



2024 to 2026 Business Plan & Budget

Engineering Group - Infrastructure, GIS/Asset Management (AM) and Major Capital Projects (MCP)

Prior Year Accomplishments

Innovate for Service Excellence

All Divisions

- Representation on various committees and working groups such as Inter-Municipal Public Works Committee, Agricultural Advisory Committee, Vegetation Management Advisory Committee, Northumberland GIS Cooperative etc. to build relationships with member municipalities and coordinate services
- MCP participated in several shared services projects, in which both the County and member municipalities benefited
- Continued to call joint tenders, RFP's/RFQ's for the benefit of County and member municipalities including but not limited to:
 - Annual Culvert Supply
 - Microsurfacing
 - Crack Sealing
 - Pavement Markings
 - Roadside Safety Devices
 - Engineering, Environmental and Architectural Roster
 - Biennial Bridge Inspections (OSIMs)
- GIS services provided to member municipalities through the execution of five (5) GIS Managed Service Agreements and the Northumberland GIS Cooperative
- Progressed on the implementation of the People Plan to develop internal talent and enhance recruitment and retention of staff
- Completed staff training in the following areas for one or more staff members:
- Training:
 - OGRA: Manage the Road, Not Just the Pavement
 - LEED Green Associate Certification



- Health and Safety Training
- eSCRIBE Training
- OTM Book 7: Temporary Traffic Protection
- Mental Health First Aid
- IPWEA Professional Certificate in Asset Management Planning
- Managing and Leading in a Municipal Environment
- Indigenous Cultural Competency Training
- Workshops/Seminars/Webinars:
 - Plain Language Writing Workshop
 - Municipal Class Environmental Assessment (MCEA) Amendments Update
 - IPWEA Professional Certificate in Asset Management
 - AMO Asset Management Workshop
 - Esri Canada Webinars
 - TAC Webinars – Infrastructure, Asset Management, Climate Change
 - International Passive House Association-Project Spotlight: The world's biggest PH Premium – Erne Campus
 - Ontario Building Envelope Council-Building Tour (State Window Corporation)
 - City of Toronto-Heat Recovery (Make waste heat useful for decarbonization)
 - Passive House Pulse Toronto – Passive House and Rapid Housing
 - City of Toronto-Funding Information for Low-Carbon Retrofits with CMHC
 - Ontario Building Envelope Council-Strategic Planning and Managing an organization
 - City of Toronto-Environment & Climate Programs & Initiatives/Canada Greener Affordable Housing
 - International Passive House Association-Passive House for everyone: Education new generation
 - Ontario Building Envelope Council-Sustainable Glazing through Building Physics
 - City of Toronto-Policy Update: Emissions Performance Reporting and Standards for Existing Buildings
 - Evolving Climate Change and Extreme Weather Risk: How the Building and Development Community Should Prepare
 - Free-form Façades: A Survey of Optimization, Documentation, and Fabrication Methodologies
 - International Passive House Association-Project Spotlight: Passive House-Training Center in Trier
 - Take Control of your Energy Future - Zero Energy Multifamily Housing
 - Electrification, Decarbonization and LEED
 - Carbon Health Circle
 - Thermal Comfort – Unpacked
 - All Electric & Net Zero Energy Buildings



Ignite Economic Opportunity

All Divisions

- Continued investment in County infrastructure to support growing economy
- Major Capital Projects (MCP) updated a 10-year plan of potential projects for the MCP division
- 10 Year Capital Program for Roads/Bridges
- Review and approval of planning and development applications
- Completed the one year pilot program for the Commuter Connect Project in collaboration with the Economic Development, Tourism and Strategic Initiatives team for two new transit routes – the Northumberland Line and the Durham Line (Durham Line connected Cobourg and Port Hope to the Oshawa GO in partnership with Metrolinx)

Foster a Thriving Community

All Divisions

- Continued to consult public on various transportation related projects in 2023
- Continued to inform the public of upcoming construction dates, road closures, changes to area speed limits, etc. through various methods including mobilization of the County's four (4) electronic message board signs, social media, JoinIn Northumberland, radio, newspaper
- Received and responded to public inquiries and complaints
- Continued to develop and foster relationships with member municipalities, Alderville First Nation, neighbouring municipalities, and other organizations such as MTO, MECP, Conservation Authorities, OPP, Cobourg and Port Hope Police Services, etc.
- Major Capital Projects (MCP) updated a 10-year plan of potential projects for the MCP division including many affordable housing projects
- Construction on Phase 1 has been completed and construction on Phase 2 has begun on the Elgin Park Affordable Housing project. The anticipated completion for Phase 2 will be in early 2025
- Initiated design with the Architect and Construction Manager for the 473 Ontario Street Affordable Housing project. Design is anticipated to be complete in 2024, with Construction to follow. This project is a partnership between the Northumberland County Housing Corporation (NCHC), Ontario Aboriginal Housing Services (OAHS), and Habitat for Humanity Northumberland
- Completed Indigenous Cultural Competency Training (ICCT) through the Ontario Federation of Indigenous Friendship Centres for the broader project team for the 473 Ontario Street project
- Reviewed technical investigations and completed site evaluation for several potential sites for future housing and major building projects



Propel Sustainable Growth

Major Capital Projects

Golden Plough Lodge and Northumberland County Archives and Museum (GPLNCAM)

Redevelopment Project:

- Construction continued through 2023 with anticipated completion of Phase 1 in 2024
- Phase 2 and 3 (demolition of existing GPL and campus site works) is anticipated to be completed in 2025
- Planning and coordination for the procurement of furniture, fixtures and equipment as well as planning the logistics of moving residents in once completed is on-going

Joint Operations Base Feasibility Study

- The Joint Operations Base Feasibility Study was initiated in 2021 to determine the need for a new or expanded facility to accommodate Public Works, Plumbing and Inspection Services, Health, Safety and Emergency Preparedness, Natural Heritage, and Community and 911 Paramedics
- Managers and Directors from each department collaborated with the consultant through a series of workshops
- The feasibility study was finalized and was presented to County Council in 2023
- Trent River Crossing and Arterial Road Network (Campbellford Bridge) Implementation
 - Continued with detailed design for the new crossing as per the approved EA
 - A second Public Information Centre was held in April 2023 to present the 60% design
 - Continued to progress agency consultation and approval process
 - Continued with Indigenous engagement on the project through meetings with Alderville First Nations, Metis Nation of Ontario – Region 6, and Rama First Nations to provide updates on the project and solicit feedback for opportunities to incorporate indigenous design elements and culture into the design
 - Anticipate completion of design in early 2024 and subsequent completion of tender documents
 - Construction is anticipated to begin in 2025 and extend through to 2027

Infrastructure

- Continued management of County issued permits
- Issued the following permits within Northumberland County (as of September 26, 2023)
 - 21 Entrance Permits



- 36 Setback Permits
- 31 Permission to Open Cut Permits
- 36 Permission to Enter Permits
- 8 Permission to Bore Permits
- 22 Permission to Open Cut/ Bore (application was combined)
- 64 Wide Load Annual Permits
- 71 Wide Load Single Permits
- 12 Special Event Permit
- Completed the review of 14 utility municipal consents (MC's)
- Completed the review of over 20 planning inquiries / pre-consultation requests, over 48 Consent / Minor Variance / Zoning Bylaw Application Reviews, and 55 planning and development applications (Site Plan, Subdivision, and Residential Developments)
- Attendance at various pre-consultation and planning meetings for member municipalities, when possible (Town of Cobourg 3-4 per month, Municipality of Port Hope typically 1-2 per month, and other member municipalities as developments arise)
- On-going coordination and collaboration with utility companies to support new and updated utility infrastructure in the County right of way

Capital Works Construction Program

The capital works program is divided into four main areas: Pavement Rehabilitation and Maintenance, Traffic Safety Measures, Bridge Rehabilitation and Maintenance, and Service Expansion.

