

TOWN OF CALEDON
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Environmental Noise Feasibility Study

Argo Mayfield West I-III

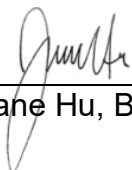
Proposed Mixed-Use Development
Town of Caledon

September 27, 2024
Project: 123-0369 / 123-0370 / 123-0371

Prepared for

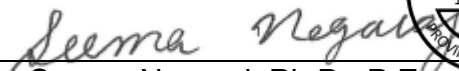
**Argo Mayfield West I Limited, Argo Mayfield West II
Limited and Argo Mayfield West III Limited**

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Version History

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Environmental Noise Feasibility Study

Argo Mayfield West I-III

Proposed Mixed-Use Development Town of Caledon

EXECUTIVE SUMMARY

Valcoustics Canada Ltd. (VCL) was retained to prepare an Environmental Noise Feasibility Study for the proposed mixed-use development in support of the Draft Plan of Subdivision application submission to the Town of Caledon.

The proposed development will consist of detached dwellings (Blocks 1 to 444), street townhouses (Blocks 445 to 465), rear lane townhouses (Blocks 466 to 523), back-to-back townhouses (Blocks 524 and 525), two blocks for medium-high density residential development (Blocks 526 and 527), a school block (Block 528), a neighbourhood park block (Block 529) and a stormwater management pond (Block 534). There will also be 22 residential reserve part blocks (Blocks 537 to 558) that will be combined with neighbouring developments to create full detached or townhouse dwelling blocks.

The transportation noise source with the potential for impact at the subject site is road traffic on Chinguacousy Road as well as the new internal roadways in the development (Tim Manley Avenue, Alexander Gillespie Avenue, Speersville Avenue, and Welsh Avenue). There are no stationary noise sources in the vicinity with the potential for impact at the subject site.

To meet the noise guideline limits:

- Mandatory air conditioning is required for the first row of dwellings from Chinguacousy Road, specifically:
 - All dwelling units in Blocks 510, 511, 512, and 558; and,
 - The easternmost dwelling units in Blocks 450, 451, 496, 497, 547 and 548.
- The provision for adding air conditioning is required at dwellings throughout the development. Refer to Figure 2 and Table 3 for specific blocks/locations.
- For the first row of dwellings from Chinguacousy Road, exterior wall construction meeting Sound Transmission Class (STC) 37 and exterior windows with ratings up to STC 30 will mitigate the indoor sound levels to the noise criteria.

Exterior wall construction meeting the minimum non-acoustical requirements of the Ontario Building Code (OBC) is expected to achieve a rating of STC 37. If upgraded exterior wall construction with a higher STC rating is used (e.g. brick veneer), the window STC requirements are expected to decrease.

- At all other locations, exterior wall and window construction meeting the minimum non-acoustical requirements of the Ontario Building Code (OBC) will be sufficient to meet the indoor noise criteria.
- Sound barriers are required (see Figure 2 for specific locations):
 - 2.4 m high at the townhouse dwellings siding toward Chinguacousy Road (easternmost units in Blocks 450 and 451);
 - 2.1 m high at the detached dwelling siding onto Tim Manley Avenue (Block 1);
 - 1.8 m high at:
 - the townhouse dwellings siding onto Tim Manley Avenue (the northernmost units in Blocks 460 and 461);
 - all dwellings siding onto Alexander Gillespie Avenue and Welsh Avenue (Blocks 30, 31, 101, 164, 243, 244, 322, 363 and 364, and the westernmost units in Blocks 445 and 456); and
 - the detached dwellings backing onto the stormwater management pond (Blocks 175 to 183).

Plans showing the layouts for the medium-high density residential blocks and the future school block have not yet been prepared. The noise control requirements at these blocks should be determined once the site layout has been finalized. This should be done as part of the SPA applications for these blocks.

1.0 INTRODUCTION

Valcoustics Canada Ltd. (VCL) has been retained to prepare an Environmental Noise Feasibility Study for the proposed mixed-use development in support of the Draft Plan of Subdivision application submission to the Town of Caledon.

The sound levels from the environmental noise sources have been predicted on site and compared to the applicable MECP, Region of Peel and Town of Caledon noise guideline limits. Where sound level excesses above these guideline limits occur, noise mitigation measures have been recommended.

1.1 THE SITE AND SURROUNDING AREA

The subject site is located within the Alloo Secondary Plan area in the Town of Caledon. The site is bounded by:

- Chinguacousy Road, with residential dwellings currently under construction beyond, to the east;
- Future residential and mixed-use development (part of the Alloo Secondary Plan), with Mayfield Road beyond, to the south;
- Future residential development to the west (part of the Alloo Secondary Plan); and

- Future natural heritage system blocks, stormwater management pond blocks and residential development (part of the Alloo Secondary Plan) to the north.

Note that the site consists of a northern portion (consisting of two adjacent parcels) and a southern portion (one parcel). The land between the two portions will consist of detached dwellings, townhouse blocks, and part blocks that will, in the future, be combined with the school block and residential part blocks on the subject site.

The site is currently occupied by agricultural land and associated single-family dwellings that will be demolished as part of the development.

Figure 1 shows a key plan.

This report was prepared using the Draft Plan of Subdivision, prepared by Glen Schnarr and Associates, dated August 20, 2024. The Draft Plan of Subdivision is included as Figure 2.

1.2 THE PROPOSED DEVELOPMENT

The proposed development will consist of detached dwellings (Blocks 1 to 444), street townhouses (Blocks 445 to 465), rear lane townhouses (Blocks 466 to 523), back-to-back townhouses (Blocks 524 and 525), two blocks for medium-high density residential development (Blocks 526 and 527), a school block (Block 528), a neighbourhood park block (Block 529) and a stormwater management pond (Block 534). There will also be 22 residential reserve part blocks (537 to 558) that will be combined with neighbouring developments to create full detached or townhouse dwelling blocks.

It is understood that all townhouse blocks and detached dwellings will be two storeys with a potential additional loft space.

The detached dwellings and the standard townhouses will be provided with grade-level rear yard outdoor amenity space. The rear lane and back-to-back townhouses will be provided with small (less than 4 m in depth) private balconies or terraces.

2.0 NOISE SOURCES

2.1 TRANSPORTATION SOURCES

There are road noise sources in the area that could impact the proposed residential development. There are no rail lines in the vicinity of the site. The site lies outside airport noise influence areas (i.e., areas at NEF/NEP 25 or higher). Thus, rail and aircraft noise were not considered further in this study.

2.1.1 Road Traffic

The roadways with the potential to impact the site are Chinguacousy Road and the internal collector roadways (Tim Manley Avenue, Alexander Gillespie Avenue, Speersville Avenue and Welsh Avenue). Other roadways are either far enough removed from the site or are anticipated to have low traffic volumes and are not expected to create a significant noise impact on the site.

The road traffic data is discussed below and summarized in Table 1. Road traffic correspondence is included as Appendix A.

Chinguacousy Road

Year 2024 and 2044 traffic volumes for Chinguacousy Road were provided by the traffic consultant, in the form of future peak hour turning movement count (TMC) data. The 24-hour traffic volumes were calculated by multiplying the higher of either the AM or PM peak hour volume by 10.

Truck percentages for Chinguacousy Road were calculated using the year 2024 TMC data provided by the traffic consultant since truck information was not provided for the 2044 TMC data. For this analysis, it was assumed that these truck percentages would also be applicable to the year 2044 condition.

The day/night split for Chinguacousy Road were assumed to be 90%/10%, as is typical for well travelled roadways. The speed limit on Chinguacousy Road is 60 km/h.

Internal Roadways

Year 2044 traffic volumes for the internal roadways were provided by the traffic consultant, in the form of future peak hour turning movement count (TMC) data. The 24-hour traffic volumes were calculated by multiplying the higher of either the AM or PM peak hour volume by 10. The continuation of Tim Manley Avenue on the west side of Chinguacousy Road corresponds to Street B in the traffic data; Alexander Gillespie Avenue corresponds to Street D; Speersville Avenue to Street E; and Welsh Avenue to Street A.

Although current truck percentages are not available for the future internal roadways, some of these roadways will be continuations or connections to existing roads on the east side of Chinguacousy Road and the south side of Mayfield Road (for example, the new Tim Manley Avenue will be a continuation of the existing Tim Manley Avenue on the east side of Chinguacousy Road, and Speersville Avenue will connect to Brisdale Avenue south of Mayfield Road). The existing truck percentages on these existing roadways were used to estimate the future truck percentages on the internal roadways in the development.

The 2024 TMC data indicated that the truck percentage was approximately 5% of the total vehicle volume on the existing roadways outside of the site. All internal roadways were therefore assumed to have a future total truck percentage of 5%. It is noted that the current truck volumes mostly consist of buses (medium trucks). However, to be conservative, the future medium and heavy truck percentages on the internal roadways were assumed to be 60% and 40% of the total truck volume, respectively.

It should be noted that the 2024 TMC for the existing portion of Tim Manley Avenue indicated that the truck percentages are as high as 25%. However, it was noted during a site visit by VCL staff that the traffic on Tim Manley Avenue was dominated by construction vehicles associated with the new residential subdivision under construction on the east side of Chinguacousy Road. The truck volumes are expected to be lower once construction is complete. Tim Manley Avenue were therefore also modelled with a total of 5% trucks, split 60%/40% medium/heavy.

The day/night splits for all roadways were assumed to be 90%/10%, as is typical for well travelled roadways. The traffic consultant indicated that the speed limits on the future internal collector roadways are expected to be 50 km/h. Tim Manley Avenue is expected to be 60 km/h. The speed limit on Chinguacousy Road is 60 km/h.

TABLE 1 ROAD TRAFFIC DATA

Roadway	24-Hour Traffic Volume ⁽¹⁾	% Trucks		Speed Limit (kph) ⁽³⁾	Day/Night Split (%)
		Medium	Heavy		
Chinguacousy Road	31 640	3.3	2.2	60	90/10
Tim Manley Avenue	11 320	3	2	60	90/10
Alexander Gillespie Avenue	6 130	3	2	50	90/10
Speersville Avenue	2 790	3	2	50	90/10
Welsh Avenue	5 350	3	2	50	90/10

Notes:

- (1) The year 2044 24-hour traffic volumes for all five roadways were calculated from the 2044 peak hour TMCs provided by C.F. Crozier & Associates Inc. The peak hour volumes were converted to 24-hour volumes by multiplying the higher of the am or pm peak hour volume by 10.
- (2) Truck percentages were calculated from the existing (year 2024) turning movement counts. Speed limits were provided by C.F. Crozier & Associates Inc. The day/night splits were assumed.
- (3) Vehicle speeds 10 kph higher than the indicated speed limit were used in the analysis, per Town of Caledon guidelines.

2.2 STATIONARY SOURCES

An existing transformer station is located at the northwest corner of Mayfield Road and Chinguacousy Road, approximately 390 m away from the closest planned residential block (Block 523) in the draft plan. During a site visit by VCL staff on June 21, 2024, observations were made from the south property line of the transformer station (close to Mayfield Road). No large fans or cooling equipment was visible, and noise from the transformer station was not audible at this location over the ambient traffic noise from Mayfield Road. Thus, due to the distance separation from the subject site as well as the on-site observations, noise from the transformer station is not anticipated to have a significant impact at the subject site. Thus, this transformer station has not been considered further in the study.

There are future mixed-use blocks along Mayfield Road in some of the development parcels to the south of the subject site. These blocks must be designed to meet the environmental noise guidelines of the MECP at the neighbouring residential dwellings, including dwellings within the subject site. As such, the future mixed-use blocks have not been considered further in this study.

3.0 ENVIRONMENTAL NOISE GUIDELINES

3.1 TRANSPORTATION SOURCES

3.1.1 MECP Publication NPC-300

The applicable noise guidelines for new residential development are those in MECP Publication NPC-300, “*Environmental Noise Guideline, Stationary and Transportation Sources – Approval and Planning*”.

The environmental noise guidelines of the MECP (Publication NPC-300) are discussed briefly below and summarized in Appendix C.

3.1.1.1 Architectural Elements

In the daytime (0700 to 2300), the indoor criterion for road noise is $L_{eq\ Day}^{(1)}$ of 45 dBA for sensitive spaces such as living/dining rooms, dens and bedrooms. At night, the indoor criterion for road noise is $L_{eq\ Night}^{(2)}$ of 45 dBA for sensitive spaces such as living/dining rooms and dens and 40 dBA for bedrooms.

The architectural design of the building envelope (walls, windows, etc.) must provide adequate sound isolation to achieve the above indoor sound level limits applying the outdoor sound level predicted at the facades.

3.1.1.2 Ventilation

When the daytime sound level ($L_{eq\ Day}$) at the exterior face of a noise sensitive window is greater than 65 dBA, means must be provided so that windows can be kept closed for noise control purposes and central air conditioning is required. For daytime sound levels between 56 dBA and 65 dBA inclusive, there need only be the provision for adding air conditioning. A warning clause advising the occupant of the potential interference with some activities is also required. At nighttime, air conditioning is required when the sound level exceeds 60 dBA ($L_{eq\ Night}$) at a noise sensitive window (provision for adding air conditioning is required when the sound level is greater than 50 dBA).

3.1.1.3 Outdoors

For OLA's, the guideline objective is 55 dBA $L_{eq\ Day}$, with an excess not exceeding 5 dBA considered acceptable if it is not feasible to achieve the 55 dBA objective for technical, economic or administrative reasons, provided warning clauses are registered on title. Note, a balcony or elevated terrace is not considered an OLA unless it is:

- the only OLA for the occupant;
- at least 4 m in depth; and
- unenclosed

3.1.2 **Region of Peel**

The Region of Peel's noise guidelines are described in the "General Guidelines for the Preparation of Acoustical Reports in the Region of Peel" document (Reference 5). The Region of Peel noise guidelines are essentially the same as the MECP noise guidelines for transportation noise sources except that the nighttime sound level for triggering the air conditioning requirement is 1 dBA more stringent (i.e., less) than the sound level specified by the MECP; i.e., mandatory air conditioning for nighttime sound levels of 60 dBA or greater, and the provision for adding air conditioning for sound levels between 51 to 59 dBA inclusive.

The Peel guidelines also indicate a maximum desirable sound barrier height of 4.0 m (relative to the roadway centreline) with a maximum acoustic fence height of 2.4 m, although a height of no more than 2.0 m is preferred. To make up any additional height beyond that of the fence, a berm is to be used.

(1) $L_{eq, Day}$ 16-hour energy equivalent sound level (0700-2300 hours).
(2) $L_{eq, Night}$ 8-hour energy equivalent sound level (0700-2300 hours).

