambulance Buildings	$8,200,800	8%
Pump House Building	$373,000	0%
TOTAL	**$96,910,050**	**100%**

Condition Assessment

Condition assessment rating was carried out on the Property Services asset network, in consultation with staff and a Building Condition Assessment completed in 2023, to identify the current replacement needs and building conditions. Based on the current Facility Condition Index, the overall portfolio of building assets is in good condition, but on the low end of the range. Some reinvestments needs are required to maintain the facilities in good condition. The JMB for example, is rated as poor due to the amount of repairs that are required due to the age of the building.

The following table summarizes the facility ratings:

Property Services - Condition		
Building Type	**Facility Condition Rating (1 year)**	
Historical Buildings	3.44	Good
Office Buildings	6.49	Fair
Transformer Building	30.00	Very Poor
Storage Buildings	4.00	Good
Ambulance Stations	0.28	Excellent
Pump House	0.10	Excellent
TOTAL	**5.00**	**Good**

Over the next 10 years, the FCI indices show that many of our facilities will be in poor condition without ongoing rehabilitation.

Facility Condition Index ratings are based the following:
Excellent <1%
Good – 1-5%
Fair – 5-10%
Poor – 10-30%
Very Poor - >30%

Current Levels of Service

The current service objectives for the County of Huron Property Services facilities are as follows:

Service	Program Service Objectives	Community Levels of Service
Property Services	Municipal buildings will be functionable, safe, accessible, comfortable and welcoming to the public, residents and staff.	- Buildings/site are kept in good condition - Buildings are safe, accessible and easy to navigate. - Parking space is adequate and well maintained - The internal building environment is comfortable - Building design and technology are energy efficient - Buildings have sufficient capacity to meet service needs - All buildings have adequate security.

Overall Condition and Performance ratings for Property Services are as follows:

Target Asset Levels of Service (by Asset Class)	Current Asset Levels of Service					
	Asset Class Average	Distribution by Asset Rating				
		Very Good	Good	Fair	Poor	Very Poor
Condition	**Condition**					
Facility Condition Index = Good	5	62%	8%	15%	8%	8%
Performance	**Performance**					
Operational Functionality = Good	66	0%	62%	23%	8%	8%
Capacity - Good	67	0%	69%	15%	8%	8%
Operational Resiliency = Good	47	0%	31%	8%	54%	8%
Environmental Resiliency = Good	57	0%	23%	62%	8%	8%

Overall the asset class average is slightly under target for overall condition ratings, but performing reasonable well with a fair status overall as a class with its performance measures. There are some issues with operational functionality and capacity at the Courthouse and JMB, along with some lack of back up power at many of the properties.

Performance Ratings are based on the following likelihood of failure:
Very Good: 91 – 100 Lowest chance of failure
Good: 70 – 90

Fair:	40 – 69	
Poor:	10 – 39	
Very Poor	<10	Highest chance of failure

Current Priority Projects

Current priority projects for 2024 include replacing the boilers at the Jacob Memorial building, upgrading the public elevator at the Museum, and upgrading the building automation systems at three sites. Ongoing lifecycle repairs at the various buildings are required annually to maintain their functional requirements.

General Lifecycle of the Asset

The current lifecycle for Property Services that is set up for accounting purposes is listed below. This provides an approximate lifecycle, however, the actual replacement of the assets is based on the actual need.

Asset Useful Life in Years	
Asset Type	Useful Life
Building	60
Building Electrical	20
Building Equipment	5
Building Exterior	20
Building Interior	20
Building Mechanical	20
Building Site	22

Rehabilitation Needs and Sustainable Funding Levels

An estimated $7.7 million is required over the next 10 years for Property Services. These are all standard lifecycle costs associated with asset components that are at end of life and require replacement to maintain the overall condition and performance of the County Facilities. These costs are based on 2024 estimates and not indexed for future inflation.

The following table breaks down the replacement costs by period:

Property Services - Replacement Needs			
Asset	**2025-2029**	**2030-2034**	**TOTAL**
Property Services	$4,881,000	$2,903,500	$7,784,500
Annual Average	$976,200	$581,000	$778,450

The costs over the next 10 year is frontloaded as there are some more immediate pressures in 2027 and 2029 with some of the required rehabilitation requirements as identified in the building condition assessments.

Currently budget funding levels for Property Services should be sufficient to maintain existing rehabilitation of the building assets, barring any unforeseen events.

Operating Costs to Maintain Current Service Levels

Building maintenance costs are estimated to average $148,000 annually, based on current 2024 levels. Over a 10 year period, with annual inflation at 3%, this is expected to rise to $193,000 by 2034.

10 Year Life Cycle Costing

10 YEAR LIFECYCLE COSTING				
		Average Years 1-5	Average Years 6-10	Total Average Years 1-10
Facilities	Capital	$ 1,076,973	$ 729,198	$ 903,086
	Operating	$ 156,690	$ 181,648	$ 169,169
	Total	$ 1,233,663	$ 910,846	$ 1,072,255

Over the next 10 years, the total average cost of Property Services Capital and Operating expenses is expected to increase to average approximately $1.07 million per year. These costs are inflated by 3% annually.

The required investment in Property Services capital is included in the overall financing strategy presented in this report.

Growth Impacts on Infrastructure

With increases in estimated call volumes, it is expected that an additional base will be required in 2026. A study is being conducted in 2024 to review and update the current growth estimates on the EMS program in the County. The funding for this new EMS base will have to come from County reserves or partially funded by reserves/debenture, and currently is estimated at $4 million.

Performance Indicators for Property Services

Key Indicator: *Response time regarding requests for work*

Issue
Calls for work are assessed regarding the level of urgency. The clients who request work include external (MAG) and internal (the Departments within the Corporation) should receive confirmation of receipt of their work order request within 24 hours, and be provided with an anticipated response time.

Potential Impact
Failure to assess and respond to problems may lead to increased damages if the maintenance concern is not identified within a timely manner. Also, a lack of a timely response to clients may lead to decreased client satisfaction.

Current Controls
The internal clients complete and submit an electronic Property Services Request form. Each PSR is received by the Maintenance Coordinator for Housing and Property Services and the County's Maintenance Technicians and Building Custodians are also able to view the PSR. The work is assigned, and this information is input; once the work is finished, the PSR is marked complete.
The external clients call or email their requests for maintenance service to the Maintenance Coordinator. An electronic work order is created through the Property Services Request form, and the protocols listed above for internal clients also then apply.

Action plan
The Maintenance Coordinator is to continually monitor the status of all PSR's that are incomplete. The continuous monitoring of all incomplete PSR's will help to ensure that work does not remain unfinished or "fall through the cracks".

Key Indicator: *Capital*

Issue
The Building Condition Assessments completed in 2023 indicate a much more substantial requirement for capital repairs than what the County has historically provided for the capital works budget.

Potential Impact
Many projects, in future years, will have to be deferred as the average capital allocation is substantially lower than the cost of the recommended repairs within the Building Condition Assessments.

Current Controls
A thorough analysis of the capital requirements is undertaken by Housing and Property Services to determine which capital projects are able to be funded each year.

Action plan

It is anticipated that the process of completing the County's Asset Management Plan will result in a system within the County that recognizes the need for substantial capital repairs and works toward providing the funding allocations to enable the work to be completed.

Key Indicator: *Preventative Maintenance*

Issue
The role of preventative maintenance plays an important part in the longevity of a building and the cost efficiencies of a building.

Potential Impact
By monitoring building systems, providing a consistent, regular preventative maintenance program will significantly aid in reducing building costs. The cost savings will be realized through fewer system failures over time and the decreased need to replace components and systems.

Current Controls
The role of Preventative Maintenance Technician has develops and implements a preventative maintenance program to ensure the components within the building envelope operate as efficiently as possible, leading to fewer repairs and replacements.

Action plan
The preventative maintenance software allows for work necessary for completion to be tracked and monitored.

Key Indicator: *Energy Savings*

Issue
As energy costs increase, the need to reduce usage is recognized.

Potential Impact
Utility costs have increased substantially and are predicted to continue in this manner.

Current Controls
Building occupants are encouraged to reduce energy costs by keeping windows closed when heat or a/c is on, turning off lights, etc.
Low flush toilets and aerators have been installed, and some energy efficient lighting.

Action plan
The legislated Green Energy Act, O/Reg 397/11 requires all municipalities to have in place energy conservation and demand management plans and Huron County is in compliance with this legislation.

Management Strategies – Property Services

Strategic and Corporate Goals

Infrastructure levels of service are influenced and guided by the County's strategic planning initiative. It is anticipated that the County's strategic plan will provide direction regarding the allocation of resources and the prioritization of how municipal tax dollars will be spent in the future.

Expected Asset Performance

As the buildings continue to ago, the required upkeep is expected to increase to maintain levels of service.

The Building Condition Assessment indicates higher costs than are available within the annual capital budget for Property Services. This shortfall may eventually lead to component failures or decreased marketability of the properties. These buildings are substantial capital assets for the County, and the continued upkeep is vital to maintaining, or exceeding the life expectancy of the buildings.

Energy Savings

As energy costs increase, the need to reduce utility consumption is recognized. The *Green Energy Act, O/Reg 397/11* requires all municipalities to have in place energy conservation and demand management plans. The County is compliant with this request. Property Services recognizes the need for continuous energy upgrades, and targets capital and operating projects annually that will provide energy savings.

HOUSING SERVICES

Housing Services

Scope of the Housing Infrastructure

The County of Huron has: 16 Apartments buildings and 88 Family units. These consist of detached dwellings, row townhouses and semi-detached townhouses. The assets are managed by the Social and Property Services - Housing Services department.

