



Report
Staff Report
The Corporation of the City of Brampton
6/5/2024

Date: 2024-06-05

Subject: **Report back on Signal Warrant Study outcome at Countryside Drive and Bellini Avenue - RM 10/2024**

Contact: Shane Loftus, Manager, Transportation Right of Way and Safety, Road Maintenance, Operations and Fleet Division

Report number: Public Works & Engineering-2024-401

RECOMMENDATIONS:

1. That the report from Shane Loftus, Manager, Transportation Right of Way and Safety, Road Maintenance, Operations and Fleet, to the Committee of Council Meeting on June 5, 2024 re: **RM 10/2024 Report back on Signal Warrant Study outcome at Countryside Drive and Bellini Avenue**, be received; and
2. That the intersection of Countryside Drive and Bellini Avenue not be signalized in accordance with the outcomes of the Traffic Signal Warrant studies conducted in January 2023 and March 2024; and
3. That staff continue to monitor traffic volumes at this location on an annual basis with the intention of installing traffic signals once the intersection meets the warrant conditions for traffic signals.

OVERVIEW:

- **In January 2023, a Traffic Signal Warrant Study was conducted at Countryside Drive and Bellini Avenue, based on a number of resident complaints.**
- **The Warrant Study in 2023 indicated that based on the factors reviewed for traffic signals, the intersection did not warrant signalization at that point.**
- **Based on several resident complaints, it was requested of staff to conduct an updated Traffic Signal Warrant Study at the intersection of Countryside Drive and Bellini Avenue.**

- **A second Traffic Signal Warrant Study was conducted at the intersection of Countryside Drive and Bellini Avenue in March 2024.**
- **The Warrant Study in 2024 confirmed the results in 2023; the intersection does not meet the warrant standards for signalization.**

BACKGROUND:

In 2022, resident complaints regarding the intersection of Countryside Drive and Bellini Avenue prompted staff to conduct a Traffic Signal Warrant Study in January 2023. The results of the warrant study at that time indicated that the intersection did not warrant signalization.

Repeated resident concerns persisted in 2023 and into 2024, so the following recommendation of the Committee of Council Meeting of March 20, 2024, was approved by Council on March 27, 2024, pursuant to Council Resolution C049-2024:

CW111-2024

That, due to the high volume of traffic in the area, staff be directed to investigate signalized lights for the intersection of Countryside Drive and Bellini Avenue and report back to a future Committee of Council meeting.

Following the Council resolution, an updated Traffic Signal Warrant Study was conducted in March 2024 to determine if conditions at the intersection had changed and to determine if signalization was now warranted.

CURRENT SITUATION:

After completing Traffic Signal Warrant Studies in January 2023 and March 2024 (Attachment A and Attachment B), the intersection of Countryside Drive and Bellini Avenue does not meet the minimum warrant criteria for signalization.

In a traffic signal warrant study, the metrics that are collected and analyzed need to meet a minimum percentage or minimum value to justify the warrant.

Justification #1 – Minimum Vehicle Volume (Major and Minor Streets) – Minimum of 80% (lesser of Justification 1a and Justification 1b). Score achieved, 19% (2023), 14% (2024).

Justification #2 – Cross Traffic Delay (Major and Minor Streets) – Minimum of 80% (lesser of Justification 2a and Justification 2b). Score achieved, 35% (2023), 20% (2024).

Justification #3 – Combination of Justification #1 and Justification #2 – Yes/No – Score achieved, No (2023), No (2024).

Justification #4 – Minimum 4 Hour Vehicle Volume – Yes/No – Score achieved, No (2023), No (2024).

Justification #5 – Collision Experience – Minimum Volume (5) over 3 Year Period, Score achieved, 1 (2023), 1 (2024).

Justification #6 – Pedestrian Volume and Delay (Major Street) – Yes/No, Score achieved, No (2023), No (2024).

As demonstrated through the reports, the intersection of Countryside Drive and Bellini Avenue is significantly below the minimum thresholds for signalization and based on the results of both reports, the volumes and delays have decreased from 2023 to 2024.

If a traffic signal is installed at a location that does not meet warrant, it could add delay and inefficiency to the traffic network. Delay and inefficiency in a system may lead to speeding, aggressive driving and non-compliance with the traffic control, collisions, residential cut through traffic, increased complaints/Service Requests to adjust timing, progression (to compensate for introduced delay and inefficiency), etc.

CORPORATE IMPLICATIONS:

Financial Implications:

N/A

Other Implications:

N/A

STRATEGIC FOCUS AREA:

This report supports **Transit & Connectivity**: Focusing on transportation and a connected infrastructure that is safe, convenient, efficient, and sustainable.

CONCLUSION:

This report recommends that the intersection of Countryside Drive and Bellini Avenue remain unsignalized until such time as the intersection meets the warrant criteria for the installation of Traffic Signals.

Authored by:

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Chief Administrative Officer

Attachments:

- Attachment A - Signal Warrant - Countryside Dr and Bellini Ave 24JAN23
- Attachment B - Signal Warrant - Countryside Dr and Bellini Ave 27MAR24