

Working together with our community

Council-In-Committee Meeting – June 11, 2024

Subject:	Speed Watch Sign Program
Report Number:	EIS-24-042
Division:	Environmental and Infrastructure Services
Department:	Engineering
Ward:	All Wards
Purpose:	For Decision

Recommendation(s):

That Report EIS-24-042 Speed Watch Sign Program be received as information; and,

That Council approve Policy EIS-03 Speed Watch Program; and,

Further That the financial impacts related to the installation of new speed watch signs that meet the warrants of the Speed Watch Policy be referred to the 2025-2034 Capital Plan deliberations for consideration and inclusion as appropriate.

Executive Summary:

Vehicle Activated Traffic Calming Signs, also known as Speed Watch Signs, are an effective tool to address vehicular speeding at locations where conventional signage has been ineffective and physical traffic calming measures are inappropriate or cost prohibitive.

Speed Watch Signs are utilized to address the problem of inappropriate speed on roads. They are not a replacement for conventional signage but are designed to be activated by vehicles approaching and are intended to provide information to the driver about the speed limit.

Norfolk County currently has 18 locations where Speed Watch Signs are deployed. Four (4) were deployed prior to 2020 and 14 were deployed in 2022 using funding that was included in the Approved Capital Budget.

The Norfolk Road Safety Committee (NRSC) has received requests for an additional 15 signs to be installed across Norfolk County.

The cost of a new Speed Watch sign and installation is \$7,000 to \$10,000.

Speed Watch Signs are used in many Municipalities and data has shown that they are effective in driver education and speed reduction. Overuse of Speed Watch Signs or installing them where speeding is not a problem can cause a dilution of the effectiveness.

Staff have included a Draft Speed Watch Sign Policy in this report for Council to review. The policy provides the rationale for the Speed Watch Program as well as warrants as to when new locations should be approved.

Discussion:

The Speed Watch Program is a public awareness program to address speeding on Norfolk County roads.

The purpose of the Speed Watch Program is to reduce the incidence of speeding in the municipality by making drivers aware of their speed as it relates to the posted speed limit. Drivers are often unaware when they are speeding due to inattentiveness or other factors. The objective of the Speed Watch Program is to improve road safety by alerting drivers to their travel speed and encourage compliance of the posted speed limit.

Speeding is one of the most frequent concerns expressed to The Norfolk Road Safety Committee (NRSC). The inquiries request measures such as increased enforcement or installing stops signs to reduce speeding. Research shows that the use of Speed Watch signs can be effective in reducing speeds.

Any person requesting a Speed Watch sign shall submit a request to the NRSC.

To avoid a proliferation of their use and a dilution of their effect on drivers, Speed Watch Signs should only be used for speed management where there is evidence that they would be beneficial.

There are currently 18 Speed Watch signs deployed in Norfolk County. As well there are requests for an additional 15 locations. These are shown in the attachments.

Speed display devices are typically pole-mounted signs equipped with a radar speed detector and a LED display. The signs can detect the speed of an approaching vehicle and display it back to the driver. The signs are triggered for all drivers, not just those exceeding a certain speed. When combined with a regulatory speed limit sign, a clear message is sent to the driver displaying the vehicle speed.

Speed Watch Program – Policy

The purpose is to provide a guideline for Norfolk County to determine when it is appropriate to deploy new Speed Watch Signs.

Evaluation Guidelines

Upon receipt of a request for the installation of a speed display sign, staff will review the location and conduct a speed study for 48 to 72 hours. The speed study will be used to calculate the score as shown in Table 1. The purpose of the evaluation is to ensure that the speed display signs are installed on road sections where a combination of 85th percentile speeds, traffic volumes, roadside environment, and collision statistics meet the minimum score required.

The 85th percentile speed is the speed at which 85% of the recorded vehicles travel at or below on a given street section.

The maximum score a location can receive is 21 and locations with a score of 14 and above and meeting the installation criteria will be recommended to have Speed Watch Signs installed.

Staff have begun to review existing traffic data and initiated collection of new traffic data at the proposed new speed watch sign locations. St John's Road locations between Blueline and Highway 6 will not be evaluated at the posted speed is 80km/hr. As well there are already planned Capital upgrades for St Johns Road to include traffic control at the intersections of Blueline and Cockshutt Road. Upon early review of available data, it is anticipated that five (5) of the 15 proposed locations could meet the minimum required score.