Housing Services	
Building Type	**Quantity**
Social Housing Apartments	15
Social Housing Family Homes	88
Countyview Seniors Apartments	1
TOTAL	**104**

The residential family homes are further broken down into:

Family Units	Quantity
Single	34
Duplex	38
Row	10
Triplex	6
Total	88

Current Replacement Value

The total estimated current value of the assets of $161.6 million. These replacement costs are based on current unit and square foot pricing for the two new housing developments being constructed in 2024/2025. Construction prices have increased significantly raising the current replacement values over previous years. The average age of the Housing apartments is 48 years old and the residential family homes are 67 years old.

Housing Services Replacement Value		
Building Type	**Replacement Value**	**% of Total**
Social Housing Apartments	$115,850,000	72%
Social Housing Family Homes	$34,960,000	22%
Countyview Seniors Apartments	$10,850,000	7%
TOTAL	**$161,660,000**	**100%**

Condition Assessment

Condition assessment rating was carried out on the Housing Services asset network, in consultation with staff and a Building Condition Assessment completed in 2023, to identify the current replacement needs and building conditions. Based on the current Facility Condition Index, the overall portfolio of housing assets is in good condition overall across all property types. This is based on the reinvestment that is required within one year.

However, based on the 10 year forecast for the Housing facility condition indices, without significant reinvestment and due to the age of the housing portfolio, they would quickly deteriorate to fair and poor condition. Ongoing reinvestment will ensure service needs are being met.

The following table summarizes the facility ratings:

Housing Services Condition Rating		
Building Type	**Facility Condition Rating (1 year)**	
Social Housing Apartments	3.07	Good
Social Housing Family Homes	2.15	Good
Countyview Seniors Apartments	1.72	Good
TOTAL	**2.78**	**Good**

Conditions ratings further refined:

Building Type	**Excellent**	**Good**	**Fair**	**Total**
Social Housing Apartment	7	6	2	15
Social Housing Family Homes	18	57	13	88
Senior Housing Apartment		1		1
TOTAL	**25**	**64**	**15**	**104**

Facility Condition Index ratings are based the following:

Excellent <1%
Good – 1-5%
Fair – 5-10%
Poor – 10-30%
Very Poor - >30%

Current Levels of Service

The current service objectives for the County of Huron Housing Services facilities are as follows:

Service	Program Service Objectives	Community Levels of Service
Housing Services	Municipal buildings will be functionable, safe, accessible, comfortable and welcoming to the public, residents and staff.	- Buildings/site are kept in good condition - Buildings are safe, accessible and easy to navigate. - Parking space is adequate and well maintained - The internal building environment is comfortable - Building design and technology are energy efficient - Buildings have sufficient capacity to meet service needs - All buildings have adequate security.

Overall Condition and Performance ratings for Housing Services are as follows:

Target Asset Levels of Service (by Asset Class)	Current Asset Levels of Service					
	Asset Class Average	Distribution by Asset Rating				
		Very Good	Good	Fair	Poor	Very Poor
Condition	**Condition**					
Facility Condition Index = Good	2.78	24%	62%	14%	0%	0%
Performance	**Performance**					
Operational Functionality = Good	67%	0%	50%	50%	0%	0%
Capacity - Good	70%	0%	73%	27%	0%	0%
Operational Resiliency = Good	52%	0%	50%	0%	50%	0%
Environmental Resiliency = Good	57%	0%	0%	73%	27%	0%

Overall the asset class average is on target for overall condition ratings, and performing reasonable well with a fair status overall as a class with its performance measures. There are some issues with operational functionality, operational resiliency and environmental resiliency.

Capacity to meet demands does not take into account the waiting lists and overall need for housing. The availability of units relative to demand would be very poor if that was a consideration in this analysis.

Performance Ratings are based on the following likelihood of failure:

Very Good:	91 – 100	Lowest chance of failure
Good:	70 – 90	
Fair:	40 – 69	
Poor:	10 – 39	
Very Poor	<10	Highest chance of failure

Current Priority Projects

Priority projects for 2024 are:

- Gibbons St Housing build – Goderich
- Sanders St Housing build - Exeter
- Installation of Generator – Goderich
- Installation of Generator – Zurich
- Upgrade Exterior Cladding / Insulation - Goderich

General Lifecycle of the Asset

The current lifecycle for Housing Services that is set up for accounting purposes is listed below. This provides an approximate lifecycle, however, the actual replacement of the assets is based on the actual need.

As assets age, staff must decide when maintenance is no longer cost effective thereby requiring that the structure or components are to be replaced.

Asset Useful Life in Years	
Asset Type	Useful Life
Building	60
Building Electrical	20
Building Equipment	5
Building Exterior	20
Building Interior	20
Building Mechanical	20
Building Site	22

Apartments	50
Residential Family Units	30

Rehabilitation Needs and Sustainable Funding Levels

An estimated $18.5 million is required over the next 10 years for Housing Services. These are all standard lifecycle costs associated with asset components that are at end of life and require replacement to maintain the overall condition and performance of the County Housing portfolio. These costs are based on 2024 estimates and not indexed for future inflation.

The following table breaks down the replacement costs by period:

Housing Services - Asset Needs			
	2025-2029	**2030-2034**	**Total**
Housing Services - Capital	$10,289,500	$8,225,000	$18,514,500
Annual Average	$2,058,000	$1,645,000	$1,851,450

The costs over the next 10 year is frontloaded as there are some more immediate pressures in 2026 and 2027 with some of the required rehabilitation requirements as identified in the building condition assessments.

Currently budget funding levels for Housing Services falls significantly short of required expenditures by approximately $950,000 per year. Increased funding will be required to maintain the Housing portfolio in a reasonable state of repairs. The aging housing stock is creating pressures on available funding.

Operating Costs to Maintain Current Service Levels

Housing maintenance costs are estimated to average $275,000 annually, based on current 2024 levels. Over a 10 year period, with annual inflation at 3%, this is expected to rise to $359,000 by 2034.

10 Year Life Cycle Costing

10 YEAR LIFECYCLE COSTING				
		Average Years 1-5	Average Years 6-10	Total Average Years 1-10
HOUSING	Capital	$ 2,237,021	$ 2,052,471	$ 2,144,746
	Operating	$ 292,282	$ 338,835	$ 315,559
	Total	$ 2,529,303	$ 2,391,306	$ 2,460,304

Over the next 10 years, the total average cost of Housing capital and operating expenses is expected to average approximately $2.46 million. This is inflated based on 3% annually.

The required investment in Housing Services capital is included in the overall financing strategy presented in this report.

Growth Impacts on Infrastructure

Demand for social and affordable housing continues to increase. The County of Huron is investing in two new housing facilities - Sanders St in Exeter with a 20 unit building with an investment of $7.5 million and a 40 unit building in Goderich – Gibbons St, with an investment of $13.5 million. Future housing builds will be subject to available funding.

Desired levels of service

Key Indicator: *Response time to requests for work*

Issue
Calls for work are assessed regarding/based on level of urgency. The clients who request work include social housing tenants.
All tenants should receive confirmation of receipt of work order request within 24 hours, and be provided with an anticipated response time.

Potential Impact
Failure to assess and respond to problems may lead to increased damages if the maintenance concern is not identified within a timely manner. Also, a lack of a timely response to tenants may lead to decreased tenant satisfaction.

Current Controls
The tenants call the office and speak directly with the Maintenance Coordinator. The Maintenance Coordinator creates a work order in the property management software and advises the Maintenance Technician of the work to be completed via a phone call or faxes the work order to the site. When the work is completed, the Maintenance Technician indicates the completion information on the work order and faxes back to the office.

Action Plan
The Maintenance Coordinator is to continually monitor the status of all work orders that are incomplete. The continuous monitoring of all incomplete work orders will help to ensure that work does not remain unfinished or “fall through the cracks”.

Key Indicator: *Capital*

Issue

The Building Condition Assessments completed in 2023 indicate a much more substantial requirement for capital repairs than what the County has historically provided for the capital works budget.

Potential Impact
Many projects, in future years, will have to be deferred as the average capital allocation is substantially lower than the cost of the recommended repairs within the Building Condition Assessments.

Current Controls
A thorough analysis of the capital requirements is undertaken by Housing and Property Services to determine which capital projects are able to be funded each year.

Action Plan
It is anticipated that the process of completing the Asset Management Plan will result in a system within the County that recognizes the need for substantial capital repairs and works toward providing the funding allocations to enable the work to be completed.

Key Indicator: *Preventative Maintenance*

Issue
The role of preventative maintenance plays an important part in the longevity of a building and the cost efficiencies of a building.

Potential Impact
By monitoring building systems, providing a consistent, regular preventative maintenance program will significantly aid in reducing building costs. The cost savings will be realized through fewer system failures over time and the decreased need to replace components and systems.

Current Controls
The role of Preventative Maintenance Technician develops and implements a preventative maintenance program to ensure the components within the building envelope operate as efficiently as possible, leading to fewer repairs and replacements.

Key Indicator: *Energy Savings*

Issue
As energy costs increase, the need to reduce usage is recognized

Potential Impact
Utility costs have increased substantially and are predicted to continue in this manner.

Current Controls
Tenants are encouraged to reduce energy costs by keeping windows closed when heat or a/c is on, turning off lights, etc.
Low flush toilets and aerators have been installed, and some energy efficient lighting.

Action Plan
The legislated Green Energy Act, O/Reg 397/11 requires all municipalities to have in place energy conservation and demand management plans and Huron County is in compliance with this legislation.

Management Strategies – Housing Services

Legislative Requirements

The apartment buildings, detached houses and duplex units managed under the Huron County Housing Corporation are directly influenced by many legislative and regulatory requirements which prevent levels of service from declining below a certain standard, and ensures the total number of Social Housing units does not decrease.