Pavement Rehabilitation and Maintenance:

The following capital projects were completed as part of our requirements to maintain and improve the road network:

- 2023 Paving Tender (13.80 km)
 - County Road 10 - 275m north of County Road 74 to 4th Line (1.80 km)
 - County Road 25 - 375m north of Oak Street to Tobacco Road (6.10 km)
 - County Road 50 – 11th Line West to Trent River Road (5.90 km)
- 2023 Microsurfacing Tender (5.9 km)
 - County Road 9 - Halstead Beach Road to County Road 18 (4.4 km)
 - County Road 18 - FF# 4325 to Minifie Road (1.5 km)
- 2023 Crack Sealing Tender (16.2 km) - completed 82,073 meters of crack sealing on the following roads:
 - County Road 9 from Beagle Club Road to County Road 45 (2.4 km)
 - County Road 25 from Huycke Road to Clarke Road (2.1 km)
 - County Road 26 from Dalwood Road to Highway 401 (2.7 km)



- County Road 29 from Glover Road to County Road 30 (2.7 km)
 - County Road 30 from County Road 35 to 9th Line (2.5 km)
 - County Road 45 from Baxter Road to Merrill Road (3.8 km)
- Continued EA and detailed design for County Road 64 road reconstruction project jointly with the Municipality of Brighton

Traffic Safety Measures:

- Traffic Signals
 - Completed all upgrades to the intersection of County Road 20 (Elgin Street) and Ontario Street in Cobourg
 - Smart Micro Sensor installed at the intersection of County Roads 18 and County Road 74
 - New controller installed at the intersection of Elgin Street and Birchwood Trail
 - Replacement of traffic heads and LED lights at various traffic signals throughout the County
 - Audible Pedestrian Signals (APS) installed at County Road 18 (Burnham Street) and Depalma Drive intersection in Cobourg
 - Completion of Spring and Fall maintenance on all traffic signals and flashing beacons throughout the County.
 - Implemented flashing beacons in five community safety/school zones to accompany speed limit reductions during school hours.
- Completed design and installation of approximately 1,560 metres of steel beam guiderail on County Roads (3-Cable Guide rail will no longer be installed on County Roads because of changes to OPS and MTO standards, except for minor repairs to existing post and cable)
- Continued to review and implement safety improvements identified in the TMP (i.e., Hamlet Entry Treatments, high collision intersections, etc.)
- Intersection Improvements:
 - Completed construction of modifications to County Road 18 at the intersections of Danforth Road and Telephone Road in Hamilton Township
 - Finalized feasibility study and initiated detailed design for improvements to the County Road 2/10/74 intersection in Welcome based on the recommendations from the Intersection Safety Review completed in 2019 including an online public information centre held in April, 2022 to present options and gather feedback
- Reviewed and continued monitoring radar speed sign data from nine (9) permanent locations and four (4) portable units
- Continued with implementation of a County Wide Speeding Awareness Campaign jointly with member municipalities and Police Services. The campaign slogan was 'Slow Your Roll Northumberland' and included the following strategies:
 - Radio and Print ads



- Roadside Signage
- Website and Social Media
- Digital pledge from residents to 'Slow their roll' and receive a window cling to install on their vehicle
- Prince Edward Street (County Road 64) at-grade crossing safety improvements
 - Successful in receiving funding from Transport Canada to complete detailed design and implement the at-grade crossing safety improvements (application submitted in summer 2019 in partnership with CNR, CPR and the Municipality of Brighton)
 - Successful in receiving funding from Transport Canada for communication and promotion of the at-grade crossing safety improvements
 - Completed the at-grade crossing safety improvements in coordination with CNR and CPR in Summer 2023
 - Implemented communication and promotion plan for the at -grade crossing safety improvements and general railway safety in coordination with Operation Lifesaver in Summer 2023
 - Completed a Before and After study of the crossing to gauge comprehension and compliance with the new measures, which showed a significant increase in compliance and understanding from road users after safety measures were implemented

Structure Rehabilitation and Maintenance:

- Completed the Braithwaite Bridge rehabilitation on County Road 24
- Completed the Hickerson Culvert Replacement on County Road 45 in Baltimore
- Completed the Thompson Bridge replacement in the Municipality of Trent Hills
- Completed the Campbellford Bridge Expansion Joint Replacements
- Completed detailed design, tender preparation, and approvals for the County Road 45 retaining wall in Baltimore
- Initiated the Municipal Class Schedule 'A' EA and detailed design for the rehabilitation of the Burnley Creek Bridge on County Road 25 in Warkworth
- Initiated the Municipal Class Schedule 'A' EA and detailed design for the replacement of the Lot 16 Concession 9 structural CSP culvert on County Road 25 in Warkworth
- Completed various minor repairs to various structures

Service Expansion

- County Road 2 EA Implementation
 - County Road 2 – phase II implementation between Rogers Rd and New Amherst Boulevard was anticipated to commence in 2019 pending approvals and coordination with the developer. Discussions with the developer were reinitiated in 2022 and the County was working with the developer on updating the design, issuing approvals, and coordinating the timing of construction.
- Cycling Master Plan (CMP) Implementation
 - Continue with long term implementation goals



- Continue to partner with the Town of Cobourg to find and apply to any available funding to continue the Multi-use trail on Elgin Street from William/Burnham Street to east of Ontario Street
- Provide on-going support to Communications and Economic Development and Tourism Departments to promote cycling routes within the County
- Transportation Master Plan (TMP) Implementation
 - Completed the 1-year pilot program (Commuter Connect) in partnership with Metrolinx to connect the communities of Northumberland with GO transit services in Oshawa
 - Continued with feasibility/conceptual design study for the relocation of the EDR in Cramahe and Brighton anticipated to be complete in 2024
 - Initiated review and development of a Rural Intersection Street Light Policy with anticipated completion in 2024
 - On-going review and development of various policies including Sign Policy and ATV Policy

GIS/Asset Management

- Continued implementation of GIS Cooperative strategic plan initiatives
 - On-going data collection, updates, and maintenance to County geodatabase
 - Continued GIS support for County departments, including Public Works, Forestry, Paramedics and Social Services
 - On-going development and maintenance of internal and external GIS Web applications
 - Continued development and maintenance of Cadastral Parcel Fabric project
 - On-going maintenance of road network and Fires Services data for all of Northumberland County
 - Implementation and maintenance of asset data contained in Asset Management Software, Cityworks
 - Execution of and support for Esri Multi-jurisdictional Enterprise License Agreement, including the County and six (6) member municipalities.
 - Provided year-round GIS services to the public and consultants
 - Implemented GIS Municipal Services Agreements with five (5) local municipalities and provided ad-hoc services to remaining member municipalities, including integration with Asset Management software solutions
 - Completed database upgrades to support hosting member municipalities data
 - Developed educational material for circulation to municipal staff and Councils for GIS Day
- Completed upgrade to Esri and Cityworks software to improve functionality and enhance available features
- Continued to provide technical support to staff for the implementation and roll-out of Cityworks asset management software, including custom report development



- Continued development of the County's Asset Management Plan to include all assets by July 1, 2024 in accordance with O.Reg.588/17
- Continued asset data collection to improve asset register
- Completed development of the County's Performance Indicator Hub including staff training in preparation for public roll out in 2024

Champion a Vibrant Future

- Continued to advocate for the extension of GO services to Northumberland County based on the economic impact study and business case completed in late 2021
- Completed the one-year pilot service for regional bus transportation service connecting the communities of Northumberland through a partnership with Metrolinx, with GO transit services in Oshawa and an extension of the pilot program is anticipated
- Continued to advance critical infrastructure projects included in the County's Development Charge Study to support growth in Northumberland
- Continued to advocate for funding from other levels of government for relocation of the EDR in Brighton and Cramahe

2024 to 2026 Service Objectives & Initiatives

Innovate for Service Excellence

All Divisions

- Continue with implementation of the People Plan and various initiatives to recruit and retain talent within the Engineering Division
- On-going research and staff training on sustainable building processes including the anticipated first Net Zero Energy and Zero Carbon Building at the 473 Ontario Street Affordable Housing Development Project
- Representation on various committees and working groups such as Inter-Municipal Public Works Committee, Agricultural Advisory Committee, Northumberland GIS Cooperative etc.
- Continue to call joint tenders, RFP's/RFAQ's for the benefit of County and member municipalities including but not limited to:
 - Annual Culvert Supply
 - Roadside Safety Devices
 - Biennial Bridge Inspections (OSIMs)
 - Microsurfacing
 - Crack Sealing
 - Pavement Markings
 - Engineering, Environmental and Architectural Roster



- Continue to provide GIS services to member municipalities through GIS Managed Service Agreements and the GIS Cooperative

Ignite Economic Opportunity

All Divisions

- Continue to update the 10-year plans for MCP and Infrastructure (Roads and bridges)
- Continue to progress planning/design and construction of infrastructure to support growing economy including housing, roads, and bridges
- Continue to advance and implement projects identified in DC Study
- Continue to analyze the feasibility of purchasing land for Housing or other corporate projects
- Continue to review and provide permits and approvals for planning and development applications and municipal consents for utilities
- Continue with implementation of One Window Permitting through Permit Central with plan to have all County Road permits in the new platform by end of 2025
- Continue to provide mapping and data through various online GIS apps and website

