Nov.24th, 2025

Re: Comments on Highway 401 Planning Study from Gananoque to Mallorytown

To the Ontario Ministry of Transportation and AECOM Canada ULC:

The Algonquin to Adirondacks (A2A) Collaborative is dedicated to protecting and enhancing the ecological connectivity of the region between Algonquin Park in Ontario and Adirondack Park in New York State. Highway 401 critically bisects this region, meaning any proposed changes to the highway are of paramount importance to our organization and to the well-being and biodiversity of wildlife in this region.

Ecological Imperative

As noted in our *Right to Roam Report* [1], we believe it is critical to maintain and enhance ecological connectivity within the Frontenac Arch, a globally significant UNESCO Biosphere Reserve. This area serves as a fundamental link between the Appalachian Mountains and the boreal forests of Northern Ontario, supporting a rich diversity of species, many of which are at risk. However, the sensitive ecosystems of this region are increasingly threatened by climate change, unsustainable development, invasive species, and expanding road networks.

This section of Highway 401 is particularly significant, as it abuts the boundary of Thousand Islands National Park. In this context, it is imperative that all ecological impacts, especially those related to widening the highway, are thoroughly assessed to ensure that the sensitive lands of the National Park and surrounding protected areas are not disturbed. It is crucial to ensure connectivity between these protected lands to ensure that wildlife have the space needed to move.

Two significant wildlife pathways flow through the centre of the Frontenac Arch and this study area, in what is arguably the most critical link for wildlife movement within the A2A corridor. Highway 401 already poses a massive barrier to wildlife movement, fragments wildlife habitat and is a major cause of wildlife mortality. Consequently, this study must carefully consider and plan for the ecological impacts that an additional four lanes will have on connectivity.

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[1] Black, K., Danby, R., & Urquhart, O. (2023). The Right to Roam: A Strategy to Reconnect a Continental Wildlife Pathway in the Frontenac Arch. https://www.a2acollaborative.org/uploads/7/6/8/5/7685208/a2a_road_ecology_report.pdf

Core Mitigations Recommended

We propose major infrastructure upgrades as detailed in our *Right to Roam Report* [1] focusing on two westernmost pathways (Landons Bay to Lansdowne and Rockport to Waterton) that support high biodiversity and landscape connectivity through networks of provincially significant wetlands, watercourses, protected areas, and mature forests:

Wildlife Overpasses (Three Structures)

We recommend the construction of three wildlife overpasses along an approximately 10 km stretch of Highway 401 in association with the Landons Bay to Lansdowne and Rockport to Waterton pathways.

Landons Bay Overpass (O1)	An overpass should be installed over Highway 401 near Landons Bay Creek, connecting Landons Bay on the south side to the wetland complex on the north side. This location is facilitated by rock cuts of approximately the same elevation on both sides of the roadbed. The overpass should be at least 40 m wide.
Rockport to Waterton Overpasses (O2 and O3)	Two overpasses are required within the critical Rockport to Waterton route, reflecting a split in the wildlife pathway caused by a large wetland complex south of the highway.
The **western overpass (O2)** should be built west of the wetland complex where there is dry land and a rock cut on the north side (approximately 44.386749, -75.965242). The **eastern overpass (O3)** should be east of Escott-Rockport Road, adjacent to upland forest (approximately 44.400171, -75.940820).	

Wildlife Underpasses and Culvert Upgrades

Landons Bay Creek Culvert (U1)	The existing tall box culvert (44.372953, -76.050921) should be retrofitted to improve footing, and terrestrial shelves should be added to promote passage, particularly to address potential flooding from beaver activity.
Landons Bay Small Culvert (U2)	An existing undersized culvert (44.376385, -76.041487) should be replaced with a larger culvert (at least 4 m in diameter) to ensure

	suitability for reptile and amphibian passage and prevent separation at the highway median.
Rockport to Waterton Culverts (U6 and U7)	Existing box culverts (Site 16X-0225/C1 and Site 16X-0225/C2) and corrugated steel pipes between Highway 137 and Escott-Rockport Road (which are prone to flooding) should be replaced with larger culverts (>3 m diameter) and include terrestrial shelves.
	Additional Considerations: The existing fencing between Darlingside Drive and Escott-Rockport Road should be extended by approximately 3 km to fully span the stretch of highway between Highway 137 and Escott-Rockport Road, corresponding with the most significant wildlife mortality hotspots identified. Gaps along the existing fence should be closed.

Wildlife Fencing (Essential Component)

All three overpasses are necessary to provide sufficient spatial opportunities for safe crossing. The success of these infrastructure upgrades is dependent on the installation of appropriate wildlife fencing. Fencing is essential to funnel wildlife toward the safe crossing points and prevent high-mortality

Fencing associated with the Highway 401 crossing structures should consist of chain-link or knotted-woven wire game fences that are at **least 5 km long** on each side, approximately 2.4 m (8 ft) tall, and include fine mesh for the bottom 60 cm to exclude small to medium-sized mammals and herpetiles.

General Recommendations and Future Considerations

We further recommend that MTO and road ecologists meet annually to review mitigation plans, and develop monitoring studies to assess any mitigations put into place. Monitoring and maintenance plans must be incorporated into infrastructure improvement strategies to ensure the efficacy and long-term functionality of the mitigation measures. Well-designed mitigation measures that are not monitored and maintained can increase wildlife mortalities.

Benefits

Implementing the full suite of recommended actions will yield massive benefits to Ontario's biodiversity, including substantially reducing road mortality, restoring movement pathways, supporting vulnerable species at risk, and enabling genetic diversity. These actions will also reduce safety risks to drivers related to wildlife-vehicle collisions and minimize associated economic costs.

Wildlife crossings also have the potential to strengthen tourism in the region, such as in the Canadian Rockies where overpasses have become recognized attractions. Their placement over Canada's busiest highway and in the heart of Frontenac Arch could similarly capture public interest and pride in the region's unique natural heritage.

Constructing these crossings in such a highly visible corridor would offer an opportunity for the province to demonstrate its commitment to balancing economic development with environmental sustainability. This initiative presents an opportunity for the province to showcase their alignment with Parks Canada, demonstrating intergovernmental cooperation and a shared dedication to conservation.

These recommendations are a crucial tool for safeguarding our environment from the impacts of climate change. We hope you recognize the urgency of this matter and give careful consideration to our suggestions. We remain committed to working collaboratively with MTO to explore all options for the successful design and implementation of these critical infrastructure projects.

We look forward to reviewing the next stage of designs that truly reflect the ecological significance of this landscape and ensure its connectivity for wildlife for generations to come.

Sincerely,

Jessica Lax

Executive Director, Algonquin to Adirondacks (A2A) Collaborative
On behalf of the A2A Collaborative Board Members and Staff