Strategic and Corporate Goals

Infrastructure levels of service are influenced and guided by the County's strategic planning initiative. It is anticipated that the County's strategic plan will provide direction regarding the allocation of resources and the prioritization of how municipal tax dollars will be spent in the future.

Expected Asset Performance

As the buildings begin to age, the required upkeep is expected to increase to maintain levels of service. The detached houses, duplex units and row housing have an expected life span now at approximately 30 years. Many of these houses were constructed in the late 1940s and early 1950s, and are of basic construction. Although upgrades have been completed over the years, such as new windows, bathrooms, kitchens, toilets and insulation, these modest properties have had substantial wear and tear. These are substantial asset for the County, and the regeneration of these properties is vital to maintaining, or exceeding life expectancy of the buildings, and retaining legislated service level numbers.

Housing and Homelessness Plan
The Ministry of Housing, under the *Housing Services Act, 2011*, required all service managers to develop a long-term 10 year Housing and Homelessness Plan. The Plan assists in establishing priorities for housing and homelessness services based on targeted consultations and research. Based on a projected need forecast, the Plan makes several recommendations that address homelessness and affordable housing options, and has a strong emphasis on a mixed approach to housing needs. Budget impact will depend greatly on the direction and recommendations of the Housing and Homelessness's Steering Committee and the ongoing and potentially shifting needs of the County. The impact of these recommendations will be brought to County Council as required.

Energy Savings

As energy costs increase, the need to reduce utility consumption is recognized. The *Green Energy Act, O/Reg 397/11* requires all municipalities to have in place energy conservation and demand management plans. The County is compliant with this request. Housing Services recognizes the need for continuous energy upgrades, and targets capital and operating projects annually that will provide energy savings.

HOMES FOR THE AGED

Homes for the Aged

Scope of the Homes for the Aged Infrastructure

The County of Huron has 2 Homes for the Aged:

- Huronview Home for the Aged with 120 beds and Heartland Apartments with 20 apartments, located in Clinton
- Huronlea Home for the Aged with 64 beds and Highland Apartments with 20 apartments, located in Brussels

Current Replacement Value

The total estimated value of the Homes for the Aged assets is $34.2 million. This is based on $300 per square foot. However, with recent redevelopments of long term care homes, replacement costs could be as high as $1 million per resident bed, which is significantly higher than standard facility replacement costs being calculated below. The average age of the Homes for the Aged is 32 year old.

Home For The Aged - Replacement Value			
Asset Type	**Square Footage**	**2024 Replacement Cost**	**% of Total**
Huronview and Heartland	81,000	$19,798,200	58%
Huronlea and Highland	58,000	$14,399,600	42%
Total		$34,197,800	100%

Condition Assessment

Condition assessment rating was carried out on the Homes for the Aged asset network, in consultation with Homes for the Aged Department and a Building Condition Assessment completed in 2023, to identify the current replacement needs and building conditions. Based on the current Facility Condition Index, Huronview is in fair condition and Huronlea is in good condition. Overall, weighted based on square feet, the Homes in aggregate are in fair condition.

Homes for the Aged - Condition Assessment		
Home	**Facility Condition Index**	**Rating**

Huronview and Heartland	9.18	Fair
Huronlea and Highland	2.23	Good
Total	**6.28**	**Fair**

However, as the Homes are at end of life for much of the internal and mechanical systems, HVAC etc, the 10 year FCI projections are 21.04% for Huronview and 20.36% for Huronlea. If no rehabilitation is performed, in 10 years, the Homes will be in poor condition overall with some failures. Even based on the level of investment that is required to maintain the Homes over the next 10 years, it is still more cost effective to do so than it is to replace it with a new facility.

Both Homes, built in 1992, have been well maintained to date and are now at an age when ongoing capital expenditures will be necessary to continue their excellent level of service to the community.

Facility Condition Index ratings are based the following:

Excellent <1%
Good – 1-5%
Fair – 5-10%
Poor – 10-30%
Very Poor - >30%

Current Levels of Service

The current service objectives for the County of Huron Homes for the Aged are as follows:

Service	Program Service Objectives	Community Levels of Service
Homes for the Aged	Municipal buildings will be functionable, safe, accessible, comfortable and welcoming to the public, residents and staff.	- Buildings/site are kept in good condition - Buildings are safe, accessible and easy to navigate. - Parking space is adequate and well maintained - The internal building environment is comfortable - Building design and technology are energy efficient - Buildings have sufficient capacity to meet service needs - All buildings have adequate security.

Overall Condition and Performance ratings for the Homes for the Aged are as follows:

Target Asset Levels of Service (by Asset Class)	Current Asset Levels of Service					
	Asset Class Average	Distribution by Asset Rating				
		Very Good	Good	Fair	Poor	Very Poor
Condition	**Condition**					
Facility Condition Index = Good	6.28		50%	50%		
Performance	**Performance**					
Operational Functionality = Good	85		100%			
Capacity - Good	83		100%			
Operational Resiliency = Good	65			100%		
Environmental Resiliency = Good	70		100%			

Overall the asset class average has some gaps in overall condition and performance measure ratings, with the Homes in an overall fair condition. The Homes are performing well overall, despite their age, with some gaps in operational resiliency due to the generators. This is being addressed in 2024/2025.

Performance Ratings are based on the following likelihood of failure:

Very Good:	91 – 100	Lowest chance of failure
Good:	70 – 90	
Fair:	40 – 69	
Poor:	10 – 39	
Very Poor	<10	Highest chance of failure

Current Priority Projects

Priority projects for the Homes in 2024 are the replacement of the generators at each Home ($1.8 million for both), and the call bell system ($300,000) at Huronlea. These are included in the 2024 Budget.

For 2025-2027, the HVAC systems at both Homes require replacement ($1.1 million at Huronview, and $875,000 at Huronlea, over 3 years), plus the call bell system ($500,000) in 2025 at Huronview.

General Lifecycle of the Asset

The current lifecycle for the Homes for the Aged that is set up for accounting purposes is listed below. This provides an approximate lifecycle, however, the actual replacement of the assets is based on the actual need.

Asset Type - Homes for the Aged	Useful Life (years)
Building Envelope	60
Electrical	20
Equipment	5
Exterior	20
Interior	20
Mechanical	20
Site	22

Rehabilitation Needs and Sustainable Funding Levels

An estimated $13 million is required over the next 10 years for the Homes for the Aged. The majority of these costs are related to the HVAC systems at both Homes, call bell system at Huronview, and windows and roofing at both Homes. These are all standard lifecycle costs associated with asset components that are at end of life and require replacement to maintain the overall condition and performance of the Homes. These costs are based on 2024 estimates and not indexed for future inflation.

The following table breaks down the replacement costs by Home:

Homes for the Aged - Replacement Needs		
Home	**2025-2029**	**2030-2034**
Huronview and Heartland	$ 4,472,000	$ 3,560,000
Huronlea and Highland	$ 3,137,000	$ 1,824,000
Total	**$ 7,609,000**	**$ 5,384,000**

Costs are frontloaded in the next 5 years as many components are at end of expected life.

Reserve usage will be required in 2025 and again in 2030 to help offset the significant expected costs in those years. However, for the remaining years, current capital funding levels are sufficient, with some small increases where required.

Operating Costs to Maintain Current Service Levels

Building maintenance costs are estimated to average $248,000 annually, based on current 2024 levels. Over a 10 year period, with annual inflation at 3%, this is expected to rise to $267,000 by 2034.

10 Year Life Cycle Costing

10 YEAR LIFECYCLE COSTING				
		Average Years 1-5	Average Years 6-10	Total Average Years 1-10
HOMES	Capital	$ 1,627,209	$ 1,350,855	$ 1,489,032
	Operating	$ 230,329	$ 267,014	$ 248,672
	Total	$ 1,857,538	$ 1,617,869	$ 1,737,704

Over the next 10 years, the total average cost of Homes Capital and Operating expenses is expected to increase to average approximately $1.7 million per year. This is higher in the next five years due to some more immediate capital pressures with the HVAC systems.

The required investment in the Homes for the Aged capital is included in the overall financing strategy presented in this report.

Growth Impacts of Infrastructure

Currently there are no estimated impacts on the Homes due to population growth, as capacity is being increased in the private sector. The County is mandated to operate only one Home, and not required to increase capacity with increased demand for the services.

EMERGENCY SERVICES

Emergency Services

Scope of the EMS Assets

The County of Huron currently has: 13 Ambulances (including power loads), 5 Rapid Response units, 1 Emergency Support Trailer, 20 Defibrillators, 18 Stretchers, 13 Power Load, 15 Stairchairs and 17 Autopulse. These assets are managed by the Emergency Services department. The EMS Bases are included with Property Services.

ES Fleet Inventory		
Asset Type	**Asset Component**	**Quantity**
Ambulances	Vehicle	13
Rapid Response Units	Vehicle	5
Community Care Team Vehicles	Vehicle	3
Defibrillators	Vehicle Equipment	20
Autopulse	Vehicle Equipment	17
Stretchers	Vehicle Equipment	18
Stairchair	Vehicle Equipment	15
EM Trailer	Vehicle Equipment	1
Total		**92**

Current Replacement Value

The total estimated value of the EMS assets is $6.6 million. This is valued based on current pricing in 2024. The majority of the replacement value of the assets is with the Ambulances, at 69% of total asset value. Defibrillators are the second largest asset class at 13% of total EMS Fleet assets. The average age of the EMS Fleet assets is 4 years old.

