
HALDIMAND COUNTY

Report PWO-01-2025 Roads Optimization Review

For Consideration by Council in Committee on February 25, 2025



OBJECTIVE:

To receive Council's approval to move forward with the phased implementation of the results of the Public Works Operations – Roads Optimization Review.

RECOMMENDATIONS:

1. THAT Report PWO-01-2025 Roads Optimization Review be received;
2. AND THAT staff report back through future budget cycles to implement the recommendations from the KPMG report as needed;
3. AND THAT consolidating the Cayuga and Oneida Roads Operations yards into a single location be approved in principle;
4. AND THAT staff be directed to undertake a review to identify a suitable property for a new Roads yard and to report back to Council in Committee with appropriate recommendations;
5. AND THAT staff report back to Council in Committee with the financial implications and business case of constructing a facility that includes indoor heated storage and wash down facilities.

Respectfully submitted: Dan McKinnon, General Manager, Public Works Operations

Approved: Cathy Case, Chief Administrative Officer

EXECUTIVE SUMMARY:

Within the 2024 Public Works Operations (PWO) work plan was a project to undertake an Operations Facility Study and Service Review, later named the Roads Optimization Review. The motivation for this project is the need to develop a plan to ensure Public Works Operations can grow and sustain its activities over the long term. Unprecedented growth in the broader community and the condition of the existing Roads yards, primarily in Cayuga and Oneida, presents growing concerns about the ability for the Roads Division to continue to provide this vital service in an effective and sustainable manner. While the study considered all divisions within PWO, the emphasis was on Roads Operations.

In the spring of 2024 and in response to a competitive procurement, KPMG was the successful proponent to undertake the review on behalf of Haldimand County and authored the study attached to this report. Since then, KPMG has been working with staff to undertake document reviews and site visits as well as several validation meetings to ensure the data and understanding of the current state was accurate. KPMG then undertook proprietary modelling to examine different scenarios to support their recommendations. The attached KPMG report summarizes their work and is provided for Council's consideration.

While their report summarizes a number of recommendations relative to staffing and equipment levels, service standards and future growth, the most significant recommendation is to consolidate the Cayuga and Oneida Roads yards into a single new facility. The recommendations in this report do not seek

approval to construct a facility at this time but rather to approve the consolidation, in principle, which allows staff to take the next steps necessary towards that outcome. Staff anticipate that immediate next steps include determining the size and specific location of a property that can accommodate the proposed amalgamated works yard as well as developing a conceptual design including heated and covered storage standards for the facility. Through this process staff will return to Council with an update on these efforts and to seek approval to acquire the aforementioned property. Future actions responding to the remaining recommendations in the KPMG study will flow through future Tax Supported operating and capital budget cycles as necessary.

BACKGROUND:

The approved 2024 Tax Supported Capital Budget included project ID 321003, to undertake the study and associated capital construction. The motivation for this project emerged from a few concerns including facility condition assessments revealing significant investments required for the Cayuga Roads yard, observations of growing operational disfunction within the outdated yard locations, growing concerns respecting road salt management, the constrained size of the Oneida yard as well as the unprecedented growth within the community, especially the areas of Caledonia, Cayuga and Hagersville. As a result of the above factors a project was initiated to undertake a study to ensure the development of a coordinated and coherent plan for the short and medium term needs of PWO.

ANALYSIS:

The study completed by KPMG involved a number of phases to examine not only Roads Operations, but also future needs for the other Public Works Divisions. These included Fleet Operations, Environmental Operations, and Facilities, Parks, Cemeteries & Forestry Operations. Included in the analysis was an in-depth assessment of current service delivery models and potential requirements for office space and service bays at Roads facilities, with a focus on aligning these facilities with the anticipated growth and service demands due to increasing population. The approach encompassed a multi-faceted analysis and included reviewing operational workflows, operational capacities, and resource utilization. The review identifies areas for improvement, proposes strategic service delivery adjustments, and recommends a coherent plan of action to ensure timely enhancements to Public Works operations. The recommendations offer a strategic framework that not only addresses current shortcomings but also anticipates and accommodates future needs, thereby facilitating seamless operational efficiency and effective service delivery in tandem with the community's expanding requirements.

The methodology for the review is divided into several phases, each focused on the accomplishment of specific, tangible objectives and activities and includes current state analysis, service delivery and facility optimization using proprietary models and followed by an implementation plan. Additionally, the review included a best practice review and benchmarking component to inform recommendations.

KPMG's final report includes forecasts respecting the future needs of PWO from a staffing, equipment and budget perspective as well as recommendations relative to physical space needs to support current and future operations. The following analysis describes key elements of the study and circumstances unique to Haldimand County.

The early part of the project required Haldimand staff to provide a significant amount of corporate documentation and data for KPMG to populate their model. Generally, the availability of data for this purpose was minimal and of low quality. The absence of a consistent and modern work order system causes the lack of data integrity and availability and diminishes the precision of the model outputs however, for planning at this level staff remain confident with the recommendations in the report.

