Appendix L

Collingwood Speed Reduction Policy

Town of Collingwood

Type of Document:
Technical Report

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1. Introduction

1.1 Project Background and Purpose

The Town of Collingwood received 65 community requests from 2019 to 2023 that identified speeding concerns at specific intersections and road segments within the Town. These requests highlight ongoing concerns related to high vehicular speeds - particularly in relation to their potential impacts to vulnerable road users (i.e. pedestrians, cyclists, children and senior citizens). In response, the Town of Collingwood has initiated a Speed Limit Reduction Study for local and collector roads only, with the goal of encouraging appropriate travel speeds.

The study aims to:

1. Consider the road features such as geometry, intersections, on-street parking and roadside hazards;
2. Include the impacts of the road functional use and its users (vehicle classification);
3. Identify and recommend appropriate countermeasures and posted speed limit reductions, if necessary, to encourage appropriate speeds.

The speed reduction study focused on consideration of the following types of measures:

- Engineering;
- Enforcement; and
- Education and Awareness.

A combination of these approaches is often used to effectively reduce speeding. The study emphasizes a data-driven approach, incorporating speed data collection and analysis to evaluate actual speeding scenarios. Public stakeholder engagement is crucial for the study and is conducted in two stages to gain community support for speed reduction strategies. The first stage involves analyzing the current situation, while the second stage gathers community input on their preferred options or solutions. Study reviews several speed reduction studies that has already been done in other communities in Canada to provide the best recommendations. Recommendations have been developed in alignment with Collingwood's speed reduction policy, as well as guidelines and warrants established by the National Association of City Transportation Officials (NACTO), the Highway Traffic Act, and other municipalities speed reduction warrants.

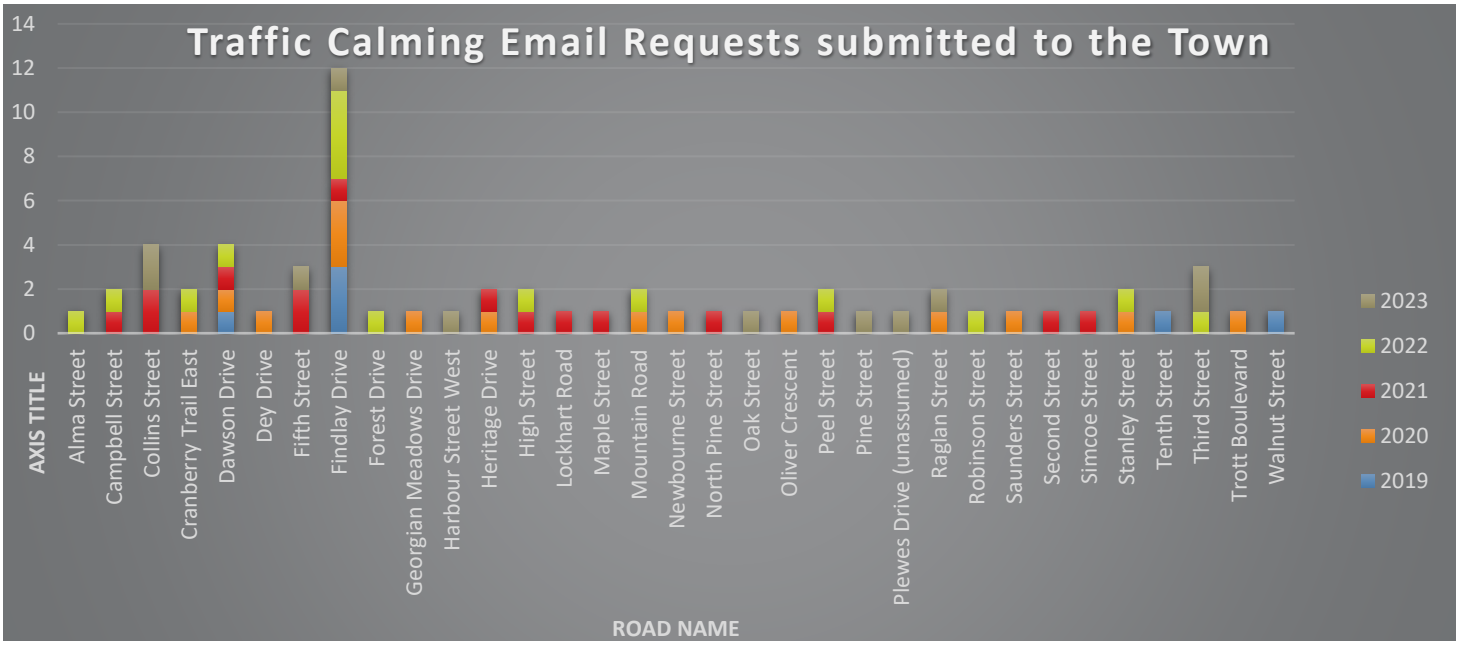


Figure 1: Traffic Calming Email Requests Submitted to the Town

Two conceptual options are explored in the study with two alternative approaches that evaluate the impact of speed management strategies on active transportation, transit operations, and environmental and social factors. Potential countermeasures, such as gateway signage, vertical speed humps, and other traffic-calming strategies, are examined to address safety concerns effectively.

This report outlines the methodology, findings, and recommendations of the Speed Reduction Study, providing actionable insights that may enhance road safety and help foster a safer, more livable community in Collingwood.

1.2 Objectives

- **Assess Current Speed Limits:** Evaluate the appropriateness of existing speed limits on local and collector roads in Collingwood.
- **Analyze Collision and Traffic Data:** Review recent collision statistics and traffic flow data to identify high-risk areas where speed reduction may improve safety. Performed on another project by EXP.
- **Identify Key Safety Concerns:** Focus on the needs of vulnerable road users, such as pedestrians and cyclists, to enhance overall road safety.
- **Gather Community and Stakeholder Input:** Collect feedback from residents and stakeholders to understand public concerns and perceptions regarding current speed limits.
- **Recommend Speed Reduction Measures:** Based on the analysis, provide actionable recommendations for adjusting speed limits, enhancing signage, or implementing traffic calming measures where appropriate.

1.3 Study Area

The Town of Collingwood, situated on the southern shores of Georgian Bay in Ontario and part of Simcoe County, is known for its scenic landscapes, vibrant tourism, and year-round recreational activities. With a population that experiences seasonal surges due to tourism, Collingwood's transportation network needs to serve both residents and visitors.

Collingwood's road network comprises a mix of local, collector, and arterial roads that can accommodate a variety of users, including pedestrians, cyclists, public transit, and motorists. Key transportation corridors like Highway 26 and County Road 124 provide essential connectivity to nearby towns, while local streets and residential roads serve as connectors within Collingwood.

Figure 2: Study Area – Collingwood

2. Methodology

The study has two-phase methodology comprising Part A & Part B. These phases are interconnected, with the outcomes of Part B informing the completion of Part A and guiding the preparation of the final report. The methodology integrates technical analysis, stakeholder engagement, and regulatory compliance to develop practical and effective speed management strategies.

Part A: Comprehensive Review and Reporting

1. **Initiation and Coordination**
   The project commenced with a foundational phase that established key parameters, defined objectives, and aligned timelines. Stakeholder coordination ensured clarity on goals, roles, and responsibilities, creating a structured approach to project execution.
2. **Background Information Collection and Review**
   A detailed review of relevant documentation and resources was undertaken to support the study's framework. Key sources analyzed included:
   - Jurisdictional scans of speed limit reduction strategies from two comparable municipalities.
   - Documents from the Highway Traffic Act, Ontario Traffic Manual (OTM), NACTO guidelines, and the Transportation Association of Canada (TAC) standards.
   - Municipal engineering standards, including speed limit recommendations.
   - Potential enforcement challenges associated with speed limit reductions.
3. **Collision Data Review**
   Collision data, previously analyzed in another EXP project.
4. **Community and Stakeholder Engagement**
   Public and stakeholder engagement records from public surveys and consultations.

5. **Final Report and Presentation to Council**
   The final step of Part A involved integration of all findings into a comprehensive report, summarizing analysis and recommendations, and presenting these to the Town Council for consideration and implementation.

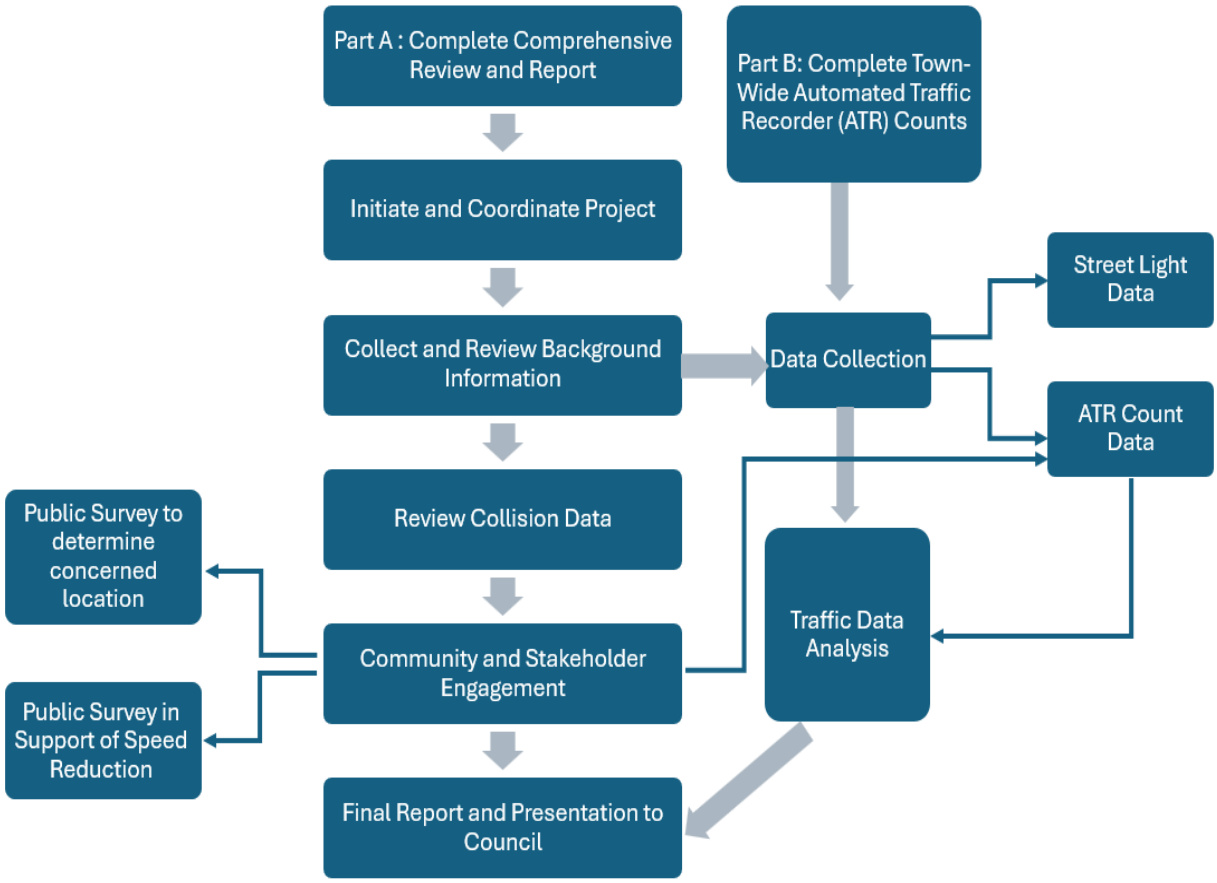


Figure 3: Methodology Flowchart

Part B: Town-wide Automated Traffic Recorder (ATR) Counts

1. **Traffic Data Collection**
   Traffic data collection occurred in two phases to capture a comprehensive understanding of speed and volume patterns. The first phase utilized Streetlight data to analyze specific road sections. Following public feedback gathered through surveys, a second phase of Automated Traffic Recorder (ATR) data collection took place. These focused-on areas identified as having significant traffic concerns, informed by community and stakeholder input.

2. **Traffic Data Analysis**
   The collected data was analyzed to evaluate various metrics, including:

   - The 85th percentile speed, providing insight into prevailing traffic speeds.
   - Average Annual Daily Traffic (AADT) demand, identifying road usage patterns.
   - Physical characteristics of the roads under study.

Based on this analysis, three conceptual options were developed: a Do-Nothing scenario and two proposed alternatives (rely on other policies) that may permit changes to posted speed limits when considering the safety and functionality of the road network.