EMS Fleet Replacement Value		
Asset Type	**Value**	**% of Total**
Ambulances	$ 4,550,000	69%
Rapid Response Units	$ 630,000	10%
Community Care Team Vehicles	$ 180,000	3%
Defibrillators	$ 840,000	13%
Autopulse	$ 238,000	4%
Stretchers	$ 25,200	0%
Stairchair	$ 90,000	1%

EM Trailer	$	50,000	1%
Total	**$**	**6,603,200**	**100%**

Condition Assessment

Condition assessment rating was carried out on the Emergency Services asset network, in consultation with Emergency Services Department, to identify the current conditions of the assets. Condition ratings are based on both age and physical condition of the assets. The results of the detailed condition assessment of the targeted Assets are summarized below in the table.

EMS Fleet Condition Rating		
Asset Type	**Rating**	
Ambulances	62	Fair
Rapid Response Units	70	Good
Community Care Team	80	Good
Defibrillators	81	Good
Autopulse	76	Good
Stretchers	55	Fair
Stairchair	60	Fair
EM Trailer	90	Good
Total	**68**	**Fair**

Overall, the EMS Fleet is in fair condition, with assets ranging from excellent to poor depending on their lifecycle replacement.

The condition rating relates to the age and usage of the overall vehicles or equipment and is a rating out of 100. When the rating is between 30 and 50 the item needs to be replaced. The rating system is as follows:

Excellent:	91 – 100	No evident defects
Good:	70 – 90	Slight decline
Fair:	51 – 69	Decline asset apparent
Poor:	30 – 50	Severe decline or failure

Current Levels of Service

The current service objectives for the County of Huron EMS Fleet is as follows:

Service	Program Service Objectives	Community Levels of Service
EMS Fleet	EMS Fleet vehicles and equipment will be safe, efficient and reliable	- EMS Fleet is kept in good condition, and meets required standards - EMS Fleet is efficient, reliable and cost effective - EMS Fleet has sufficient capacity to meet service needs - EMS Fleet reduces climate impacts where possible - EMS Fleet is safe, comfortable and accessible

Overall Condition and Performance ratings for the EMS Fleet is as follows:

Target Asset Levels of Service (by Asset Class)	Current Asset Levels of Service					
	Asset Class Average	Distribution by Asset Rating				
		Very Good	Good	Fair	Poor	Very Poor
Condition	**Condition**					
Vehicle Condition = Good	68	16%	46%	16%	22%	
Performance	**Performance**					
Operational Functionality = Good	73%		100%			
Capacity - Good	80%		100%			
Operational Resiliency = Good	80%		100%			
Environmental Resiliency = Good	86%		100%			

Overall the asset class average has some gaps in overall condition and performance measure ratings, with the EMS Fleet in an overall fair condition. The EMS Fleet is performing well functionally overall, with good overall performance ratings.

Performance Ratings are based on the following likelihood of failure:
Very Good: 91 – 100 Lowest chance of failure
Good: 70 – 90

Fair:	40 – 69	
Poor:	10 – 39	
Very Poor	<10	Highest chance of failure

Current Priority Projects

Two Ambulances are being procured in 2024, however, delivery will occur in 2025 as there is approximately a 18 month delay in delivery. One rapid response unit, some defibrillators, stairchairs and autopulse units are also being replaced as part of the normal cycle replacement.

For 2025, two ambulances will be replaced. Generally, 2 ambulances are replaced each year, with a third every 6th year.

General Lifecycle of the Asset

The table below highlights the general lifecycle replacement of the assets based on the accounting estimates. Actual replacement is not just based on the age of the asset, but also the actual condition. Some of the EMS fleet assets are replaced in accordance with the ambulance vehicle replacement cycle.

Asset Useful Life in Years	
Asset Type	Useful Life
Ambulances	6
Rapid Response Units	6
Defibrillators	6
Autopulse	6
Stretchers	6
Stairchair	6
EM Trailer	12

Rehabilitation Needs and Sustainable Funding Levels

An estimated $10.7 million is required over the next 10 years for the EMS Fleet. The majority of these costs are related to the replacement of the vehicles – Ambulances and Rapid Response Units. These are all standard lifecycle costs associated with Fleet assets that are at end of life and require replacement to maintain the overall condition and performance of the EMS Fleet program. These costs are based on 2024 estimates and not indexed for future inflation.

The following table breaks down the replacement costs by fleet category:

EMS Replacement Needs		
Asset Category	**Years 1-5**	**Years 6-10**
Vehicles	$ 4,235,000	$ 4,405,000
Defibrillators	$ 798,000	$ 798,000
Other	$ 248,400	$ 239,200
TOTAL	**$ 5,281,400**	**$ 5,442,200**

Sufficient funding is available annually to support the capital replacement, however, in the year where a 3rd ambulance is required, funding from reserves is required to supplement the available funding for EMS Fleet.

Operating Costs to Maintain Current Service Levels

EMS Fleet maintenance costs are estimated at $248,000 annually, based on current 2024 levels. Over a 10 year period, with annual inflation at 3%, this is expected to rise to $336,000 by 2034.

10 Year Life Cycle Costing

10 YEAR LIFECYCLE COSTING				
		Average Years 1-5	Average Years 6-10	Total Average Years 1-10
EMS FLEET	Capital	$ 1,153,312	$ 1,345,669	$ 1,249,491
	Operating	$ 274,087	$ 317,742	$ 295,915
	Total	$ 1,427,399	$ 1,663,411	$ 1,545,405

Over the next 10 years, the total average cost of EMS Capital and Operating expenses is expected to increase due to inflation, from $1.3 million per year to $1.68 million per year. Overall average cost per year is estimated at $1.54 million.

Growth Impacts on Assets

With increases in estimated call volumes, it is expected that an additional base will be required in 2026. With this additional base, will come the need to add an additional ambulance. Two additional ambulances are forecast for 2028 and 2029 as well due to anticipated growth. This will require additional funding to be raised in the County levy to support the initial cost, plus ongoing cycle replacement.

A study is being conducted in 2024 to review and update the current growth estimates on the EMS program in the County.

Library Services

Library Services

Scope of the Library Assets

The County of Huron - Library Services, provides services to residents of Huron County through its 12 branches, plus online platforms. The Branches are leased from the Lower Tier Municipalities, however, the County Library owns all of the assets in the Branch, including books, computers and fixtures (shelving etc). The Library owns approximately 211,500 assets available for circulation to Huron County residents, plus shelving and other fixtures at the 12 Branch locations.

The current list of circulation assets is as follows:

Library Services	
Asset Type	**Quantity**
Electronic Media	26,826
Mixed Media	68
Object	228
Printed Material/Books	182,676
Technology/Other	42
E Audio Books	792
E Books	867
Computers	51
TOTAL	**211,550**

Current Replacement Value

The total estimated value of the Library Services assets is $7.4 million. This is valued based on current pricing in 2024. The majority of the replacement value of the assets is with the printed material/books, at 57% of total asset value. Shelving at the branches is the second largest asset class at 30% of total Library assets. The average age of the Library assets is 10 years old.

The breakdown in value is as follows:

Library Services Replacement Value

Asset Type	Value		% of Total
Electronic Media	$	838,505	11.21%
Mixed Media	$	1,151	0.02%
Object	$	12,550	0.17%
Printed Material/Books	$	4,214,031	56.32%
Technology/Other	$	19,432	0.26%
E Audio Books	$	63,360	0.85%
E Books	$	34,380	0.46%
Shelving	$	2,245,000	30.01%
Computers	$	53,550	0.72%
TOTAL	**$**	**7,481,959**	**100%**

Condition Assessment

Condition assessment rating was carried out on the Library Services assets, in consultation with the Library staff, to identify the current conditions of the assets. Condition ratings are based primarily on the circulation of the assets. The results of the detailed condition assessment of the targeted Assets are summarized below in the table.

Library Services Condition Rating		
Asset Type	**Condition Rating**	
Electronic Media	Good	74
Mixed Media	Good	87
Object	Good	75
Printed Material/Books	Good	89
Technology/Other	Fair	48
E Audio Books	N/A	N/A
E Books	N/A	N/A
Shelving	Fair	50
Computers	Good	75
TOTAL	**Good**	**75**

Overall, the Library assets are in good condition, with assets ranging from excellent to very poor depending on their lifecycle replacement.

The condition rating relates to the age and available support and updates for the assets and is a rating out of 100. When the rating is below 39 the item needs to be replaced as reaching end of life. The rating system is as follows:

Excellent:	90 – 100	No evident defects
Good:	70 – 89	Slight decline

Fair:	40 – 69	Decline asset apparent
Poor:	10 – 39	Severe decline
Very Poor:	< 10	Out of support or possible failure

Current Levels of Service

The current service objectives for the County of Huron Library Services assets are as follows:

Library	Library services will be safe, accessible, comfortable and welcoming to the public and staff.	Library collections are current and relevant
		Library collections are kept in good condition
		Library collections have sufficient capacity to meet service needs
		Library spaces are comfortable, safe, accessible, and easy to navigate

Overall Condition and Performance ratings for the Library Services assets are as follows:

Target Asset Levels of Service (by Asset Class)	**Current Asset Levels of Service**					
	Asset Class Average	**Distribution by Asset Rating**				
		Very Good	**Good**	**Fair**	**Poor**	**Very Poor**
Condition	**Condition**					
Library Assets = Good	75	74%	16%	6%	3%	1%
Performance	**Performance**					
Operational Functionality = Good	70%		69%	31%		
Capacity - Good	72%		99%		1%	
Operational Resiliency = Good	76%		100%			
Environmental Resiliency = Good	43%		1%	31%	68%	

Overall the asset class average has some gaps in overall condition and performance measure ratings, with the Library Services assets in an overall good condition. The Library assets are performing well functionally overall, with good overall performance ratings, but with significant gaps in environmental resiliency.

Performance Ratings are based on the following likelihood of failure:

Very Good:	91 – 100	Lowest chance of failure
Good:	70 – 90	
Fair:	40 – 69	

Poor:	10 – 39	
Very Poor	<10	Highest chance of failure

Current Priority Projects

Current priority project for 2024 include ongoing circulation material refresh at approximately $276,000 per year, plus a partial refresh for the Clinton Library Branch which is required but on hold. The capital book budget is planned at approximately the same amount for the next couple of years.