Foster a Thriving Community

All Divisions

- Continue to consult public on various engineering related projects and studies
- Receive and respond to public inquiries and complaints related to engineering services
- Continue to maintain and develop working relationships with member municipalities, Alderville First Nation, neighbouring municipalities, and other organizations such as MTO, MECP, Conservation Authorities, OPP, Cobourg and Port Hope Police Services, etc.
- MCP will continue to work closely with the County's Social Services department, the NCHC, and all housing partners and stakeholders in the design and construction of the 473 Ontario Street Affordable Housing Development, the construction of the Elgin Park Affordable Housing Redevelopment, and all other potential affordable housing or other corporate projects
- Continue to have open communication with the GPL community, neighbours, staff, residents, and residents' families as the project progresses through webpages, newsletters and social media regarding the construction progress of the GPLNCAM redevelopment

Propel Sustainable Growth



Major Capital Projects

- Continue to progress in the construction of the new GPLNCAM redevelopment with anticipated completion in 2025 (including demolition of existing building and completion of site works)
- Finalize the design and complete tender documents in 2024 and proceed to construction phase for the new Trent River Crossing and Arterial Road Network (2025-2027)
- Continue construction of the Elgin Park Affordable Housing Redevelopment with anticipated completion in 2025
- Complete the design phase for the 473 Ontario Street Affordable Housing Development Project and proceed to construction with anticipated completion in 2026
- Continue to progress the Joint Operations Base including locating and purchase of property and initiating design, pending Council approval
- Work with the Municipality of Brighton to advance the design and construction of a joint emergency services base in Brighton
- Continue to support all necessary due diligence studies for all potential affordable housing and building projects

Infrastructure

- Continue management of County issued permits
- Continue to review and approve utility municipal consents (MCs), permits and all planning and development applications as they relate to the County right-of-way (ROW)
- Continue to attend various pre-consultation and planning meetings with member municipalities and provide comments / feedback.
- In-house designs for drainage improvements on various County Roads
- Delivery of 2024-2026 Capital Construction Program (see attached 5-year plan)
 - The annual updating of the 10-year construction program for the County Road system has been prepared. This plan is compiled based on biennial pavement condition index (PCI) inspections, OSIM inspections, traffic volumes, identified safety concerns, previous studies and Master Plans, input from County maintenance and operations staff, as well as our member municipalities.
 - The plan covers four main areas in Transportation: Pavement Rehabilitation and Maintenance, Traffic Safety Measures, Structure Rehabilitation and Maintenance and Service Expansion.
 - The Infrastructure division will continue to look for efficiencies and strive for competitiveness and transparency in the procurement of contracted services for the major construction contracts for Roads and Bridges.

GIS/Asset Management

- Continue implementation of GIS Cooperative strategic plan initiatives
 - On-going data collection, updates and maintenance to County geodatabase



- Continued GIS support for County departments, including Forestry, Planning, Social Services and Paramedics
- On-going development and maintenance of internal and external GIS Web applications for the County and member municipalities
- Continue development and maintenance of Cadastral Parcel Fabric project
- On-going maintenance of road network and Fire Services data for all of Northumberland County
- Implementation and maintenance of asset data contained in Asset Management Software
- Provide year-round GIS services to the public, consultants and area municipalities through the permanent GIS Coordinator positions
- On-going administration of the Esri Multi-jurisdictional Enterprise License Agreement (ELA), including the County and six (6) member municipalities.
- On-going implementation of GIS Municipal Services Agreements with five (5) local municipalities and provide ad-hoc services to remaining member municipalities, including integration with Asset Management software solutions
- On-going development and administration of County Performance Indicator Hub (KPI site)
- Creation of Open Data Hub as per the County's Digital Strategy
- Continue to provide technical support for implementation and roll-out of Cityworks asset management software
- Continue development of the County Asset Management Plan to include all additional assets by July 1, 2024, as per O.Reg.588/17

Champion a Vibrant Future

- Continue to advocate for the extension of GO services to Northumberland County based on the economic impact study and business case completed in late 2021
- Continue to collaborate with the Economic Development, Tourism and Strategic Initiatives team to implement and monitor the extended pilot service for regional bus transportation service connecting the communities of Northumberland with GO transit services in Oshawa
- Continue to advance critical infrastructure projects included in the County's Development Charge Study to support growth in Northumberland as outlined in the 5 year Capital Construction Plan
- Continue to advocate for funding from other levels of government for relocation of the EDR in Brighton and Cramahe

Long Term Plan & Strategic Objectives

Innovate for Service Excellence

All Divisions

- Continue with implementation of the People Plan and various initiatives to recruit and retain talent within the Engineering Division
- Representation on various committees and working groups such as Inter-Municipal Public Works Committee, Agricultural Advisory Committee, Northumberland GIS Cooperative etc.
- Continue to provide GIS services to member municipalities through GIS Managed Service Agreements and the GIS Cooperative
- Continue discussions and explore other opportunities for shared resources/managed service agreements with member municipalities

Ignite Economic Opportunity

All Divisions

- Continue to update the 10-year plans for MCP and Infrastructure (Roads and bridges)
- Continue to progress planning/design and construction of infrastructure to support growing economy including housing, roads, and bridges
- Continue to advance and implement projects identified in DC Study
- Continue to analyze the feasibility of purchasing land for Housing or other corporate projects
- Continue to review and provide permits and approvals for planning and development applications and municipal consents for utilities
- Continue to provide mapping and data through various online GIS apps and website

Foster a Thriving Community

All Divisions

- Continue to develop and provide public consultation and communication on projects and initiatives using various methods including JoinIn Northumberland
- Receive and respond to public inquiries and complaints related to infrastructure, MCP, and GIS/AM in an effective and efficient manner
- Continue to maintain and develop working relationships with member municipalities, Alderville First Nation, neighbouring municipalities, and other organizations such as MTO, MECP, Conservation Authorities, OPP, Cobourg and Port Hope Police Services, etc.
- Continue to develop projects with our member municipalities through shared services, and to work with various County departments on long term building plans. i.e. Affordable Housing, Transportation, Paramedics and Forestry



- Continue to work with Ontario Aboriginal Housing Services, Habitat for Humanity Northumberland, Northumberland County Housing Corporation for Affordable Housing developments

Propel Sustainable Growth

Major Capital Projects

- Work with Community and Social Services, NCHC, and Facilities on a plan to increase County Housing Stock to required levels
- Work with Northumberland Paramedics on plans for new bases
- Continue to advance design and plan for phased construction of the Joint Operations Base
- Work with Infrastructure on plans for large Transportation projects identified in the TMP

Infrastructure

- With on-going budgetary pressures to meet needs identified in the County's Asset Management Plan, continue to advocate for and use all available funding sources for capital construction including gas tax funding, OCIF formula-based funding, use of development charges applicable to roads, structures and storm sewer and the dedicated infrastructure levy

10 Year Construction Plan:

In 2023, County of Northumberland Staff completed the biennial update of the pavement condition index (PCI) survey of the County Road system using the evaluation system developed by the Ontario Good Roads Association. The system provides a series of standardized factors used to develop a "snapshot" of the physical condition of the entire road network.

The PCI survey is the foundation for the development of the 10-year road construction program, along with traffic count updates and collision data. According to the MTO procedures and documentation, the PCI should be used to determine the need and timing for a road to be rehabilitated. The results of the 2023 PCI evaluation are summarized in the table below, which includes data from prior years for comparison purposes.

The desirable target for system adequacy is 70% and it is presently at 55% which is a slight increase from the 2020 adequacy of 54%. Although the adequacy has not changed significantly, there has been a shift in some of the adequate roads to fair (6-10 year) roads and aligns with the increase in pavement preservation to target road in the 6-10 year range to increase the life expectancy. There has also been continued reduction in 'Now rehabilitate' roads from 17% in 2014 to 2% in 2023 as these road sections have been priority in the capital plan over the past 5 years. This reduces high maintenance and operations costs and puts this category within the targeted range to reduce maintenance costs while still achieving full life expectancy.



It is important to note that in 2003, only 24% of the County Road system was deemed as 'adequate'. While significant progress has been made, the overall budget does not meet the needs for road, bridge and storm sewer rehabilitation, operations, and maintenance, nor the needs in other areas for safety improvements and service expansion as a result of growth and approved Environmental Assessments and the County's first Transportation Master Plan. The County's approved Asset Management (AM) Plan for core assets (roads, structures, and storm sewer) identifies the necessary funding required to provide services is \$29M on average per year over the 10-year planning period. The anticipated planned budget for core assets leaves a shortfall of \$9.2M on average per year. These needs are outlined in further detail in the AM Plan with the intention to focus on these areas in the next ten years.

