If you require this information in an alternate format, please contact the Accessibility Coordinator at accessibility@northumberland.ca or 1-800-354-7050 ext. 2327



Report 2025-110

Report Title:	Costs Associated with Fire Services and Infrastructure Related to Highway 401				
Committee Name:	Public Works				
Committee Meeting Date: June 2, 2025					
Prepared by:	Denise Marshall Director, Public Works Public Works				
Approved by:	Jennifer Moore, CAO				
Council Meeting Date:	June 18, 2025				
Strategic Plan Priorities:	 Innovate for Service Excellence Ignite Economic Opportunity Foster a Thriving Community Propel Sustainable Growth Champion a Vibrant Future 				

Information Report

"That the Public Works Committee receive Report 2025-110 'Costs Associated with Fire Services and Infrastructure Related to Highway 401' for information; and

Further That the Committee recommend that County Council receive this report for information."

Purpose

This report has been prepared in response to Council Resolution 2025-01-30-058 'Discretionary Services Review'. This report provides a summary of the costs incurred by the County and member municipalities for Fire Services and Infrastructure related to Highway 401.

Background

As per Council Resolution 2025-01-30-058, staff were asked to prepare a report regarding the 'costs associated with fire services and infrastructure related to Highway 401' for the County and member municipalities.

The County is required to designate Emergency Detour Routes (EDRs) for Highway 401 when there is a closure. A map of the County EDR's is included as an attachment to this report. As per the Ministry of Transportation's (MTO's) Emergency Detour Route Guideline and Best Practices, the County is required to consult with MTO on the designation of these routes, but the County is solely responsible for the maintenance and repair of these routes, including any required upgrades or rehabilitation to accommodate Highway 401 traffic during a closure. The designated EDRs are part of the existing County Road network and are maintained as per O. Reg. 239/02 Minimum Maintenance Standards (MMS), and as per the County's Asset Management Plans.

The County received one-time Build Canada Funding in 2009 to complete upgrades to a portion of County Road 22 and County Road 25, which is the EDR between the County Road 25 exit in Colborne and the County Road 45 exit in Cobourg, otherwise, upgrades, rehabilitation, maintenance and operations are all borne by the County through the existing funding sources for transportation as outlined in the County's Asset Management Plans.

The cost impact of the Highway 401 traffic on the County EDRs is estimated based on a theoretical review of the periodic increase in traffic on these roads as a result of Highway 401 closures and the resulting wear and tear on the County Roads.

Since not all traffic follows the EDRs, Highway 401 closures also impact the member municipal roads, which are not typically built to a standard that would withstand the volume and loading from heavy truck traffic. Estimated costs of the impacts on member municipal roads as provided by the municipalities are included in the Discussion/Options section below.

Emergency Services are also impacted by Highway 401, and data on the number of calls responded to on Highway 401 are included below. Fire Services are generally reimbursed for calls to the 401, with the exception of 'Calls for No Service' and the Ontario Association of Fire Chiefs are continuing to advocate for this separately.

Consultations

The Public Works/Engineering/Roads Departments and Fire Services Departments at each of the member municipalities were consulted to provide data and costs associated with Highway 401 impacts on their infrastructure and services.

Legislative Authority / Risk Considerations

N/A

Discussion / Options

The following table provides a summary of the estimated cost impact on infrastructure to the County and member municipality infrastructure as a result of Highway 401. The total estimated annual cost impact for the County and member municipalities is \$518,000. As noted above, the costs are based on a theoretical impact of the increased traffic volumes and heavy loading of truck traffic on County and municipal roads.

Table 1: Estimated Annual Cost Impact on County and Municipal Infrastructure of Highway 401 Closures

Item	County	A/H	Brighton	Cobourg	Cramahe	Hamilton	Trent Hills	Port Hope
Temp Signage	N/A	\$2,500	\$2,500	\$2,500	\$2,500	\$3,000	\$0	\$2,500
Road Maint.	\$20,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$0	\$2,500
Capital Const.	\$370,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$0	\$10,000

Notes:

1. Costs for A/H, Brighton, Cobourg and Cramahe are estimated based on information provided by others.

2. Costs are above and beyond what is incurred for normal maintenance, operations, construction, etc. to maintain assets at current LOS.

3. Capital costs associated with designating a new EDR or repairing damage to a roadway caused by an MVC during a 401 closure are not included.

The following table provides a summary of the Fire Services calls. As noted above, costs are currently recoverable from the Ministry of Transportation, with the exception of 'Calls for No Service'.

Table 2: Summary of Fire Service	es calls in Northumberland County

Calls*	A/H	Brighton	Cobourg	Cramahe	Hamilton	Trent Hills	Port Hope
Average Total calls/year	289	437	1797	235	357	N/A	688
Average 401 calls/year	33	32	43	17	50	0	70
Percentage of calls for 401	11.4%	7.3%	2.4%	7.2%	14.0%	0%	10.2%

Notes:

1. Based on 2022-2024 data.

In addition to the monetary impacts outlined above, rerouted Highway 401 traffic either using designed EDRs or local roads also has the following impacts:

• Increased traffic causes disruption and creates significant health and safety risks for residents, businesses and all road users

- Increased traffic has a significant economic impact on the business community (when using routes through downtown cores such as Brighton and Colborne)
- Road users that do not follow the EDRs take roads that are not designed to a standard to accommodate highway traffic resulting in transport trucks getting stuck in winter events, blocking the roadway and impeding other traffic, winter operations, and emergency services

Financial Impact

The financial impact is included in the tables above.

Member Municipality Impacts

As outlined above, the Public Works and Fire Services Departments from the member municipalities were consulted and provided the data included in the tables above.

Conclusion / Outcomes

The estimated annual cost associated with Highway on County and member municipality Infrastructure is \$518,000. Full or partial closures of Highway 401 also cause considerable disruption, create health and safety risks and have an economic impact on the residents, businesses and other road users as a result of detoured traffic. Fire Services are currently reimbursed for calls to the 401 with the exception of 'Calls for no Service', which they are advocating for separately through the Ontario Association of Fire Chiefs.

Attachments

- 1. Report 2025-110 ATTACH 1 'Figure 1: Emergency Detour Routes'
- Report 2025-110 ATTACH 2 'County Council Resolution 2025-01-30-058 Discretionary Services Review'