3. Existing Road Network

Collingwood has a well-developed road network characterized primarily by a pre-war grid-structure supported with a foundation of key corridors such as Highway 26, Hurontario Street (Simcoe County Highway 124, Poplar Sideroad. This network comprises a total of 355 road segments. The data provided by the Town includes various information of all 355 roads such as agency jurisdiction, road length, installation year, posted speed limit, number of lanes, curb type, road width, function class and traffic counts. Road classification information is shown in **Figure 4**.

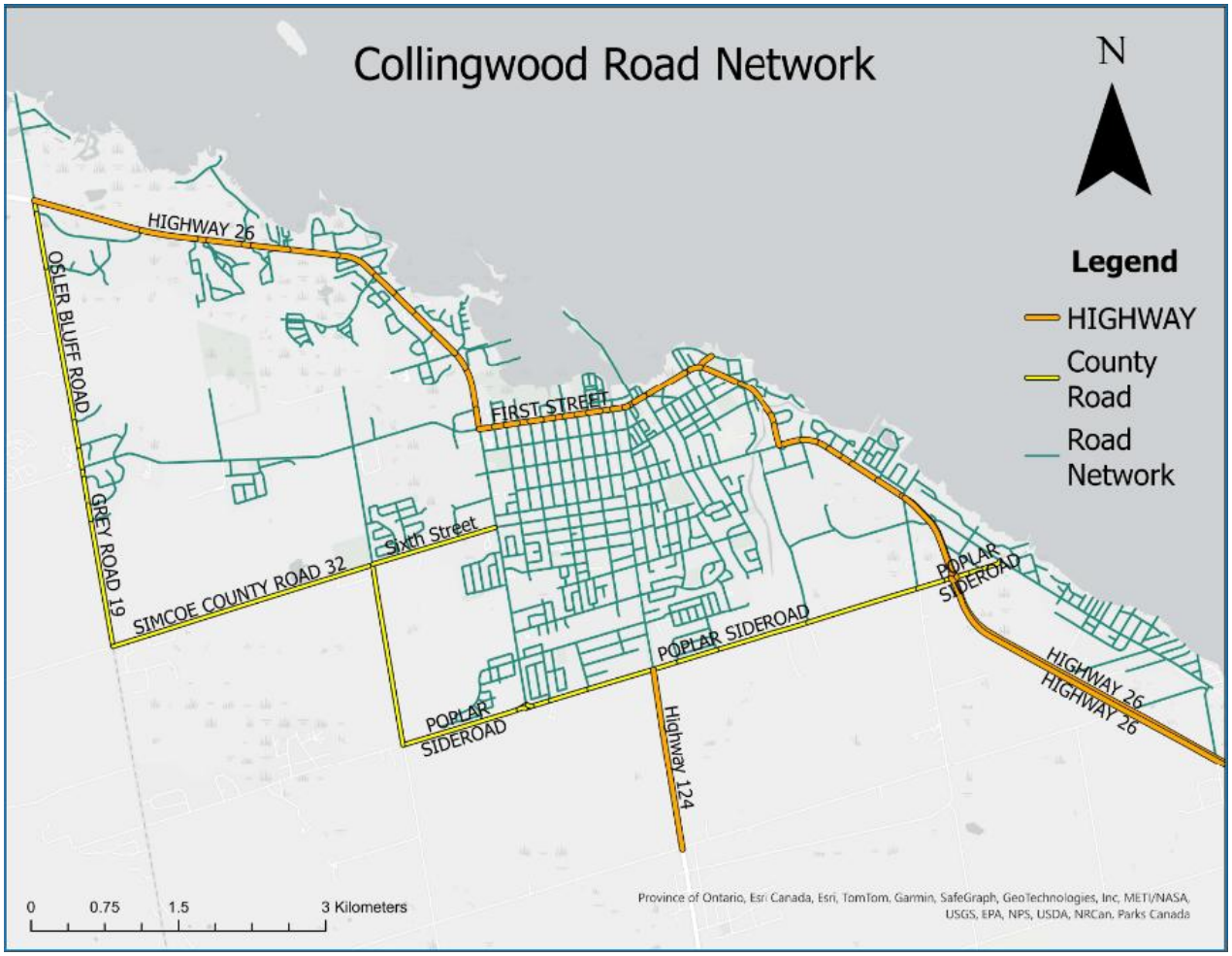


Figure 4: Collingwood Existing Road Network

Primary Highways

Collingwood is served by two primary highways/County Roads that provide critical regional connectivity:

- Highway 26: This major east-west route links Collingwood to Barrie and Wasaga Beach to the east and Meaford and Owen Sound to the west. It is a vital corridor for local commuters, tourists, and commercial traffic.
- County Road 124: Originating south of Collingwood, this highway extends north, offering access to surrounding rural areas and recreational destinations. Previously, this corridor was known as Highway 24.

Regional and County Roads

These roads provide essential intra-regional connections and complement the primary highways:

- County Road 32 (Poplar Sideroad): A significant route that links local and rural areas to Highway 26, accommodating substantial daily traffic from residents and visitors.
- County Road 42 (Sixth Street): Another key west-east connector within Collingwood, intersecting major local roads and providing access to Highway 26.

Local, Collector and Arterial Roads

The town's internal connectivity is ensured through a robust network of arterial, Collector and local roads, including:

- First Street: A critical arterial road running through downtown Collingwood, connecting residential, commercial, and tourist areas with Highway 26.
- Hurontario Street: Serving as Collingwood's central spine, this road hosts the majority of the town's commercial and business activities. It links Highway 26 (First Street) to Poplar Sideroad, supporting significant vehicular and pedestrian movement.

In addition to this, Collingwood's Road network includes many other arterial, collector, and local roads that play a vital role in maintaining smooth traffic flow and access across the town.

Road Network Characteristics

The Town of Collingwood's road network is categorized by function into three primary classes: Arterial, Collector, and Local roads. Data provided indicated there are 663 local road segments, 92 Collector Road segments, and 169 Arterial Road segments. Figure 5 illustrates the specific road classifications across Collingwood.

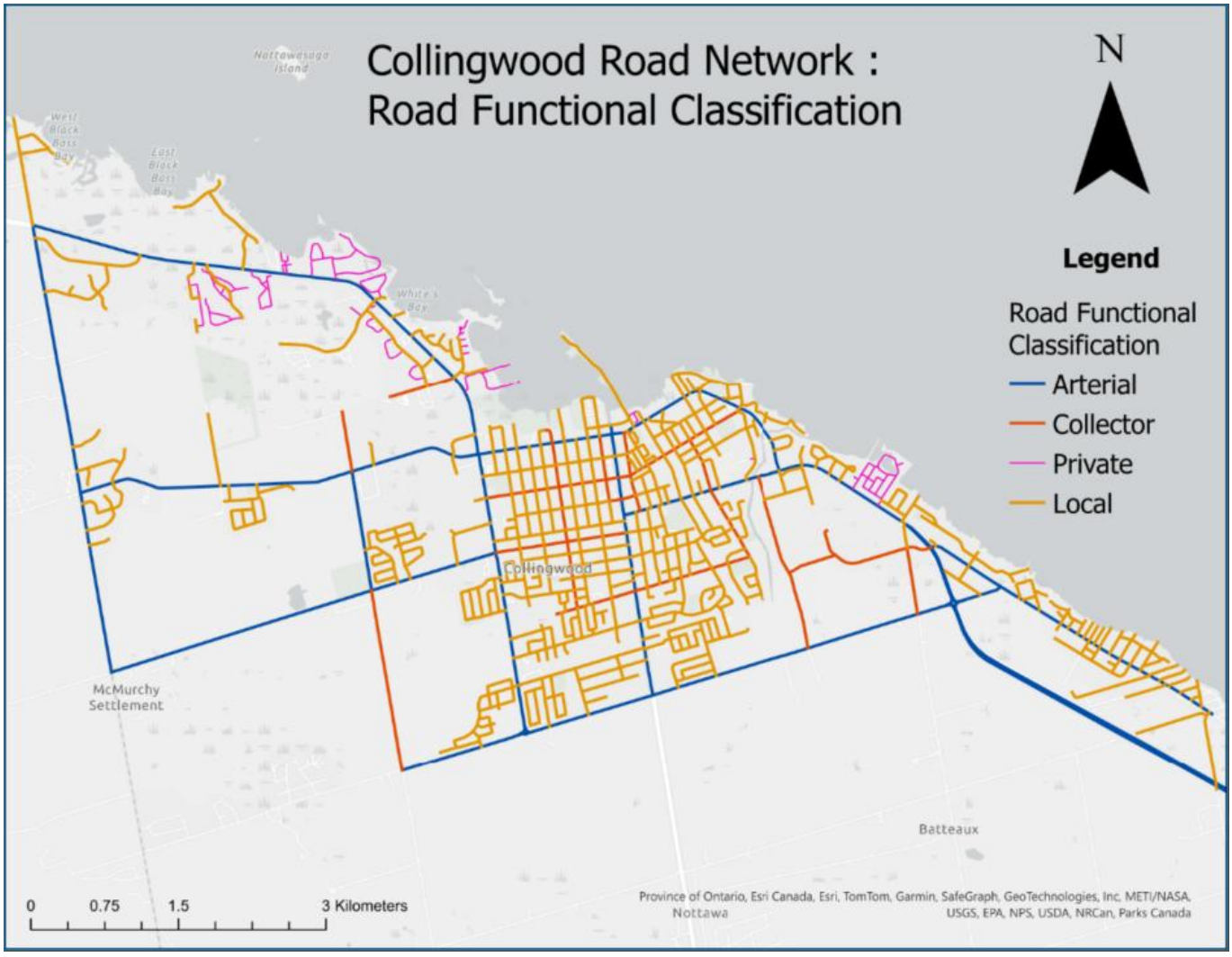


Figure 5: Collingwood Road Network: Road Function Classification

According to Figure 6, the majority of Local and Collector roads have a speed limit of 50 km/h. However, in 2024, the Town began to reduce a certain number of local streets to 30 km/h with a Community Safety Zone implemented on all these streets. In addition, the vast majority of schools within Collingwood had a 30 km/h school zone implemented. Only the school zone on Highway 26 fronting Pretty River Academy has a 40 km/h school zone speed limit implemented.

In addition, some arterial roadways in Collingwood (such as Hume Street and portions of Hurontario Street) also have had their posted speed limit reduced to 30 km/h. However, as these are arterial roads, they are not part of this assessment.

It should be noted that while the regulatory by-law for these speed limit reductions was approved in 2024, it is not clear exactly when the relevant signage was installed on the identified streets.

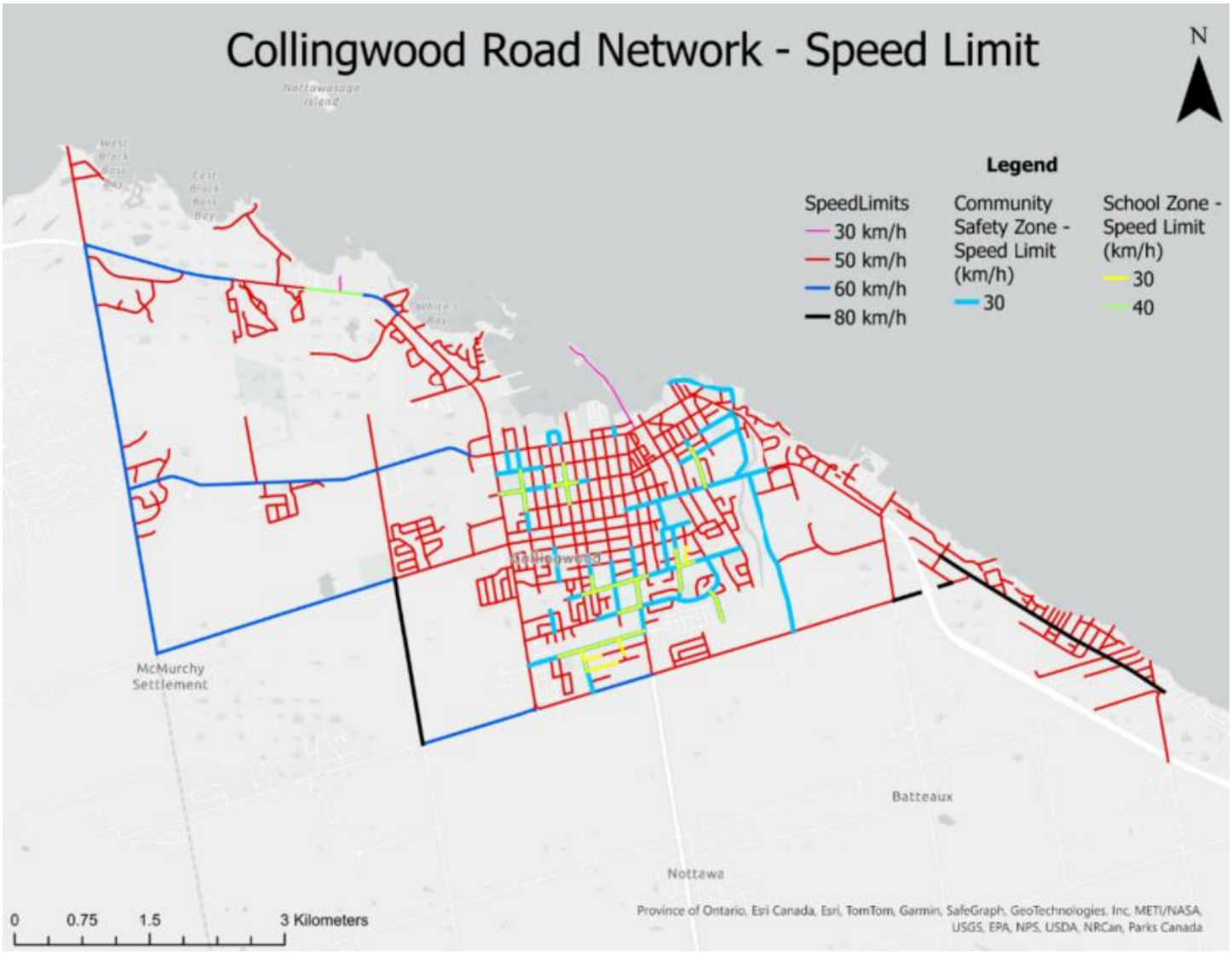


Figure 6: Collingwood Road Network: Posted Speed Limit

4. Summary Table for Background Review: Regulatory Compliance

Several speed reduction strategies were reviewed which have been implemented across two separate towns and cities. It has been observed that many cities worldwide are shifting from the traditional approach of setting road speed limits to adopting various Vision Zero initiatives.