General Lifecycle of the Asset

The general lifecycle for printed circulation material is based on the number of times the asset was circulated. The greater the circulation, the greater the wear on the asset impacting the replacement. The estimates on condition of the asset based on circulation is as follows, with poor to very poor requiring replacement.

Circulation

0-10 Very Good

11-20 Good

21-30 Fair

31-50 Poor

51+ Very poor

Age is also a factor as the older the book, the less attractive and relevant it may become to current users, so books over 10 years old with low circulation, regardless of condition, may be looked at for replacement as not meeting the overall service objectives of relevancy.

Rehabilitation Needs and Sustainable Funding Levels

An estimated $4.2 million is required over the next 10 years for Library Services. The majority of these costs are related to the replacement of circulation material and shelving. These are all standard lifecycle costs associated with assets that are at end of life and require replacement to maintain the overall condition and performance of the Library program. These costs are based on 2024 estimates and not indexed for future inflation.

The shelving included in the costs below is based on full replacement of the shelving in the branches, however, Library staff are often able to re-use the existing shelving thus favorably reducing the overall budget impacts. The suitability and condition of the existing shelving will be evaluated at the time of the branch refresh and only be replaced as necessary.

The following table breaks down the replacement costs by category:

Library Services Replacement Costs		
Asset Category	**Years 1-5**	**Years 6-10**

Circulation Assets	$1,380,000	$1,380,000
Shelving	$635,000	$725,000
Computers	$60,000	$60,000
TOTAL	**$2,075,000**	**$2,165,000**

Sufficient funding is available annually to support the capital replacement of circulation material, however, in the year where a large branch refresh is required, additional levy funds will have to be raised.

Operating Costs to Maintain Current Service Levels

The current operating costs for Library Services is with online subscription services and magazines. Annual operating costs to support current service levels is $117,300. These are not considered capital costs.

10 Year Life Cycle Costing

10 YEAR LIFECYCLE COSTING				
		Average Years 1-5	Average Years 6-10	Total Average Years 1-10
Library	Capital	$ 453,236	$ 547,136	$ 500,186
	Operating	$ 124,552	$ 144,390	$ 134,471
	Total	$ 577,789	$ 691,526	$ 634,657

Over the next 10 years, the total average cost of Library Capital and Operating expenses is expected to increase due to inflation, from $473,000 per year to $839,000 per year. Overall average cost per year is estimated at $634,000.

The required investment in Library Services capital is included in the overall financing strategy presented in this report.

Growth Impacts on Assets

The shift in technology to audio and electronic resources is having a greater impact on Library Services assets than population growth. With the shift, more subscription based services are being provided to residents, with annual subscription costs being paid vs having to purchase a printed book. The current Library budget is expected to be able to accommodate for this shift.

Information Technology

Information Technology

Scope of the Information Technology Infrastructure

The County of Huron manages a significant number of information technology assets across the County departments. Approximately 1,360 devices are being managed, ranging from servers, computers to cell phones.

The current list of assets is as follows:

Information Technology	
Asset Type	**Quantity**
Computers/Tablets	563
Servers (Physical)	10
Switches	91
Wireless Access Points	111
Universal Power Supply	53
Storage Devices	4
Appliances	4
Cell Phones/devices	245
Desktop Phones	282
TOTAL	**1,363**

Current Replacement Value

The total estimated value of the Infrastructure Technology assets is $1.6 million. This is valued based on current pricing in 2024. The majority of the replacement value of the assets is with the computers and tablets, at 41% of total asset value. Cell Phones are the second largest asset class at 14% of total IT assets. The average age of the IT assets is 6 years old.

The breakdown in value is as follows:

Information Technology Replacement Value		
Asset Type	**Replacement Value**	**% of Total**
Computers/Tablets	$ 644,000	41%
Servers (Physical)	$ 80,000	5%
Switches	$ 195,100	12%
Wireless Access Points	$ 179,900	11%
Universal Power Supply	$ 44,075	3%
Storage Devices	$ 110,000	7%
Appliances	$ 34,000	2%
Cell Phones/devices	$ 224,900	14%
Desktop Phones	$ 76,882	5%

TOTAL	**$**	**1,588,857**	**100%**

Condition Assessment

Condition assessment rating was carried out on the Information Technology assets, in consultation with the Business Technology Solutions Department (BTS), to identify the current conditions of the assets. Condition ratings are based primarily on age of the assets. The results of the detailed condition assessment of the targeted Assets are summarized below in the table.

Information Technology Condition Rating		
Asset Type	**Condition Rating**	
TOTAL	**43%**	**Fair**

Overall, the Infrastructure Technology assets are in fair condition, with assets ranging from excellent to very poor depending on their lifecycle replacement. It is essential to ensure proper lifecycle replacement of IT assets as if to old, they will be no longer supported by vendors with updates etc.

The condition rating relates to the age and available support and updates for the equipment and is a rating out of 100. When the rating is below 39 the item needs to be replaced as reaching end of life. The rating system is as follows:

Excellent:	90 – 100	No evident defects
Good:	75 – 89	Slight decline
Fair:	40 – 74	Decline asset apparent
Poor:	25 – 39	Severe decline
Very Poor:	0 – 24	Out of support or possible failure

Current Levels of Service

The current service objectives for the County of Huron Information Technology Infrastructure is as follows:

Service	Program Objective Statements	Community Levels of Service
Information Technology	IT network and equipment will be up to date, reliable and accessible	IT Assets are kept in good condition, up to date, and meets required standards
		IT Assets are efficient, reliable and cost effective
		IT Assets have sufficient capacity to meet service needs
		IT Assets are secure and accessible

Overall Condition and Performance ratings for the Information Technology infrastructure is as follows:

Target Asset Levels of Service (by Asset Class)	Current Asset Levels of Service					
	Asset Class Average	Distribution by Asset Rating				
		Very Good	Good	Fair	Poor	Very Poor
Condition	**Condition**					
Condition Index = Good	43%	0%	0%	56%	22%	22%
Performance	**Performance**					
Operational Functionality = Good	75%	0%	57%	43%	0%	0%
Capacity - Good	73%	0%	14%	86%	0%	0%
Operational Resiliency = Good	76%	0%	71%	29%	0%	0%
Environmental Resiliency = Good	71%	0%	14%	86%	0%	0%

Overall the asset class average has some gaps in overall condition and performance measure ratings, with the Information Technology infrastructure in an overall fair condition. The Information Technology infrastructure is performing well functionally overall, with both fair and good overall performance ratings.

Performance Ratings are based on the following likelihood of failure:

Excellent:	90 – 100	Lowest chance of failure
Good:	75 – 89	
Fair:	40 – 74	
Poor:	25 – 39	
Very Poor:	0 – 24	Highest chance of failure

Current Priority Projects

Cycle replacement of IT assets is included in the annual budgeting process, with ongoing replacement of computers, infrastructure devices and infrastructure hardware.

General Lifecycle of the Asset

The table below highlights the general lifecycle replacement of the assets based on general life expectancy of IT. Actual replacement is not just based on the age of the asset, but also the actual condition.

Information Technology	
Asset Type	**Lifecycle**
Computers/Tablets	4
Servers (Physical)	6
Switches	7
Wireless Access Points	6
Universal Power Supply	4
Storage Devices	6
Appliances	6
Cell Phones/devices	2
Desktop Phones	15

Rehabilitation Needs and Sustainable Funding Levels

An estimated $4.5 million is required over the next 10 years for the Information Technology assets and infrastructure. These are all standard lifecycle costs associated with IT assets that are at end of life and require replacement to maintain the overall condition and performance of the IT infrastructure. These replacement costs in the table below are based on 2024 estimates and not indexed for future inflation.

The following table breaks down the upcoming replacement costs for IT:

Information Technology - Asset Needs			
	2025-2029	**2030-2034**	**Total**
IT - Capital	$2,243,720	$2,233,942	$4,477,662
Annual Average	$448,744	$446,788	$447,766

A small increase in annual funding of approximately $100,000 will be required to ensure sufficient funding is available to maintain and update current network capabilities.

Operating Costs to Maintain Current Service Levels

Information Technology maintenance costs are estimated at $20,400 annually, based on current 2024 levels. Over a 10 year period, with annual inflation at 3%, this is expected to rise to $25,000 by 2034. Generally, IT assets are replaced rather than repaired.

10 Year Life Cycle Costing

10 YEAR LIFECYCLE COSTING				

		Average Years 1-5	Average Years 6-10	Total Average Years 1-10
IT	Capital	$ 482,040	$ 565,581	$ 523,810
	Operating	$ 20,420	$ 23,672	$ 22,046
	Total	$ 502,460	$ 589,252	$ 545,856

Over the next 10 years, the total average cost of IT Capital and Operating expenses is expected to increase due to inflation, from $502,000 per year to $589,000 per year. Overall average cost per year is estimated at $546,000. These costs are indexed by an estimate of 3% annually.

The required investment in Information Technology capital is included in the overall financing strategy presented in this report.

Growth Impacts on Infrastructure

As service demands and technology advancements continue to grow, demands increase on the Information Technology infrastructure. Modernization of our networks is an ongoing requirement and will require ongoing investments in upgrades.

County Forests and Natural Assets

County Forests and Natural Assets

Scope of the County Forest and Natural Assets

To comply with Ontario Regulation 588/17, and work towards key action items in our Corporate Climate Change Adaptation Plan and Forests For Our Future Forestry Management Plan, the County of Huron has begun to inventory and assess the County-owned natural assets to better understand how to sustain, prioritize, and manage this critical natural infrastructure for current and future use.