Additionally, limitations in modelling include an inability to evaluate work currently being completed by outside contractors. Consistent with most jurisdictions, Haldimand County uses a hybrid model across many PWO functions to deliver core services using outside contractors. Specifically this includes drinking water and wastewater treatment, all aspects of the solid waste program, snow plowing on class 1, 2 and 3 roadways, much of the County's grass cutting, horticulture and forestry operations as well as some vehicle and equipment repair and maintenance. PWO staff manage in excess of \$19 Million worth of operating contracts annually to deliver services to the community. While the model does not account for these services staff will continue to analyze the impact of growth and other influences on these aspects of service provision and report on them annually through the budget process.

Staff will continue to analyze findings from the KPMG model as it relates to current state need for equipment, in several areas the model suggested that more equipment is required currently however, with contractors and end of life spares, staff remain confident that annual reviews and proposals through the budget process, the necessary equipment will be available.

Of note in the KPMG model is the observation that the current service level for winter operations exceeds the minimum maintenance standards provided by the Province. Staff agree with this and understand that this is common among municipalities across most jurisdictions in Ontario and likely emerges from traditional expectations of residents over time. Staff remain highly aware of resident expectations relative to winter operations and as a result are not recommending changes to any service standards at this time.

KPMG has estimated that the additional direct staffing resources required to meet growth related needs over the planning horizon (2051) is approximately 48.5 staff, this assumes that the current hybrid model of inhouse and contracted staff remains generally unchanged. The forecast includes 16 FTEs in Roads Operations, 0 FTEs in Environmental Operations, 20.2 FTEs in Facilities, Parks, Cemeteries and Forestry as well as an additional 3.6 FTEs in Fleet Operations. The model forecast for Environmental Operations of zero future staff is likely due to the fact that a large portion of these services are contracted out and incomplete availability of data for the model. These figures include front-line staff only and does not take into consideration any additional supervisory, administrative or corporate support staff (finance, human resources, information systems, etc.) required over time, to effectively implement. The forecast however, provides useful data relative to general staffing needs in order to start long-term planning. Actual needs will be re-evaluated on an annual basis to ensure appropriate timing and impacts are considered. Any addition to staff would be subject to Council approval, typically presented through the annual budget process.

The most significant recommendation emerging from the study is the development of a single new roads yard in the Caledonia/Cayuga area to replace the existing yards in Cayuga and Oneida. This area of Haldimand County is expected to see the highest rate of growth over the next 25 years and thus the resources required to serve the area will need to grow as well. Contributing to this recommendation, and likely presenting an even more pressing issue is the current state of the Cayuga and Oneida yards. Additionally, as modern equipment continues to grow in size and configuration increased space is required. The physical condition of the Cayuga yard is at or beyond its useful lifecycle and while the Oneida yard is in better condition, the constrained footprint on which it exists already results in winter operations material having to be stored at other locations. As a result of the foregoing it is essential to undertake the development of this new yard location in the short term.

Relating to the proposal of consolidating two yards into one and constructing a new facility is the issue of modern design standards for such a facility. It has been identified through the KPMG study that leading practice across Ontario and other jurisdictions of similar climate is for new Roads Operations facilities to include both indoor heated storage and wash down bays for snow plowing equipment. The recommendations in the KPMG report site this as leading practice and confirm they relate to timely response to storm events as well as sustainability of the County's snow plowing equipment.

Storm event response times are critical to communities for ensuring the motoring public is as protected as possible during inclement weather. Additionally, as these circumstances often lead to the activation of first responders from Police/Fire/EMS, ensuring emergency vehicles can mobilize also relies on timely activation of snow plowing resources. Activation is significantly improved when snow plowing equipment is stored above the freezing point. Not only does this allow the vehicle systems to activate quickly but also for immediate dispatch upon start-up. Heated storage also assists in preventing the salt on board the plows from freezing which prevents jamming and allows for uniform distribution of material on the roadway.

Currently the County utilizes four Roads Operations yards including locations in Dunnville, Cayuga, Oneida and Walpole. Both the Cayuga and Dunnville locations can, on occasion, accommodate a single snow plow indoor in a heated location however, this practice is only available when there are no breakdowns or other need for the space. Walpole is capable of storing 80% of the snow plow equipment within indoor heated space and Oneida can accommodate 100%.

Considering the proposed new yard will aim to serve the community for approximately 50-75 years, the desire is to build a facility that reflects modern design, features that support the most efficient use of equipment and staff resources, and protects the County's rolling assets over the long term.

Beyond the discrete recommendations provided by KPMG, additional observations were derived from a benchmarking exercise relating to a few items, a brief discussion of each follow.