According to the Transportation Association of Canada (TAC), speed limits can be established based on several factors, including road classification, function, physical characteristics, roadside development, and collision history. One of the key methods for setting speed limits is the 85th percentile speed, which reflects the speed at or below which 85% of drivers are traveling under free-flow conditions. This approach is often used as a guideline for determining a reasonable speed limit, as it represents the driving behaviour of the majority of motorists.

However, in recent years, various Vision Zero initiatives have gained significant popularity. Several Canadian cities, including Toronto, Ottawa, Edmonton, Calgary, and Vancouver, have adopted speed reduction policies as part of their Vision Zero initiatives. The basic principle of Vision Zero is that “no loss of life is acceptable” which means zero fatality rate. These locations are often reducing speed limit on their roads to achieve this goal because studies have shown that the severity of road collisions is largely dependent on vehicle speed. As vehicle speed decreases, the fatality rate also decreases [1]. As part of this approach, cities are reducing speed limits based on road types and surrounding conditions

(such as neighbourhoods). In certain cases, speed limits have been lowered as follows: local roads from 50/40 to 40/30 km/h, collector roads from 50 to 40 km/h, and arterial roads from 60 to 50 km/h.

However, as noted previously, the Town of Collingwood has made a number of posted speed limit changes in 2024 that reduced posted speed limits on certain streets to 30 km/h (and with a Community Safety Zone).

4.1 Speed Limit Reduction Policy Adoption in Canada

Several towns and cities in Canada have adopted speed reduction policies as part of their road safety and Vision Zero initiatives which is shown in Table 1 below.

Table 1: Speed Reduction Policy Adoption in Canada

Town/City	Adopted Speed Limit Policies	Key Measures/Programs	Year of Implementation
Toronto, Ontario	Reduced speed limits on collector roads (50 km/h to 40 km/h) and local streets (40 km/h to 30 km/h).	Vision Zero 2.0, traffic calming measures, gateway signage, and targeted enforcement.	Phased since 2016, updated in 2019.
Ottawa, Ontario	Speed limits reduced to 30 km/h in school zones, residential areas, and areas with significant pedestrian activity.	Neighbourhood Speed Zones, implementation of traffic calming features like flex stakes and narrowed lanes.	Initiated in 2017.
Edmonton, Alberta	Default speed limit reduced from 50 km/h to 40 km/h on residential and collector roads.	Vision Zero strategy with comprehensive data analysis, automated enforcement, and public engagement campaigns.	Implemented in 2021.
Montreal, Quebec	Widespread implementation of 30 km/h speed limits on local streets and 40 km/h on collector roads in residential and school areas.	Extensive public consultation, focus on school zones, and addition of speed bumps and pedestrian safety infrastructure.	Phased since 2014.
Calgary, Alberta	Reduced speed limits to 40 km/h on most residential and collector roads.	Part of a road safety plan with public awareness, traffic calming infrastructure, and consistent monitoring.	Implemented in 2021.
Vancouver, British Columbia	Speed limits reduced to 30 km/h in school and playground zones, with pilot programs for reducing speeds on residential streets.	Pilot projects combined with cycling and pedestrian safety improvements.	Active since 2020.
Hamilton, Ontario	Reduction to 30 km/h in specific neighbourhoods, school zones, and high pedestrian activity areas.	Vision Zero	Action Plan 2019-2025
London, Ontario	Default speed limits reduced to 40 km/h in residential areas with 30 km/h in school zones and pedestrian-heavy areas.	Traffic calming measures, targeted enforcement, and public awareness campaigns.	Approved in 2022.

Kingston, Ontario	Implemented 40 km/h speed limits in residential zones and 30 km/h in front of schools.	Combination of traffic calming techniques such as road narrowing, signage, and speed bumps.	Phased since 2019.

4.2 Implementation of Speed Limit Reduction Criteria/Warrants

Table 2 summarizes the compliance measures and policies reviewed for the study, providing insights into their application and criteria for setting speed limits.

Table 2: Implementation of Speed Reduction Policy Criteria/Warrants

Section	Key Points	Details
Speed Limit of 30 km/h (From Research Paper) [2].	30 km/h limits reduce injury risks for vulnerable road users (pedestrians and cyclists).	• Applicable for tertiary local streets with AADT <500 vehicles/day. • Streets should meet characteristics: pavement width <6 m, frequent street parking, proximity (<1 km) to higher-speed roads. • Additional measures (e.g., traffic calming, enforcement) may be needed if conditions aren't met.
Speed Limit of 40 km/h (From Research Paper) [2].	Recommended for local residential and municipal collector streets with dense activity.	• Road width: 8–10 m (two traffic lanes + street parking). • Used near schools, hospitals, or dense commercial/residential areas. • Sidewalks on both sides are generally required. • Additional measures needed if 85th percentile speed is too high.
Lanark County Policy	Speed reductions based on differences in observed and posted speeds (10 km/h+).	• Criteria include geometric constraints, operating speed, environmental characteristics, and zone length (500m+).
Toronto Vision Zero 2.0	Context-sensitive approach to speed reductions focusing on land use, road classification, and vulnerable users.	40 km/h Speed Limit Warrants: • Warrant A: Pavement width ≤10.5 m. • Warrant B: Pedestrian Environment (e.g., adjacent school or park, no sidewalks). • Warrant C: Road/Traffic Environment (e.g., parking on narrow streets, collision history). 30 km/h Speed Limit Warrants: • Warrant A: Petition signed by ≥25% of affected households. • Warrant B: Local/collector road with adjacent park/school. • Warrant C: Meets active transportation or pedestrian safety conditions.
Collingwood Warrants	Local policy using TAC guidelines to determine speed limits based on road and safety analysis.	• Warrant A: TAC spreadsheet evaluating risks (geometry, lane width, pedestrian exposure, intersections, etc.). • Warrant B: 85th percentile speed studies. • Warrant C: School environments with 50+ students and proximity to roads (150 m).

4.3 Speed Limit Reduction Guidelines from NACTO

The **National Association of City Transportation Officials (NACTO)** provides context-sensitive speed limit reduction guidelines that can prioritize safety for vulnerable road users and align with urban mobility goals. Some of the key guidelines are noted in Table 3:

Table 3: NACTO Guidelines for speed reduction

Road Type	Recommended Speed Limit	Key Considerations	Supporting Measures	Objective
Local Streets	20–30 km/h	• Streets with high pedestrian and cyclist activity. • Dense residential or mixed-use areas.	• Narrow travel lanes. • Traffic calming measures (e.g., speed humps, raised crosswalks).	Minimize injury risks for pedestrians and cyclists. Foster safe, shared use of roadways.
Collector Roads	30–40 km/h	• Moderate vehicle traffic. • Streets serving residential, commercial, or institutional areas.	• Street redesign (e.g., bike lanes, wider sidewalks). • Enhanced signage and road markings.	Ensure safe speeds for multimodal traffic, including transit, cyclists, and pedestrians.

5. Community and Stakeholder Engagement

In 2024, the Town of Collingwood conducted survey for Community Engagement related to this matter. Town and EXP created the survey document and finalized the survey questions. The Speed Limit Reduction project in Collingwood Town engaged a diverse group of community members and stakeholders in 2024. The engagement process was designed to gather input, address concerns, and ensure that any change to posted speed limits can reflect the needs and preferences of the community. However, prior to this engagement taking place, Collingwood made adjustments to posted speed limits on certain roadways through Collingwood to reduce speeds on certain streets to 30 km/h and to also introduce community safety zones. The survey details are attached in Appendix 1.

1. **Engagement Tools and Methods**: Several tools and methods were utilized to facilitate community and stakeholder engagement:
2. **Surveys**: Two primary surveys were conducted:
   - Speed Limit Review Survey: This survey collected opinions on whether speed limits should be modified town-wide or on a case-by-case basis. For this survey there were 788 visitors and among them 243 people registered and provided feedback.
   - Traffic Speeds - Locations of Opportunity Survey: This survey allowed residents to identify specific areas where vehicle speeds were a concern. In this survey 40 attendees provided feedback.
3. **Q&A Sessions**: A platform was provided for community members to submit their questions and receive responses from project leaders.
4. **Online Engagement**: The Engage Collingwood platform was used to host surveys, provide project updates, and facilitate discussions.

5.1 Speed Limit Review Survey Result:

Speed Limit Preferences

The majority of respondents (54.7%) supported modifying speed limits in specific areas on a case-by-case basis, reflecting a preference for targeted adjustments rather than a blanket approach. A significant portion (31.7%) favored town-wide modifications, indicating a desire for uniformity across Collingwood. A smaller group (13.6%) did not support any modifications, suggesting satisfaction with current speed limits or concerns about potential changes.

Advantages of Reducing Speed Limits

Respondents identified several benefits of reducing speed limits, including improved safety for drivers, pedestrians, and cyclists. Lower speed limits were also seen as a way to reduce traffic noise and greenhouse gas emissions, contributing to a quieter and more environmentally friendly community. Additionally, fewer traffic collisions and reduced injuries when collisions occur were highlighted as key advantages.

Disadvantages of Reducing Speed Limits

Despite the benefits, some respondents expressed concerns about the potential drawbacks of reducing speed limits. Increased travel time and congestion, targeted enforcement were the primary disadvantages mentioned.

Support for Speed Limit Changes

When asked about their support for speed limit changes on their own streets, 57.4% of respondents were supportive if the speed limit was reduced, while 11.6% were supportive if it was increased. A notable portion (20.2%) remained neutral, indicating mixed feelings or a lack of strong opinion on the matter.

5.2 Traffic-Speed Location Opportunity Survey Result:

Traffic Speeds - Locations of Opportunity

The survey identified specific roads and intersections where vehicle speeds were a concern. Areas such as Kirby Avenue, High Street, Campbell Street, and other locations were highlighted for their traffic safety issues. Concerns were generally year-round, although respondents had identified issues occurring on a number of different times and days, including weekdays, weekends, and specific times of day such as mornings and late afternoons.

Reasons for Traffic Safety Issues

Respondents provided several reasons for traffic safety issues, including drivers exceeding speed limits, busy pedestrian and vehicular traffic areas, and the presence of children and seniors. The road environment, such as straight versus curved designs, and the lack of sidewalks were also significant factors contributing to safety concerns.

5.3 Key Findings

The community engagement surveys revealed a complex landscape of community preferences and concerns regarding traffic safety and speed limits. Through comprehensive surveys and engagement tools, the project gathered valuable insights from residents. A majority of respondents favored targeted speed limit modifications in specific areas. The benefits of reducing speed limits were clear, with improved safety for all road users and environmental advantages being the most prominent. However, the potential drawbacks, such as increased travel time and congestion, were also significant considerations.