Municipal natural assets are considered "*the stocks of natural resources or ecosystems that contribute to the provision of one or more services required for the health, well-being, and long-term sustainability of a community and its residents."* (MNAI, 2017). Natural assets are a form of green infrastructure that includes wetlands, forests, parks, rivers, agricultural fields and soil (MNAI, 2017).

Accounting for the ecosystem services and functions that these natural assets provide the community can help with long term management and maintenance. The inclusion of these assets into the existing asset management framework brings them to the same level of importance and awareness as other engineered assets.

The County of Huron owns 14 County forests with a total of approximately 1,600 acres of forested area and 32 kilometers of multi-purpose trails.

County Forests and Natural Assets	
Tract	**Area (acres)**
Hay's Tract	7
Collins Tract	100
Robertson Tract	182
Stevenson Tract	200
Rodger Tract	98
Redmond Tract	150
Adams Tract	100
Moreland Tract	98
Sheppardton Tract	276
Stingel Tract	100
Taylor Tract	114
O'Connor Tract	50
Rea Tract	27
Bannockburn Site	85
TOTAL	**1,586**

Current Replacement Value

It is difficult to quantify an accurate replacement value of the County's natural forests and trail networks due to the length of time it would take to replicate our current forest tracts. While staff could quantify the cost of tree planting, it does not seem realistic in terms of how these properties have come under the ownership to the County as most were donated over time.

The current assessed value of the properties is available in the table below, plus there is significant economic value that these assets bring to the local community which we would like to highlight which would far exceed the assessed value below.

County Forests and Natural Assets	
Tract	**Assessed Value**
Hay's Tract	$ 168,000
Collins Tract	$ 198,000
Robertson Tract	$ 383,000
Stevenson Tract	$ 355,000
Rodger Tract	$ 158,000
Redmond Tract	$ 207,000
Adams Tract	$ 139,000
Moreland Tract	$ 100,000
Sheppardton Tract	$ 471,000
Stingel Tract	$ 188,000
Taylor Tract	$ 284,000
O'Connor Tract	$ 174,000
Rea Tract	$ 104,000
Bannockburn Site	$ 270,000
TOTAL	**$ 3,199,000**

In addition to replacement value, County staff has created a natural asset valuation for the County Forests and their beneficial impact on the local community. A summary of the analysis is included below:

Benefits	**Value/year ($)**	**Confidence Level**
Revenue from harvest	50,000	High
Recreation	2,778,018	Medium
Mental health	3,000,000	Low

Education	96,272	Medium
Carbon stock	30,508,125	Medium
Biodiversity	9,522	Low
Water filtration/flow	126,255	Low
Flood prevention	1,106,501	High
Air quality regulation	129,776,621	Low
Soil erosion prevention	72,338,920	Medium
Wetland (bundled services)	4,570,354	Low

Condition Assessment

The overall condition of the County's Forest Tracts is difficult to assess based on a specific quantitative metric, rather, how the assets are performing relative to their current levels of service is a more appropriate assessment of condition.

The following impacts could have a negative impact to the condition of the County forests and would require a more significant budget allocation:

- Destruction from non-permitted uses such as off-road vehicles;
- Impacts from climate change such as the spread of forest fires, tornadoes, and major flooding events could require major replanting, and replacement of infrastructure;
- The spread of invasive species could require major replantings and management upgrades to protect the biodiversity and structure of the County forests.

Current Levels of Service

The current service objectives for the County of Huron Forests and Natural Assets is as follows:

Service	Program Service Objectives	Community Levels of Service

County Forests and Natural Assets	Provide a safe and accessible network of recreational trails through responsibly managed natural areas which prioritize the diversity of native species to improve the community's resilience to climate change.	Forests are accessible, connected, safe, and kept in good condition
		Trails are comfortable to use for the permitted uses
		Forests prioritize native species
		Climate resiliency is prioritized
		Forests can meet public demand during summer and winter months

Overall Condition and Performance ratings for the County Forest and Natural Asset infrastructure is as follows:

Target Asset Levels of Service (by Asset Class)	**Current Asset Levels of Service**					
	Asset Class Average	**Distribution by Asset Rating**				
		Very Good	**Good**	**Fair**	**Poor**	**Very Poor**
Condition	**Condition**					
Condition Index = Good						
Performance	**Performance**					
Operational Functionality = Good	73	0%	64%	36%	0%	0%
Capacity - Good	80	0%	93%	7%	0%	0%
Environmental Resiliency = Good	57	0%	7%	93%	0%	0%

Overall, the County Forests are performing well overall, with good performance ratings for operational functionality and capacity, and fair for environmental resiliency. Poor ratings for invasive species and fair ratings for amount of biodiversity in our tracks are impacting the environmental resiliency ratings.

Performance Ratings are based on the following likelihood of failure:

Very Good:	91 – 100	Lowest chance of failure
Good:	70 – 90	
Fair:	40 – 69	
Poor:	10 – 39	
Very Poor	<10	Highest chance of failure

Current Priority Projects

For the County forests, harvesting schedules are more predictable based on the age, and condition of specific trees within each tract. Over the next 5 years, the County is expecting to conduct harvests of dead ash to prevent the release of carbon into the atmosphere, prevent safety concerns and generate revenue for the corporation while the trees are in the appropriate condition.

Current harvest plans for 2024-2025 are with the Adams, Collins and Rodger's Tracts with trees currently being marked. Robertson Tract is scheduled for 2025-2026 and the Stevenson Tract is scheduled for 2026-2027.

General Lifecycle of the Asset

The general lifecycle of the Forestry and Natural assets are as follows:

Asset Useful Life in Years	
Asset Type	**Useful Life**
Forests	No end of life
Parking Lots	22 years
Trails	100 years for multi-use trails
Boardwalks	15 years
Bridges	15 years
Signs	10-15 years
Logging Roads	100 years
Equipment	5-10 years

Actual rehabilitation and replacement is on an as required basis based on the actual condition of the asset.

Rehabilitation Needs and Sustainable Funding Levels

Minimal capital expenditures are required to support the forestry assets at current service levels. Harvest sales, plus the current Forestry reserve, will be sufficient to meet any upcoming needs.

Operating Costs to Maintain Current Service Levels

Forest tract and trail maintenance costs are estimated at $59,000 annually, based on current 2024 levels. Over a 10 year period, with annual inflation at 3%, this is expected to rise to $77,200 by 2034. Most of the ongoing costs for the Forestry assets are operating in nature.

10 Year Life Cycle Costing

10 YEAR LIFECYCLE COSTING				
		Average Years 1-5	Average Years 6-10	Total Average Years 1-10
Forestry	Capital			
	Operating	$ 62,824	$ 72,831	$ 67,827
	Total	$ 62,824	$ 72,831	$ 67,827

Over the next 10 years, the total average cost of Forestry Capital and Operating expenses is expected to increase due to inflation, from $59,000 per year to $77,200 per year. Overall average cost per year is estimated at $67,800. These costs are indexed by an estimate of 3% annually. These current service level costs can be supported by the existing budgets for Forestry.

Growth Impacts on Assets

Increasing usage of the trail networks in County Forests may require additional staff inspections and expansion of parking areas.

FINANCIAL ANALYSIS and SUSTAINABILITY

The County has a significant amount of infrastructure under its control, with current estimates of replacement value at approximately $1.66 billion in 2024. These figures are not adjusted for future inflation. Our current tax base (weighted assessment) is $10.08 billion. This represents a significant burden on our tax base to manage and maintain such a significant level of infrastructure – 16 cents on the dollar of weighted assessment. Looking at it per household, Huron County supports approx. $65,550 in infrastructure per household.

The following table provides the replacement value and average asset age details by asset type.

County of Huron - Asset Replacement Value				
Asset Type	**Total Qty**	**Current Replacement Cost ($)**	**Average Condition**	**Avg Age**
Roads	773 km	783,354,745	82 PCI	42
Bridges	81	282,206,575	70 BCI	58
Culverts-Large	211	108,903,993	65 BCI	55
Culverts-Small	1211	80,648,100	Fair	42
Driveway culverts	8,934	33,576,000	Fair	42
Patrol Yards	4	40,139,000	Good	22
Public Works Fleet	125	19,193,500	Fair	8
County Facilities	13	96,910,050	Good	43
Housing Apartments	16	126,700,000	Good	48
Residential Family Units	88	34,960,000	Good	67
Huronview and Huronlea	2	34,197,800	Fair	32
Ambulances and Equipment	92	6,603,200	Fair	4
Library Circulation assets	211,550	8,481,959	Good	10
IT Equipment/Phones	1,351	1,588,857	Fair	6
Forest Tracts	1586 acres	3,199,000	Good	N/A
TOTAL ASSETS		**$ 1,660,662,779**		

The most significant assets fall under the Public Works department with approximately 81% of the estimated replacement value.

However, it is important to note, that not all of the existing assets would be replaced today, or at the same service level. As the County moves forward with its asset management planning, decisions will have to be made on the existing levels of service.

The next two tables illustrates the capital replacement estimates over the next 10 years for the County, both in current year dollars and also inflated by 3% annually.

This is an estimated forecast amount, as desired level of services can change; driven by the needs of the community, and or changes in legislation, or changes due to unforeseen circumstances.

