City of Vaughan

Traffic and Speed Management Study Athabasca Community

Executive Summary

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1 Executive Summary

On June 22, 2021, Council directed staff to undertake a full neighbourhood traffic and speed management study for the Athabasca community in the City of Vaughan. Residents of the Athabasca community raised concerns about speeding traffic within the area and requested traffic calming measures, traffic control measures and community road safety programs to be considered.

Traffic calming and traffic controls are measures the City can apply to manage vehicle speeds and to encourage responsible driving through physical design features (e.g., speed cushions) and/or passive measures (e.g., signage or pavement markings). These options, along with others, were explored through this Traffic and Speed Management Study.

The study reviewed the existing traffic issues, such as speed, traffic conditions and collision data, to inform and provide a set of recommendations that address these concerns and the traffic issues identified within the Athabasca community.

The study encompassed two areas; Area 1: the residential area to the west of Dufferin Street between Athabasca Drive and Hunterwood Chase, and Area 2: the residential area south of Kirby Road, west of Dufferin Street and north of Nevada Park.

A third area, the urban area bounded by Kirby Road to the north, Keele Street to the west, and identified as Area 3 during this study, was included for comparison purposes only.



Figure 1-1: Athabasca Community Study Area

Based on a review of the background information and data collection conducted in January 2022, it was found that more than 70% of vehicle traffic in the Athabasca community travel at or below the posted speed of 40 kilometres per hour, with the remaining percentage of motorists considered to be "speeding," based on the interpretation of Section 128 of the Highway Traffic Act.

In addition to speeding, inattentive driving was also noted as a major issue by the Athabasca community, increasing the potential for traffic collisions. Although the review of existing conditions did not identify parking as an issue, vehicles parking for extensive periods along Nevada Crescent to visit the Neighbourhood Park was identified as a concern by residents in the area, particularly during the winter months.

Potential locations for traffic control and traffic calming measures in the Athabasca community followed a 'self-enforcement' approach, where the evaluation focussed on determining suitable alternatives that will effectively alter driver behaviour to reduce speeds and increase awareness and respect for non-motorized users, including pedestrians and cyclists.

The proposed locations were therefore identified in a 'sequence' with the intent of altering the behaviour of drivers and generating a smooth 'slow-and-go' speed profile, where traffic calming measures, or existing traffic controls, are appropriately positioned

in the roadway to maintain a desirable reduced speed along the entire corridor. To obtain this desirable speed, a separation of 150 metres between traffic controls and traffic calming measures was considered.

Once potential locations were determined, suitable traffic calming measures were identified and evaluated for each location, based on their ability to alter driver behaviour at that specific location. The evaluation criteria included:

- Speed Reduction, which considered the effectiveness in reducing vehicle speeds;
- Local Access, which assessed any potential obstruction to local traffic, nearby driveways and private accesses;
- Emergency Services, which considers the effectiveness of any emergency service vehicle being able to respond in an appropriate timeframe;
- Active Transportation, which assessed the impacts to active transportation modes, such as pedestrians and cyclists;
- Enforcement, which looked at the on-going need for law enforcement officers or police to enforce the traffic calming measures to make them effective;
- Parking, which assessed the impacts to on-street parking provisions;
- Maintenance, which looked at the need for any maintenance and the effects on existing maintenance operations; and,
- Cost, which considered the estimated cost to implement each measure.

A critical component of the study was engaging residents in the Athabasca community for public input. Residents were invited to complete an online survey at the onset of the study regarding existing conditions and concerns, as well as attend two virtual public information sessions (March 2022 and June 2022) to learn about the study and to provide their comments on the proposed solutions.

Following the second public information session in June 2022, residents were also invited to complete either an online or hardcopy survey that was mailed to residents in the community, as a way to provide their feedback on the proposed traffic calming recommendations.

Two Stakeholder Meetings were held following each Public Information Session. The purpose of the first meeting was to introduce the study, share information about the review of the existing conditions and the community survey, and gather input and feedback about the study area to help inform and shape potential study solutions. While the second meeting discussed the development of options and gathered input and

feedback about the evaluation process to help inform and shape the implementation strategy.

As a result of the technical analysis and feedback from the community and stakeholders, the following set of measures were identified as recommendations.

Location	Type of Measure	Implementation Timeframe
Location 1 - Dufferin Street and Athabasca Drive	Pavement markings , such as special stenciling (for example "SLOW") to encourage reduced operating speeds.	Short term
Location 2 - Athabasca Drive	Mobile changeable message device or a speed display device are used to give motorists real-time traffic and travel information, such as speeds.	Short term
	Temporary Speed Cushions are being assessed as a new tool as part of the Neighbourhood Traffic and Speed Management Plan from the MoveSmart initiative, in which new guidelines and procedures for these devices will be developed. Consequently, the short-term measures listed above for this location will be implemented and evaluated before considering the temporary speed cushions.	Long term
Location 3 - Athabasca Drive and Kootenay Ridge	Refresh pavement markings , to clearly identify pedestrian crossings.	Short term
Location 4 - Athabasca Drive south of Hunterwood Chase	Mobile changeable message device or a speed display device are used to give motorists real-time traffic and travel information, such as speeds.	Short term

Location	Type of Measure	Implementation Timeframe
Location 5 - Athabasca Drive and Beakes Crescent	Mobile changeable message device or a speed display device are used to give motorists real-time traffic and travel information, such as speeds.	Short term
Location 6 - Beakes Crescent and Dufferin Street	Pavement markings , such as special stenciling (for example "SLOW") to encourage reduced operating speeds.	Short term
Location 7 - Dufferin Street and Hunterwood Chase	Pavement markings , such as special stenciling (for example "SLOW") to encourage reduced operating speeds.	Short term
Location 8 – Hunterwood Chase west of Dufferin Street	Speed display devices are signs used to give motorists real-time traffic and travel information, such as speeds.	Short term
Location 9 – Hunterwood Chase north of Antonini Ct.	Speed display devices are signs used to give motorists real-time traffic and travel information, such as speeds.	Short term
Location 10 – Hunterwood Chase south of Mapledown Way	TYPE D Pedestrian crossover (potential), which includes pavement markings, signs, and a raised crosswalk.	Long term
Location 11 – Hunterwood Chase north of Athabasca Drive	Mobile changeable message device or a speed display device are used to give motorists real-time traffic and travel information, such as speeds.	Short term

Location	Type of Measure	Implementation Timeframe
Location 12 – Kirby Street and Laurentian Boulevard	Pavement markings , such as special stenciling (for example "SLOW") to encourage reduced operating speeds.	Short term
Location 13 – Nevada Crescent south of Laurentian Boulevard	Mobile changeable message device or a speed display device are used to give motorists real-time traffic and travel information, such as speeds.	Short term
Location 14 – Laurentian Boulevard and Nevada Crescent	Refresh pavement markings / ladder crosswalk to clearly identify pedestrian crossings.	Short term
Location 15 – Foot Hills Road and Kirby Road	Gateway treatment , includes the provision of a continuous sidewalk and consideration for a dedicated cycling path or facility	Long term
Location 16 – Adirondack Drive	Mobile changeable message device or a speed display device are used to give motorists real-time traffic and travel information, such as speeds.	Short term