3.1.3 Town of Caledon

The Town of Caledon noise guidelines are described in the “Development Standards Manual” document (Reference 6). The Town of Caledon’s general policy is not to accept any excess above the 55 dBA objective for OLA’s. However, an excess may be acceptable if unreasonably high sound barriers are needed to meet the 55 dBA objective.

The Town’s maximum acoustic fence height is 2.4 m. Higher barriers can be provided by using a combination of an acoustic fence and a berm. The maximum permitted sound barrier height according to the Town’s Development Standards is 4.8 m (2.4 m fence atop a 2.4 m berm).

Road traffic noise levels are to be calculated using a minimum 20-year traffic forecast and a speed of 10 kph over the posted speed limit.

4.0 NOISE IMPACT ASSESSMENT

4.1 METHOD

Using the road traffic data in Table 1, the $L_{eq\ Day}$ and $L_{eq\ Night}$ were determined using STAMSON V5.04 – ORNAMENT, the computerized road traffic noise prediction models of the MECF.

As previously noted, all dwellings are expected to be 2 storeys, with a potential loft space. To be conservative, the daytime and nighttime sound levels at all building facades were assessed at a height of 7.5 m above grade, representing a loft-height plane of window (the worst-case location).

The daytime OLA sound levels at the rear yard outdoor amenity areas were assessed at a height of 1.5 m above grade, 3 m from the midpoint of the rear dwelling facade.

See Figure 2 for the assessment receptor locations.

Inherent screening of each building face due to its orientation to the noise source as well as screening provided by the subject development itself was taken into account. To be conservative, screening from the future development, including all residential reserve part blocks that will be combined with neighbouring parcels in the future, was not included. The stormwater management pond is modelled as a reflective surface.

4.2 RESULTS

The highest unmitigated daytime/nighttime sound levels of 68/61 dBA are predicted to occur at the east facade of Block 512 (receptor R1), the closest dwelling to Chinguacousy Road.

The highest unmitigated daytime OLA sound level of 63 dBA is predicted to occur at the easternmost dwelling in Block 451 (receptor R9), the rear yard with the greatest exposure to Chinguacousy Road.

Table 2 summarizes the unmitigated daytime and nighttime sound level predictions.

Appendix C contains a sample sound level calculation.

TABLE 2 PREDICTED UNMITIGATED SOUND LEVELS OUTDOORS

Location ⁽¹⁾	Source	Distance (m) ⁽²⁾	L _{eq} Day (dBA)	L _{eq} Night (dBA)
R1 Block 512 East Facade	Chinguacousy Road	25	68	61
R2 Block 512 South Facade	Chinguacousy Road	25	65	58
R3 Block 497 East Facade	Chinguacousy Road	35	66	59
	Tim Manley Avenue	18	62	56
	TOTAL	-	67	61
R4 Block 497 South Facade	Chinguacousy Road	35	63	56
	Tim Manley Avenue	18	65	59
	TOTAL	-	67	61
R5 Block 496 Easternmost Unit East Facade	Chinguacousy Road	34	66	59
R6 Block 496 Easternmost Unit South Facade	Chinguacousy Road	34	63	56
R7 Block 451 2 nd Easternmost Unit North Facade	Chinguacousy Road	38	60	54
	Tim Manley Avenue	209	48	42
	TOTAL	-	61	54
R8 Block 453 Easternmost Unit North Facade	Chinguacousy Road	38	54	48
	Tim Manley Avenue	209	48	41
	TOTAL	-	55	48
R9 Block 451 Easternmost Unit Rear Yard OLA	Chinguacousy Road	40	63	-
R10 Block 458 Northernmost Unit East Facade	Chinguacousy Road	243	49	43
	Tim Manley Avenue	99	51	45
	TOTAL	-	53	47
R11 Block 461 Northernmost Unit North Facade	Tim Manley Avenue	27	63	56
	Alexander Gillespie Avenue	15	59	53
	TOTAL	-	64	58
R12 Block 461 Northernmost Unit West Facade	Tim Manley Avenue	27	60	53
	Alexander Gillespie Avenue	15	62	56
	TOTAL	-	64	58

.../cont'd

TABLE 2 PREDICTED UNMITIGATED SOUND LEVELS OUTDOORS (continued)

Location ⁽¹⁾	Source	Distance (m) ⁽²⁾	L _{eq} Day (dBA)	L _{eq} Night (dBA)
R13 Block 461 Northernmost Unit Rear Yard OLA	Tim Manley Avenue	28	60	-
R14 Block 322 East Facade	Alexander Gillespie Avenue	18	61	55
R15 Block 322 Rear Yard OLA	Alexander Gillespie Avenue	23	57	-
R16 Block 321 South Facade	Alexander Gillespie Avenue	32	54	47
R17 Block 321 Rear Yard OLA	Alexander Gillespie Avenue	37	52	-
R18 Block 1 South Facade	Tim Manley Avenue	19	65	58
	Speersville Avenue	150	40	33
	TOTAL	-	65	58
R19 Block 1 Rear Yard OLA	Tim Manley Avenue	24	62	-
	Speersville Avenue	147	39	-
	TOTAL	-	62	-
R20 Block 363 East Facade	Alexander Gillespie Avenue	15	62	56
	Welsh Avenue	20	58	51
	TOTAL	-	64	57
R21 Block 363 South Facade	Alexander Gillespie Avenue	15	59	53
	Welsh Avenue	20	60	53
	TOTAL	-	62	56
R22 Block 364 Rear Yard OLA	Alexander Gillespie Avenue	31	54	-
	Welsh Avenue	21	58	-
	TOTAL	-	60	-
R23 Block 444 South Facade	Welsh Avenue	15	62	55
	Speersville Avenue	34	51	44
	TOTAL	-	62	55
R24 Block 444 West Facade	Welsh Avenue	15	59	52
	Speersville Avenue	34	54	47
	TOTAL	-	60	53

.../cont'd

TABLE 2 PREDICTED UNMITIGATED SOUND LEVELS OUTDOORS (continued)

Location ⁽¹⁾	Source	Distance (m) ⁽²⁾	L _{eq} Day (dBA)	L _{eq} Night (dBA)
R25 Block 444 Rear Yard OLA	Speersville Avenue	38	50	-
R26 Block 351 East Facade	Chinguacousy Road	109	57	51
R27 Block 509 Northernmost Unit North Facade	Chinguacousy Road	62	56	50
R28 Block 183 East Facade	Chinguacousy Road	87	59	52
R29 Block 177 East Facade	Chinguacousy Road	130	59	51
R30 Block 176 Rear Yard OLA	Chinguacousy Road	131	59	-
R31 Block 544 Rear Yard OLA	Speersville Avenue	25	53	-
R32 Block 543 West Facade	Speersville Avenue	19	57	51

Notes:

- (1) See Figure 2.
- (2) Distance indicated is from the centreline of the roadway to the facade or OLA.

4.3 NOISE ABATEMENT REQUIREMENTS

The noise control measures can generally be classified into two categories which are interrelated, but which can be treated separately for the most part:

- a) The sound isolation performance of architectural elements to achieve the indoor noise guideline sound levels for transportation sources; and
- b) design features to attenuate the sound levels in the OLA's.

Noise abatement requirements/recommendations are summarized in Table 3 and in the notes to Table 3.

4.3.1 Indoors

4.3.1.1 Architectural Requirements

The indoor noise guideline sound levels can be achieved by using appropriate construction for exterior walls, windows and doors. In determining the worst-case architectural sound isolation requirements, exterior wall and window areas were assumed to be 80% and 30%, respectively, of the associated floor area, on both facades of a corner room with both facades exposed directly or at an angle to the transportation noise source(s).

The assessment shows that for the first row of dwellings from Chinguacousy Road, exterior wall construction meeting STC 37 and exterior windows with ratings up to STC 30 will mitigate the indoor sound levels to the noise criteria. Refer to Figure 2 and Table 3 for exact block numbers/locations.

Exterior wall construction meeting the minimum non-acoustical requirements of the OBC is expected to achieve a rating of STC 37. If upgraded exterior wall construction with a higher STC rating is used (e.g. brick veneer), the window STC requirements are expected to decrease.

For windows, the window frames themselves must also be designed to ensure that the overall sound isolation performance for the entire window unit meets the sound isolation requirement. This should be confirmed by the window manufacturer through the submission of acoustical test data.

At all remaining dwellings in the development, exterior wall and window construction meeting the minimum non-acoustical requirements of the OBC will be sufficient to meet the indoor noise criteria.

4.3.1.2 Ventilation Requirements

The assessment shows that mandatory air conditioning is required at first row of dwellings from Chinguacousy Road, specifically:

- All dwelling units in Blocks 510, 511, 512, and 558; and,
- The easternmost dwelling units in Blocks 450, 451, 496, 497, 547 and 548.

The provision for adding air conditioning is required at dwellings throughout the development. Refer to Figure 2 and Table 3 for exact block numbers/locations.

For detached dwellings and townhouse blocks, the provision for adding air conditioning typically takes the form of a ducted ventilation system suitably sized to permit the addition of central air conditioning by the occupant.

4.3.2 **Outdoors**

The unmitigated daytime OLA sound levels are predicted to exceed 55 dBA at the rear yards of dwellings adjacent to Alexander Gillespie Avenue, Speersville Avenue, and Welsh Avenue, as well as dwellings backing onto the stormwater management pond at the northeast corner. The unmitigated daytime OLA sound levels are predicted to exceed 60 dBA at rear yards siding onto Chinguacousy Road. Thus, sound barriers are required.

To meet the 55 dBA design objective of the MECP, the following sound barriers are required:

- 2.4 m high at the townhouse dwellings siding toward Chinguacousy Road (easternmost units in Blocks 450 and 451);

- 2.1 m high at the detached dwelling siding onto Tim Manley Avenue (Block 1);
- 1.8 m high at:
 - the townhouse dwellings siding onto Tim Manley Avenue (the northernmost units in Blocks 460 and 461);
 - all dwellings siding onto Alexander Gillespie Avenue and Welsh Avenue (Blocks 30, 31, 101, 164, 243, 244, 322, 363 and 364, and the westernmost units in Blocks 445 and 456); and
 - the detached dwellings backing onto the stormwater management pond (Blocks 175 to 183).

4.3.2.1 Notes about the sound barrier requirements

- It is understood that that the rear lane and back-to-back townhouse units will not have grade-level rear yard outdoor amenity areas. These units will have balconies and private terraces that are less than 4 m in depth and would therefore not be considered OLAs under the MECP noise guidelines. Thus, sound barriers are not required for noise control purposes at these locations.
- Sound barriers must be of solid construction with no gaps, cracks or holes (except for small, localized openings required for water drainage) and must have a minimum surface weight of 20kg/m². A variety of materials are available, including concrete, masonry, glass, wood, specialty composite materials or a combination of the above.
- The sound barrier requirements were determined using flat topography. The sound barrier requirements will need be confirmed once a grading plan is available.

4.4 WARNING CLAUSES

Warning clauses are a tool to inform prospective owners/occupants of potential annoyance due to existing noise sources. Where the guideline sound level limits are exceeded, appropriate warning clauses should be registered on title or included in the development agreement that is registered on title. The warning clauses should also be included in agreements of Offers of Purchase and Sale and lease/rental agreements to make future occupants aware of the potential noise situation.

Table 3 and the notes to Table 3 summarize the warning clauses for the site.

TABLE 3 MINIMUM NOISE ABATEMENT MEASURES

Block ⁽¹⁾	Unit	Air Conditioning ⁽²⁾	Exterior Wall ⁽³⁾	Exterior Window ⁽⁴⁾	Sound Barrier ⁽¹⁾⁽⁵⁾	Warning Clauses ⁽⁶⁾
Blocks 510, 511, 512 and 558	All	Mandatory	STC 37	STC 30	Not Required.	A + B
Block 450 and 451	1 st unit adjacent to Chinguacousy Road	Mandatory	STC 37	STC 30	2.4 m high sound barrier	A + B
	All other units	Provision for adding.	No special acoustical requirements.	No special acoustical requirements.	Not Required.	A + C
Block 496, 497, 547, and 548	1 st unit adjacent to Chinguacousy Road	Mandatory	STC 37	STC 30	Not Required.	A + B
	All other units	Provision for adding.	No special acoustical requirements.	No special acoustical requirements.	Not Required.	A + C
Block 445, 456, 460 and 461	All	Provision for adding.	No special acoustical requirements.	No special acoustical requirements.	1.8 m high sound barrier required at 1st unit adjacent to Alexander Gillespie Avenue or Tim Manley Avenue	A + C
Blocks 462 to 465; 474 to 483; 498 to 509; 520 to 523; 449, 452, 466, 488, 489, 517, 540, 545, 546, 549, 550, 557	All	Provision for adding.	No special acoustical requirements.	No special acoustical requirements.	Not Required.	A + C
Block 1		Provision for adding.	No special acoustical requirements.	No special acoustical requirements.	2.1 m high sound barrier.	A + C
Blocks 30, 31, 101, 164, 175 to 183, 243, 244, 322, 363, and 364		Provision for adding.	No special acoustical requirements.	No special acoustical requirements.	1.8 m high sound barrier.	A + C
Blocks 109 to 127; 351 to 354; 360 to 362; 421 to 444; 537 to 539, 542, 543, 544, and 556		Provision for adding.	No special acoustical requirements.	No special acoustical requirements.	Not Required.	A + C
Block 359, 513 and 514		Provision for adding.	No special acoustical requirements.	No special acoustical requirements.	Not Required.	A + C + D
Block 323, 350, 367 to 380, and 541		Not required.	No special acoustical requirements.	No special acoustical requirements.	Not Required.	D
All other blocks		No special acoustical requirements.				

Notes to Table 3 on the following page.