Capital Estimates in 2024 dollars

Asset Type	2025-2029	2029-2034
Roads	$ 35,266,250	$ 59,495,475
Bridges/Large Culverts	$ 24,325,267	$ 28,851,000
Culverts-Small	$ 1,500,000	$ 1,500,000
Patrol Yards	$ 2,150,000	$ 600,000
Public Works Fleet	$ 11,770,335	$ 7,272,060
County Facilities	$ 4,881,000	$ 2,903,500
Social Housing	$ 10,289,500	$ 8,225,000
Huronview and Huronlea	$ 7,609,000	$ 5,384,000
Ambulances and Equipment	$ 5,281,400	$ 5,316,200
Library Circulation assets	$ 2,075,000	$ 2,165,000
IT Equipment	$ 2,243,720	$ 2,233,942
Forest Tracts	$ -	$ -
Growth Impacts	$ 7,700,000	$ 1,200,000
TOTAL EXPENDITURES	**$ 115,091,472**	**$ 125,146,177**

Capital Estimates inflated by 3% annually

Asset Type	2025-2029	2029-2034
Roads	$ 37,980,591	$ 75,642,916
Bridges/Large Culverts	$ 26,176,596	$ 36,860,684
Culverts-Small	$ 1,631,523	$ 1,901,816
Patrol Yards	$ 2,239,700	$ 760,726
Public Works Fleet	$ 12,763,992	$ 9,189,573
County Facilities	$ 5,384,867	$ 3,645,991
Social Housing	$ 11,185,105	$ 10,262,353
Huronview and Huronlea	$ 8,136,046	$ 6,754,274
Ambulances and Equipment	$ 5,766,560	$ 6,728,345
Library Circulation assets	$ 2,266,181	$ 2,735,678
IT Equipment	$ 2,410,201	$ 2,827,903
Forest Tracts	$ -	$ -
Growth Impacts	$ 8,156,873	$ 1,537,097
TOTAL EXPENDITURES	**$ 124,098,236**	**$ 158,847,356**

The next table looks at what our potential debt capacity could be given current limits as established by the Ministry of Municipal Affairs, currently at annual repayment limit of

$14,473,008. The current repayment limit at end of 2023 is $616,000, with additional debt assumed in 2024 for the PW Wingham Patrol Yard, with an estimated annual repayment limit of $1,199,000. Total debt at end of 2023 is $5.75 million, with estimated total debt at end of 2024 at $11.6 million. The Annual Replacement Limit (ARL) is 25% of own source revenue, and current debt policy is a maximum of 50% of the total ARL, or $7.2 million in annual debt payments. The ARL will grow over time as taxes increase.

It is important to note that the repayment of debt will also drive up our current levy. Based on current interest rates, a 1% increase in the levy would support approx. $5.0 - $10 million in debt, depending on the term.

TERM	Rate	Max Annual Repayment Limit	50% Annual Repayment Limit	Debt raised with 1% Levy Impact
5Y	5.00%	$62,660,549	$ 31,330,275	$2,608,434
10Y	5.00%	$111,756,729	$ 55,878,365	$5,163,199
15Y	5.00%	$150,224,871	$ 75,112,436	$7,665,398
20Y	5.00%	$180,365,667	$ 90,182,834	$10,116,113
Levy Impact (%)		27%	14%	

Debt alone will not solve our pending asset management deficits, it will have to be an integral part of a four-pronged approach – senior government funding, reserves, debt and County levy.

FINANCING STRATEGY – 2025 - 2044

Staff have developed a financing strategy which will effectively address the upcoming infrastructure needs through to 2044. This strategy uses a combination of annual County levy increases for its capital, reserves

The tables below looks at a potential scenario which can be used to address the County's asset needs in the long term. Leveraging reserves, County levy with annual levy increases, senior government funding, and debenture financing, the County should be able to adequately fund the short and long term needs of the County.

Assumptions used in the Financing Strategy
- Based on 2024 cost estimated, inflated annually by 3%
- Extrapolated needs for Homes for the Aged, Housing and Property Services, and EMS based on 10 year annual average.
- Does not included Public Works Fleet, as that is self-funding
- Consistent annual funding levels for OCIF and Gas Tax Funding

- Reserve usage is from the County's capital reserves
- Debentures – Serial, 20 year term for amortization, a 4.5% interest rate consistent for each year
- Capital deferrals and bring forwards will be required as part of the strategy to smooth out peak years.

The following table shows the estimated capital needs for a 20 year period – 2025 – 2044. Total capital needs are estimated at $699 million for this period, with the peak needs in 2034 - 2044. For the purpose of the strategy, some costs from these peak periods have been deferred or brought forward in order to effectively manage peak needs. Current cost estimates excluding any inflation is current dollars is $499 million.

Pre-inflation in current dollars, the County will spend an average of $26.8 million in capital expenditures by 2044. Adjusted for inflation, average annual capital expenditures is estimated at $48.4 million in 2044.

Year	Capital Needs	Deferrals (illustrative)	Inflation	Revised Capital Needs
2025	$ 25,730,470		$ 771,914	$ 26,502,385
2026	$ 25,209,871		$ 1,535,281	$ 26,745,153
2027	$ 22,351,875		$ 2,072,622	$ 24,424,497
2028	$ 13,092,450	$ 4,000,000	$ 2,145,253	$ 19,237,703
2029	$ 16,811,470	$ 2,000,000	$ 2,996,179	$ 21,807,649
2030	$ 18,628,450		$ 3,614,894	$ 22,243,344
2031	$ 30,221,010	$ (6,000,000)	$ 5,567,777	$ 29,788,787
2032	$ 22,833,897		$ 6,091,401	$ 28,925,298
2033	$ 18,942,575		$ 5,773,189	$ 24,715,764
2034	$ 27,123,185		$ 9,328,108	$ 36,451,293
2035	$ 33,731,795		$ 12,960,898	$ 46,692,693
2036	$ 35,661,725	$ (5,000,000)	$ 13,054,563	$ 43,716,288
2037	$ 29,340,875		$ 13,747,189	$ 43,088,064
2038	$ 23,750,113	$ 5,000,000	$ 14,737,012	$ 43,487,125
2039	$ 33,163,442	$ (10,000,000)	$ 12,924,446	$ 36,087,888
2040	$ 19,303,142	$ 10,000,000	$ 17,719,799	$ 47,022,941
2041	$ 20,122,667		$ 13,137,036	$ 33,259,703
2042	$ 18,587,592	$ 7,500,000	$ 18,324,787	$ 44,412,380
2043	$ 30,681,867		$ 23,118,973	$ 53,800,840
2044	$ 33,745,112	$ (7,500,000)	$ 21,156,480	$ 47,401,592

TOTAL	**$ 499,033,585**			**$ 699,811,387**

The following table illustrates one scenario developed by staff which addresses the future requirements using a combination of Levy, Senior Government Funding, Reserves and Debentures. The current funding in the County's budget is insufficient for the upcoming needs, therefore, staff have applied an average annual increase of 2.30% in the overall County levy to support capital funding through to 2044. The strategy requires increases in the capital levy from $9,600,000 (current) to $38,181,000 in annual funding from the County levy in 2044. To achieve this increase from years 2025 – 2029, it will require an increase of 10% in the capital levy, in 2030 – 9.5%, 2031 – 9%, in 2032 – 8.5%, 2033-2034 – 8% and from 2035-2044 – 5%.

Reserve usage of $31 million and $32.7 million in debenture financing are required to address the upcoming capital needs.

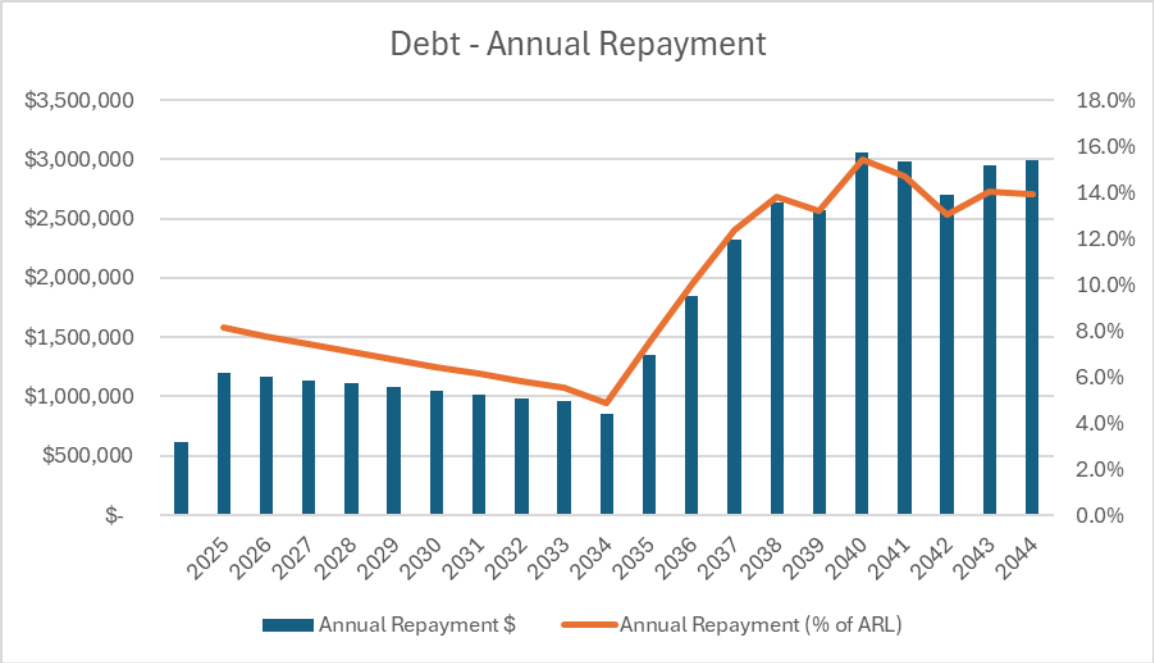
Year	Adjusted Capital		Capital Funding - Levy	Senior Government	Reserves	Debentures
	($'s)		($'s)	($'s)	($'s)	($'s)
2025	26,502,385		10,598,000	10,990,378	4,914,007	
2026	26,745,153		11,658,000	7,822,841	7,264,312	
2027	24,424,497		12,824,000	7,903,196	3,697,301	
2028	19,237,703		14,106,000	7,903,196	(2,771,493)	
2029	21,807,649		15,517,000	7,903,196	(1,612,547)	
2030	22,243,344		16,991,000	7,903,196	(2,650,852)	
2031	29,788,787		18,520,000	7,903,196	3,365,591	
2032	28,925,298		20,094,000	7,903,196	928,102	
2033	24,715,764		21,702,000	7,903,196	(4,889,432)	
2034	36,451,293		23,438,000	7,903,196	3,610,097	1,500,000
2035	46,692,693		24,610,000	7,903,196	8,679,497	5,500,000
2036	43,716,288		25,841,000	7,903,196	4,472,092	5,500,000