Support for speed limit changes varied, with a majority backing reductions on their own streets, reflecting a strong desire for safer local environments. The Traffic Speeds - Locations of Opportunity survey pinpointed specific roads and intersections where speeding was a concern, emphasizing the need for focused interventions. Reasons for traffic safety issues ranged from driver behaviour to infrastructural shortcomings (such as a lack of sidewalks), underscoring the multifaceted nature of the problem.

Overall, the community and stakeholder engagement process accurately summarized the diverse perspectives within Collingwood.

It is not clear whether or not the implementation of the posted speed limit changes (i.e., signage) was introduced before, during, or after the time the community engagement surveys were being conducted.

5.4 Detailed Analysis of Traffic-Speed Location of Opportunity Survey

EXP has identified 24 roads (Local and Collector Roads) that are of most concern. These are summarized in **Table 4**. People are concerned about these roads due to various issues such as high speed, heavy volumes, lack of pedestrian infrastructure, and proximity to sensitive areas such as schools, playgrounds, and residential zones. To address these concerns on all 24 roads, 32 locations had Automated Traffic Recorder (ATR) counts introduced. The data was collected by Ontario Traffic Inc. (OTI). Two different types of data were collected during the duration of the counts by OTI, such as vehicular speed data and traffic volume data (for different classes of vehicles).

It is worth noting that while some additional roads were identified as areas of concern through the community and stakeholder engagement survey, they fell outside the scope of this study as they were not classified as Local or Collector roads. Consequently, these roads were not included in the survey analysis.

The key issues and characteristics of the 24 roads within the scope are summarized in Table 4 and shown in Figure 7.

Table 4: Concern Road Summary Table

Sr. No.	Road Name	Key Issues/Comments	Survey Location	Nearest Cross Street
1	ALICE STREET	Speed, No sidewalks, Busy	72 Alice Street on hydro pole right beside the house.	BELL BOULEVARD
2	CAMERON STREET	Many children/citizens in the area/Schools	562 Cameron Street in front of the house	MAPLE STREET
3	CAMPBELL STREET	Speeds, No Sidewalks, Busy Pedestrian Area	76 Campbell Street on hydro pole	MASON ROAD
4	CEDAR STREET	High Volume, Speed, Children, Seniors/Schools	237 Cedar Street on hydro pole	THIRD STREET
5	CLARK STREET	Speed, Children, Seniors/ Schools/playground	36 Clark Street on hydro pole	DANCE STREET
6	COLLINS STREET	Busy, Residential, Speed, Schools	116 Collins Street on hydro pole	ROBINSON STREET
7	CRANBERRY TRAILS E	Cranberry Trails from Highway 26 to End of Blue Fairways, Speed, Busy	Hydro pole opposite to 44 Cranberry Trails E	ROBBIE WAY
8	FIFTH STREET	Busy, Children, Schools	183 Fifth Street hydro pole right beside house	BIRCH STREET
9	FINDLAY DRIVE	Speed, Schools, Children	98 Findlay Drive on hydro pole	NEWBOURNE STREET
10	FOURTH STREET	Busy, No Stop Signs for 4 block length, High Speed	254 Fourth Street hydro pole opposite the house	OAK STREET
11	GLEN ROGERS ROAD	Speed is too fast, Busy	25 Glen Rogers Road on hydro pole	ST. CLAIR STREET
12	HAMILTON STREET	Speed too high, Busy	78 Hamilton Street on hydro pole	ST. MARIE STREET
13	KIRBY AVENUE	Speeding, Busy, Schools	48 Kirby Ave nearest any available pole	BAILEY STREET
14	MAPLE STREET	Speed, Schools, Children, Busy pedestrian	544 Maple Street on hydro pole	CAMPBELL STREET
			210 Maple Street on hydro pole	THIRD STREET
			449 Maple Street on hydro pole	EIGHTH STREET
15	MINNESOTA STREET	Minnesota St. north of Hume, Busy cycling, Speed	270 Minnesota Street on hydro pole	HUME STREET

Sr. No.	Road Name	Key Issues/Comments	Survey Location	Nearest Cross Street
16	OAK STREET	High Volume, Children, Schools	460 Oak Street on hydro pole	SEVENTH STREET
			225 Oak Street on hydro pole right beside house	THIRD STREET
17	ONTARIO STREET	Speed, Busy Pedestrian, Busy Vehicular Traffic	289 Ontario Street hydro pole opposite to house	WEST STREET
			157 Ontario Street on hydro pole	ST. PAUL STREET
18	PEEL STREET	Speed, Children, Schools	357 Peel Street on hydro pole left side of the house	HARBEN COURT
19	PRETTY RIVER PARKWAY SOUTH	Speed, Busy	102 Pretty River Pkwy South on hydro pole	SOUTH SERVICE ROAD
20	ROBINSON STREET	Busy, Speed, Children	125 Robinson Street on hydro pole opposite to house	HAMILTON STREET
21	SECOND STREET	Busy, Speed, Children, Seniors	433 Second Street on hydro pole left side	SPRUCE STREET
22	SIXTH STREET	No Sidewalks, Speed, Busy vehicular, Children/seniors	420 Sixth Street on hydro pole	SPRUCE STREET
			141 Sixth Street on hydro pole opposite house	MAPLE STREET
			321 Sixth Street on hydro pole opposite house	WALNUT STREET
23	STANLEY STREET	Speed, Children, Seniors, Schools	118 Stanley Street light pole right side	SAUNDERS STREET
24	THIRD STREET	Busy, High volume, Speed, Children/Seniors, Road Environment, schools	418 Third Street hydro pole in front of house	HICKORY STREET
			175 Third Street on hydro pole	BEECH STREET
			346 Third Street on hydro pole near Beech Street intersection.	WALNUT STREET

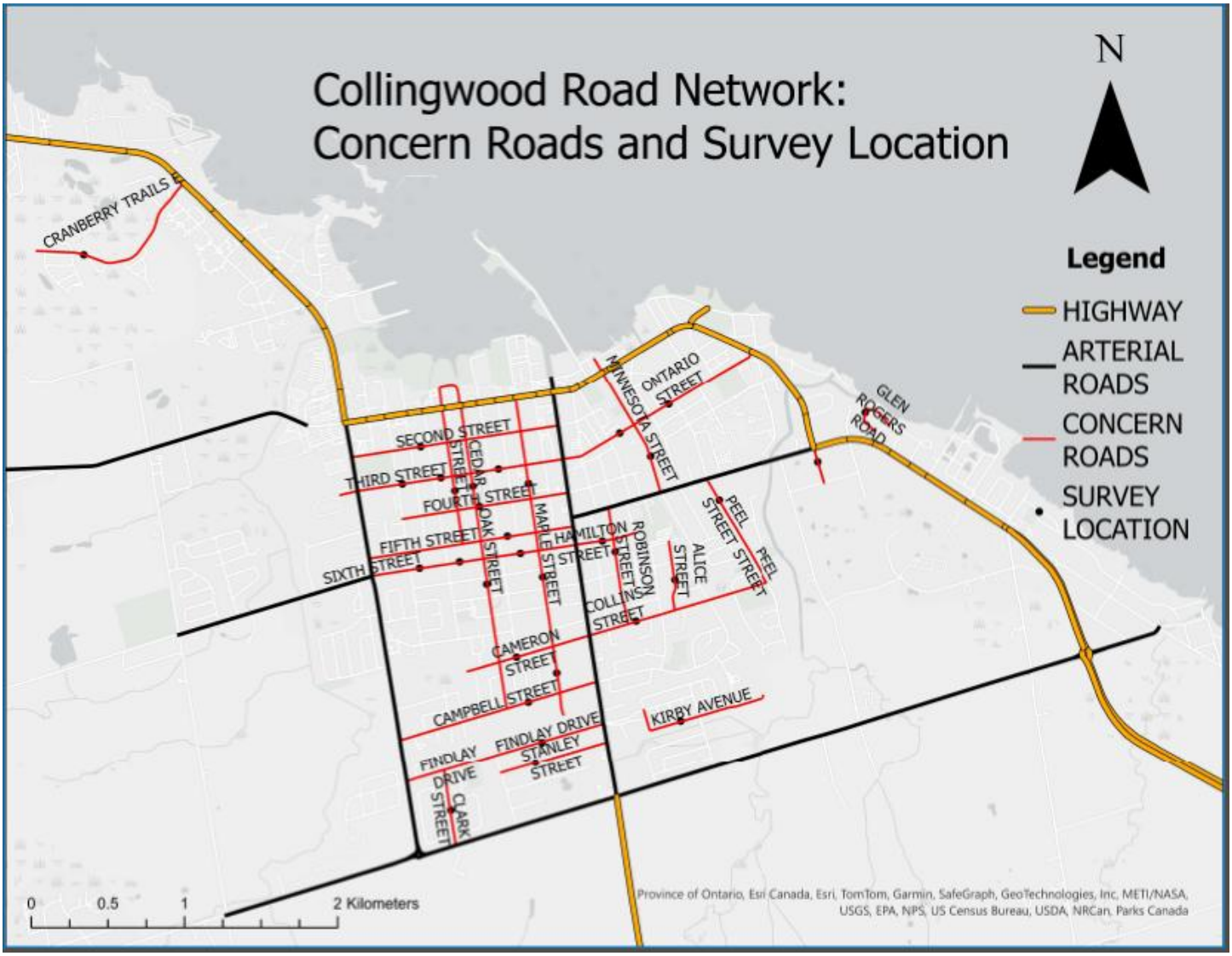


Figure 7: Collingwood Road Network – Concerned Roads and Survey Location

6. Data Analysis

In this study, data was collected from three primary sources to comprehensively analyze road traffic and speed patterns in the Town of Collingwood. Three sources are mentioned below:

1. Town of Collingwood: The town provided historical traffic data and speed enforcement evaluator results. The speed data was collected over the past five years at different roads. This data used to validate the data collected from ATR by OTI.
2. Street Light Data: Street Light Data was accessed online to review speed counts on select roads. This data provides valuable information, including directional traffic, 85th percentile speed, 95th percentile speed, and average speed, helping to analyze traffic behavior comprehensively.
3. Automated Traffic Recorder (ATR) Counts by Ontario Traffic Inc.: Detailed speed and traffic count data were collected at 32 locations identified on 24 identified roadways which were identified in the Speed-Limit Location Opportunity Survey. ATR data was collected continuously over three consecutive days, from October 29, 2024, to October 31, 2024, between 12:00 AM and 11:45 PM each day. The data was recorded at both 15-minute and

60-minute intervals, providing information on peak hour traffic, 85th percentile speed, 95th percentile speed, and average speed. The results were delivered in PDF and Excel formats, facilitating detailed analysis and reporting. The ATR data is included Appendix 2. The ATR was generally relied upon. It should be noted that the Town of Collingwood had changed posted speed limits in 2024 to reduce certain roadways (and school zones) to 30 km/h, and it has been confirmed that the data was collected after the signage changes were complete.

6.1 85th Percentile Speed:

The 85th percentile speed is the speed at or below which 85% of vehicles travel on a particular road. It is often used to set speed limits and assess road safety. The idea is that most drivers travel at a speed they consider safe and reasonable, so the 85th percentile speed can reflect the natural flow of traffic and help in making informed decisions about speed limits and enforcement measures.

The graph (Figure 8) provides a detailed comparison of the speed limit and the 85th percentile speed for various roads in Collingwood.