Notes to Table 3

- (1) See Figure 2.
- (2) Where methods must be provided to allow windows to remain closed for noise control purposes, a commonly used technique is that of air conditioning.
- (3) STC – Sound Transmission Class Rating (Reference ASTM E-413).
The requirements are based on the assumed percentages of wall and window area to associated floor area stated in Section 2.4.1 and should be reviewed once detailed floor plans are available
- (4) STC – Sound Transmission Class Rating (Reference ASTM E-413). A sliding glass walkout door should be considered as a window and be included in the percentage of glazing.
The requirements were based on the assumed percentages of wall and window area to associated floor area stated in Section 4.3.1.1 and should be reviewed once detailed floor plans are available.
- (5) Sound barriers must be of solid construction with no gaps cracks or holes, and must have a minimum surface density of 20 kg/m².
- (6) Standard example warning clauses to be registered on title and be included in Offers of Purchase and Sale for designated lots:
 - A. "Purchases/tenants are advised that despite the inclusion of noise control features in the development and within the building units, sound levels due to increasing road traffic may on occasions interfere with some activities of the dwelling occupants as the sound levels exceed the sound level limits of the Municipality and the Ministry of the Environment, Conservation and Parks."
 - B. "This dwelling unit has been supplied with a central air conditioning system which will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the Municipality and the Ministry of the Environment, Conservation and Parks."
 - C. "This dwelling unit has been designed with the provision for adding central air conditioning at the occupant's discretion. Installation of central air conditioning by the occupant in low and medium density developments will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the Municipality and the Ministry of the Environment, Conservation and Parks."
 - D. "Purchasers / occupants are advised that due to the proximity of the elementary school, noise from this facility may, at times, be audible".
- (7) All exterior doors shall be fully weather-stripped.

5.0 FUTURE DEVELOPMENT BLOCKS

Building plans for the medium-high density residential and school block are currently not available. Specific mitigation measures have therefore not been established.

It is expected that the dwellings in these blocks would require mandatory air conditioning due to the proximity to Chinguacousy Road. Upgraded facade construction and/or upgraded exterior windows may also be expected for the dwellings closest to the roadway.

It is anticipated that all balconies and terraces in these blocks will be less than 4 m in depth and would therefore would not qualify as OLA's under the MECF guidelines. Thus, sound barriers would not be required. If larger balconies or terraces are included in the site design, the sound barrier requirements should be reviewed.

The school block would need to be designed so that noise generated by this facility complies with the stationary source sound level limits in Publication NPC-300, with consideration to the surrounding residential uses including those that are part of this proposed development.

Detailed noise studies of these blocks should be done as part of the Site Plan Approval process.

6.0 CONCLUSIONS

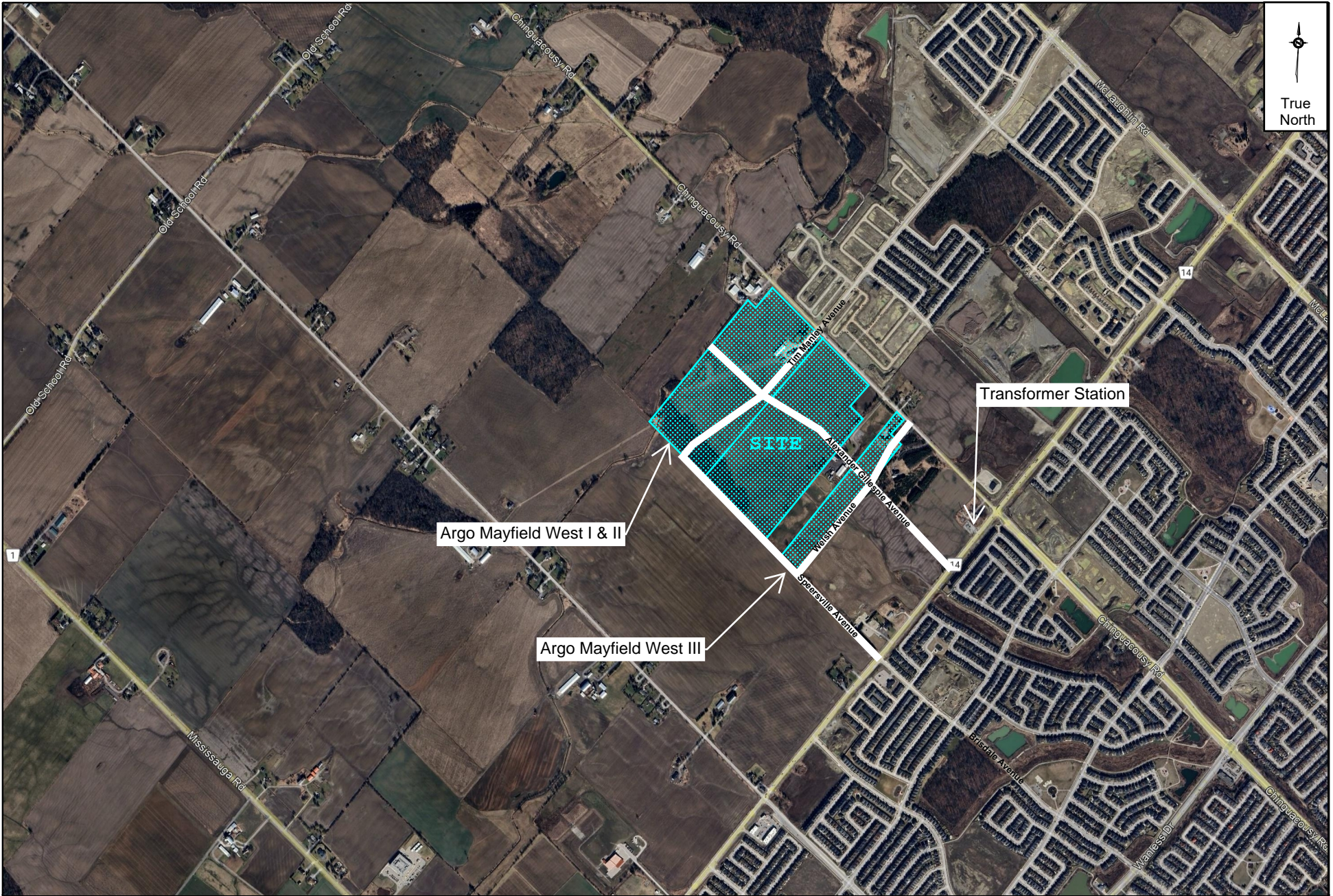
With the incorporation of the recommended noise mitigation measures, the applicable Town of Caledon, Peel Region and MECP noise guidelines can be met and a suitable acoustical environment provided for the occupants.

The approvals and administrative procedures are available to ensure that the noise requirements are implemented.

7.0 REFERENCES

1. PC STAMSON 5.04, “Computer Program for Road Traffic Noise Assessment”, Ontario Ministry of the Environment.
2. Building Practice Note No. 56: “Controlling Sound Transmission into Buildings”, by J. D. Quirt, Division of Building Research, National Council of Canada, September 1985.
3. “Environmental Noise Assessment in Land-Use Planning 1987”, Ontario Ministry of the Environment, February 1987, ISBN 0-7729-2804-5.
4. MECP Publication NPC-300, “Stationary and Transportation Sources – Approval and Planning” Ontario Ministry of the Environment, August 2013.
5. “General Guidelines for the Preparation of Acoustical Reports in the Region of Peel”, Region of Peel. November 2012.
6. “Development Standards Manual, Version 5.0”, Town of Caledon, 2019.

SNJH\sk
Argo Mayfield West I-III, Caledon - Noise v1_0 Fnl

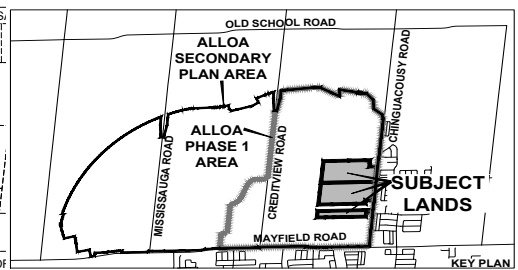


Title	Key Plan
Project Name	Argo Mayfield West I-III, Caledon

Date	September 19, 2024
Project No.	1230369.000

Figure
1

- Legend**
- 2.4 m high sound barrier required.
 - 2.1 m high sound barrier required.
 - 1.8 m high sound barrier required.
 - Mandatory AC,
Exterior windows meeting STC 30
Exterior walls meeting STC 37
required.
 - Provision to add AC required.
- Exterior windows and walls meeting the minimum non-acoustical requirements of the OBC are sufficient for all other dwellings within the development.



DRAFT PLAN OF SUBDIVISION
ARGO MAYFIELD WEST I LIMITED,
ARGO MAYFIELD WEST II LIMITED &
ARGO MAYFIELD WEST III LIMITED
FILE # 217-___ C

PART OF LOTS 18 & 19, CONCESSION 3,
 WEST OF HURONTARIO STREET
 (GEOGRAPHIC TOWNSHIP OF CHINGUACOUSY)
 TOWN OF CALEDON
 REGIONAL MUNICIPALITY OF PEEI

SURVEYORS CERTIFICATE
 I HEREBY CERTIFY THAT THE BOUNDARIES OF THE LANDS TO BE SUBDIVIDED AS SHOWN ON THIS PLAN AND THEIR RELATIONSHIP TO ADJACENT LANDS ARE CORRECTLY AND ACCURATELY SHOWN.

SIGNED: *A. U. KUMARAYAKE*
 A. U. KUMARAYAKE, O.L.S.
 R-PE SURVEYING LTD.
 643 CHRISLEA ROAD, SUITE 7
 WOODBRIDGE ON L4L 6A3
 PHONE: (416) 635-5000

DATE: APR. 23, 2024

ADDITIONAL INFORMATION
 (UNDER SECTION 51(17) OF THE PLANNING ACT) INFORMATION REQUIRED BY CLAUSES A, B, C, D, E, F, G, J & L ARE SHOWN ON THE DRAFT AND KEY PLANS.

- H) MUNICIPAL AND PIPED WATER TO BE PROVIDED
- I) SANDY LOAM AND CLAY LOAM
- K) SANITARY AND STORM SEWERS TO BE PROVIDED

LAND USE SCHEDULE

LAND USE	LOTS / BLOCKS	AREA (ha)	AREA (ac)	UNITS	DENSITY (UP/HA)
DETACHED - 12.80m (42')	1-444	6.87	16.98	268	39.01
DETACHED - 13.72m (45')		1.88	4.65	65	34.57
DETACHED - 15.24m (50')		3.50	8.15	111	33.64
STREET TOWNHOUSE - 7.30m (24')	445-465	1.61	3.98	96	59.63
REAR LANE TOWNHOUSE - 6.05m (20')	466-523	3.87	9.56	297	76.74
BACK-TO-BACK TOWNHOUSE - 5.60m (18')	524-525	0.16	0.40	18	112.50
MEDIUM-HIGH DENSITY RESIDENTIAL	526-527	3.71	9.17		
PUBLIC ELEMENTARY SCHOOL	528	1.36	3.36		
NEIGHBOURHOOD PARK	529	2.22	5.49		
WALKWAY BLOCK	530-531	0.02	0.05		
OPEN SPACE	532-533	0.02	0.05		
SWM POND	534	0.41	1.01		
ENVIRONMENTAL POLICY AREA	535-536	4.54	11.22		
RESIDENTIAL RESERVE	537-558	0.61	1.51		
ROAD WIDENING	559-560	0.38	0.94		
0.3m RESERVE	561-577	0.02	0.05		
8.0m LANEWAY R.O.W. (LENGTH: 1.236m)		1.03	2.55		
16.0m TIE-IN LOCAL R.O.W. (LENGTH: 5.176m)		9.43	23.30		
22.0m COLLECTOR R.O.W. (LENGTH: 1.205m)		2.27	5.35		
29.0m COLLECTOR R.O.W. (LENGTH: 663m)		1.94	4.79		
TOTAL	677	45.95	113.54	855	48.20

- NOTES**
- STREET 'A' & CHINGUACOUSY ROAD DAYLIGHT TRIANGLE - 15.0m x 15.0m
 - COLLECTOR TO COLLECTOR DAYLIGHT TRIANGLE - 10.0m x 10.0m
 - LOCAL TO COLLECTOR DAYLIGHT TRIANGLE - 7.5m x 7.5m
 - LANEWAY TO LOCAL / COLLECTOR DAYLIGHT TRIANGLE - 3.0m x 3.0m
 - LOCAL TO LOCAL DAYLIGHT RADII - 5.0m
 - PAVEMENT ILLUSTRATION IS DIAGRAMMATIC
 - ALL INTERSECTION ANGLES ARE 90° UNLESS OTHERWISE NOTED

SCALE: 1:1500
 (24 x 36)
 AUGUST 20, 2024



Base drawing prepared by Glen Schnarr and Associates, 2024



Title	Site Plan	Date	September 19, 2024	Figure	2
Project Name	Argo Mayfield West I-III, Caledon	Project No.	1230369.000		

APPENDIX A

TRAFFIC DATA CORRESPONDENCE

Jane Hu

From: Aidan Hallsworth <ahallsworth@cfcrozier.ca>
Sent: Wednesday, June 19, 2024 2:56 PM
To: Jane Hu; My-Linh Yee; Seema Nagaraj
Cc: Alexander Fleming; Zechariah Bouchard; Jason Afonso; Michael Linton
Subject: RE: Alloa Secondary Plan Traffic Data
Attachments: 2024.06.19 Alloa Secondary Plan 2044 Future Total Volumes.xlsx

Good afternoon Jane,

Our expectation is that the speed limits on the future internal roadways to be 50 km/h for collector roadways and 40 km/h for local roads. Tim Manley Avenue is expected to be 60 km/h.

In addition, there are speed limit changes outlined by the Town of Caledon Transportation Master Plan for the future, we have listed these below (these are for the segments north of Mayfield Road) just in case you might need them:

Chinguacousy Road – 60km/h

Creditview Road – 60km/h

We also note that there has been a minor update to the 2044 volume projection, with the updated values attached to this email.

Any questions, please let us know.

Thanks,

Aidan Hallsworth, EIT
Engineering Intern, Transportation
Office: 905.693.4712
Collingwood | Milton | Toronto | Bradford | Guelph

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From: Jane Hu <jhu@valcoustics.com>
Sent: Tuesday, June 18, 2024 3:53 PM
To: My-Linh Yee <myee@cfcrozier.ca>; Seema Nagaraj <seema@valcoustics.com>
Cc: Alexander Fleming <afleming@cfcrozier.ca>; Aidan Hallsworth <ahallsworth@cfcrozier.ca>; Zechariah Bouchard <zechariahb@gsai.ca>; Jason Afonso <jasona@gsai.ca>; Michael Linton <mlinton@cfcrozier.ca>
Subject: RE: Alloa Secondary Plan Traffic Data

Hi My-Linh,

Thank you for the data. For our analysis, we also need the posted speed limits of the roadways. What do you currently expect the posted speed limits on the internal roadways to be?