See the summary Chart 1 of 2023 PCI Road Needs – System Adequacy



2023 PCI Road's Needs – System Adequacy

	PCI Rating	2003 KM	%	2006 KM	%	2008 KM	%	2010 KM	%	2012 KM	%	2014 KM	%	2016 KM	%	2018 KM	%	2020 KM	%	2023 KM	%
Adequate	> 85	121.9	24%	245.2	49%	255.4	51%	280.0	56%	287.6	57%	272.1	54%	305.2	62%	316.7	63%	266.7	54%	275.9	55%
6 to 10 Years	76 to 85	152.3	30%	86.1	17%	67.5	13%	76.8	15%	74.7	15%	79.9	16%	83.6	17%	84.1	17%	127.2	26%	138.5	28%
1 to 5 Years	56 to 75	209.3	42%	119.9	24%	132.6	26%	113.8	23%	85.4	17%	64.6	13%	29.3	6%	44.8	9%	76.3	15%	73.9	15%
NOW - Rehabilitate	1 to 55	19.5	4%	51.5	10%	47.7	9%	32.8	7%	55.5	11%	86.5	17%	75.7	15%	49.0	10%	24.9	5%	9.3	2%



GIS/Asset Management

- Continue implementation of GIS Cooperative strategic plan initiatives
- Continue to collect additional data, enhance and expand the County's geodatabase and web applications, to improve overall quality and quantity of data
- Continue to provide technical support for implementation and roll-out of Cityworks asset management software expansion to other areas within the County
- Continue to update and work on the improvements identified in the improvement plan section of the County Asset Management Plan as per O.Reg.588/17

Champion a Vibrant Future

All Divisions

- Continue to advocate to other levels of government for sustainable long term funding models to address the needs in the County's Asset Management Plan for infrastructure and services
- Continue to work with all partners on the planning, design and construction of affordable housing developments
- Continue to advocate for the extension of GO services to Northumberland County and consider other options for regional transportation

Type of Project	Location	2024		Road Section	Municipality	Length (km)	Estimated Cost
1. Pavement Rehabilitation and Maintenance	County Road 64 - Harbour Street to Stoney Point Road (Phase 1 rural Construction and Phase 2 preparatory works)		064000/064017/064043		Brighton	4.90	\$ 3,520,000
	Welcome Intersection Improvements - Year 1		102070/074000/010000		Port Hope	0.95	\$ 510,000
	County Road 15 - County Road 9 to Harwood south limit (pulverize and pave)		015116		Hamilton	2.90	\$ 1,700,000
	County Road 41 - County Road 30 to County Road 26 (Pulverize and Pave 100mm)		041000/041017		Brighton	4.00	\$ 1,900,000
						12.75	
	County Road 25/County Road 22 - Castleton - Preliminary and Detailed Design		025106/022136		Cramahe	1.70	\$ 70,000
	Miscellaneous Padding						\$ 100,000
	Crack Sealing						\$ 100,000
	Design/Geotech/Material Testing/Professional Services						\$ 100,000
	Pavement Preservation						
	Annual Allowance						\$ 800,000
							\$ 8,800,000
2. Traffic Safety Measures	Traffic Control Signals and Streetlights						\$ 100,000
	Guiderail Replacement/Safety Improvements						\$ 200,000
	Intersection Improvement Program						\$ 100,000
							\$ 400,000
3. Structures Rehabilitation & Maint. For Bridges, Culverts & & Retaining Walls	Bridge Rehabilitation - Tender						
	Burnley Creek Bridge (25261) - Rehabilitation		\$ 800,000.00				
	County Road 45 Roseneath Retaining Wall (000051) - replacement		\$ 100,000.00				
	428 Elgin Street Retaining Wall (000042) - rehabilitation		\$ 150,000.00				
	Burnley Bridge (29080) - Design and Tender		\$ 75,000.00				
	45111 Culvert (45111) - Design and Tender		\$ 50,000.00				
	Lot 16 Concession 9 Culvert (25213) - Replacement		\$ 775,000.00				
			\$ 1,950,000.00				\$ 1,950,000
	Bridge Reserve (future new bridges or major rehabilitation)						\$ 50,000
	Bridge Inspections (OSIM), structural evaluations, detailed deck conditions surveys						\$ 130,000
	Bridge/Culvert Maintenance						\$ 180,000
	Bridge - Time & Material Repairs						\$ 20,000
							\$ 2,330,000

**Chart Continues on the following page



Type of Project	Location	2024		Road Section	Municipality	Length (km)	Estimated Cost
4. Service Expansion	GIS						\$ 80,000
	Cycling Master Plan/Active Transportation						\$ 50,000
	Transportation Service Improvement needs indentified by Transportation Master Plan or other EA Processes						\$ 100,000
	Trent River Bridge Crossing (Campbellford) - detailed design, additional studies, property acquisition, etc.						\$ 1,176,955
	Master Drainage Plan - Hamilton Unnamed 07 East Tributary - EA for Area 'B' (joint with Cobourg) - Year 1						\$ 50,000
	Locates (On1Call, Promark)						\$ 75,000
	<u>Development Charge Supported</u>						
	County Road 2 EA - Additional Studies (Waterfront Trail EA, Detailed Design, etc.)	DC #4					\$ 50,000
	County Road 2 EA - Phase II-b - Rogers Road to Lovshin/New Amherst Widening - Year 1	DC #5					\$ 1,300,000
	Elgin Street Widening - D'Arcy Street to Brook Road North (Detailed Design)	DC #7					\$ 205,375
	Elgin Street & D'Arcy Street Intersection Improvements (Detailed Design)	DC #10					\$ 30,000
	Elgin Street & Brook Road Intersection Improvements (Detailed Design)	DC #11					\$ 30,000
	Brook Road Widening - South of Brook Road (Detailed Design)	DC#8 (North Portion)					\$ -
	Brook Road CN/CP Rail Grade Crossing (EA - Year 1)	DC#14					\$ 25,000
							\$ 3,172,330
						TOTAL ESTIMATE FOR 2024	\$ 14,702,330
							AVAILABLE FUNDING
Notes:						Base	\$ 8,460,095
1. Class 3 estimates; subject to final tender results						Gas Tax	\$ 2,364,412
2. Subject to Council budget approval						Develoment Charge Funding	\$ 1,541,359
						2024 OCIF Formula Funding (assumed)	\$ 1,276,955
						Dedicated Infrastructure Levy (DIL)	\$ 1,060,000
TOTAL FUNDS SAVED for Trent River Bridge Crossing in 2024			\$1,176,955			Total	\$ 14,702,821

Type of Project	Location	2025		Road Section	Municipality	Length (km)	Estimated
							Cost
1. Pavement Rehabilitation and Maintenance	County Road 64 (Prince Edward Street) - Main Street to Harbour Street (Phase 2 Construction)		064000/064017/064043	Brighton	1.80	\$	4,370,000.00
	Welcome Intersection Improvements - Year 2		102070/074000/010000	Port Hope	0.95	\$	2,740,000
	County Road 2 - Hwy 401 Overpass to Limit of Intersection Works		102096	Port Hope	1.10	\$	495,000
					3.85		
	County Road 31 - Front Street to Jurisdictional Boundary with A/H (Utility Relocation and Future Construction)		031000	Cramahe & A/H	1.00	\$	492,000
	County Road 23 and County Road 2 - In Grafton Urban Area (Design)		102378/023000	A/H	0.80	\$	70,000.00
	County Road 2A - Hastings Village West Limit to Bridge Street North in Hastings Urban Area (Design)		002005	Trent Hills	0.40	\$	60,000.00
	Miscellaneous Padding						\$ 100,000.00
	Crack Sealing						\$ 100,000.00
	Design/Geotech/Material Testing/Professional Services						\$ 100,000.00
	Pavement Preservation						
	Annual Allowance						\$ 750,000.00
							\$ 9,277,000.00
2. Traffic Safety Measures	Traffic Control Signals and Streetlights						\$ 100,000.00
	Guiderail Replacement/Safety Improvements						\$ 200,000.00
	Intersection Improvement Program						\$ 100,000.00
							\$ 400,000.00
3. Structures	Bridge Rehabilitation - Tender						
	Rehabilitation & Maint. For Bridges, Culverts & Retaining Walls	Burnley Bridge (29080) - Replacement	\$ 1,400,000.00				
		45111 Culvert (45111) - Replacement	\$ 800,000.00				
		25168 Culvert (25168) - Design and Tender	\$ 75,000.00				
		Killoran Creek Culvert (25391) - Design and Tender	\$ 75,000.00				
		Ganaraska Culvert (009076) - Design and Tender	\$ 50,000.00				
			\$ 2,400,000.00				\$ 2,400,000
	Bridge Reserve (future new bridges or major rehabilitation)						\$ 100,000
	Bridge Inspections (OSIM), structural evaluations, detailed deck conditions surveys						\$ 45,000
	Bridge/Culvert Maintenance						\$ 100,000
	Bridge - Time & Material Repairs						\$ 50,000
							\$ 2,695,000