2037	43,088,064		27,133,000	7,903,196	2,551,868	5,500,000
2038	43,487,125		28,490,000	7,903,196	3,058,772	4,035,157
2039	36,087,888		29,915,000	7,903,196	(1,730,308)	
2040	47,022,941		31,411,000	7,903,196	1,824,824	5,883,921
2041	33,259,703		32,982,000	7,903,196	(7,625,493)	
2042	44,412,380		34,631,000	7,903,196	1,878,184	
2043	53,800,840		36,363,000	7,903,196	6,034,152	3,500,492
2044	47,401,592		38,181,000	7,903,196		1,317,396
TOTAL	**$699,811,387**		**$475,005,000**	**$161,070,747**	**$30,998,674**	**$32,736,966**

The following table illustrates the debenture financing, including, new annual debt, repayments, annual accumulated balance and interest. It also illustrates the annual repayment and the annual repayment in relation to the Annual Repayment Limit as established by the Ministry. The County is recommending a total Annual Repayment Limit of 50% of the established limit with 25% allocated to Asset Management Requirements and an additional 25% if required to respond to emergencies, peak period asset management pressures, and/or to meet senior government funding opportunities.

Debenture - 4.5% Serial 20 year							
Year	Beginning	New	Repayment	Ending	Interest	Annual Repayment $	Annual Repayment (% of ARL)
				$ -		$ 616,253	
2025	$ 11,636,424		$ (730,084)	$ 10,906,340	$ 468,644	$ 1,198,728	8.1%
2026	$ 10,906,340	$ -	$ (730,084)	$ 10,176,256	$ 438,680	$ 1,168,764	7.8%
2027	$ 10,176,256	$ -	$ (730,084)	$ 9,446,172	$ 407,717	$ 1,137,801	7.4%
2028	$ 9,446,172	$ -	$ (730,084)	$ 8,716,088	$ 378,138	$ 1,108,222	7.1%
2029	$ 8,716,088	$ -	$ (730,084)	$ 7,986,004	$ 347,789	$ 1,077,873	6.7%
2030	$ 7,986,004	$ -	$ (730,084)	$ 7,255,920	$ 317,824	$ 1,047,908	6.4%
2031	$ 7,255,920	$ -	$ (730,084)	$ 6,525,836	$ 286,861	$ 1,016,945	6.1%
2032	$ 6,525,836	$ -	$ (730,084)	$ 5,795,752	$ 257,108	$ 987,192	5.8%
2033	$ 5,795,752	$ -	$ (730,084)	$ 5,065,668	$ 226,933	$ 957,017	5.5%
2034	$ 5,065,668	$ 1,500,000	$ (590,084)	$ 5,975,584	$ 266,562	$ 856,646	4.9%
2035	$ 5,975,584	$ 5,500,000	$ (865,084)	$ 10,610,500	$ 490,940	$ 1,356,024	7.5%
2036	$ 10,610,500	$ 5,500,000	$ (1,140,084)	$ 14,970,416	$ 703,410	$ 1,843,494	10.0%
2037	$ 14,970,416	$ 5,500,000	$ (1,415,084)	$ 19,055,332	$ 902,694	$ 2,317,778	12.4%
2038	$ 19,055,332	$ 4,035,157	$ (1,616,842)	$ 21,473,647	$ 1,024,072	$ 2,640,914	13.8%
2039	$ 21,473,647	$ -	$ (1,616,842)	$ 19,856,805	$ 954,450	$ 2,571,292	13.2%
2040	$ 19,856,805	$ 5,883,921	$ (1,911,038)	$ 23,829,688	$ 1,149,858	$ 3,060,896	15.4%
2041	$ 23,829,688	$ -	$ (1,911,034)	$ 21,918,655	$ 1,067,205	$ 2,978,239	14.7%
2042	$ 21,918,655	$ -	$ (1,710,954)	$ 20,207,701	$ 986,000	$ 2,696,954	13.0%
2043	$ 20,207,701	$ 3,500,492	$ (1,885,979)	$ 21,822,214	$ 1,067,000	$ 2,952,979	14.0%
2044	$ 21,822,214	$ 1,317,396	$ (1,951,848)	$ 21,187,762	$ 1,041,000	$ 2,992,848	13.9%

Based on the scenario above, the County will maintain its annual repayment limit within the established goal of 50%, with the peak debt in 2040 at 15.4% of our annual repayment limit. This will still allow the County to maintain some flexibility for additional debt for emergencies or other requirements. The chart below illustrates the annual repayment in both dollars and %.



The County currently has approximately $24 million in its reserves that can be considered applicable for capital expenditures included in this plan. These funds will be required to be leveraged over the next 20 years in order to assist in addressing our asset management funding pressures to allow the capital levy funding to increase to required levels. Based on current scenarios, the capital reserves are not expected to replenish over the next 20 years.

County Capital Reserve Usage				
Year	**Beginning**	**Interest**	**Usage**	**Ending**
	($)	**($)**	**($)**	**($)**
2025	24,563,820	736,915	(4,914,007)	20,386,728
2026	20,386,728	611,602	(7,264,312)	13,734,018
2027	13,734,018	412,021	(3,697,301)	10,448,738
2028	10,448,738	313,462	2,771,493	13,533,693
2029	13,533,693	406,011	1,612,547	15,552,251

2030	15,552,251	466,568	2,650,852	18,669,671
2031	18,669,671	560,090	(3,365,591)	15,864,170
2032	15,864,170	475,925	(928,102)	15,411,993
2033	15,411,993	462,360	4,889,432	20,763,785
2034	20,763,785	622,914	(3,610,097)	17,776,602
2035	17,776,602	533,298	(8,679,497)	9,630,403
2036	9,630,403	288,912	(4,472,092)	5,447,223
2037	5,447,223	163,417	(2,551,868)	3,058,772
2038	3,058,772	91,763	(3,058,772)	91,763
2039	91,763	2,753	1,730,308	1,824,824
2040	1,824,824	54,745	(1,824,824)	54,745
2041	54,745	1,642	7,625,493	7,681,880
2042	7,681,880	230,456	(1,878,184)	6,034,152
2043	6,034,152	181,025	(6,034,152)	181,025
2044	181,025	5,431	-	186,456

There will some impacts to the County levy as a result of increased capital funding being raised through the annual budget process, as well funding for the annual repayment (principal and interest). The annual levy is required to be increased by approximately 2.33% annually through to 2044 in order to finance the required asset management expenditures.

All other operating budget increases or funding cuts excluded, it is estimated that the County levy will be required to increase to $83.7 million by 2044 in order to finance our infrastructure.

County Levy Impact					
Year	Annual Capital Funding Increase	Annual Repayment Increase	County Levy Increase	County Levy	Annual Levy % Increase
	($)	($)	($)	($)	%
2025	963,331	582,475	1,545,806	54,372,412	2.93%
2026	1,060,000	(29,964)	1,030,036	55,402,448	1.89%
2027	1,166,000	(30,963)	1,135,037	56,537,485	2.05%
2028	1,282,000	(29,579)	1,252,421	57,789,906	2.22%
2029	1,411,000	(30,349)	1,380,651	59,170,557	2.39%
2030	1,474,000	(29,965)	1,444,035	60,614,592	2.44%
2031	1,529,000	(30,963)	1,498,037	62,112,629	2.47%
2032	1,574,000	(29,753)	1,544,247	63,656,876	2.49%
2033	1,608,000	(30,175)	1,577,825	65,234,701	2.48%
2034	1,736,000	(100,371)	1,635,629	66,870,330	2.51%
2035	1,172,000	499,378	1,671,378	68,541,708	2.50%
2036	1,231,000	487,470	1,718,470	70,260,178	2.51%
2037	1,292,000	474,284	1,766,284	72,026,462	2.51%
2038	1,357,000	323,136	1,680,136	73,706,598	2.33%
2039	1,425,000	(69,622)	1,355,378	75,061,976	1.84%
2040	1,496,000	489,604	1,985,604	77,047,580	2.65%
2041	1,571,000	(82,657)	1,488,343	78,535,923	1.93%
2042	1,649,000	(281,285)	1,367,715	79,903,638	1.74%

2043	1,732,000	256,025	1,988,025	81,891,663	2.49%
2044	1,818,000	39,870	1,857,870	83,749,533	2.27%
Average increase to 2044					2.33%

An additional analysis was undertaken to determine if a higher debt strategy earlier on in the next 20 years would be more prudent and provide more favourable levy impacts. The end result by 2044 is a compounded annual increase of 2.35%, a final levy of $84.09 million, total debt issued of $110 million with an ARL of 43%, and an ending reserve balance of $23 million.

Outside of the 20 year period, through 2059, there are significantly greater annual expenditures that are required. Under both scenarios, there will be either additional debt capacity available to address the peak periods, or additional reserve capacity that will be available.

In order to provide sustainable capital funding, regardless of the specific strategy, annual increases in the overall County levy of 2.3%-2.5%, will be required. This will be above and beyond operating pressures also being experienced.