Thank you,
Jane Hu



30 Wertheim Court, Unit 25
Richmond Hill, Ontario
Canada L4B 1B9
Tel: 905-764-5223 ext. 233
Fax: 905-764-6813
solutions@valcoustics.com

From: My-Linh Yee <myee@cfcrozier.ca>
Sent: Tuesday, June 18, 2024 10:00 AM
To: Seema Nagaraj <seema@valcoustics.com>
Cc: Alexander Fleming <afleming@cfcrozier.ca>; Aidan Hallsworth <ahallsworth@cfcrozier.ca>; Zechariah Bouchard <zechariahb@gsai.ca>; Jason Afonso <jasona@gsai.ca>; Michael Linton <mlinton@cfcrozier.ca>; Jane Hu <jhu@valcoustics.com>
Subject: RE: Alloa Secondary Plan Traffic Data

Hi Seema,

I have attached the TMCs that we conducted in June for **additional intersections**. As for the TMCs provided in May, they are the most recent counts for those intersections, which are also reattached.

Let me know if you have any further questions.

Thanks,
My-Linh

My-Linh Yee, EIT
Engineering Intern, Transportation
Office: 905.876.7159
Collingwood | Milton | Toronto | Bradford | Guelph

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From: Seema Nagaraj <seema@valcoustics.com>
Sent: Tuesday, June 18, 2024 9:32 AM
To: My-Linh Yee <myee@cfcrozier.ca>; Michael Linton <mlinton@cfcrozier.ca>; Jane Hu <jhu@valcoustics.com>
Cc: Alexander Fleming <afleming@cfcrozier.ca>; Aidan Hallsworth <ahallsworth@cfcrozier.ca>; Zechariah Bouchard

<zechariahb@gsai.ca>; Jason Afonso <jasona@gsai.ca>

Subject: RE: Alloa Secondary Plan Traffic Data

Hi My-Linh,

Thank you for sending the data.

Can you please also TMCs provided in May (attached for reference) are the latest set of current counts?

Thank you,

Seema Nagaraj, Ph.D., P.Eng.
Acoustical Engineer



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Richmond Hill, Ontario
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Fax: 905-764-6813
solutions@valcoustics.com

From: My-Linh Yee <myee@cfcrozier.ca>

Sent: June 17, 2024 11:49 PM

To: Michael Linton <mlinton@cfcrozier.ca>; Jane Hu <jhu@valcoustics.com>

Cc: Alexander Fleming <afleming@cfcrozier.ca>; Aidan Hallsworth <ahallsworth@cfcrozier.ca>; Seema Nagaraj <seema@valcoustics.com>; Zechariah Bouchard <zechariahb@gsai.ca>; Jason Afonso <jasona@gsai.ca>

Subject: RE: Alloa Secondary Plan Traffic Data

Hi Jane,

Please see the attached 2044 Future Total Volumes, which include the entire Secondary Plan area. It is noted that there may be some minor changes, but these should be adequate for your review.

We will advise you if there are any major changes in these volumes. Let me know if you have any questions.

Thanks,
My-Linh

My-Linh Yee, EIT
Engineering Intern, Transportation
Office: 905.876.7159
Collingwood | Milton | Toronto | Bradford | Guelph

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From: Michael Linton <mlinton@cfcrozier.ca>
Sent: Monday, June 17, 2024 12:11 PM
To: Jane Hu <jhu@valcoustics.com>
Cc: Alexander Fleming <afleming@cfcrozier.ca>; My-Linh Yee <myee@cfcrozier.ca>; Aidan Hallsworth <ahallsworth@cfcrozier.ca>; Seema Nagaraj <seema@valcoustics.com>
Subject: RE: Alloa Secondary Plan Traffic Data

Thanks Jane and will do.

We can provide the growth rates for the relevant roadways that you can use on the corridor for the 2044 Volumes and beyond if needed in that case.

Thanks,

Mike

Michael Linton, M.A.Sc., P.Eng. | Associate
Senior Project Manager, Transportation
DID: 905.693.7849 | Cell: 289.892.7050

From: Jane Hu <jhu@valcoustics.com>
Sent: Monday, June 17, 2024 12:00 PM
To: Michael Linton <mlinton@cfcrozier.ca>
Cc: Alexander Fleming <afleming@cfcrozier.ca>; My-Linh Yee <myee@cfcrozier.ca>; Aidan Hallsworth <ahallsworth@cfcrozier.ca>; Seema Nagaraj <seema@valcoustics.com>
Subject: RE: Alloa Secondary Plan Traffic Data

Hi Michael,

Thanks for the email. Yes, confirming we are looking for the future total traffic volume forecasts with the full site build out.

The Town of Caledon requires noise analyses to be based on 20-year forecasts. Would these volumes also represent the 2044 condition, or should we project the data for an additional 3 years? If we need to project the data, what is a suitable growth rate to use?

I believe we have already received the current year turning movement count showing truck volumes at the beginning of May. Could you also please resend the data to ensure that we have the most current full set?

Thank you,
Jane Hu



30 Wertheim Court, Unit 25
Richmond Hill, Ontario
Canada L4B 1B9

From: Michael Linton <mlinton@cfcrozier.ca>
Sent: Monday, June 17, 2024 11:40 AM
To: Jane Hu <jhu@valcoustics.com>
Cc: Alexander Fleming <afleming@cfcrozier.ca>; My-Linh Yee <myee@cfcrozier.ca>; Aidan Hallsworth <ahallsworth@cfcrozier.ca>
Subject: Alloa Secondary Plan Traffic Data

Hi Jane,

As we finalize our forecasts and check against our model results, we wanted to confirm specifically the info you'll need from us for your work?

Would you only need our 2041 Future Total Volume Forecasts?

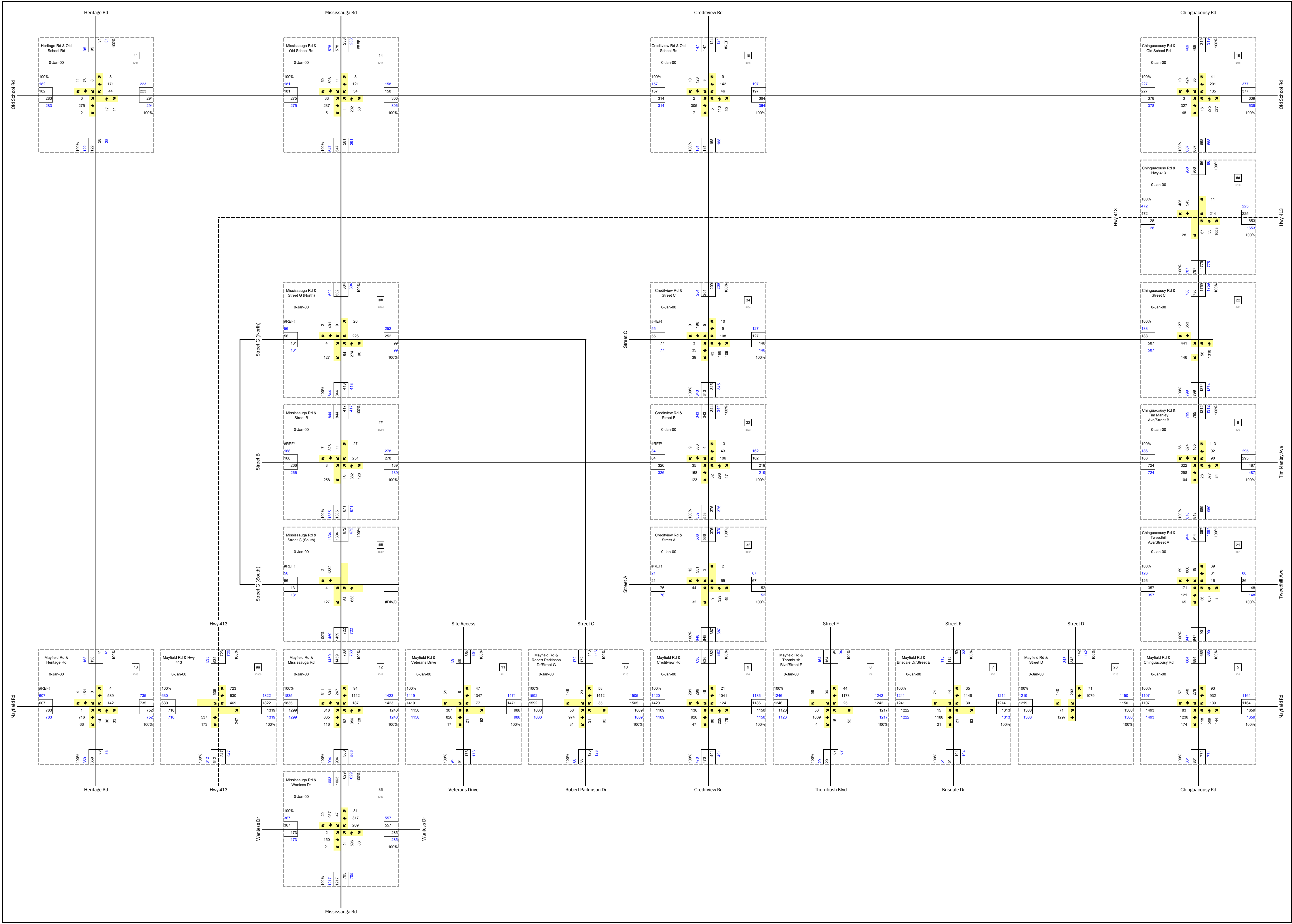
Thanks,

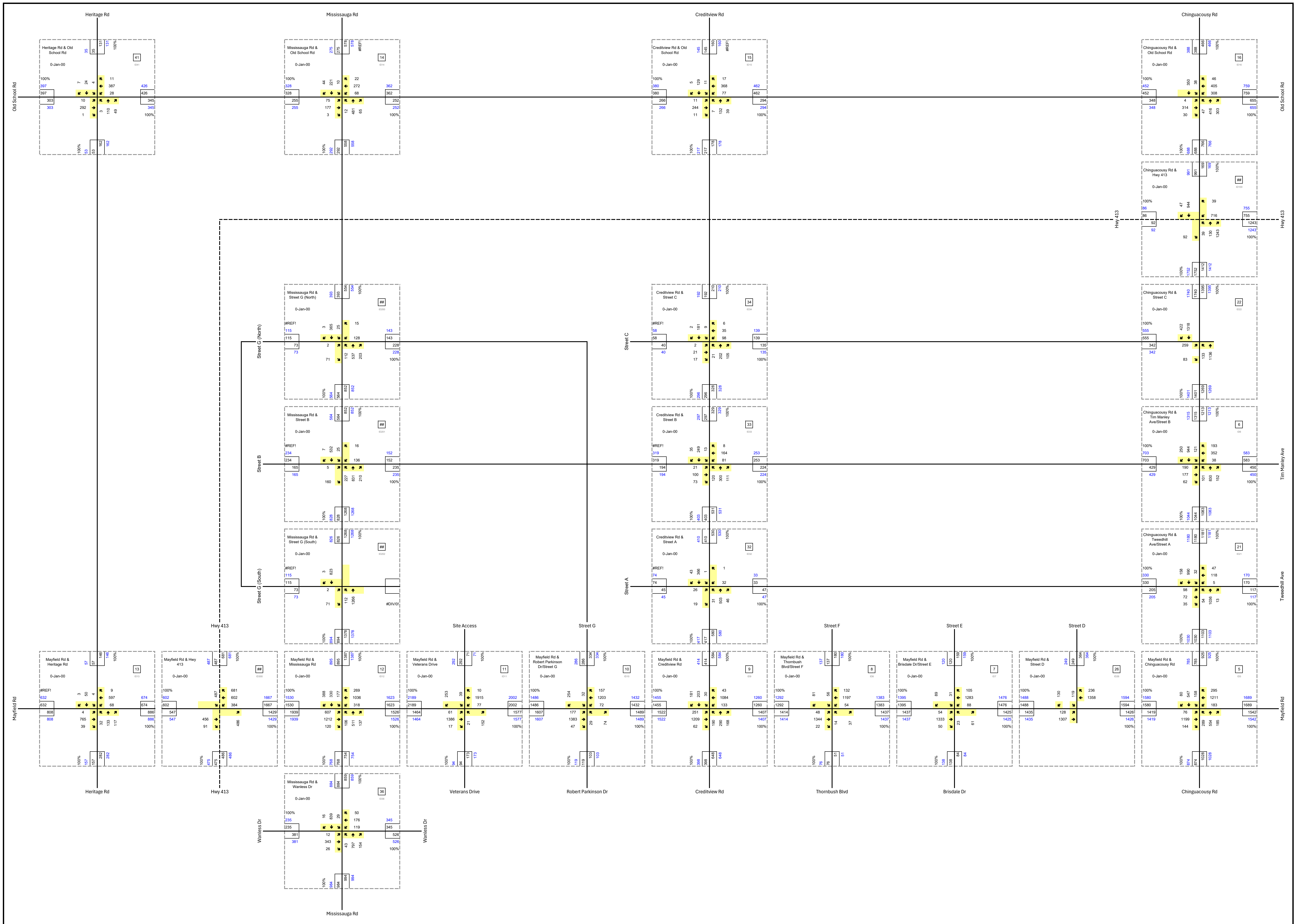
Mike
Michael Linton, M.A.Sc., P.Eng. | Associate
Senior Project Manager, Transportation
Office: 905.693.7849
Collingwood | Milton | Toronto | Bradford | Guelph

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Turning Movement Count (6 - CHINGUACOUSY RD & TIM MANLEY AVE)