**Chart Continues on the following page

Type of Project	Location	2025		Road Section	Municipality	Length (km)	Estimated Cost
4. Service Expansion	GIS						\$ 80,000.00
	Cycling Master Plan/Active Transportation						\$ 50,000.00
	Transportation Service Improvement needs indentified by Transportation Master Plan or other EA Processes						\$ 100,000.00
	Master Drainage Plan - Hamilton Unnamed 07 East Tributary - EA for Area 'B' (joint with Cobourg) - Year 2						\$ 50,000
	Locates (On1Call, Promark)						\$ 75,000.00
	<u>Development Charge Supported</u>						
	County Road 2 EA - Additional Studies (Waterfront Trail EA, Detailed Design, etc.)	DC #4					\$ 100,000.00
	County Road 2 EA - Phase II-b - Rogers Road to Lovshin/New Amherst Widening - Year 2	DC #5					\$ 1,800,000.00
	Elgin Street Widening - D'Arcy Street to Brook Road North (Utility Relocation)	DC #7					\$ 432,400.00
	Elgin Street & D'Arcy Street Intersection Improvements (Construction)	DC #10					\$ 565,000.00
	Elgin Street & Brook Road Intersection Improvements (Detailed Design)	DC #11					\$ 30,000.00
	Brook Road Widening - South of Brook Road (Detailed Design)	DC #8 (North Portion)					\$ -
	Brook Road CN/CP Rail Grade Crossing (EA - Year 2)	DC#14					\$ 75,000
	Trent River Crossing and Arterial Road Network (Construction Year 1)	DC#3					\$ 985,411.75
							\$4,342,812
						TOTAL ESTIMATE FOR 2025	\$16,714,812
							AVAILABLE FUNDING
Notes:						Base	\$ 8,960,095
1. Class 3 estimates; subject to final tender results						Gas Tax	\$ 2,364,412
2. Subject to Council budget approval						Develoment Charge Funding	\$ 3,294,146
						2025 OCIF Formula Funding (assumed)	\$ 1,085,412
						Dedicated Infrastructure Levy (DIL)	\$ 1,011,000
						Total	\$ 16,715,064



Location	2026		Road Section	Municipality	Length (km)	Estimated Cost
County Road 23 and County Road 2 - In Grafton Urban Area			023000/102378	Alnwick/Halifax	0.70	\$ 1,850,000
County Road 2A - Hastings Village West Limit to Bridge Street North in Hastings Urban Area			002000/002005	Trent Hills	0.50	\$ 1,540,000
County Road 25 - Structure 025104 to Cemetery North Entrance (Urban, grind and pave) and County Road 22 from FF1851 to			025106/022136	Cramahe	1.70	\$ 1,500,000
County Road 30 - FF6378 to County Road 35			30332	Trent Hills	1.30	\$1,200,000
					4.20	
County Road 31 - Front Street to Jurisdictional Boundary with A/H (Construction - Road Urbanization & Storm Sewer)				Cramahe & A/H	1.00	\$ 1,144,900.00
County Road 20 (Burnham to Ontario Street) - Design including storm sewer						\$150,000
Misc Padding						\$ 100,000
Crack Sealing						\$ 75,000
Design/Geotech/Material Testing/Professional Services						\$ 75,000
<u>Pavement Preservation</u>						
Annual Allowance						\$ 900,000
						\$ 8,534,900
Traffic Control Signals and Streetlights						\$ 100,000
Guardrail Replacement/Safety Improvements						\$ 200,000
Intersection Improvement Program						\$ 100,000
						\$ 400,000

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Type of Project	Location	2027		Road Section	Municipality	Length (km)	Estimated
							Cost
1. Pavement Rehabilitation and Maintenance	County Road 20 - County Road 18/Burnham Street to Ontario Street (including MUP)			020000	Cobourg	0.73	\$ 2,000,000
	County Road 26 - County Road 30 to Telephone Road			26000	Brighton	2.30	\$ 950,000
	County Road 18 - County Road 15 to Corkery Road			18225	Hamilton	1.80	\$ 750,000
	County Road 28 - County Road 9 to County North Boundary			128119/128140/128161	Hamilton/Port Hope	5.50	\$ 2,750,000
	County Road 23 - Pete's Road to County Road 22			023091/023108	Alnwick/Haldimand	2.00	\$ 1,000,000
	County Road 30 - FF 527 to Taylor Lane (Urban, grind and pave)			030295	Trent Hills	1.00	\$ 700,000
						13.33	
	Misc Padding						\$ 200,000
	Crack Sealing						\$ 200,000
	Design/Geotech/Material Testing/Professional Services						\$ 100,000
	<u>Pavement Preservation</u>						
	Annual Allowance						\$ 830,000
							\$ 9,480,000
2. Traffic Safety Measures	Traffic Control Signals and Streetlights						\$ 200,000
	Guiderail Replacement/Safety Improvements						\$ 300,000
	Intersection Improvement Program						\$ 300,000
							\$ 800,000
3. Structures	Bridge Rehabilitation - Tender						
	Rehabilitation & Maint. For	Lot 16 Con 7/8 culvert (009106) - replacement	\$ 900,000				
	Bridges, Culverts &	Canton Retaining Wall (000033) - rehabilitation	\$ 300,000				
	& Retaining Walls	Baltimore Bridge (074118) - design and tender	\$ 100,000				
		Cold Creek Bridge (130118) - design and tender	\$ 100,000				
		Black's Bridge (10114) - design and tender	\$ 100,000				
			\$ 1,500,000				\$ 1,500,000
	Bridge Reserve (future new bridges or major rehabilitation)						\$ 200,000
	Bridge Inspections (OSIM), structural evaluations, detailed deck conditions surveys						\$ 50,000
	Bridge/Culvert Maintenance						\$ 300,000
	Bridge - Time & Material Repairs						\$ 50,000
							\$ 2,100,000

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Type of Project	Location	2027		Road Section	Municipality	Length (km)	Estimated Cost
4. Service Expansion	GIS						\$ 75,000
	Cycling Master Plan/Active Transportation						\$ 40,000
	Transportation Service Improvement needs indentified by Transportation Master Plan or other EA Processes						\$ 200,000
	Locates (On1Call, Promark)						\$ 80,000
	Development Charge Supported						
	County Road 2 EA - Additional Studies (Waterfront Trail EA, Detailed Design, etc.)	DC #4					\$ 500,000
	Brook Road Widening - Future Kerr Street to Elgin Street (Detailed Design)	DC #8					\$ 461,250
	Brook Road CN/CP Rail Grade Crossing (Preliminary Design)	DC#14					\$ 100,000
	Trent River Crossing and Arterial Road Network (Construction Year 3)	DC#3					\$ 1,184,210
							\$ 2,640,460
						TOTAL ESTIMATE FOR 2027	\$ 15,020,460
							AVAILABLE FUNDING
Notes:						Base	\$ 9,960,095
1. Class 3 estimates; subject to final tender results						Gas Tax	\$ 2,364,412
2. Subject to Council budget approval						Development Charge Funding	\$ 1,395,343
						2027 OCIF Formula Funding (assumed)	\$ 784,210
						Dedicated Infrastructure Levy (DIL)	\$ 520,000
						Total	\$ 15,024,060



Type of Project	Location	2028		Road Section	Municipality	Length (km)	Estimated Cost
1. Pavement Rehabilitation and Maintenance	County Road 50 - Bridge Street to 11th Line			50000/50017/500	Trent Hills	6.00	\$ 3,000,000
	County Road 33 - County Road 45 to 5th Line			033000	Alnwick/Halifax	1.50	\$ 750,000
	County Road 31 -Urban sectionss - Townline Road to FF 161 and Ontario St. to King St E.			031008/031027	Cramahe	1.70	\$ 850,000
	County Road 30 - County Road 35 to 9th Line			030345	Trent Hills	2.50	\$ 1,250,000
						11.70	
	Misc Padding						\$ 100,000
	Crack Sealing						\$ 100,000
	Design/Geotech/Material Testing/Professional Services						\$ 100,000
	<u>Pavement Preservation</u>						
	Annual Allowance						\$ 800,000
							\$ 6,950,000
2. Traffic Safety Measures	Traffic Control Signals and Streetlights						\$ 200,000
	Guiderail Replacement/Safety Improvements						\$ 200,000
	Intersection Improvement Program						\$ 100,000
							\$ 500,000
3. Structures Rehabilitation & Maint. For Bridges, Culverts & & Retaining Walls	Bridge Rehabilitation - Tender						
	Baltimore Bridge (074118) - rehabilitation	\$ 1,000,000.00					
	Pratt's Mill Bridge (20008) - rehabilitation	\$ 1,400,000.00					
	Cold Creek Bridge (130118) - rehabilitation	\$ 1,300,000.00					
	Garden Hill Bridge (009083) - design and tender	\$ 100,000.00					
		\$ 3,800,000.00					\$ 3,800,000
	Bridge Reserve (future new bridges or major rehabilitation)						\$ 150,000
	Bridge Inspections (OSIM), structural evaluations, detailed deck conditions surveys						\$ 70,000
	Bridge/Culvert Maintenance						\$ 150,000
	Bridge - Time & Material Repairs						\$ 20,000
							\$ 4,190,000

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2024 to 2026 Issue Paper

Convert Part Time Contract Administrator Position to Full Time Equivalent (FTE)

Purpose

The purpose of this issue paper is to request the conversion of the existing part time equivalent Contract Administrator position within the Infrastructure Division to a Full Time equivalent (FTE) position.