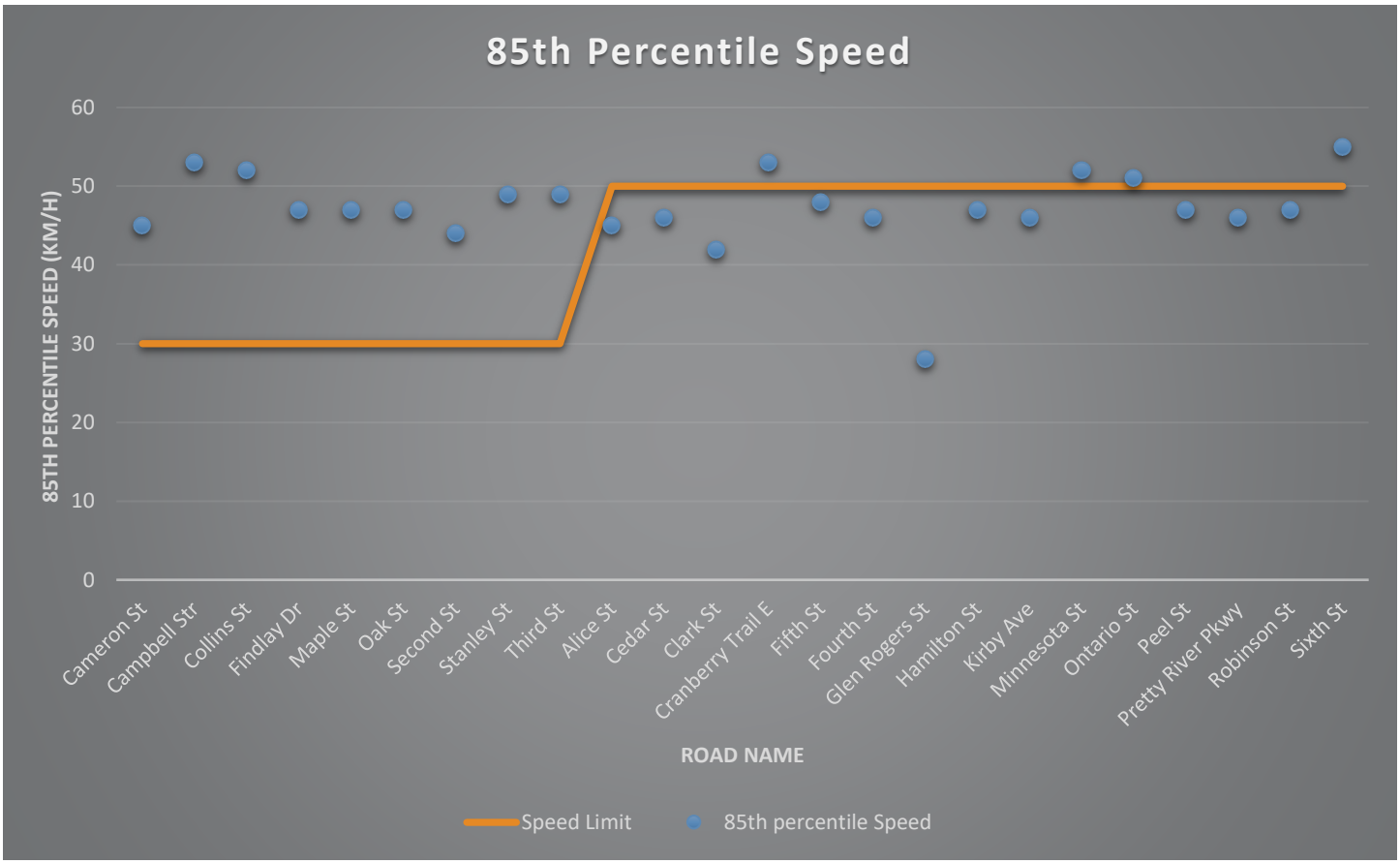


Figure 8: 85th Percentile Speed and Posted Speed Limit in km/h.

The speed limit on most collector and local roads has generally been set at 50 km/h, although Collingwood introduced 30 km/h and community safety zones on certain streets in 2024. The blue dots representing the 85th percentile speeds show most roads see the 85th percentile speed fairly close to 50 km/h. Most roads have 85th percentile speeds close to 50 km/h. However, limited compliance is noted on the streets where the 30 km/h reduced speed limit and community safety zone was implemented. Based on the data collected, it is evident the speed limit reductions have not had a notable impact on 85th percentile speeds.

6.2 95th Percentile Speed

The graph (Figure 9) provides a detailed comparison of the posted speed limit and the 95th percentile speed for various streets in Collingwood.

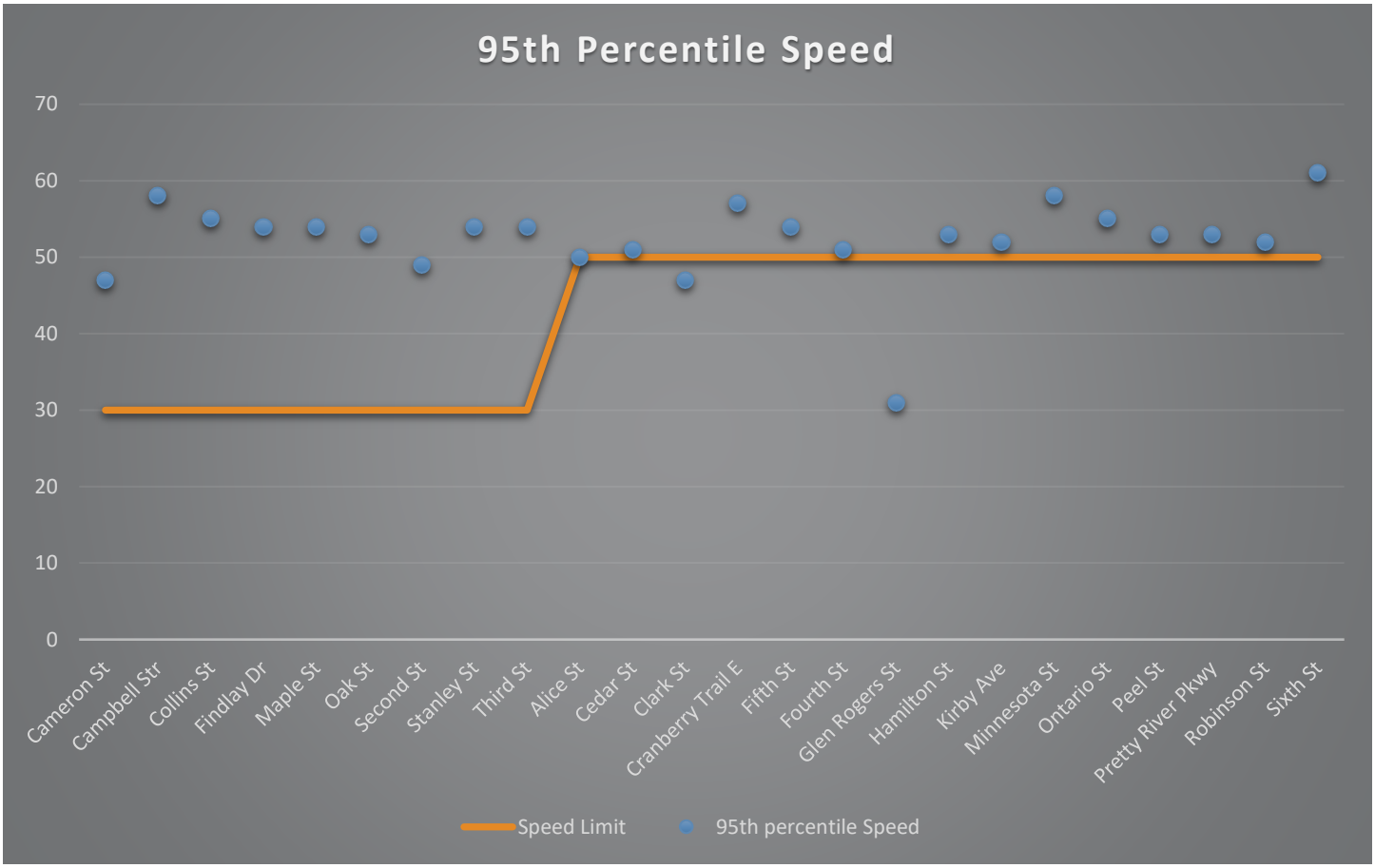


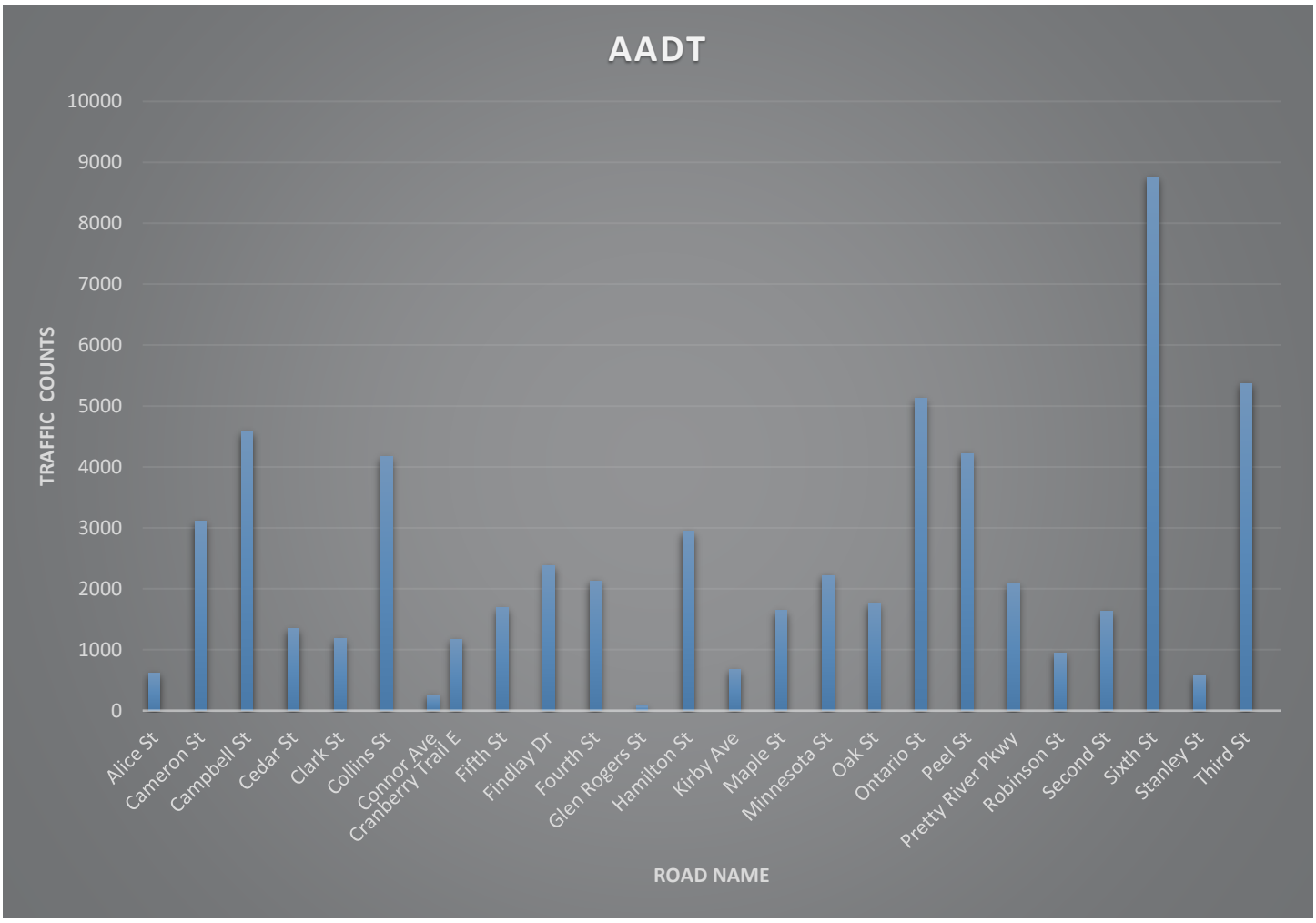
Figure 9: 95th Percentile Speed and Posted Speed Limit in Km/h.

The 95th percentile speed represents the speed at or below which 95% of vehicles travel. This data is essential for understanding actual driving behavior and determining appropriate speed limits. The 95th percentile speed is used to determine if motorists are racing along a roadway. We have analyzed 95th percentile speed for all 24 roads and it has been noted that maximum 95th percentile speed is 61 km/h. This was also found on Sixth St which had the fastest 85th percentile speed. The vast majority of streets seen its 95th percentile speed being between 50 km/h and 60 km/h, noting no measurable change on streets where the posted speed limit was reduced to 30 km/h compared to the streets where the statutory posted speed limit of 50 km/h remains.

6.3 Traffic Flow – Annual Average Daily Traffic (AADT)

The ATR data provided detailed traffic volume data classified on various vehicle classes, including bikes, cars, trailers, and multi-axle trucks.

Figure 10: AADT on Collingwood Streets



Most roads recorded less than 3,000 vehicles per day with a few experiencing higher traffic volumes. Roads such as Sixth Street, Third Street, Ontario Street, Campbell Street, Peel Street, Portland Street, and Collins Street exhibited significant traffic, with Sixth Street having the highest AADT exceeding 8,500 vehicles.

6.4 Heavy Vehicle Traffic

ATR data provides detailed information about the presence of heavy vehicles, which include Buses, 2 Axle 6 Tire, 3 Axle Single, 4 Axle Single, <5 Axle Double, 5 Axle Double, >6 Axle Double, <6 Axle Multi, and >6 Axle Multi on the roads. Based on this data, 24 roads were analyzed for heavy vehicle traffic flow. According to the analysis, all roads have less than 10% heavy vehicle traffic per day. The highest proportion, 8.3%, was recorded on Pretty River Parkway near Highway 26, primarily due to the presence of a logistics company in the area. Cedar Street recorded the lowest heavy vehicle percentage at 1.9%. Seventeen roads had less than 5% heavy vehicle counts, while seven roads had a higher proportion of heavy vehicles, exceeding 5%. This pattern highlights areas with substantial commercial or industrial traffic. This indicates that heavy vehicle traffic is minimal and does not significantly impact most roads. Therefore, when developing a speed reduction policy, heavy vehicle traffic does not need to be a primary consideration.