Start Time	N Approach CHINGUACOUSY RD						E Approach TIM MANLEY AVE						S Approach CHINGUACOUSY RD						W Approach WEST DRIVEWAY						Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Thru N:S	Left N:E	UTurn N:N	Peds N:	Approach Total	Right E:N	Thru E:W	Left E:S	UTurn E:E	Peds E:	Approach Total	Right S:E	Thru S:N	Left S:W	UTurn S:S	Peds S:	Approach Total	Right W:S	Thru W:E	Left W:N	UTurn W:W	Peds W:	Approach Total		
06:00:00	0	3	1	0	0	4	0	0	9	0	0	9	1	19	0	0	0	20	0	0	0	0	0	0	33	
06:15:00	0	11	0	0	0	11	1	0	4	0	0	5	4	32	0	0	0	36	0	0	0	0	0	0	52	
06:30:00	0	6	2	0	0	8	3	0	5	0	0	8	7	23	0	0	0	30	0	0	0	0	0	0	46	
06:45:00	0	15	5	0	0	20	0	0	6	0	0	6	6	24	0	0	0	30	0	0	0	0	0	0	56	187
07:00:00	0	9	2	0	0	11	2	0	14	0	0	16	15	28	0	0	0	43	0	0	0	0	0	0	70	224
07:15:00	1	20	4	0	0	25	0	0	7	0	0	7	7	27	0	0	0	34	0	0	0	0	0	0	66	238
07:30:00	0	21	2	0	0	23	0	0	11	0	0	11	8	25	0	0	0	33	0	0	0	0	0	0	67	259
07:45:00	0	47	1	0	0	48	2	0	13	0	0	15	0	34	0	0	0	34	0	0	1	0	0	1	98	301
08:00:00	0	35	1	0	0	36	0	0	12	0	0	12	14	24	1	0	0	39	0	0	0	0	0	0	87	318
08:15:00	0	31	1	0	0	32	0	0	16	0	0	16	13	32	0	0	0	45	0	0	1	0	0	1	94	346
08:30:00	0	29	6	0	0	35	2	0	20	0	0	22	12	20	0	0	0	32	0	0	0	0	0	0	89	368
08:45:00	1	17	0	0	0	18	3	0	17	0	0	20	14	22	0	0	0	36	0	0	0	0	0	0	74	344
09:00:00	0	9	2	0	0	11	2	0	8	0	0	10	17	23	0	0	0	40	0	0	1	0	0	1	62	319
09:15:00	0	14	0	0	0	14	0	0	5	0	0	5	9	18	0	0	0	27	0	0	0	0	0	0	46	271
09:30:00	0	8	0	0	0	8	5	0	9	0	0	14	6	15	0	0	0	21	0	0	0	0	0	0	43	225
09:45:00	0	9	0	0	0	9	2	0	12	0	2	14	14	25	0	0	0	39	0	0	0	0	0	0	62	213
BREAK																										
15:00:00	0	25	0	0	0	25	1	0	9	0	0	10	4	27	0	0	0	31	0	0	0	0	0	0	66	
15:15:00	0	25	5	0	0	30	1	0	15	0	0	16	23	40	0	0	0	63	0	0	0	0	0	0	109	
15:30:00	0	27	2	0	0	29	2	0	10	0	0	12	15	37	0	0	0	52	0	0	0	0	0	0	93	
15:45:00	0	36	5	0	0	41	1	0	13	0	0	14	26	28	0	0	0	54	0	0	0	0	0	0	109	377
16:00:00	0	31	1	0	0	32	2	0	17	0	0	19	7	35	0	0	0	42	0	0	0	0	0	0	93	404
16:15:00	0	32	0	0	0	32	0	0	13	0	0	13	3	24	0	0	0	27	0	0	0	0	0	0	72	367
16:30:00	1	35	1	0	0	37	1	0	12	0	0	13	10	35	0	0	0	45	0	0	2	0	0	2	97	371
16:45:00	0	30	2	0	0	32	3	0	14	0	0	17	14	23	0	0	0	37	0	0	1	0	0	1	87	349
17:00:00	0	47	2	0	0	49	4	0	14	0	0	18	16	30	0	0	0	46	0	0	0	0	0	0	113	369
17:15:00	0	35	1	0	0	36	1	0	14	0	0	15	12	20	0	0	0	32	0	0	0	0	0	0	83	380
17:30:00	0	50	4	0	0	54	1	0	9	0	0	10	14	27	0	0	0	41	0	0	0	0	0	0	105	388
17:45:00	0	46	0	0	0	46	1	0	7	0	0	8	17	29	0	0	0	46	0	0	0	0	0	0	100	401
18:00:00	1	33	0	0	0	34	0	0	13	0	0	13	16	24	0	0	0	40	0	0	0	0	0	0	87	375
18:15:00	0	32	2	0	0	34	0	0	7	0	0	7	17	23	0	0	0	40	1	0	0	0	0	1	82	374
18:30:00	0	25	2	0	0	27	0	0	15	0	0	15	15	24	0	0	0	39	0	0	0	0	0	0	81	350
18:45:00	0	35	0	0	0	35	1	0	13	0	0	14	13	24	0	0	0	37	0	0	0	0	0	0	86	336
Grand Total	4	828	54	0	0	886	41	0	363	0	2	404	369	841	1	0	0	1211	1	0	6	0	0	7	2508	-
Approach%	0.5%	93.5%	6.1%	0%	-	-	10.1%	0%	89.9%	0%	-	-	30.5%	69.4%	0.1%	0%	-	14.3%	0%	85.7%	0%	-	-	-	-	-
Totals %	0.2%	33%	2.2%	0%	35.3%	1.6%	0%	14.5%	0%	16.1%	14.7%	33.5%	0%	0%	48.3%	0%	0%	0.2%	0%	0.3%	-	-	-	-	-	-
Heavy	0	20	9	0	-	8	0	57	0	-	56	19	0	0	-	0	0	1	0	-	-	-	-	-	-	-
Heavy %	0%	2.4%	16.7%	0%	-	19.5%	0%	15.7%	0%	-	15.2%	2.3%	0%	0%	-	0%	0%	16.7%	0%	-	-	-	-	-	-	-
Bicycles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycle %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Peak Hour: 07:45 AM - 08:45 AM Weather: Overcast Clouds (7.73 °C)

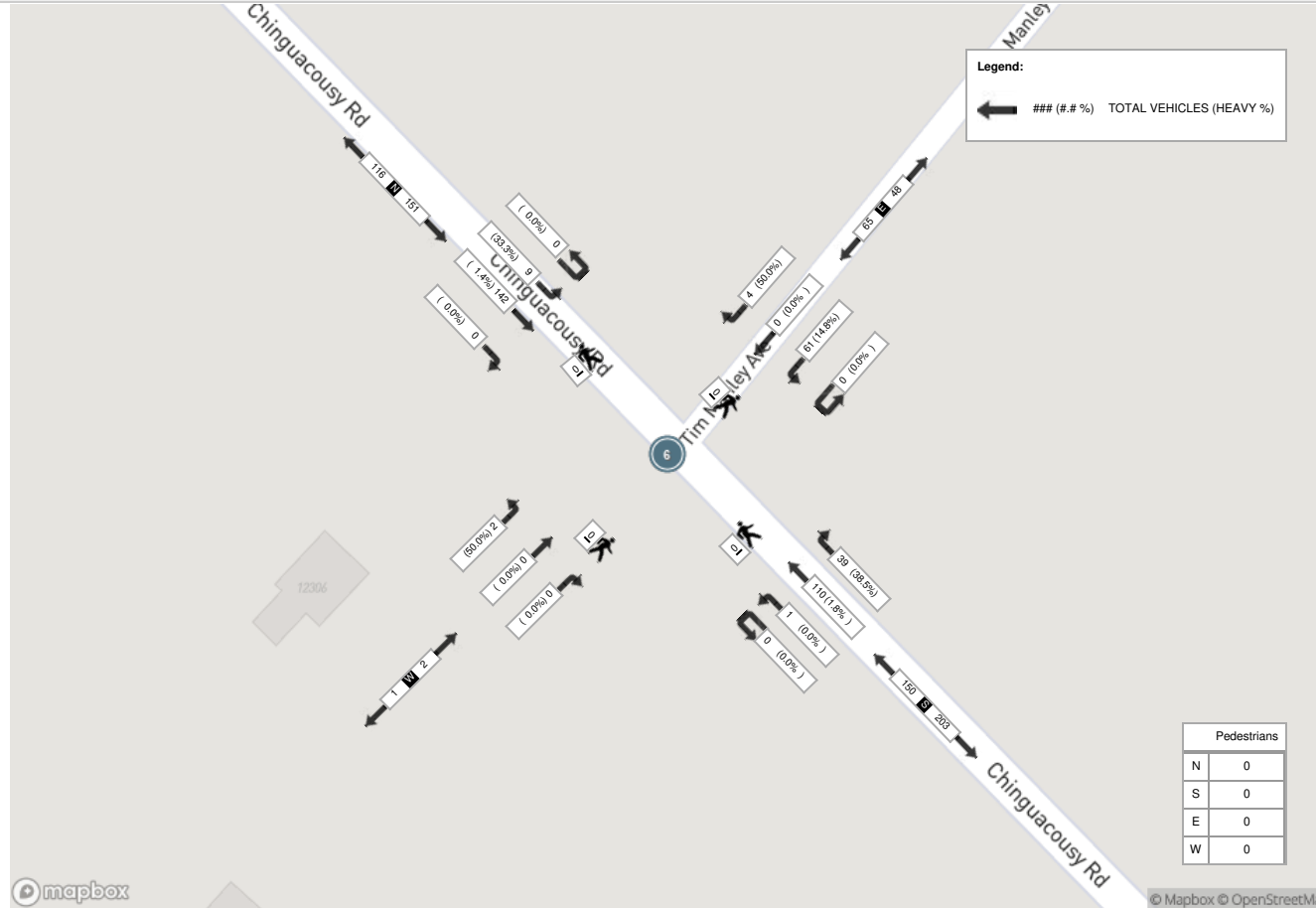
Start Time	N Approach CHINGUACOUSY RD						E Approach TIM MANLEY AVE						S Approach CHINGUACOUSY RD						W Approach WEST DRIVEWAY						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
07:45:00	0	47	1	0	0	48	2	0	13	0	0	15	0	34	0	0	0	34	0	0	1	0	0	1	98
08:00:00	0	35	1	0	0	36	0	0	12	0	0	12	14	24	1	0	0	39	0	0	0	0	0	0	87
08:15:00	0	31	1	0	0	32	0	0	16	0	0	16	13	32	0	0	0	45	0	0	1	0	0	1	94
08:30:00	0	29	6	0	0	35	2	0	20	0	0	22	12	20	0	0	0	32	0	0	0	0	0	0	89
Grand Total	0	142	9	0	0	151	4	0	61	0	0	65	39	110	1	0	0	150	0	0	2	0	0	2	368
Approach%	0%	94%	6%	0%	-	-	6.2%	0%	93.8%	0%	-	-	26%	73.3%	0.7%	0%	-	-	0%	0%	100%	0%	-	-	-
Totals %	0%	38.6%	2.4%	0%	41%	1.1%	0%	16.6%	0%	17.7%	10.6%	29.9%	0.3%	0%	40.8%	0%	0%	0.5%	0%	0.5%	0%	0.5%	-	-	-
PHF	0	0.76	0.38	0	0.79	0.5	0	0.76	0	0.74	0.7	0.81	0.25	0	0.83	0	0	0.5	0	0.5	0	0.5	-	-	-
Heavy	0	2	3	0	5	2	0	9	0	11	15	2	0	0	17	0	0	1	0	1	0	1	-	-	
Heavy %	0%	1.4%	33.3%	0%	3.3%	50%	0%	14.8%	0%	16.9%	38.5%	1.8%	0%	0%	11.3%	0%	0%	50%	0%	50%	0%	50%	-	-	
Lights	0	140	6	0	146	2	0	52	0	54	24	108	1	0	133	0	0	1	0	1	0	1	-	-	
Lights %	0%	98.6%	66.7%	0%	96.7%	50%	0%	85.2%	0%	83.1%	61.5%	98.2%	100%	0%	88.7%	0%	0%	50%	0%	50%	0%	50%	-	-	
Single-Unit Trucks	0	0	1	0	1	1	0	7	0	8	12	0	0	0	12	0	0	1	0	1	0	1	-	-	
Single-Unit Trucks %	0%	0%	11.1%	0%	0.7%	25%	0%	11.5%	0%	12.3%	30.8%	0%	0%	0%	8%	0%	0%	50%	0%	50%	0%	50%	-	-	
Buses	0	2	2	0	4	0	0	2	0	2	3	2	0	0	5	0	0	0	0	0	0	0	-	-	
Buses %	0%	1.4%	22.2%	0%	2.6%	0%	0%	3.3%	0%	3.1%	7.7%	1.8%	0%	0%	3.3%	0%	0%	0%	0%	0%	0%	0%	-	-	
Articulated Trucks	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	-	-	
Articulated Trucks %	0%	0%	0%	0%	0%	25%	0%	0%	0%	1.5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-	-	
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	
Bicycles on Road %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-	-	
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	
Pedestrians%	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	



Peak Hour: 03:15 PM - 04:15 PM Weather: Overcast Clouds (14.32 °C)

Start Time	N Approach CHINGUACOUSY RD						E Approach TIM MANLEY AVE						S Approach CHINGUACOUSY RD						W Approach WEST DRIVEWAY						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
15:15:00	0	25	5	0	0	30	1	0	15	0	0	16	23	40	0	0	0	63	0	0	0	0	0	0	109
15:30:00	0	27	2	0	0	29	2	0	10	0	0	12	15	37	0	0	0	52	0	0	0	0	0	0	93
15:45:00	0	36	5	0	0	41	1	0	13	0	0	14	26	28	0	0	0	54	0	0	0	0	0	0	109
16:00:00	0	31	1	0	0	32	2	0	17	0	0	19	7	35	0	0	0	42	0	0	0	0	0	0	93
Grand Total	0	119	13	0	0	132	6	0	55	0	0	61	71	140	0	0	0	211	0	0	0	0	0	0	404
Approach%	0%	90.2%	9.8%	0%		-	9.8%	0%	90.2%	0%		-	33.6%	66.4%	0%	0%		-	0%	0%	0%	0%		-	-
Totals %	0%	29.5%	3.2%	0%		32.7%	1.5%	0%	13.6%	0%		15.1%	17.6%	34.7%	0%	0%		52.2%	0%	0%	0%	0%		0%	-
PHF	0	0.83	0.65	0		0.8	0.75	0	0.81	0		0.8	0.68	0.88	0	0		0.84	0	0	0	0		0	-
Heavy	0	7	2	0		9	0	0	17	0		17	18	6	0	0		24	0	0	0	0		0	-
Heavy %	0%	5.9%	15.4%	0%		6.8%	0%	0%	30.9%	0%		27.9%	25.4%	4.3%	0%	0%		11.4%	0%	0%	0%	0%		0%	-
Lights	0	112	11	0		123	6	0	38	0		44	53	134	0	0		187	0	0	0	0		0	-
Lights %	0%	94.1%	84.6%	0%		93.2%	100%	0%	69.1%	0%		72.1%	74.6%	95.7%	0%	0%		88.6%	0%	0%	0%	0%		0%	-
Single-Unit Trucks	0	0	0	0		0	0	0	12	0		12	13	0	0	0		13	0	0	0	0		0	-
Single-Unit Trucks %	0%	0%	0%	0%		0%	0%	0%	21.8%	0%		19.7%	18.3%	0%	0%	0%		6.2%	0%	0%	0%	0%		0%	-
Buses	0	7	2	0		9	0	0	5	0		5	5	5	0	0		10	0	0	0	0		0	-
Buses %	0%	5.9%	15.4%	0%		6.8%	0%	0%	9.1%	0%		8.2%	7%	3.6%	0%	0%		4.7%	0%	0%	0%	0%		0%	-
Articulated Trucks	0	0	0	0		0	0	0	0	0		0	0	1	0	0		1	0	0	0	0		0	-
Articulated Trucks %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0.7%	0%	0%		0.5%	0%	0%	0%	0%		0%	-
Bicycles on Road	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	-
Bicycles on Road %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	-
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-
Pedestrians%	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	-	-	0%	-	-	-