Background

The Contract Administrator (CA) position was introduced in 2006 as part of the Engineering (now Infrastructure) team to oversee the administration and inspection of capital construction contracts. The position was originally approved as a contract position for 8 months of the year (April to November) to align with the construction season. For many years, the position was easily filled by retired individuals with extensive experience in the construction field who were only interested in part time work and returned year after year until they decided to retire again. Since 2020, it has been more challenging to fill this role and through the recruitment process there are few to no qualified applicants. The position was unable to be filled in 2020 and 2023, and it has required reassignment of existing staff as well as the use of consultants to fulfill the responsibilities of the position.

It has also been identified that during the winter months when the tenders are being developed, there is a missed opportunity for input from the CA who has practical construction knowledge and experience on the specifications, construction methodologies, construction sequencing and scheduling, etc. included in the tender documents. This input can help to mitigate potential change orders during construction.

Consultation/Options

Since this is a critical position to ensure the contractors are complying with the construction contract drawings and specifications, and ensuring the projects are completed on time and budget, the position is required to be filled every year.

Option 1 – Maintain as 8-month contract position and reassign Infrastructure Staff if not filled



This option requires the annual recruitment and training for the position and in the event a qualified candidate is not hired, requires existing staff to be reassigned and/or take on the additional duties and responsibilities in addition to their current role.

Staff time and costs are incurred annually from multiple departments (HR, IT, Public Works) for the recruitment process, training (County specific and technical training depending on the qualifications of the candidate), and there is also an increased risk of the employee leaving the County for full time employment elsewhere.

If the position is not filled and existing staff are reassigned, this takes away the ability to complete other studies, projects, address public inquiries and complaints, etc. Given the on-going challenges to fill already vacant positions in the Infrastructure group, this option will result in the deferral of projects in the annual capital plan and reduced levels of service in responding to public inquiries and complaints. The existing staff also do not have the extensive construction experience that is required for the position, but they could learn from the CA to further expand their knowledge and experience.

Option 2 – Use of Consulting Services

This option relies on retaining a qualified consultant to provide CA and inspection services to the County for construction contracts. This option is already used on bridge and structure projects given the specific area of expertise required through a structural engineer.

In 2023, the County retained a consultant through the roster to provide CA and Inspection services for the County's paving contract since the CA position was unable to be filled. While this option ensures a qualified and experienced CA is administering the contract, there is an increased cost for this service. The estimated cost to oversee the 2023 paving contract using consulting services is approximately \$51,000 for 3 months. The County will also be paying the CA overseeing the County Road 50 project (Northumberland portion) which is estimated at \$30,000 for 2 months, for a total of approximately \$81,000 on CA in 2023 over a 5-month period.

With this option, there are a number of other duties and responsibilities that are not being completed by the consultant such as pavement condition index surveys, assisting with estimates for upcoming tenders, assisting with public inquiries and complaints (not related to the paving contract), which are currently being absorbed by other staff. If these duties were to be assigned to the consultant as well and they were obtained for the full 8 months at 40 hours per week, the estimated cost would be \$150,000.



Option 3 – Convert position to FTE

This option would convert the existing 8-month contract position to full time permanent. The advantages of this option are it will ensure continuity and input from the CA in the development of the tender specifications and documents through to the administration and inspection of the paving and other construction projects (pavement preservation, traffic safety, signals, etc.). This option also ensures all of the duties and responsibilities of the current position are completed without reassignment to existing staff or through the use of consultants at much higher costs. It also reduces staff time and training budget for the annual recruitment and onboarding process. The annual salary inclusive of benefits is approximately \$155,500, which is equivalent to the cost of retaining a consultant for the 8-month construction period.

Overall, this option is more efficient, cost effective, and better value compared to the other options and is the recommended option.

Financial Impact

The annual salary (including burden) for the current 8-month contract position is \$107,400. The annual salary (including burden) for a full-time equivalent is \$155,500, or an increase of \$48,100 per year. The breakdown of cost for each year from 2024-2026 is provided below:

2024

FTE (hire in Q2)	\$116,625.00
Approved budget for 8-month contract	<u>\$107,400.00</u>
Additional budget for 2024	\$ 9,225.00

2025 and 2026

FTE	\$155,500.00
Approved budget for 8-month contract	<u>\$107,400.00</u>
Additional budget for 2025 onwards	\$ 48,100.00

There is a truck within the engineering fleet designated for this position, as such no additional capital costs are anticipated in converting the position to full time permanent.

As outlined under Consultations/Options, if the current 8-month contract position is unable to be filled, the cost for a consultant for the 8-month period is approximately the same as the full-time permanent position. Converting to full-time permanent provides additional capacity, value, and flexibility within the infrastructure team at the same cost or less than through the use of consulting services.



Risk Considerations

This position is required to monitor and ensure contractors complete work in compliance with the County's construction contracts, which includes the contractor's compliance with all other relevant legislation such as OTM Book 7 for working in traffic, Ontario Health and Safety Act, On-Site and Excess Soils Management, etc..

This position is required to be filled each year either through County staff or consulting services to ensure quality work by contractors following all specifications, to minimize change orders, ensure contracts are completed on time and budget, to address public inquiries and concerns related to construction and to follow-up on construction deficiencies and warranty items from previous years' work.

This position is essential for the delivery of the annual capital construction program and the on-going maintenance and renewal of the County's transportation assets in accordance with the Asset Management Plan.

Impacts to Member Municipalities/Partners

The CA position works closely with member municipalities, agencies, and stakeholders to ensure all required permits are in place, coordinates detours, and addresses any questions or concerns related to the construction projects. The County's capital infrastructure program improves the County Road network, addresses safety concerns, and benefits the residents, tourists and the economic development of Northumberland County as a whole.

Included in 2023 Long Term Plan: YES/NO

The conversion from an 8-month contract position to a full-time permanent position was not included in the Long-Term Plan, however, it was identified as the most efficient, cost effective approach moving forward to provide contract administration and inspection services for the County construction projects for the reasons outlined in this issue paper.



2024 to 2026 Business Plan & Budget

Public Works Operations – Facilities, Roads, Waste

Prior Year Accomplishments

Innovate for Service Excellence

All Divisions

Representation on various committees and working groups, such as Inter-Municipal Public Work Committee, Agricultural Advisory Committee, Brighton Landfill Liaison Committee, Municipal Waste Association, RPRA (Resource Productivity and Recovery Authority) Service Provider Advisory Committee, to build relationships with member municipalities, stakeholders, public and customers.

Completed staff training in the following areas for one or more staff members:

- Health and Safety
- Emergency and Standard First Aid
- Transportation of Dangerous Goods
- MOLO (Manager of Landfill Operations)
- Accessibility seminars
- Management Development courses
- Mental Health
- Book 7
- eScribe
- Public Works Leadership Development (PWLD) program
- Traffic Protection
- Chainsaw
- CVOR / Hours of Work
- Snowplow
- NAMS+ Lifecycle Modelling and Asset Management Maturity Assessments



Ignite Economic Opportunity

Facilities Division:

- Update 10 Year Capital Plans for 555 Courthouse Road Cobourg, 860 William Street Cobourg, 600 William Street Cobourg, 423 Croft Street Port Hope, 232 Purdy Road Colborne Emergency Services Base and all County Housing properties.
- Develop budget plans for Roseneath Emergency Services Base, Trent Hills Emergency Services Base and Agri-Food Centre building.
- Implementation of the County's 5-year Energy Conservation Plan.

Road Operations Division:

- 10 Year Equipment Replacement Strategy

Waste Services Division:

- 10 year Equipment Replacement Strategy

Foster a Thriving Community

Facilities Division:

- Conducted fire drills for 555 Courthouse Road Cobourg, 860 William Street Cobourg, 600 William Street Cobourg, Agri-Food Centre and all County Housing properties.
- Continued to work with Community and Social Services staff to develop new Social Housing policies and procedures to address concerns of tenants and County staff.