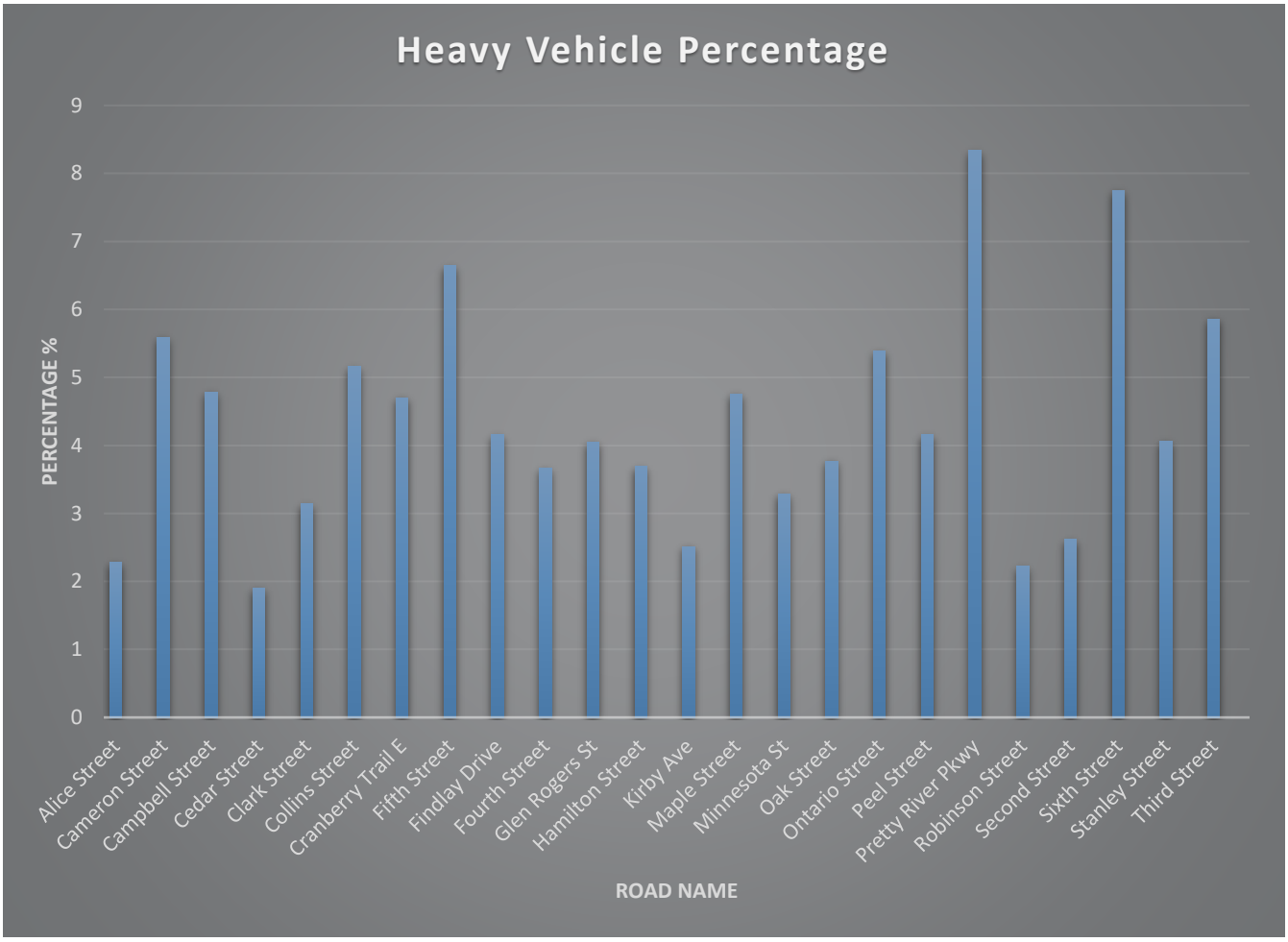


Figure 11: Heavy Vehicle Percentages

6.5 Physical Characteristics

In this study, a detailed physical characteristics analysis was conducted for all 24 roads.

Data regarding physical characteristics were primarily collected through Google Maps, which provided information on sidewalk availability, on-street parking, nearby schools, cemeteries, and parks, Community Safety Zones, variable speed limits, and pedestrian crossovers. Additionally, information about cycling facilities was gathered from the Town of Collingwood Cycling Plan (2019), where roads marked in the plan were identified as having cycling routes.

Collecting and analyzing the physical characteristics of roads enables the identification of areas requiring interventions, such as speed management, infrastructure upgrades, or enhanced pedestrian safety measures. The table below presents the infrastructure assessment of various streets, detailing sidewalk availability, pedestrian safety features, and traffic control measures.

Table 5: Physical Characteristics of Roads

Street Name	Sidewalk	Traffic Calming & Safety Measures	Additional Notes
Alice Street	No sidewalk	None	Ends near Central Park Arena, children's activities
Campbell Street	No sidewalk initially, One side	School crossing sign near Maple St	Near school at Cameron St
Cameron Street	One side and two side	Community Safety Zone (Hurontario to Birch), School crossing	40 km/h at Maple St due to school, speed bump
Cedar Street	One side at Fifth St, two-sided after Fourth St	40 km/h speed limit at First St	Ends at Harbourview Park
Clark Street	Two-sided sidewalks	None	On-street parking
Collins Street	Sidewalks available	Community Safety Zone from Collins at Lockhart, speed bump	Community garden, Catholic school
Cranberry Trail E	No sidewalk	None	More than 2 curves
Fifth Street	No walkway from High St to Walnut St, one side and Both Side	None	-
Findlay Drive	One side and two sides	Speed bumps, speed monitor, Majority of road has 40 km/h speed limit	Community Safety Zone, ends at Hurontario St
Fourth Street	One side, two side	None	On-street parking
Glen Rogers St	No sidewalk	None	Residential with 3 curves, one-lane road
Hamilton Street	Both side	50 km/h speed limit, Community Safety Zone near Central Park Arena	-
Kirby Ave	No sidewalk	None	Residential street
Maple Street	One-sided and two-sided	School crossing signs at Cameron St	On-street parking near Second St, church nearby
Minnesota Street	One side	Pedestrian crossover	Leisure club and medical aesthetic
Oak Street	One side, two side and Between Third and Second street no sidewalk.	Pedestrian crossover at River St, 30 km/h after River St	School at Parliament St, on-street parking
Ontario Street	One side	Community Safety Zone (40 km/h) from Pretty River Pkwy to Niagara St	-

Peel Street	One side	Speed bumps near Collins and Bush St, 40 km/h zone after Hume St	Community Safety Zone near Connaught Public School
Pretty River Pkwy	No Sidewalk	Heavy vehicle traffic	Shipping & receiving services, Collingwood Distillery
Robinson Street	One sided and two sided	None	-
Second Street	Two-side	Community Safety Zone near High St to Cedar St, pedestrian lines	On-street parking at Hurontario St
Sixth Street	Two-side	School crossing	50 km/h throughout the road
Stanley Street	No sidewalk	None	Residential area with some on-street parking
Third Street	Both Side and One side	Community Safety Zone (High St to Spruce St), pedestrian crossings	Aquatic center at High St

7. Speed Reduction Policy

As a result, the following recommendations generally do not consider the 2024 posted speed limit changes (30 km/h zones and but focus on two separate policies to come up with potential speed limit reduction options. However, some of the scenarios have made recommendations to introduce certain speed limit reductions on certain streets and locations where the recommended speed limit is higher than what is present today. This is because many of the recent posted speed limit reductions that the Town made in 2024 go beyond what the indicated scenarios had recommended.

In addition, due to recent changes made by the Province of Ontario to ban Automated Speed Enforcement (ASE) across the province, this type of tool is no longer identified as a potential solution, nor can it be considered.

After carefully analyzing speed reduction policies from various municipalities, it has become clear that decisions regarding posted speed limits reductions on urban roads may not be solely based on the 85th percentile speed. A context-sensitive approach is often essential to account for the unique characteristics of each road and its surrounding environment. Traditional methods for implementing speed limits, which primarily rely on the 85th percentile speed, may not be able to address the safety concerns of all road users, particularly cyclists and pedestrians. The study incorporates both the recorded 85th percentile speed and an in-depth analysis of physical characteristics to develop effective speed reduction measures.

In this study, several speed reduction warrants from other Ontario municipalities were reviewed and considered, and it was concluded that the Toronto Speed Reduction Warrant and Town of Halton Hills Speed Reduction Warrant may be the most suitable for Collingwood. Based on these two sets of warrants, the study proposes two options (Option A and Option B) for potential speed reductions and how it could be applied within Collingwood. In this study we have focused on case-by-case basis speed reduction instead of Town wide speed reduction method because according to community engagement survey majority of community preferred to provide speed reduction on case-by-case basis compared to a town-wide speed reduction.

Traffic Calming Measures

Extensive analysis to implement countermeasures on all 24 Local and Collector roads was considered and based on Collingwood's Traffic Calming Policy 2021. According to this policy, roads qualify for consideration of traffic calming measures if the 85th percentile speed exceeds the posted speed limit by 10 km/h for roads with a 50 km/h posted speed limit. In our case, the 85th percentile speed on all 24 roads does not exceed the posted speed limit by 10 km/h (refer to figure 8). Therefore, all roads are disqualified from consideration for this traffic calming measures.

7.1 Proposed Option A: Toronto's Speed Reduction Warrants

According to Toronto's Vision Zero 2.0 Road Safety Plan, the traditional design speed method is insufficient for urban contexts. Instead of solely relying on the 85th percentile speed to evaluate speed reduction, a context-sensitive approach can be considered This approach has become more mainstream with a number of municipalities focusing on a context sensitive approach over the traditional approach. This approach considers street-specific roadside context, incorporating factors such as land use, road classification, sidewalks, cycling facilities, on-street parking, schools, parks, horizontal and vertical alignment, and the presence of senior residences.

Option A proposes speed limit reductions based on Toronto's Speed Reduction Warrants for 30 km/h and 40 km/h speed limits. These warrants, provide a structured framework for assessing roads based on their physical characteristics, road environments, and pedestrian or cyclist activity. The 30 km/h Speed Limit Warrants, introduced in 2015, and the 40 km/h Speed Limit Warrants, implemented in 2002, have been applied as guidelines in this study to determine eligible roads in Collingwood.

For the 30 km/h Speed Limit Warrants, the first mandatory criterion, Warrant A: Petition, requires a petition signed by at least 25% of residents in the affected area. The 40 km/h Speed Limit Warrants are applied to wider roads with specific pedestrian, traffic, or geometric characteristics. These include roads near schools, parks, or senior residences and those with poor stopping sight distances or challenging geometries, such as steep curves or hills.

Table 6: Toronto's Speed Limit Warrants

Warrant	Criteria
	30 km/h Speed Limit warrants
Warrant A: Petition (Mandatory - Responsibility of Residents)	Petition signed by at least 25% of affected households (or 10% for multiple family dwellings like apartment buildings)
Warrant B: Road Environment (All criteria must be met)	1. Must be a local or collector road 2. Road width must be 8.5 meters or less 3. 85th percentile speed must be 50 km/h or below 4. Vehicle volume must be less than 8,000 vehicles per day
Warrant C: School and Cycling Environment (At least one of these criteria must be met)	1. An elementary or junior high school is beside the road 2. The road is beside parkland that has access to a school or park 3. There are bike lanes, sharrows, or signed bike routes
Warrant D: Pedestrian and Traffic Environment (At least three criteria must be met)	1. No sidewalk on either side of the road or a major part of the road 2. Frequent parking throughout the day with pavement of less than 6.5 meters 3. Two or more curves in short distance from each other 4. Not enough stopping distance
	40 km/h Speed Limit Warrants
Warrant A: Wide Roads	Pavement width cannot be more than 10.5 meters
Warrant B: Pedestrian Environment (One criteria must be met)	1. An elementary or junior high school is beside the road 2. The road is beside parkland that has access to a school or park 3. No sidewalk (on either side or a major portion of the road) 4. The sidewalk is not separated from motor vehicle traffic by street

	parking or bike lanes AND the roadway width is 5.7 meters (if two-way street) or 4.0 meters (if one-way street)
Warrant C: Road and Traffic Environment (One criteria must be met)	1. Two or more locations with steep hills and/or curves, with a safe speed of less than 50 km/h 2. Not enough distance to stop safely at two or more locations when traveling at 50 km/h 3. Pattern of collisions affected by vehicle speed: 3+ collisions over 3 years for local roads, 5+ collisions over 3 years for other roads 4. Long-term parking permitted on one or both sides AND roadway width is 5.7 meters (if two-way street) or 4.0 meters (if one-way street)

Selection of Roads

Using Toronto's warrants, the study identified a total of 14 roads eligible for speed reductions. 7 roads qualify for a 30 km/h speed limit, meeting one or more of Warrants B, C, or D. These roads are primarily located near schools, lack sidewalks, or have significant pedestrian and cyclist activity. Additionally, 7 roads qualify for a 40 km/h speed limit, based on their pedestrian and traffic environments, including no sidewalks or challenging road geometry.