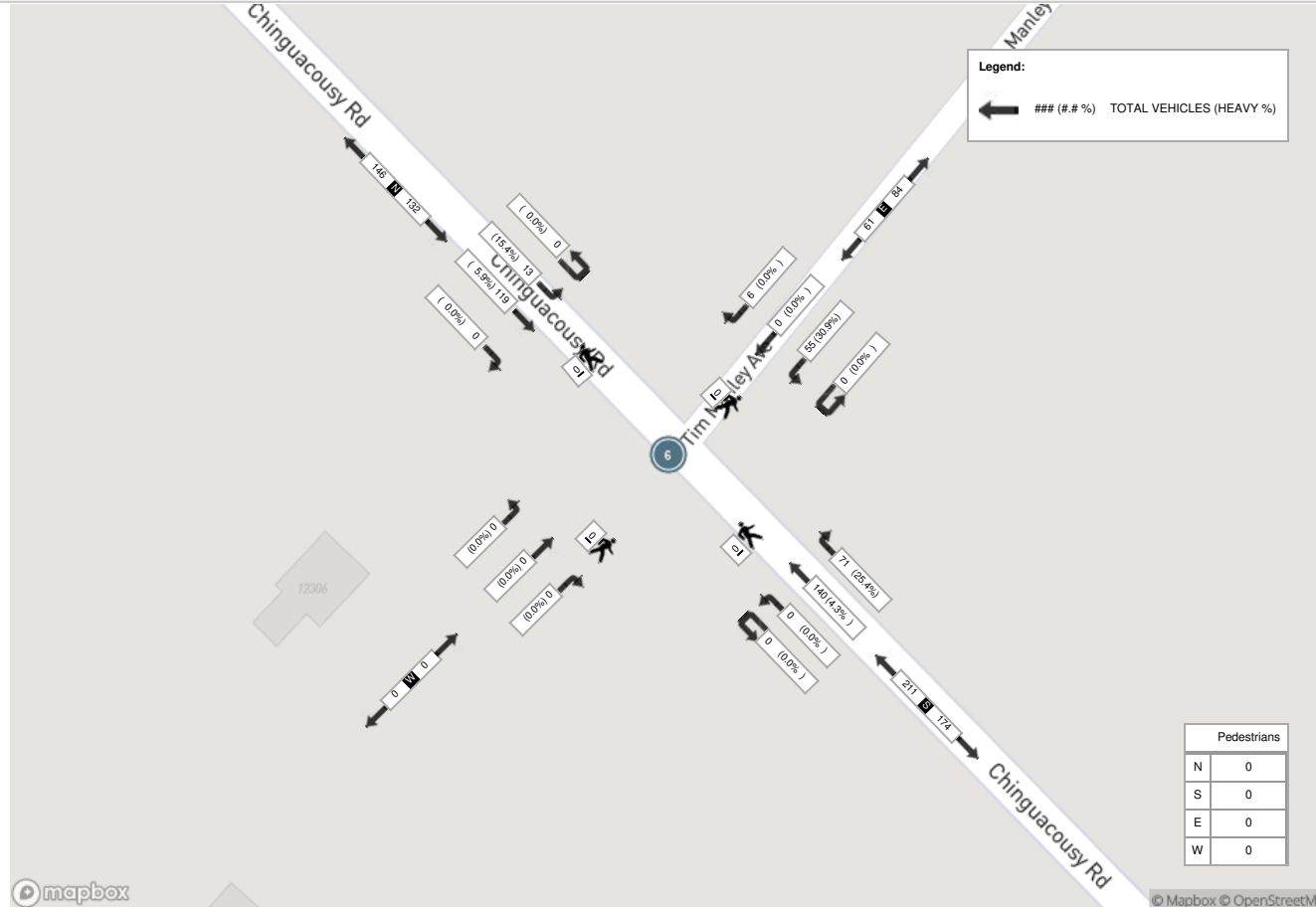
Peak Hour: 07:45 AM - 08:45 AM Weather: Overcast Clouds (7.73 °C)



mapbox

© Mapbox © OpenStreetMap

Peak Hour: 03:15 PM - 04:15 PM Weather: Overcast Clouds (14.32 °C)





Turning Movement Count (7 . MAYFIELD RD & BRISDALE DR) CustID: 01420005

Start Time	E Approach MAYFIELD RD					S Approach BRISDALE DR					W Approach MAYFIELD RD					Int. Total (15 min)	Int. Total (1 hr)
	Thru E:W	Left E:S	UTurn E:E	Peds E:	Approach Total	Right S:E	Left S:W	UTurn S:S	Peds S:	Approach Total	Right W:S	Thru W:E	UTurn W:W	Peds W:	Approach Total		
06:00:00	85	2	0	0	87	17	1	0	0	18	0	92	0	0	92	197	
06:15:00	80	2	0	0	82	13	3	0	0	16	1	94	0	0	95	193	
06:30:00	151	3	0	0	154	20	4	0	0	24	0	99	0	0	99	277	
06:45:00	106	4	0	0	110	20	1	0	0	21	0	105	0	0	105	236	903
07:00:00	122	5	0	0	127	18	8	0	0	26	4	138	0	0	142	295	1001
07:15:00	119	5	0	0	124	22	7	0	0	29	3	153	0	0	156	309	1117
07:30:00	139	8	0	0	147	19	4	0	0	23	0	149	0	0	149	319	1159
07:45:00	147	12	0	0	159	15	4	0	0	19	2	135	0	0	137	315	1238
08:00:00	147	8	0	0	155	19	3	0	0	22	6	160	0	0	166	343	1286
08:15:00	160	9	0	0	169	24	4	0	0	28	5	193	0	0	198	395	1372
08:30:00	146	5	0	0	151	14	3	0	0	17	4	150	0	0	154	322	1375
08:45:00	182	4	0	0	186	18	4	0	0	22	5	125	0	0	130	338	1398
09:00:00	154	8	1	0	163	14	5	0	0	19	5	158	0	0	163	345	1400
09:15:00	103	11	0	0	114	16	6	0	0	22	5	143	0	0	148	284	1289
09:30:00	115	7	0	0	122	20	3	0	0	23	8	112	0	0	120	265	1232
09:45:00	100	2	0	0	102	18	5	0	0	23	2	124	0	0	126	251	1145
BREAK																	
15:00:00	150	16	0	0	166	12	5	0	0	17	11	175	0	0	186	369	
15:15:00	159	22	0	0	181	16	5	0	0	21	10	159	0	0	169	371	
15:30:00	148	9	0	0	157	17	3	0	0	20	9	194	0	0	203	380	
15:45:00	157	20	0	0	177	6	3	0	0	9	8	194	0	0	202	388	1508
16:00:00	139	22	0	0	161	16	4	0	0	20	5	159	0	0	164	345	1484
16:15:00	150	15	0	0	165	13	4	0	0	17	5	154	0	0	159	341	1454
16:30:00	138	13	0	0	151	5	3	0	0	8	7	160	0	0	167	326	1400
16:45:00	123	23	0	0	146	16	6	0	0	22	11	158	0	0	169	337	1349
17:00:00	133	17	0	0	150	16	5	0	0	21	4	168	0	0	172	343	1347
17:15:00	145	13	0	0	158	10	5	1	0	16	7	167	0	0	174	348	1354
17:30:00	145	13	0	0	158	16	3	0	0	19	7	195	0	0	202	379	1407
17:45:00	137	19	0	1	156	10	5	0	0	15	14	150	0	0	164	335	1405
18:00:00	153	15	0	0	168	12	1	0	0	13	14	169	0	0	183	364	1426
18:15:00	165	19	0	0	184	12	5	0	0	17	7	181	0	0	188	389	1467
18:30:00	113	23	0	0	136	7	3	0	1	10	5	145	0	0	150	296	1384
18:45:00	122	20	0	0	142	10	3	0	0	13	9	146	0	0	155	310	1359



Grand Total	4333	374	1	1	4708	481	128	1	1	610	183	4804	0	0	4987	10305	-
Approach%	92%	7.9%	0%		-	78.9%	21%	0.2%		-	3.7%	96.3%	0%		-	-	-
Totals %	42%	3.6%	0%		45.7%	4.7%	1.2%	0%		5.9%	1.8%	46.6%	0%		48.4%	-	-
Heavy	291	9	0		-	16	11	0		-	9	296	0		-	-	-
Heavy %	6.7%	2.4%	0%		-	3.3%	8.6%	0%		-	4.9%	6.2%	0%		-	-	-
Bicycles	-	-	-		-	-	-	-		-	-	-	-		-	-	-
Bicycle %	-	-	-		-	-	-	-		-	-	-	-		-	-	-



Peak Hour: 08:15 AM - 09:15 AM Weather: Overcast Clouds (7.73 °C)

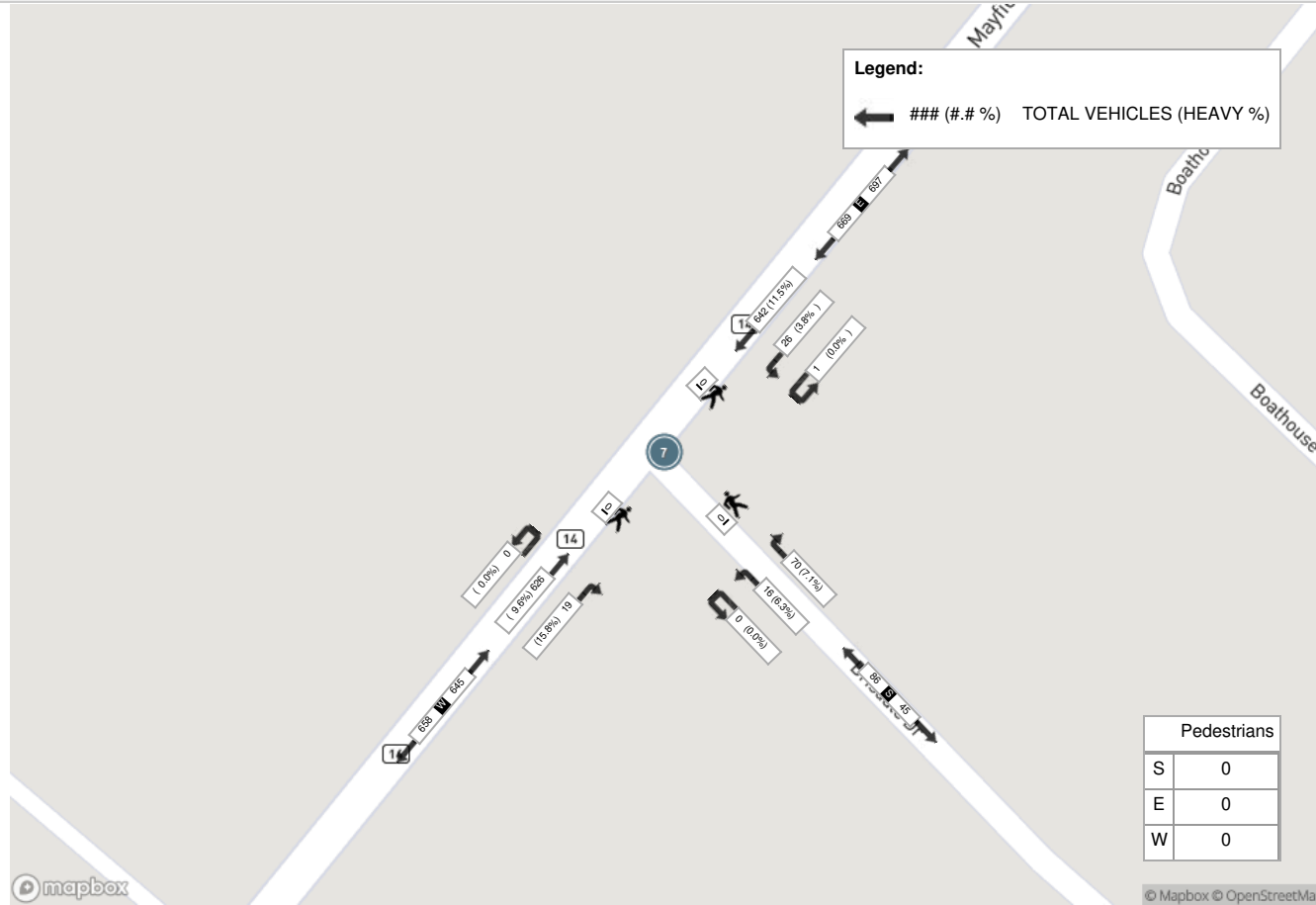
Start Time	E Approach MAYFIELD RD					S Approach BRISDALE DR					W Approach MAYFIELD RD					Int. Total (15 min)
	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds	Approach Total	
08:15:00	160	9	0	0	169	24	4	0	0	28	5	193	0	0	198	395
08:30:00	146	5	0	0	151	14	3	0	0	17	4	150	0	0	154	322
08:45:00	182	4	0	0	186	18	4	0	0	22	5	125	0	0	130	338
09:00:00	154	8	1	0	163	14	5	0	0	19	5	158	0	0	163	345
Grand Total	642	26	1	0	669	70	16	0	0	86	19	626	0	0	645	1400
Approach%	96%	3.9%	0.1%		-	81.4%	18.6%	0%		-	2.9%	97.1%	0%		-	-
Totals %	45.9%	1.9%	0.1%		47.8%	5%	1.1%	0%		6.1%	1.4%	44.7%	0%		46.1%	-
PHF	0.88	0.72	0.25		0.9	0.73	0.8	0		0.77	0.95	0.81	0		0.81	-
Heavy	74	1	0		75	5	1	0		6	3	60	0		63	-
Heavy %	11.5%	3.8%	0%		11.2%	7.1%	6.3%	0%		7%	15.8%	9.6%	0%		9.8%	-
Lights	568	25	1		594	65	15	0		80	16	566	0		582	-
Lights %	88.5%	96.2%	100%		88.8%	92.9%	93.8%	0%		93%	84.2%	90.4%	0%		90.2%	-
Single-Unit Trucks	30	1	0		31	1	1	0		2	0	18	0		18	-
Single-Unit Trucks %	4.7%	3.8%	0%		4.6%	1.4%	6.3%	0%		2.3%	0%	2.9%	0%		2.8%	-
Buses	33	0	0		33	4	0	0		4	3	39	0		42	-
Buses %	5.1%	0%	0%		4.9%	5.7%	0%	0%		4.7%	15.8%	6.2%	0%		6.5%	-
Articulated Trucks	11	0	0		11	0	0	0		0	0	3	0		3	-
Articulated Trucks %	1.7%	0%	0%		1.6%	0%	0%	0%		0%	0%	0.5%	0%		0.5%	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
Pedestrians%	-	-	-	0%	-	-	-	-	0%	-	-	-	-	0%	-	-