Road Operations Division:

- Continued to consult public on various transportation related projects in 2023.
- Continued to inform the public of upcoming construction dates, road closures, changes to area speed limits, etc. through the mobilization of the County's two (2) electronic message board signs
- Received and responded to public inquiries and complaints related to transportation
- Continued to maintain and develop working relationships with member municipalities, Alderville First Nation, neighbouring municipalities and other organizations such as MTO, MECP, Conservation Authorities, OPP, Cobourg and Port Hope Police Services, etc.



- Representation on various committees and working groups such as Inter-Municipal Public Works Committee, Agricultural Advisory Committee, Waterfront Trail Committee, Safe Communities, etc.

Waste Services Division:

- Through newspaper, radio, social media, and our Waste Information Calendar, continued to promote the County's waste diversion programs
- Continued to promote the use of the County's "what goes where" on-line tool which assists residents in determining how to properly dispose of various common waste items
Conducted a Give-away event for Blue and Grey Recycling Box Lids. The purpose of this campaign was to further reduce the scattering of recyclables from curbside setouts on windy days.

Propel Sustainable Growth

Facilities Division:

Corporate Projects Completed

- 600 William Street- lower roof replacement
- 555 Courthouse Road – West entrance walkway improvements – design completed

NCHC - Annual Capital Work

- Installed modernized accessible lifts at 111 Front Street and 6 Percy Street
- Completed numerous repairs and upgrades to the newly acquired 123 King Street property.
Repairs / upgrades included:
 - Electrical repairs and upgrades
 - Driveway re-grading
 - Roof repairs
 - Foundation repairs
 - Door replacements
 - Exterior window / door capping and waterproofing
 - HVAC system repairs and modifications
- Completed major renovations to the 152 Cockburn Street property to transform the former bed and breakfast into a 5-unit Supportive Housing Facility

Road Operations Division:

Winter Maintenance

In the area of winter maintenance, the following accomplishments were achieved:

- Sanding and salting, snow plowing, snow removal, culvert thawing and road patrol – meeting or exceeding compliance with the Minimum Maintenance Standards (MMS) for County roads



- Seasonal staff engaged to support our night shift resulting in 24-hour service to seven (7) major roads
- Snow removal in all towns and villages enhancing safety and sight lines. Removal was done a minimum of one time and up to three times in the following villages and towns: Castleton, Harwood, Cold Springs, Warkworth, Dartford, Centreton, Plainville, Camborne, Grafton, Roseneath, Gores Landing, and Campbellford
- Annual calibration of all snowplow combination units
- 6,275 tonnes of treated salt, 834 tonnes of rock salt, 18,592 tonnes of winter sand and 320,187 litres of salt brine was applied throughout the County
- Cobourg, Morganston, Plainville, Brighton, and Roseneath domes required refilling during the winter season
- Continued work on joint tenders through shared services initiatives.

Roadside Maintenance

In the area of roadside maintenance, the following accomplishments were achieved:

- Tree removal, brushing, ditching, mowing, litter pickup
- Ditching and berm removal on shoulders
- Annual roadside mowing and weed removal at intersections, around safety devices and signs completed by in-house and contracted staff
- Continued with the annual roadside litter cleanup program

Hardtop Maintenance

In the area of hardtop maintenance, the following accomplishments were achieved:

- Shoulder grading, catch basin cleaning, cold mix patching, and sweeping
- Four (4) oil grit separators flushed and cleaned
- Completed minor road repairs using asphalt and cold mix asphalt
- Staff spent most of May and June sweeping, picking up winter sand, and flushing storm sewers in all towns and villages
- Installed and/or upgraded 21 new driveway entrances

Surface Treatment Program

In the area of surface treatment, the following accomplishments were achieved:

- Surface treated approximately 122 km of Municipal and County roads, including:
 - 106.1 km for area municipalities (Trent Hills, Alnwick/Haldimand, Hamilton, Port Hope and Cobourg)
 - 1,236,236 litres of emulsion for area municipalities
 - 15.7 km of County Roads
 - 210,901 litres of emulsion for County roads
 - Total emulsion used is 1,447,137 litres



Traffic Safety Measures

In the area of Traffic Safety Measures, the following accomplishments were achieved:

- Repair of damaged post and cable, and steel beam guide rail
- Inspected and updated County's inventory of approximately 5,360 regulatory and warning road signs on all County Roads to ensure they meet the Provincial Standard for retro-reflectivity
- Installation of approximately 70 new signs due to damage, non-reflective surface or new requirements as of November 1, 2023
- Continued routine maintenance of traffic signals and streetlights and completed capital upgrades
- Reviewed and continued to monitor portable radar speed sign data and locations

Culvert and Bridge Maintenance

In the area of culvert and bridge maintenance, the following accomplishments were achieved:

- Completed washing and flushing of bridges and structures throughout the County
- Removed and replaced two (3) major road cross culverts, on County Road 50

Capital Housing and Equipment

In the area of capital equipment acquisitions, the following purchases were completed to maintain and upgrade our road maintenance equipment:

- One (1) – Pick-up Truck
- One (1) – Rubber Tired Excavator (Tender was awarded in 2023; however, the excavator will not be received until the first quarter of 2024)
- One (1) – Tandem Combination Snowplow Unit (Tender awarded in 2023; however, the truck will not be received until mid-way through 2025)

A feasibility study/needs assessment for a Joint Operations Facility was completed and presented to Council in 2023. It was identified that further investigation is required, and staff are to continue gathering information throughout 2024 and report back to Council. Subsequently, capital housing needs will be reviewed and updated based on Council's direction.

Waste Operations Division:

Material Recovery Facility

- Maintained equipment and building structure
- Successfully negotiated the sale for the MRF property to a private sector waste management company who anticipate continuing to operating the facility as a Material Recovery Facility long-term.



Community Recycling Centres

- Continued to safely and efficiently operate the County's 3 CRCs
- Completed the decommissioning of the Leachate Pumping Station and the construction of alterations to the Leachate Collection System at the Eagleson Landfill

Curbside Collection

- Continued to provide waste collection services (incl. 2-stream recycling, green bin, garbage and leaf & yard waste) to residents and smaller commercial locations with minimal concerns or complaints from the public.

Champion a Vibrant Future

All Divisions

- Continue to work towards finalizing a GHG Emission Reduction Plan that will detail how the County can meet its goals of reducing its GHG emissions by 30% by the year 2030 and 80% by the year 2050, as compared to year 2005 levels.
- Initiate works on the development of a Climate Change Adaptation and Resiliency Plan that will position the County to be better prepared and able to respond to current and future operational impacts resulting from climate change.

2024 - 2026 Service Objectives & Initiatives

Innovate for Service Excellence

All Divisions

- Continue with implementation of the People Plan and various initiatives to recruit and retain talent within the Operations Divisions of the Public Works Department
- Ongoing representation on various committees and working groups, such as Inter-Municipal Public Work Committee, Agricultural Advisory Committee, Brighton Landfill Liaison Committee, Municipal Waste Association, RPRA (Resource Productivity and Recovery Authority) Service Provider Advisory Committee.

Ignite Economic Opportunity

Facilities Division:

- Update 10 Year Plans for Northumberland County Housing Corporation (NCHC), Public Works, Corporate Services and Paramedic Base buildings.
- Compile Capital and Repairs & Maintenance budgets for NCHC, Public Works, Corporate Services and Paramedic Base buildings.



- Continue to implement the Cityworks work order system to track all incoming work orders and staffing hours.
- Continue to adopt the asset management program inputting all relevant data.

Road Operations Division:

- 10 Year Equipment Replacement Strategy
- Operational Review and development of a 10 Year Housing Strategy

Waste Operations Division:

- 10 year Capital Program for Waste Services
- 10 year Equipment Replacement Strategy

Foster a Thriving Community

Facilities Division:

- Continue to work with Social Services staff to develop new Social Housing policies and procedures.
- Continue to update Fire Safety Plans for Corporate Services, Paramedic Bases, Waste Services Division, Agri-Food Venture Centre and NCHC buildings.

Road Operations Division:

- Continue to consult public on various transportation related projects in 2024
- Receive and respond to public inquiries and complaints related to transportation
- Continue to maintain and develop working relationships with member municipalities, Alderville First Nation, neighbouring municipalities, and other organizations such as MTO, MECP, Conservation Authorities, OPP, Cobourg and Port Hope Police Services, etc.
- Representation on various committees and working groups such as Inter-Municipal Public Works Committee, Agricultural Advisory Committee, Waterfront Trail Committee, Safe Communities, etc.