- Implementation of Activity Based Costing (ABC). ABC is not currently possible in Haldimand due to the absence of a functioning work order system; KPMG suggests there are a number of benefits the County would enjoy should it move toward this approach. The asset management regulation provided by the Province continues to require municipalities to undertake various actions and ABC is a natural component of this.
- Implementation of a work order system. Work order systems not only support asset management and ABC but provide the ability for staff to manage their workforce, their work and by extension their business. Having a coherent and functioning work order system is essential for managing assets and the inherent risks associated with service delivery across the spectrum of PWO. Staff within PWO are excited to be partnering with Engineering and Capital Works (ECW) throughout 2025-26 to implement a work order system as part of the Money/Assets/People project (MAP). The Assets stream of MAP relies heavily on a coherent and effective work order system and it is expected that by year end 2026 most of this element will be implemented.
- Explore best practice in salt management. Haldimand County has an existing salt management plan however a recent audit of the procedures and practices associated with it revealed significant weaknesses. A combination of document control, regular review and updating of standard operating procedures (SOPs), available and effective facilities and the work order system are all components required to ensure the County's salt management practices are appropriate and effective. Improvements in this practice also support the objectives of source water protection as it relates to minimizing salt impacts to drinking water sources.
- Explore Green Fleet Strategies. A common feature of municipalities in supporting efforts to adapt and mitigate the effects of climate change. ECW recently brought forward the corporate energy plan, within which is a component dedicated to the migration of the County's fleet to a lower carbon model. Regular updates will be provided on this annually.
- Regular Analysis of Fleet Operations staffing. The use of County staff combined with contracted services is regularly reviewed to determine best value for the County. Any recommendations respecting changes or additions to this model will be carefully considered and if necessary, brought forward through future budget cycles.

- Maintain Community Partnerships. The County has a uniquely robust program of community partnerships relating to sports field maintenance and operation. This legacy is something to be very proud of however, there remains a risk that should volunteer involvement decline over time it may require the County to absorb these activities and would therefore require increase to staffing complement, operating and capital budgets.

Beyond the above noted observations from KPMG, is the emerging and growing risks from climate change. Extreme wet weather and the attendant risks of flooding, extreme heat, invasive species including insects, aquatic, plant, animal and microorganisms are already affecting the County and creating upward pressure on expenditures. PWO is the front line reacting to these issues and is required to continuously monitor and adapt. The recommendations in the KPMG report help to ensure PWO is ready and effective to respond to all future events.

FINANCIAL/LEGAL IMPLICATIONS:

The approved 2025 Tax Supported Capital Budget and Forecast has a specific project identified for the Roads Operations Service Model – Implementation (County-Wide) - project ID 932105. This project includes costs for the acquisition of land as well as non-specific design and construction of a new roads yard facility. This project was phased over several years to include the purchase of suitable lands, as recommended by KPMG’s Final Study and the associated engineering/design costs in 2025 totalling \$2.004 million. Additional costs for the construction of the new facility were included in 2027 totalling \$12.096 million. It was always the intent that these costs may need to be revised, once the Roads Optimization Review was completed and the recommendations therein were approved by Council.

As such, subject to the approval of Council related to the recommendations and implementation of the Optimization Review, any revised costs will be presented to Council as the various stages of the project are initiated. The first such phase is the evaluation and purchase of the land for the new consolidated roads facility.

Once Council has approved the financial implications and business case of constructing a facility that includes indoor heated storage and wash down facilities, the design stage of this project can be initiated. At this time, staff will be able to evaluate if there are sufficient funds in the Tax Supported Capital to complete this project. Based on the estimates provided by KPMG, it is likely that additional construction costs may be required. Additionally, there will be tax supported operational impacts associated with this new facility if heated storage and wash down bays are included.

The financing of the construction portion of this new facility was originally predicated on a large portion of the project being directly driven by growth. Through the KPMG study, the growth need for this project is much less than originally contemplated. As such, through the Development Charge (DC) update in 2025, the DC eligible portion will be revisited. From this review, it is likely that the Development Charge funding will be significantly less, likely requiring increased Debt financing for the construction portion of this project.

It should be noted that the approved 2025 Tax Supported Capital Budget and Forecast also includes the replacement of the Dunnville Parks Workshop/Yard – project ID 121949. This project is also phased with engineering/design in 2025 totalling \$210,000 and construction in 2026 totalling \$2.1 million. The Council approval of the financial implications and business case of constructing a facility that includes indoor heated storage and wash down facilities may also impact the construction costs of this project. Any impacts will be presented to Council through the draft 2026 Tax Supported Capital Budget.

Future increases to the PWO complement and operating and capital budgets to support KPMG’s entire list of recommendations will be included in the Long-Term Financial Plan scheduled to start later this year as well as through future budget cycles as needed.

STAKEHOLDER IMPACTS:

Not applicable.

REPORT IMPACTS:

Agreement: No

By-law: No

Budget Amendment: No

Policy: No

REFERENCES:

None.

ATTACHMENTS:

1. KPMG Final Report