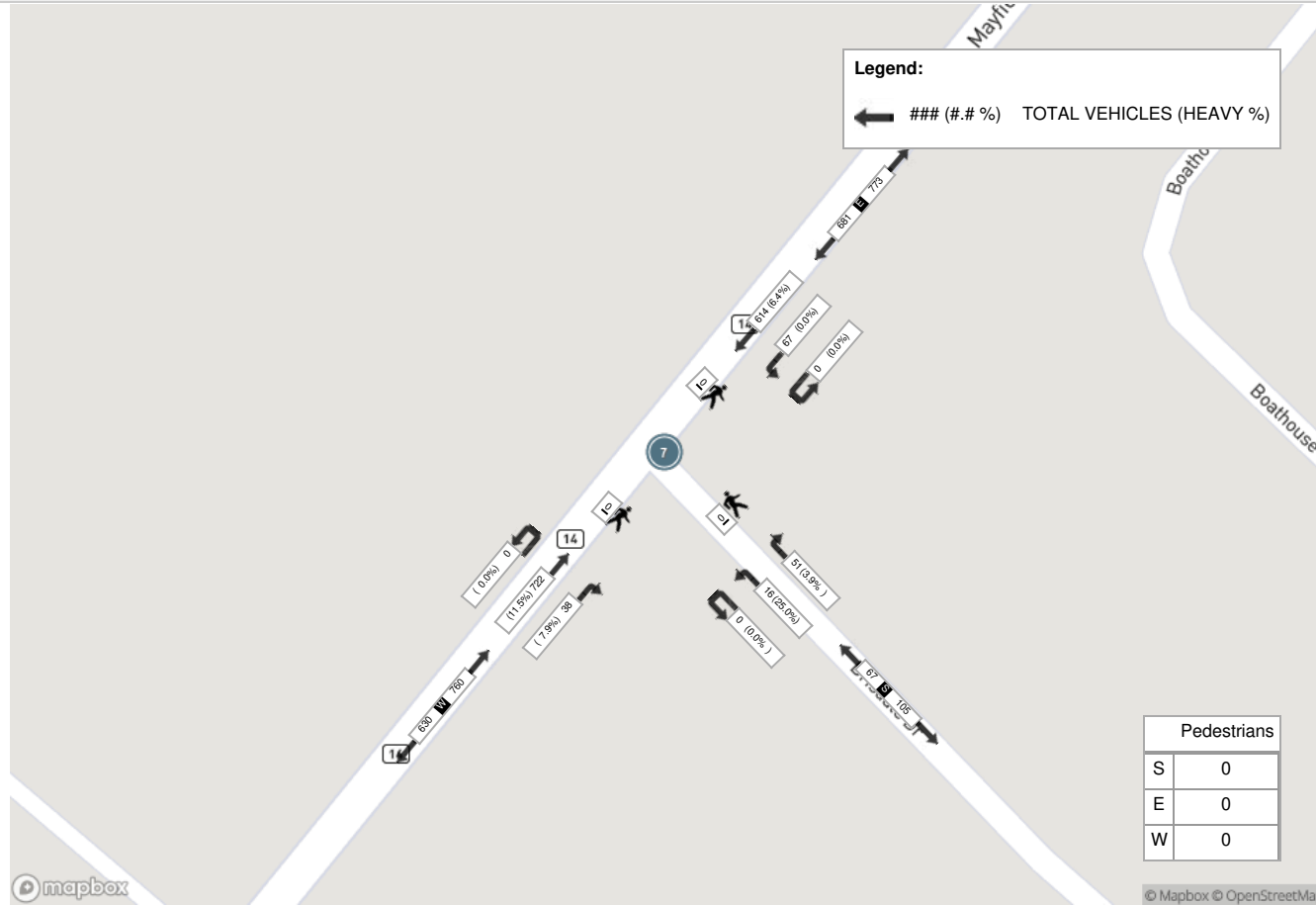
Peak Hour: 03:00 PM - 04:00 PM Weather: Overcast Clouds (14.32 °C)

Start Time	E Approach MAYFIELD RD					S Approach BRISDALE DR					W Approach MAYFIELD RD				Int. Total (15 min)	
	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds		Approach Total
15:00:00	150	16	0	0	166	12	5	0	0	17	11	175	0	0	186	369
15:15:00	159	22	0	0	181	16	5	0	0	21	10	159	0	0	169	371
15:30:00	148	9	0	0	157	17	3	0	0	20	9	194	0	0	203	380
15:45:00	157	20	0	0	177	6	3	0	0	9	8	194	0	0	202	388
Grand Total	614	67	0	0	681	51	16	0	0	67	38	722	0	0	760	1508
Approach%	90.2%	9.8%	0%		-	76.1%	23.9%	0%		-	5%	95%	0%		-	-
Totals %	40.7%	4.4%	0%		45.2%	3.4%	1.1%	0%		4.4%	2.5%	47.9%	0%		50.4%	-
PHF	0.97	0.76	0		0.94	0.75	0.8	0		0.8	0.86	0.93	0		0.94	-
Heavy	39	0	0		39	2	4	0		6	3	83	0		86	-
Heavy %	6.4%	0%	0%		5.7%	3.9%	25%	0%		9%	7.9%	11.5%	0%		11.3%	-
Lights	575	67	0		642	49	12	0		61	35	639	0		674	-
Lights %	93.6%	100%	0%		94.3%	96.1%	75%	0%		91%	92.1%	88.5%	0%		88.7%	-
Single-Unit Trucks	17	0	0		17	0	0	0		0	0	29	0		29	-
Single-Unit Trucks %	2.8%	0%	0%		2.5%	0%	0%	0%		0%	0%	4%	0%		3.8%	-
Buses	17	0	0		17	2	4	0		6	3	41	0		44	-
Buses %	2.8%	0%	0%		2.5%	3.9%	25%	0%		9%	7.9%	5.7%	0%		5.8%	-
Articulated Trucks	5	0	0		5	0	0	0		0	0	13	0		13	-
Articulated Trucks %	0.8%	0%	0%		0.7%	0%	0%	0%		0%	0%	1.8%	0%		1.7%	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
Pedestrians%	-	-	-	0%	-	-	-	-	0%	-	-	-	-	0%	-	-

Peak Hour: 08:15 AM - 09:15 AM Weather: Overcast Clouds (7.73 °C)



Peak Hour: 03:00 PM - 04:00 PM Weather: Overcast Clouds (14.32 °C)





Turning Movement Count (5 . MAYFIELD RD & CHINGUACOUSY RD) CustID: 01419287

Start Time	N Approach CHINGUACOUSY RD						E Approach MAYFIELD RD						S Approach CHINGUACOUSY RD						W Approach MAYFIELD RD						Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Thru N:S	Left N:E	UTurn N:N	Peds N:	Approach Total	Right E:N	Thru E:W	Left E:S	UTurn E:E	Peds E:	Approach Total	Right S:E	Thru S:N	Left S:W	UTurn S:S	Peds S:	Approach Total	Right W:S	Thru W:E	Left W:N	UTurn W:W	Peds W:	Approach Total		
06:00:00	4	9	0	0	0	13	1	78	12	0	0	91	27	12	5	0	0	44	2	100	6	0	0	108	256	
06:15:00	4	11	1	0	0	16	3	77	17	0	0	97	25	27	1	0	0	53	5	95	6	0	0	106	272	
06:30:00	3	6	1	0	0	10	1	139	15	0	0	155	22	26	11	0	0	59	3	117	6	0	0	126	350	
06:45:00	6	13	0	0	0	19	5	101	10	0	0	116	23	19	5	0	0	47	4	109	4	0	0	117	299	1177
07:00:00	16	12	1	0	0	29	7	112	17	0	0	136	28	26	5	0	0	59	8	128	12	0	0	148	372	1293
07:15:00	5	17	3	0	0	25	2	111	17	0	0	130	33	26	8	0	0	67	10	177	3	0	0	190	412	1433
07:30:00	5	24	3	0	0	32	4	132	26	0	0	162	24	30	8	0	0	62	11	151	5	0	0	167	423	1506
07:45:00	8	44	2	0	0	54	2	143	29	0	0	174	27	24	9	0	0	60	11	160	6	0	0	177	465	1672
08:00:00	8	43	1	0	0	52	2	136	30	0	0	168	26	29	12	0	0	67	15	154	11	0	0	180	467	1767
08:15:00	13	33	3	0	0	49	4	145	14	0	0	163	31	26	8	0	0	65	12	167	12	0	0	191	468	1823
08:30:00	7	39	5	0	0	51	3	141	18	0	0	162	29	19	6	0	0	54	18	158	7	0	0	183	450	1850
08:45:00	13	21	4	0	0	38	4	148	31	0	0	183	32	22	22	0	0	76	5	121	14	0	0	140	437	1822
09:00:00	7	9	1	0	0	17	3	135	27	0	0	165	25	22	22	0	0	69	17	147	13	0	0	177	428	1783
09:15:00	6	12	1	0	0	19	2	98	29	0	1	129	28	20	10	0	0	58	13	139	7	0	0	159	365	1680
09:30:00	6	6	1	0	0	13	0	110	24	0	0	134	27	11	6	0	0	44	3	121	7	0	0	131	322	1552
09:45:00	8	13	2	0	0	23	5	89	31	0	0	125	23	17	3	0	0	43	2	130	14	0	0	146	337	1452
BREAK																										
15:00:00	7	24	3	0	0	34	5	154	26	0	0	185	36	23	10	0	1	69	9	160	5	0	0	174	462	
15:15:00	14	23	4	0	0	41	5	154	35	0	0	194	33	47	13	0	3	93	16	170	10	0	0	196	524	
15:30:00	8	30	3	0	0	41	3	140	28	0	0	171	31	34	8	0	0	73	10	162	16	0	0	188	473	
15:45:00	14	28	2	0	0	44	6	153	32	0	0	191	24	32	10	0	0	66	15	174	17	0	0	206	507	1966
16:00:00	12	36	2	0	0	50	9	141	34	0	0	184	21	24	7	0	0	52	11	162	9	0	0	182	468	1972
16:15:00	9	38	1	0	0	48	2	140	40	0	0	182	22	23	17	0	0	62	11	160	3	0	0	174	466	1914
16:30:00	9	34	0	0	0	43	5	139	40	0	0	184	34	33	4	0	0	71	9	144	7	0	0	160	458	1899
16:45:00	9	32	4	0	0	45	3	131	48	0	0	182	26	26	4	0	0	56	12	163	7	0	0	182	465	1857
17:00:00	11	42	6	0	0	59	3	135	35	0	0	173	26	33	8	0	0	67	5	163	10	0	0	178	477	1866
17:15:00	11	39	2	0	0	52	2	129	29	0	1	160	24	22	17	0	0	63	8	166	10	0	0	184	459	1859
17:30:00	8	46	3	0	0	57	2	139	33	0	0	174	29	27	12	0	0	68	12	173	14	0	0	199	498	1899
17:45:00	8	45	3	0	0	56	2	139	41	0	0	182	35	36	11	0	0	82	17	143	7	0	0	167	487	1921
18:00:00	9	32	3	0	0	44	1	148	40	0	0	189	28	28	9	0	0	65	17	142	12	0	0	171	469	1913
18:15:00	5	30	2	0	1	37	2	174	42	0	0	218	34	22	6	0	0	62	10	173	13	0	0	196	513	1967
18:30:00	7	34	4	0	0	45	1	122	49	0	1	172	44	32	8	0	1	84	10	139	7	0	0	156	457	1926
18:45:00	8	33	1	0	0	42	6	127	30	0	0	163	38	29	6	0	0	73	13	141	5	0	0	159	437	1876
Grand Total	268	858	72	0	1	1198	105	4160	929	0	3	5194	915	827	291	0	5	2033	324	4709	285	0	0	5318	13743	-
Approach%	22.4%	71.6%	6%	0%	-	-	2%	80.1%	17.9%	0%	-	-	45%	40.7%	14.3%	0%	-	-	6.1%	88.5%	5.4%	0%	-	-	-	
Totals %	2%	6.2%	0.5%	0%	8.7%	0.8%	30.3%	6.8%	0%	37.8%	6.7%	6%	2.1%	0%	14.8%	2.4%	34.3%	2.1%	0%	38.7%	-	-	-	-	-	
Heavy	47	22	6	0	-	14	228	43	0	-	29	14	22	0	-	17	250	47	0	-	-	-	-	-	-	
Heavy %	17.5%	2.6%	8.3%	0%	-	13.3%	5.5%	4.6%	0%	-	3.2%	1.7%	7.6%	0%	-	5.2%	5.3%	16.5%	0%	-	-	-	-	-	-	
Bicycles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycle %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Peak Hour: 07:45 AM - 08:45 AM Weather: Overcast Clouds (7.73 °C)