Table 7: Option A selected roads for speed reduction

Road Name	Speed Limit From/To	Key Characteristics
Clark Street	50/30	Pedestrian/cyclist activity.
Fifth Street	50/30	No sidewalks, pedestrian/cyclist activity.
Findlay Drive	50/30	Elementary school nearby, pedestrian/cyclist activity.
Hamilton Street	50/30	Pedestrian/cyclist activity.
Maple Street	50/30	Elementary school nearby, pedestrian/cyclist activity.
Peel Street	50/30	Elementary school nearby, pedestrian/cyclist activity.
Third Street	50/30	Elementary school nearby, pedestrian/cyclist activity.
Alice Street	50/40	Lack of sidewalks.
Campbell Street	50/40	Lack of sidewalks, pedestrian activity.
Collins Street	50/40	Elementary school nearby, lack of sidewalks.
Cranberry Trail E	50/40	Horizontal Alignment, lack of sidewalks.
Glen Rogers Street	50/40	Lack of sidewalks.
Second Street	50/40	Elementary school nearby.
Stanley Street	50/40	Lack of Sidewalks

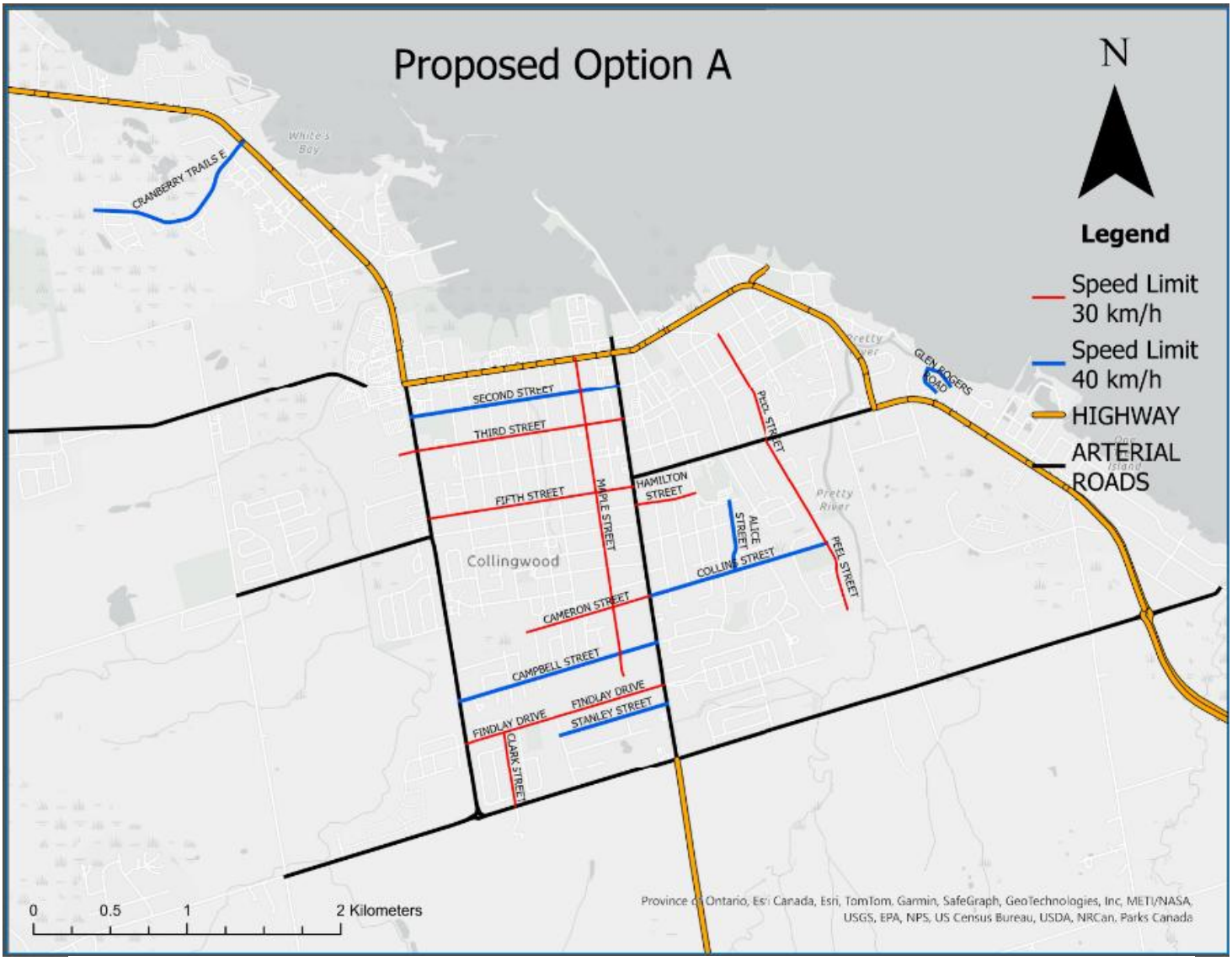


Figure 12: Option A

Benefits of Option A

Implementing Option A aligns with modern speed reduction strategies by focusing on roads with significant pedestrian and cyclist activity or unique road environments. By utilizing Toronto's established warrants for 30 km/h and 40 km/h speed limits, this option provides a structured framework for improving road safety. It prioritizes safety for vulnerable road users, such as children, seniors, and cyclists, while addressing community-specific needs. Option A ensures context-sensitive speed limits that reflect the unique characteristics of the road environment, resulting in a reduction in speeding-related risks, particularly in residential and school zones. A complete list of eligible roads is provided in the accompanying figures, reinforcing Collingwood's commitment to adopting broader municipal speed reduction practices.

Traffic Calming Measures

Extensive analysis to implement countermeasures on all 24 Local and Collector roads based on Toronto's 2023 Traffic Calming Policy was considered. The warrants analysis criteria of this policy involve three warrants to qualify for Speed Hump and Cushion Warrants, which are stated below:

- **A:** Minimum block length of 120 meters based on the measured distance from centre to centre of controlled intersections;
- **B:** Minimum 85th percentile speed of 8 km/h over warrant speed limit; and
- **C:** Minimum 95th percentile speed of 15 km/h over warrant speed limit.

To qualify for implementation of Traffic Calming Measures, a road must meet the criteria of Warrant (A) and either Warrant (B) or (C). In Collingwood, the maximum 85th percentile speed found is 55 km/h on Sixth St, and the maximum 95th percentile speed is 61 km/h (refer to Figure 8 and 9). Both speeds are less than 8 km/h and 15 km/h over the posted speed limit, respectively, which is required to qualify for the criteria. Therefore, no traffic measures such as Speed Hump and Cushion Warrants are required on the 24 roads when considering Toronto's 2023 Traffic Calming Policy.

7.2 Proposed Option B: Town of Halton Hills Speed Reduction Warrants

Option B utilizes the Town of Halton Hills Speed Reduction Policy (2022) as a framework for implementing speed limit reductions in Collingwood. This policy categorizes roads into three groups: Local Roads, Local Roads with Cut-Through Traffic, and Collector Roads, and establishes specific eligibility criteria for reducing speed limits from 50 km/h to 40 km/h. The policy provides a structured approach to assess roads based on their classifications and traffic characteristics, ensuring that speed reductions are applied effectively where warranted.

Screening and Eligibility Criteria

For Local Roads, the policy states that roads with normal traffic patterns and residential land use are automatically eligible for a 40 km/h speed limit. However, roads with significant cut-through traffic must meet at least three criteria to qualify. These criteria include the proximity of elementary schools, senior residences generating pedestrian traffic, nearby parks or cemeteries, challenging road geometrics (e.g., vertical or horizontal curves), and the absence of pedestrian facilities such as sidewalks or multi-use pathways. For Collector Roads, the eligibility threshold is higher, requiring at least four of these criteria to qualify for a speed reduction.

Table 8: Halton Hills Town Speed Reduction Warrants

Road Classification	Traffic Type	Eligibility Criteria
Local Roads	Normal Traffic	Automatically eligible for a 40 km/h speed limit based on residential land use.
Local Roads	Cut-Through Traffic	Must meet at least three (3) of the following criteria to qualify for a 40 km/h speed limit: • Elementary schools within walking distance. • Senior residences generating pedestrian traffic. • Nearby parks, parkettes, or cemeteries. • Challenging road geometry (e.g., vertical or horizontal curves). • Lack of pedestrian facilities (e.g., sidewalks or multi-use pathways).
Collector Roads	Any Traffic	Must meet at least four of the above criteria to qualify for a 40 km/h speed limit.

Selection of Roads

The Halton Hills 40 km/h Area Speed Limit Implementation Policy was applied to Collingwood's Road Network using data collected by Ontario Traffic Inc. (OTI) and an analysis of road network characteristics. To identify which roads have normal traffic and those that may have cut through traffic, ATR Speed and Volume data was analyzed and used to verify traffic flows on local roads. If there is a sudden increase in traffic during peak hours, then those roads are qualified for cut through traffic. Also, it would be valuable to review/confirm the location of the road in the road network to identify if road is viable option to use for the short cut to reduce traveling on a nearby arterial road which may increase traffic volumes. If cut-through traffic is identified these local roads are identified. Nine roads with normal traffic patterns qualified for speed reduction based on their residential land use and automatic eligibility under the policy. Six additional roads were found to be eligible based on cut-through traffic, including Campbell Street, Clark Street, Findlay Drive, Second Street, Trott Blvd, and Nettleton Court. For Collector Roads, none met the stricter eligibility criteria of three required factors. Consequently, no speed reduction measures were applied to Collector roads when considering this policy.

Table 9: Option B selected roads for speed reduction

Road Name	Traffic Type	Key Criteria Met	Speed Limit From/to
Campbell Street	Cut-Through	Elementary school, senior residence, park, lack of pedestrian facilities	50/40
Clark Street	Cut-Through	Elementary school, park, lack of pedestrian facilities	50/40
Findlay Drive	Cut-Through	Elementary school, park, lack of pedestrian facilities	50/40
Second Street	Cut-Through	Elementary school, park, lack of pedestrian facilities	50/40
Alice Street	Normal Traffic	Lack of pedestrian facilities	50/40
Cranberry Trail E	Normal Traffic	Challenging geometrics, lack of pedestrian facilities	50/40
Fifth Street	Normal Traffic	Senior residence, lack of pedestrian facilities	50/40
Fourth Street	Normal Traffic	Elementary school	50/40
Glen Rogers Street	Normal Traffic	Lack of pedestrian facilities	50/40
Kirby Avenue	Normal Traffic	Senior residence, lack of pedestrian facilities	50/40
Minnesota Street	Normal Traffic	Challenging geometrics	50/40
Stanley Street	Normal Traffic	Senior residence, lack of pedestrian facilities	50/40

Countermeasures for Roads with Cut-Through Traffic

According to the Halton Hills 40 km/h Area Speed Limit Implementation Policy, lowering speed limits alone may not effectively address the risks associated with significant cut-through traffic. To complement speed reductions, traffic calming measures are recommended for local roads which have cut through traffic and qualified for a posted speed reduction. Suggested interventions include speed humps, speed cameras, and other traffic calming measures designed to manage traffic flow and improve safety for vulnerable road users. These measures would be implemented following the Town's Traffic Calming Implementation Protocol, ensuring that necessary steps are taken to enhance road safety.

Table 10: Proposed countermeasures for roads with cut-through traffic

Road Name	Proposed Traffic Calming Measures
Campbell Street	Install 1 speed hump near the Maple intersection. Install 1 speed hump at the south end of Walnut Trails.
Clark Street	Install 1 speed hump between Poplar Side Road and Dance Street.