Waste Services Division:

- Initiate work on the residual waste disposal Environmental Assessment (EA) which, through extensive consultation with the public, will ultimately determine the County's long-term solution for managing our non-divertible waste
- Continue to implement the recommendations of the Long-Term Waste Management Master Plan, in an effort to reach the goal of 75% waste diversion from landfill



Propel Sustainable Growth

Facilities Division:

- Continue to develop a more efficient NCHC maintenance scheduling program for staff.
- Continue to develop the preventive maintenance plan for all County Buildings.
- Complete NCHC, Northumberland Paramedics, Public Works, and Corporate capital projects on time and on budget.
- Continue to manage the repairs and maintenance budgets for the buildings in NCHC, Public Works, Corporate Services, and the 6 Northumberland Paramedic bases.
- Complete projects in the next stage of the Energy Conservation Plan, while updating the 5-year plan.

Road Operations Division:

Winter Maintenance

- In consideration of the extreme weather conditions that may be experienced during the winter season, the Public Works Department will strive to achieve the objectives of the winter control program as approved by County Council to deliver an efficient and effective winter maintenance program
- Meet or exceed all winter maintenance requirements specified in the Provincial Minimum Maintenance Standards
- Provide a timely response to winter storms and hazardous road condition situations by proactive road patrols augmented with web-based weather reports and radar
- Stockpile necessary winter sand and salt
- Utilize County fleet with units to provide center bare pavement on a timely and efficient basis
- Maintain drainage system during spring thaw with the timely removal of ice and snow
- Annual update of the Salt Management Plan to maintain environmental awareness and compliance

Roadside and Hardtop Maintenance

- Meet or exceed all road patrol requirements specified in the Minimum Maintenance Standards
- Monitor and make necessary removal of trees and brush.
- Sweep all intersections, bridges, towns, and villages, patch all roads and grade all shoulders.
- Mow grass at all intersections, along roadsides, and around safety devices.
- Annual catch basin and oil-grit separator cleaning, and litter pick up.
- Continue maintenance and enhancements to our ditching and drainage systems
- Installation of new driveways for approved entrance permits.



Surface Treatment Program

- Provide a cost efficient and cost-effective surface treatment program for the benefit of the local municipal and county road networks.
- Anticipated surface treatment of approximately 120 km of Municipal and County roads

Traffic Safety Measures

- Meet or exceed all road patrol requirements specified in the *Minimum Maintenance Standards*
- Service all signal systems and upgrade and replace defective signs

Culvert and Bridge Maintenance

- Washing and flushing of bridges and structures throughout the County
- Monitor the condition of road cross culverts and replace as necessary

Capital Housing and Equipment

- The total replacement value of the Roads Division's equipment is over \$20 million. A ten-year capital equipment replacement and housing plan has been developed. This ten-year program identifies the following capital equipment purchases in 2024:
 - One (1) - Loader Backhoe - \$ 375,000
 - One (1) - Distributor Chassis (VO46) - \$200,000.
 - One (1) - Pick-up mechanics truck - \$70,000
 - One (1) - 1 Ton Truck Dump body - \$150,000
 - One (1) - ¾ Ton pick-up Lead hand - \$100,000
 - Two (2) - Combination Snowplows (VO80) - \$460,000 each* will not be received until 2025/2026

The County has been completing routine maintenance and capital repairs to roads housing over the past 10 years, in accordance with the 10-year capital housing plan. Over the past several years, there have been a number of legislative changes, to operational procedures and methodologies, in order to meet or exceed public expectations. Given these changes, and in the interest of finding the most effective and efficient way to deliver transportation services, an operational review was initiated to establish direction for the future. In addition, a feasibility study/needs assessment for a Joint Operations Facility was completed and presented to Council in 2023. It was identified that further investigation is required, and staff are to continue gathering information throughout 2024 and report back to Council. Subsequently, the capital housing needs will be reviewed and updated based on Council's direction.



Waste Services Division:

Community Recycling Centres

- Ensure the continued environmentally sensitive and economical operation of the Brighton Landfill.
- Continue to review and update the management and monitoring strategies for the County's closed landfills.
- Continue to offer year-round access to Household Hazardous Waste (HHW) at the Brighton and Bewdley CRCs
- Plan for the implementation of diversion programs for asphalt shingles and dimensional lumber.

Curbside Collection

- Continue to work with our Collection Contractor to improve service levels, and strive for a continual reduction in resident complaints relating to collection services

Education

- Continue to offer tours of our MRF to schools, service clubs and the general public.
- Continue to offer "guest speaker" services to service clubs and the general public, in an effort to further promote the County's waste diversion programs

Long Term Waste Management Master Plan (LTWMMP)

- Commence an internal review of the current LTWMMP and look to complete a draft revised LTWMMP for review / approval by Council
- Initiate work on the Residual Waste Disposal Environmental Assessment process– Cost \$1,500,000 over 5 years

Champion a Vibrant Future

All Divisions

- Continued implementation of recommendations from the GHG Emission Reduction Plan
- Finalize and implement recommendations of the Climate Change Adaptation and Resiliency Plan

Long Term Plan & Strategic Objectives

Innovate for Service Excellence

All Divisions



- Continue with implementation of the People Plan and various initiatives to recruit and retain talent within the Operations Divisions of the Public Works Department
- Ongoing representation on various committees and working groups, such as Inter-Municipal Public Work Committee, Agricultural Advisory Committee, Brighton Landfill Liaison Committee, Municipal Waste Association, RPRA (Resource Productivity and Recovery Authority) Service Provider Advisory Committee.

Ignite Economic Opportunity

Facilities Division:

- Continue to further develop the NCHC, Public Works, Corporate and Paramedic buildings repair and maintenance and Capital Budget
- Continue to work with Finance develop and implement an Asset Management plan for our Facilities in order to be compliant with O. Reg 588/17

Road Operations Division:

- 10 Year Equipment Replacement Strategy
- Conduct a complete review of road operations and 10 Year Housing Strategy

Waste Services Division:

- 10 year Capital Program for Waste Services
- 10 year Equipment Replacement Strategy

Foster a Thriving Community

Facilities Division:

- Provide safe, well maintained affordable housing for the County
- Continue to keep up to date with all new Fire Safety and Accessibility Standards
- Continue to develop projects with our member municipalities under the guise of shared services, and to work with various County departments on long term building plans. i.e. Social Housing, Public Works, Paramedics and Forestry

Road Operations Division:

- Continue to develop and provide public consultation and communication on projects and initiatives
- Receive and respond to public inquiries and complaints related to transportation in an effective and efficient manner
- Continue to maintain and develop working relationships with member municipalities, Alderville First Nation, neighboring municipalities, and other organizations such as MTO, MECP, Conservation Authorities, OPP, Cobourg and Port Hope Police Services, etc.



- Representation on various committees and working groups such as Inter-Municipal Public Works Committee, Agricultural Advisory Committee, Waterfront Trail Committee, Safe Communities, etc.

Waste Services Division:

- Continue work on the residual waste disposal Environmental Assessment (EA) which, through extensive consultation with the public, will ultimately determine the County's long-term solution for managing our non-divertible waste
Continue to implement the recommendations of the Long-Term Waste Management Master Plan, in an effort to reach the goal of 75% waste diversion from landfill

Propel Sustainable Growth

Facilities Division:

- Ensure County facilities are maintained and improved according to 10-year plans

Road Operations Division:

- Investigate and apply for any other funding opportunities that arise in 2024 and beyond
- With the recent and anticipated retirement of several senior level Road Operations Division staff, there is a crucial need to continue with the implementation of succession planning and to maintain a consistent level of dedicated and professional staff

Waste Services Division:

Overall Budget

- Develop sustainable and realistic budgets

Community Recycling Centres

- Ensure the continued environmentally sensitive and economical operation of the Brighton Landfill
- Look to implement additional diversion programs for materials such as asphalt shingles, dimensional lumber, etc.
- Initiate the development of a remediation plan for the Highland Drive Landfill to mitigate the effects the residential component of the waste at this site is having, or could have, on the environment. This plan will need to be implemented in conjunction with or immediately following the remedial activities that will be undertaken by the Federal Government to remove Low Level Radioactive Waste from the Highland Drive Landfill.

Education

- Develop and enhance the County's education and communication techniques and strategies



- Continue to provide accurate, informative and educational communications to all users of the County's waste management system
- Educate residents about the transition of Blue Box recyclables from municipal responsibility to full producer responsibility and how this transition may affect them

Long Term Waste Management Plan

- Implementation of goals / objectives of revised Long-Term Waste Management Master Plan (if / when approved by Council)
- Continue work on the Residual Waste Disposal Environmental Assessment

Champion a Vibrant Future

All Divisions

- Continued implementation of recommendations from the GHG Emission Reduction Plan
- Continued implementation of recommendations of the Climate Change Adaptation and Resiliency Plan