



Roadside Mower Attachment Business Case

Public Works

2025 Budget

Public Works

Roadside Mower Attachment

Executive Summary

The roadside mower attachment has reached its established useful life and due for replacement. The unit helps to maintain approximately 280 lane km of rural roads. Options considered in the report include remaining status quo, replacement, 3rd party contract and changes in service level. Replacement of the roadside mower attachment was determined to be the most cost effective and reliable option.

Business Need

The mower attachment is used seasonally, between May and October, to maintain grassed areas of Township right of ways. The mower typically makes two passes during the season. The first pass is limited to the front side of the ditch and is primarily done for sightline control purposes. The second pass extends beyond the front ditch and extends to the fence line in several areas. Each pass is approximately 280 lane km in distance however the second pass covers substantially more area of the ROW.

The expected useful life of the asset is 2-3 years based on historical trends. Most recent replacements include 2016, 2020, 2022 and now due in 2025. Some of the factors that lead to the short EUL include the steep inclines, rough terrain and undetected deposited materials hidden within the longer grass. This creates additional wear and tear on parts and additional downtime.

Both operating expenses and downtime increase substantially during year 3 of the cycle.

Options or Solutions Analysis

Option # 1: Remain status quo. Extend the unit beyond it's useful life by completing an extensive overhaul in preparation to operate for another cutting season.

Option # 2: Replace the existing mower attachment with a similar model. This is the most cost effective and reliable option that also provides some limited warranty on non-wearable parts.

Option # 3: Tender for 3rd party services. This was assessed in 2021 and determined to be less cost effective and limited the flexibility to adjust work schedule.

Option # 4: Service level change. Limit the two passes to only include the front portion of the ditch. This would be considered a reduction in service. However, leaving the back portion of the ditch and area between ditch and fence line in a more natural state could lead to the establishment of a pollinator habitat area.

Financial and/or Non Financial Benefits

The mower attachment has operated for 1243hrs since purchased in 2022. The capital and operating expenses for the attachment during this period are summarized below in Table 1 and compared to 2021 external 3rd party rates for mowing the Spencerville Lagoons. Note: the mowing of the Spencerville Lagoons was moved in-house in 2022.

Expenses included tractor repair, labour, fuel, mower repair and capital replacement cost of mower.

Table 1:

In-house Operating and Capital

	Year 2022	Year 2023	Year 2024	
Total Expenses	\$35,753.00	\$ 45,002.00	\$ 54,389.00	<u>3 year total</u> \$135,144.00
Hours of Operation	476	392	375	<u>3 year total</u> 1243
Cost per Hour	\$ 75.11	\$ 114.80	\$ 145.04	
External Cost (\$120.00 per hour)	\$57,120.00	\$47,040.00	\$45,000.00	<u>3 year total</u> \$149,160.00
In-house savings (Total)				
2 year cycle	\$17,538.00			
3 year cycle	\$14,016.00			

Option # 1: The cost would be covered under the operating portion of the 2025 budget and be lower in comparison to Option # 2 and 3. Estimate \$15,000.00.

Option # 2: Higher upfront cost and provides a better return on investment. The first 2 years of operation provide the best cost efficiency. Estimate \$25,000.00

Option # 3: No capital asset investment. Annual operating cost would increase to between \$50,000.00 and \$60,000.00 based on the same hours of operation.

Option # 4: Potential to reduce operating depending on the service level change however the unit would still need to be overhauled or replaced.

Risk Analysis

Option # 1: High cost for shortest return. Higher probability of breakdowns.

Option # 2: Best return in the short range and minimizes the chances of downtime, at least in the first two years of operation.

Option # 3: Highest cost, loss of some control and could negatively impact staff morale.

Option # 4: Increased risk of incidents involving vehicles and animals (wildlife and domestic) based on limited visibility of entire ROW. Vegetation growth could reduce the effectiveness of natural water channeling and create water pooling hazards.

Recommendation

That committee recommends that Council include the replacement of the roadside mower attachment for consideration into the 2025 budget.

Implementation Plan

If approved, mower would be ordered for delivery, setup and initial training in advance of the 2025 roadside mowing activities.

Acceptance Sign-off

Lead Department: Public Works

Prepared By: Chris LeBlanc, Public Works Manager **Date:** January 9, 2025

Signature: 

Approved By: Jessica Crawford, Treasurer **Date:** January 9, 2025

Signature: 

Approved By: Sean Nicholson, CAO **Date:** January 9, 2025

Signature: 