Evaluation Criteria	Points		
Traffic Speeds (85 th Percentile)			
Less than 5 km/hr. above posted speed limit	Does not qualify		
5 to 9 km/hr. above posted speed limit	1		
10 to 14 km/hr. above posted speed limit	3		
15 km/hr. or greater above posted speed limit	5		
Average Annual Daily Traffic (AADT)			
Less than 1000 vehicles per day	1		
1000 to 2000 vehicles per day	2		
2001 to 3000 vehicles per day	3		
3001 to 4000 vehicles per day	4		
4000+ vehicles per day	5		
Street Conditions (select all that apply)			
No Sidewalks	1		
Pedestrian or school crossing in zone	1		

Table 1: Speed Watch Sign Evaluation

Hidden intersections or driveways in zone	1		
Paved shoulders or share the road signs	1		
Significant road grade/ alignment (i.e. Curves)	1		
Proximity to Parks or Schools			
Greater than 500 meters	1		
Between 250 and 500 meters	2		
Within 250 meters	3		
Collisions in the past three (3) years (related to speeding)			
0 to 2	1		
3 to 5	2		
Greater than 5	3		

Rotation Schedule

Norfolk County currently has 18 locations where Speed Watch signs are currently deployed. Recommendations for new Speed Watch sign locations will be added to the inventory when approved during budget. To lessen the budgetary impact of the purchase of new Speed Watch signs, staff may provide an option for a rotation of the existing signs among the approved locations. Staff shall bring a report to Council prior to implementation of any rotational installations. The report will provide traffic data for the locations to be rotated as well as the rationale to support.

Funding

Speed Watch signs will be implemented based on funding available through the capital budget process.

Recommended Speed Watch locations captured within the year shall be costed and prioritized for consideration in the capital project budget plans and presented to Council as part of the Capital Budget consideration process.

In addition to the capital cost for new sign installations, all signs (including the existing 18) have a life cycle that will require consideration within the Capital Planning/Budget process.

Implementation Procedure:

Any person bringing forward a speeding concern and requesting installation of a Speed Watch sign (as a suggested treatment) may submit a request to the NRSC. The request can be completed by contacting service Norfolk or accessing the online platform for the Road Safety Committee. The NRSC will assess the concern and confirm if the thresholds for consideration of an action (any action) is required and further, if action is required, what the appropriate response would be.

Financial Services Comments:

Speed Watch Signage History and Budget

The Approved Capital Budget includes an allocation for an automated speed enforcement study, which is ongoing, but does not include an allocation for any speed watch signs.

Council has approved projects for the installation of new speed watch signs through the capital budgeting process in the past. Staff completed the installation of 18 signs over the course of 2019-2022, within the cumulative budget of \$158,000 that was approved for the projects during that span.

In the Proposed 2023-2032 Capital Plan, two (2) projects to install six (6) more signs in each of 2023 (\$48,000) and 2024 (\$48,000) were removed during Council's budget deliberations, and as such, the projects never moved forward.

Projected Expenditures and Funding

Within the body of this report, an estimate of \$105,000-\$150,000 in costs for the installation of up to 15 new speed watch signs has been provided. Staff will work together to refine the budgets and timelines of these projects for inclusion in the Proposed 2025-2034 Capital Plan. For any speed watch sign projects that are introduced, staff will recommend a corresponding funding source, which will likely be either the New/Incremental Capital Reserve or the Roadway Construction Reserve.

Prior to the presentation of the Proposed 2025 Levy Supported Operating Budget, staff will also review and determine whether any additional impacts should be incorporated for the maintenance/rotation of these speed watch signs, which would be funded through the net levy requirement.

Interdepartmental Implications:

The Roads Department will be required to task resources to install New Speed Watch signs or rotate existing signs around to new locations. The estimated operational costs to install or rotate new speed watch signs is \$1,000.

Consultation(s):

The draft Speed Watch Program policy was provided to the Ontario Provincial Police for comment.

Strategic Plan Linkage:

This report aligns with the 2022-2026 Council Strategic Priority Connecting Norfolk -Bringing the community together with cultural, physical and technological linkages. Explanation: The creation of a Speed Watch Program and policy provides an opportunity to engage our residents on road safety measures that the County has put into effect.

Conclusion:

The Speed Watch Program is a public awareness program that was initiated to address speeding on Norfolk County roads.

Speed Watch Signs are used in many municipalities and data has shown that they are effective in driver education and speed reduction. To avoid overuse of Speed Watch Signs or installing them where speeding is not a problem, staff are recommending that Council approve the Speed Watch Program Policy.

Attachment(s):

- Speed Watch Sign Inventory
- Locations of Existing and Proposed Speed Watch Signs
- Draft Speed Watch Program Policy

Approval:

Approved By: Andrew Grice General Manager, Environmental and Infrastructure Services

Reviewed By: Darnell Lambert Director, Engineering

Prepared By: Mike King Engineering