Option B provides a more balanced and structured approach to speed reduction by integrating 40 km/h speed limits with traffic calming measures where necessary. This ensures that roads with significant cut-through traffic are effectively managed, addressing safety concerns for vulnerable road users while maintaining alignment with traffic flow efficiency and broader safety goals.

- Findlay Drive has been identified as having cut-through traffic, but it has been excluded from further traffic calming considerations. This decision is based on a previous study conducted by EXP in April 2024, titled "Findlay Drive Cycling and Traffic Calming Design Study." In this study, several traffic calming measures were proposed and subsequently installed on Findlay Drive, including permanent speed humps, curb extensions, flexible bollards and delineators, road markings and signage, digital speed display boards, and pedestrian crossovers (PXOs).
- During the speed reduction survey on Findlay Drive, two different sets of data were found. The town's data indicated a consistent speed limit of 50 km/h throughout Findlay Drive. However, an online street view survey showed that the speed limit is 50 km/h between High Street and Dance Street and then reduces to 40 km/h up to Tracey Lane. When considering the Halton Hills Policy, it is proposed that Findlay Drive should have a uniform speed limit of 40 km/h along its entire stretch.

When considering the Halton Hills Traffic Calming Implementation Protocol 2022 for roads other than the three above mentioned, no additional roads qualify for traffic calming measures. According to this policy, roads qualify for traffic calming measures if the 85th percentile speed is 62 km/h on local and collector roads. For roads with schools, retirement centers, and major parks, the 85th percentile speed should be 57 km/h (Refer to Figure 8). In our case, the maximum 85th percentile speed was measured to be 55 km/h (refer to Figure 8), which is less than the requirement to qualify for traffic calming measures. Therefore, only the three above-mentioned roads qualify for traffic calming measures due to the Halton Hills Speed Reduction Policy for cut-through traffic.

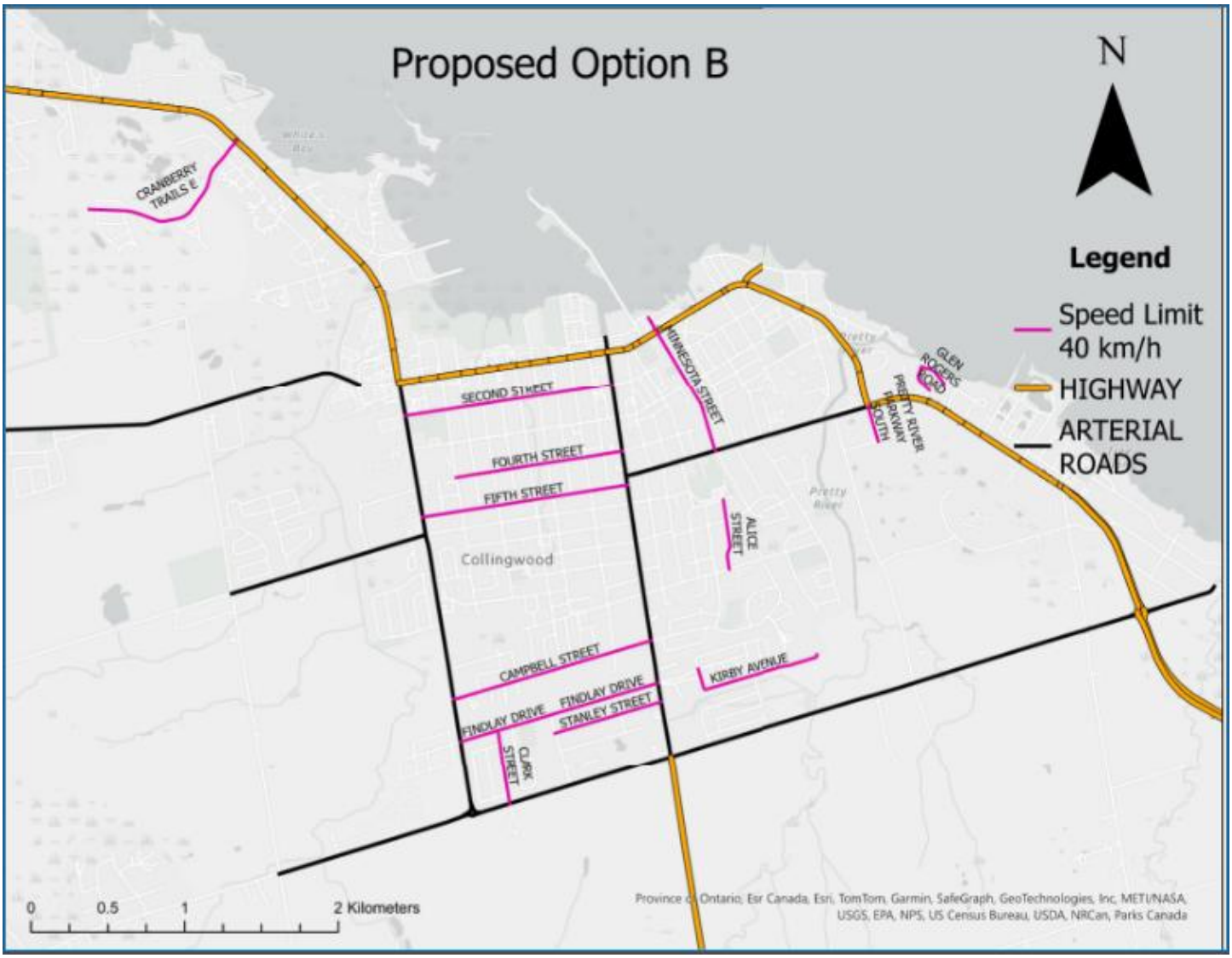


Figure 13: Option B

7.3 Comparison between Option A & B

Option A (City of Toronto policy) provides a comprehensive approach, addressing a wider range of roads, including Collector roads, with both 30 km/h and 40 km/h speed limits. However, it lacks provisions for traffic calming measures, which may limit the effectiveness of speed reductions on roads with high traffic volumes or cut-through traffic. Option B (Town of Halton Hills) offers a targeted solution, focusing primarily on local roads with cut-through traffic and integrating speed reductions with traffic calming measures. However, its general exclusion of collector roads may leave some high-traffic areas unaddressed. Fourth Street and Kirby Ave are two streets included in Option B for a speed reduction but are not included in Option A.

Both Option A and Option B focus on physical characteristics, but Option B places greater emphasis on the nature of traffic and classifies roads accordingly. Additionally, Option B applies different parameters for Local and Collector roads, which is why no collector roads qualify for speed reduction in Option B when considering roadways in Collingwood.

Most of the local roads which qualify in option A also qualify in option B except for Maple St and Hamilton St. This is because these two streets are not seen to have cut through traffic and according to option B it does not qualify for at least three criteria. Therefore, the roads which are not common in both options are all collector roads in option A and two local roads (Hamilton St and Maple St).

8. Conclusion and Recommendations

8.1 Conclusion

The Speed Reduction Study for Local and Collector Roads in Collingwood has highlighted the need for enhanced road safety measures, particularly for vulnerable road users such as pedestrians and cyclists. This implies adopting modern, context-sensitive approaches to speed management that prioritize the physical characteristics of roads and land use over traditional methods like the 85th percentile speed.

The study has developed two options for speed reduction. However, these options were based on consideration that no recent posted speed limit changes were made in the past year, and that the statutory speed limit of 50 km/h remained in place on the vast majority of local and collector streets in Collingwood:

1. **Option A**: Combining traditional methods with a context-based approach, this option uses Toronto's speed reduction warrants from 2015 (30 km/h) and 2002 (40 km/h). It includes both Local and Collector roads, providing a balanced framework for speed reduction while addressing a wider range of roads. However, it lacks provisions for traffic calming measures, which may limit the effectiveness of speed reductions on roads with high traffic volumes or cut-through traffic.
2. **Option B**: Focusing primarily on Local roads, this option uses the Town of Halton Hills policy to ensure comprehensive safety measures are implemented on residential streets but exclude Collector roads, potentially overlooking safety concerns on roads with higher traffic volumes. It integrates speed reductions with traffic calming measures, ensuring that roads with significant cut-through traffic are effectively managed.

8.2 Recommendations

The study recommends adopting Option B for both collector and local roads, complemented by traffic calming measures and regular monitoring to ensure the effectiveness of the interventions and address community concerns comprehensively. However, given a number of streets were previously reduced to 30 km/h with a community safety zone put into place, it is likely not possible to fully adopt this option moving forward (without increasing posted speed limits on some streets). In addition, as Automated Speed Enforcement (ASE) has been banned by the province of Ontario as of November 2025, it is no longer an option/tool that can be considered by the Town for implementation.

To achieve a balanced and effective speed reduction policy, we recommend the following:

1. Adopt Option B for Collector and Local Roads:
   - Utilize Halton Hills Town's speed reduction warrants to ensure the identified roads in the concern list are addressed. This approach leverages a proven framework to systematically reduce speed limits on Local roads, enhancing safety for vulnerable road users such as pedestrians and cyclists. The criteria used to identify roads with normal traffic and those with cut-through traffic should be clearly specified to provide transparency and clarity on how the roads were selected for speed reduction.
2. Enhance Compliance with Countermeasures:
   - Implement physical traffic calming (i.e. speed humps), gateway signage at specific locations to improve compliance with the revised posted speed limits where warranted. These measures will help monitor and manage speeding, ensuring that the reduced speed limits are adhered to and enhancing overall road safety. Providing more details on the specific locations where these measures will be implemented and the expected impact on road safety will add value to this recommendation.

- Should the Community Safety Zones as implemented remain on the streets where 30 km/h speed limits were recently reduced, certain streets were found to have the 85th percentile speed around 50 km/h. In terms of the top four streets with the fastest 85th percentile speed, they are noted as:
  - Campbell Street
  - Collins Street
  - Stanley Street
  - Third Street.

  However, caution should be taken as some of the recent speed limit changes are well beyond what was recommended, particularly when using the Halton Hills Town's speed reduction warrants for collector and local roads.

3. Regular Monitoring and Community Feedback:
   - Establish a timeline for regular monitoring of speed on roads where speed reduction measures are applied. Specify the methods for gathering community feedback and outline how this feedback will be used to make further improvements or changes. This approach may help ensure that the interventions are effective and that community concerns are continuously addressed.
4. Traffic Calming Measures:
   - Consolidate the recommendations for traffic calming measures in this section to provide a clear and cohesive plan for implementing these measures on roads with significant cut-through traffic. Suggested interventions can include speed humps, and other traffic calming measures designed to manage traffic flow and improve safety for vulnerable road users.
5. Integration with the Proposed Master Mobility & Transportation Plan:
   - Clarify how the recommendations in Section 8.2 align with the goals and initiatives of the proposed Master Mobility Plan. This ensures that the recommendations are consistent with the broader transportation strategy for Collingwood and demonstrate a commitment to long-term road safety and mobility improvements.

This combined approach could have leveraged the strengths of Option B, ensuring that Local and Collector roads are addressed effectively while prioritizing the safety and comfort of all road users in Collingwood. However, the recent changes to posted speed limits on some roadways may make it more difficult to fully rely on this option, as some of the recent posted speed limit changes go beyond what this policy option would have recommended, and increasing posted speed limits on some corridors (i.e., from 30 km/h back to 40 km/h or 50 km/h) may not be deemed feasible.

When arbitrarily reducing posted speed limits through the Town is found to be not technically warranted, it is not found to be beneficial to the town. Typically, when lowering speed limits without corresponding changes to road design and/or increased enforcement, it is found to be generally ineffective, as motorists tend to travel at speeds they perceive to be safe based on the design and environment of the roadway. On these streets, should there be no physical traffic calming or credible enforcement introduced, low compliance to the reduced speed limit often results, resulting in minimal safety benefits and undermining of public trust in regulations.

Given this, a town-wide posted speed limit reduction to 30 km/h is not recommended, although certain streets have been identified to potentially have a 40 km/h posted speed limit in place. Speed limits should align with the functional classification and physical characteristics of the roadway, and it has been confirmed that arbitrary reductions to the posted speed limit without supporting design changes are unlikely to influence the behaviour of most motorists and can reduce the credibility of the Town's overall speed management efforts.

References

[1] B. C. Teff, "Impact Speed and Pedestrian's Risk of Severe Injurt or Death," AAA Foundation for Traffic Safety, Washington, DC, 2011.

[2] C. Berthod, "Speed Limit in Urban Areas: A New Approach," in *Transportation Association of Canada*, Charlottetown, Prince Edward Island, 2015.

Appendix 1 – Survey 1 Form and Result

Appendix 2 – ATR Data

Appendix 3 – Speed Reduction Policy Analysis