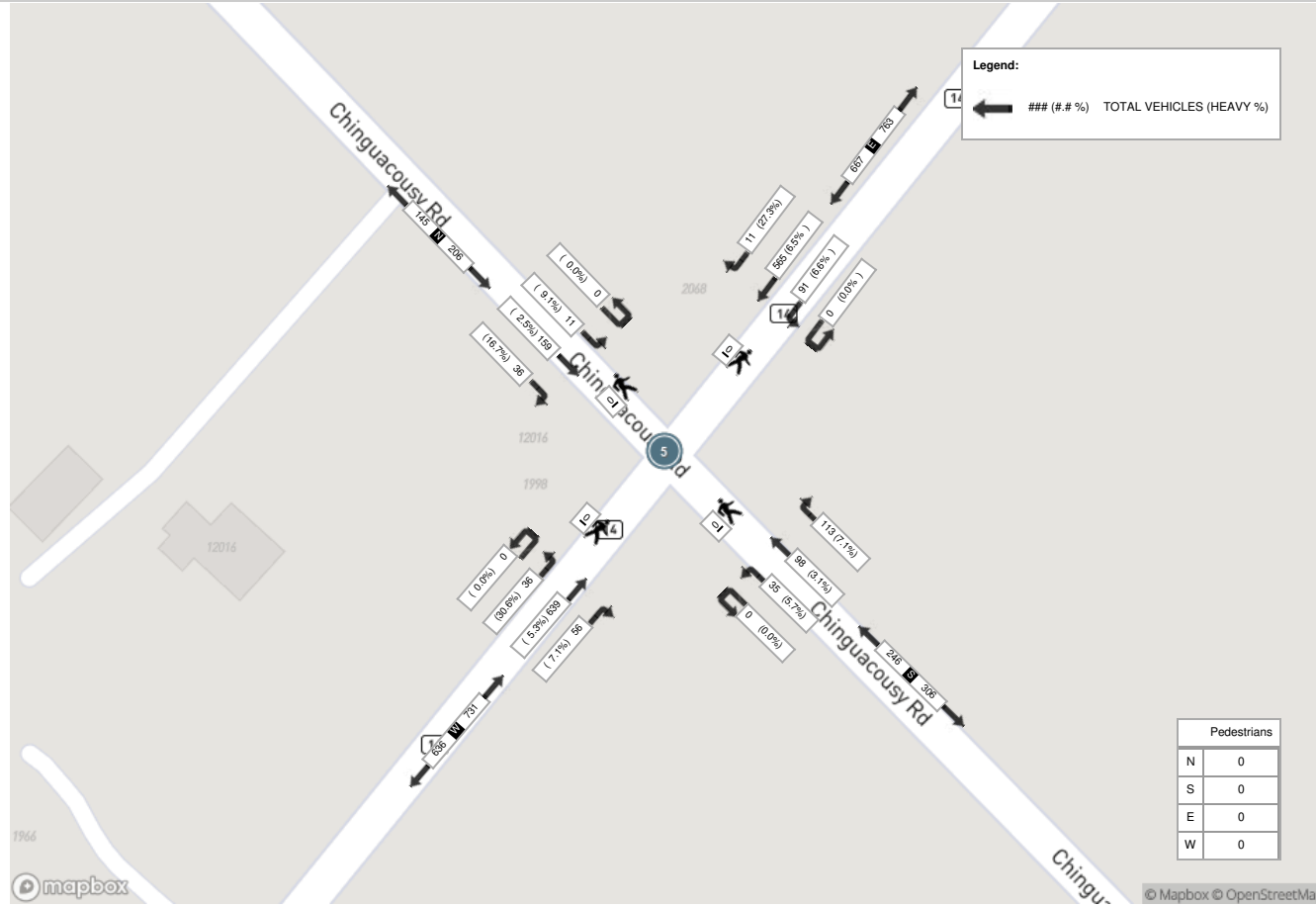
Start Time	N Approach CHINGUACOUSY RD						E Approach MAYFIELD RD						S Approach CHINGUACOUSY RD						W Approach MAYFIELD RD						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
07:45:00	8	44	2	0	0	54	2	143	29	0	0	174	27	24	9	0	0	60	11	160	6	0	0	177	465
08:00:00	8	43	1	0	0	52	2	136	30	0	0	168	26	29	12	0	0	67	15	154	11	0	0	180	467
08:15:00	13	33	3	0	0	49	4	145	14	0	0	163	31	26	8	0	0	65	12	167	12	0	0	191	468
08:30:00	7	39	5	0	0	51	3	141	18	0	0	162	29	19	6	0	0	54	18	158	7	0	0	183	450
Grand Total	36	159	11	0	0	206	11	565	91	0	0	667	113	98	35	0	0	246	56	639	36	0	0	731	1850
Approach%	17.5%	77.2%	5.3%	0%		-	1.6%	84.7%	13.6%	0%		-	45.9%	39.8%	14.2%	0%		-	7.7%	87.4%	4.9%	0%		-	-
Totals %	1.9%	8.6%	0.6%	0%		11.1%	0.6%	30.5%	4.9%	0%		36.1%	6.1%	5.3%	1.9%	0%		13.3%	3%	34.5%	1.9%	0%		39.5%	-
PHF	0.69	0.9	0.55	0		0.95	0.69	0.97	0.76	0		0.96	0.91	0.84	0.73	0		0.92	0.78	0.96	0.75	0		0.96	-
Heavy	6	4	1	0		11	3	37	6	0		46	8	3	2	0		13	4	34	11	0		49	-
Heavy %	16.7%	2.5%	9.1%	0%		5.3%	27.3%	6.5%	6.6%	0%		6.9%	7.1%	3.1%	5.7%	0%		5.3%	7.1%	5.3%	30.6%	0%		6.7%	-
Lights	30	155	10	0		195	8	528	85	0		621	105	95	33	0		233	52	605	25	0		682	-
Lights %	83.3%	97.5%	90.9%	0%		94.7%	72.7%	93.5%	93.4%	0%		93.1%	92.9%	96.9%	94.3%	0%		94.7%	92.9%	94.7%	69.4%	0%		93.3%	-
Single-Unit Trucks	6	1	0	0		7	1	15	1	0		17	3	0	0	0		3	1	19	11	0		31	-
Single-Unit Trucks %	16.7%	0.6%	0%	0%		3.4%	9.1%	2.7%	1.1%	0%		2.5%	2.7%	0%	0%	0%		1.2%	1.8%	3%	30.6%	0%		4.2%	-
Buses	0	3	1	0		4	2	12	4	0		18	4	3	2	0		9	3	11	0	0		14	-
Buses %	0%	1.9%	9.1%	0%		1.9%	18.2%	2.1%	4.4%	0%		2.7%	3.5%	3.1%	5.7%	0%		3.7%	5.4%	1.7%	0%	0%		1.9%	-
Articulated Trucks	0	0	0	0		0	0	10	1	0		11	1	0	0	0		1	0	4	0	0		4	-
Articulated Trucks %	0%	0%	0%	0%		0%	0%	1.8%	1.1%	0%		1.6%	0.9%	0%	0%	0%		0.4%	0%	0.6%	0%	0%		0.5%	-
Bicycles on Road	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	-
Bicycles on Road %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	-
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-
Pedestrians%	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	-	0%	-	-



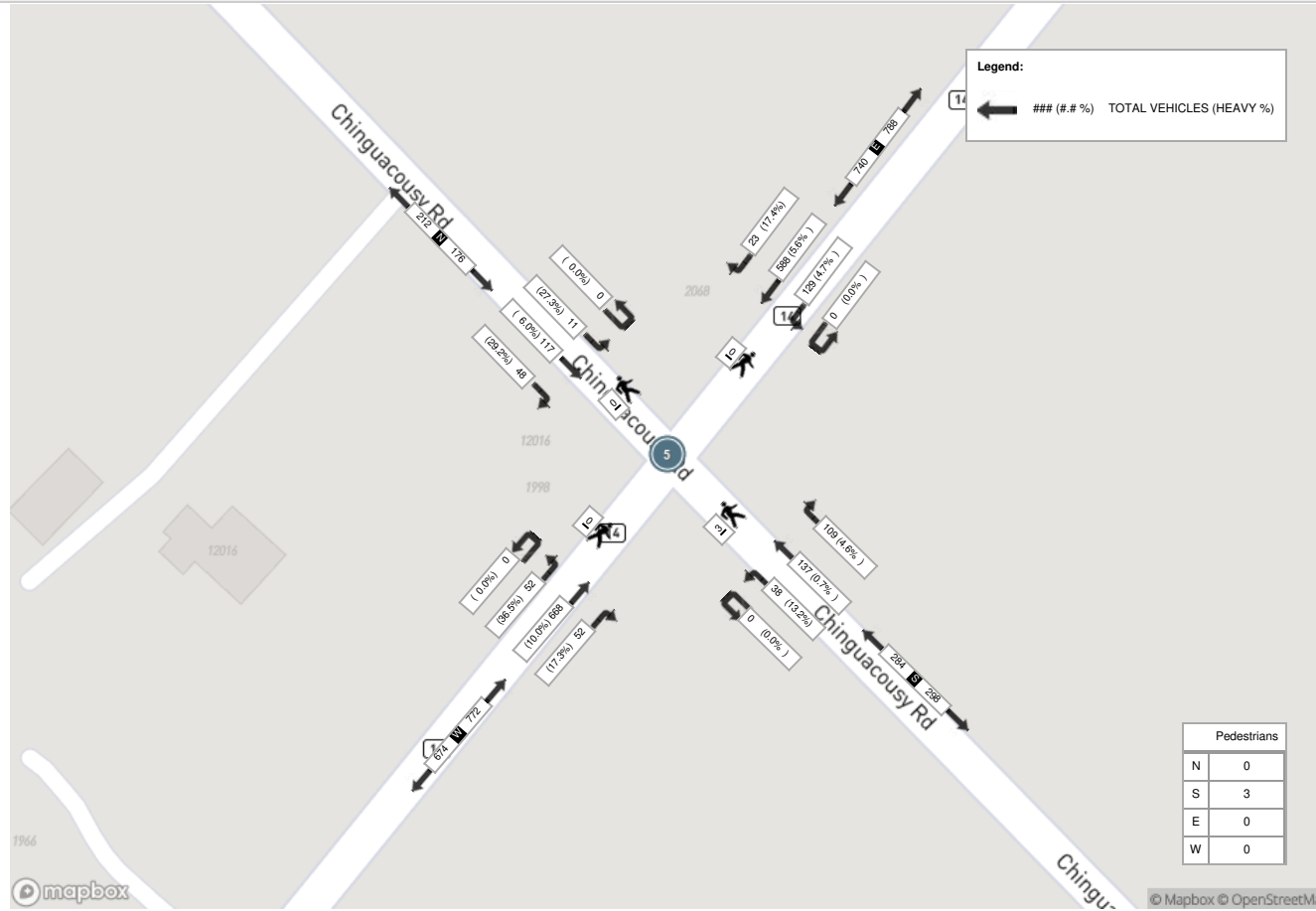
Peak Hour: 03:15 PM - 04:15 PM Weather: Overcast Clouds (14.32 °C)

Start Time	N Approach CHINGUACOUSY RD						E Approach MAYFIELD RD						S Approach CHINGUACOUSY RD						W Approach MAYFIELD RD						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
15:15:00	14	23	4	0	0	41	5	154	35	0	0	194	33	47	13	0	3	93	16	170	10	0	0	196	524
15:30:00	8	30	3	0	0	41	3	140	28	0	0	171	31	34	8	0	0	73	10	162	16	0	0	188	473
15:45:00	14	28	2	0	0	44	6	153	32	0	0	191	24	32	10	0	0	66	15	174	17	0	0	206	507
16:00:00	12	36	2	0	0	50	9	141	34	0	0	184	21	24	7	0	0	52	11	162	9	0	0	182	468
Grand Total	48	117	11	0	0	176	23	588	129	0	0	740	109	137	38	0	3	284	52	668	52	0	0	772	1972
Approach%	27.3%	66.5%	6.3%	0%		-	3.1%	79.5%	17.4%	0%		-	38.4%	48.2%	13.4%	0%		-	6.7%	86.5%	6.7%	0%		-	-
Totals %	2.4%	5.9%	0.6%	0%		8.9%	1.2%	29.8%	6.5%	0%		37.5%	5.5%	6.9%	1.9%	0%		14.4%	2.6%	33.9%	2.6%	0%		39.1%	-
PHF	0.86	0.81	0.69	0		0.88	0.64	0.95	0.92	0		0.95	0.83	0.73	0.73	0		0.76	0.81	0.96	0.76	0		0.94	-
Heavy	14	7	3	0		24	4	33	6	0		43	5	1	5	0		11	9	67	19	0		95	-
Heavy %	29.2%	6%	27.3%	0%		13.6%	17.4%	5.6%	4.7%	0%		5.8%	4.6%	0.7%	13.2%	0%		3.9%	17.3%	10%	36.5%	0%		12.3%	-
Lights	34	110	8	0		152	19	555	123	0		697	104	136	33	0		273	43	601	33	0		677	-
Lights %	70.8%	94%	72.7%	0%		86.4%	82.6%	94.4%	95.3%	0%		94.2%	95.4%	99.3%	86.8%	0%		96.1%	82.7%	90%	63.5%	0%		87.7%	-
Single-Unit Trucks	11	0	1	0		12	0	11	0	0		11	1	0	0	0		1	1	17	13	0		31	-
Single-Unit Trucks %	22.9%	0%	9.1%	0%		6.8%	0%	1.9%	0%	0%		1.5%	0.9%	0%	0%	0%		0.4%	1.9%	2.5%	25%	0%		4%	-
Buses	3	7	2	0		12	4	17	6	0		27	3	1	5	0		9	8	35	5	0		48	-
Buses %	6.3%	6%	18.2%	0%		6.8%	17.4%	2.9%	4.7%	0%		3.6%	2.8%	0.7%	13.2%	0%		3.2%	15.4%	5.2%	9.6%	0%		6.2%	-
Articulated Trucks	0	0	0	0		0	0	5	0	0		5	1	0	0	0		1	0	15	1	0		16	-
Articulated Trucks %	0%	0%	0%	0%		0%	0%	0.9%	0%	0%		0.7%	0.9%	0%	0%	0%		0.4%	0%	2.2%	1.9%	0%		2.1%	-
Bicycles on Road	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	-
Bicycles on Road %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	-
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-
Pedestrians %	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	-	100%	-	-	-	-	-	0%	-	-	-

Peak Hour: 07:45 AM - 08:45 AM Weather: Overcast Clouds (7.73 °C)



Peak Hour: 03:15 PM - 04:15 PM Weather: Overcast Clouds (14.32 °C)





Turning Movement Count (9 . MAYFIELD RD & CREDITVIEW RD) CustID: 01420659

Start Time	N Approach CREDITVIEW RD						S Approach CREDITVIEW RD						W Approach MAYFIELD RD						E Approach MAYFIELD RD						Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Thru N:S	Left N:E	UTurn N:N	Peds N:	Approach Total	Right S:E	Thru S:N	Left S:W	UTurn S:S	Peds S:	Approach Total	Right W:S	Thru W:E	Left W:N	UTurn W:W	Peds W:	Approach Total	Right E:N	Thru E:W	Left E:S	UTurn E:E	Peds E:	Approach Total		
06:00:00	3	2	1	0	0	6	17	16	7	0	0	40	3	68	1	0	0	72	2	69	4	0	0	75	193	
06:15:00	3	13	1	0	0	17	14	12	8	0	0	34	5	61	6	0	0	72	0	79	7	0	0	86	209	
06:30:00	2	4	1	0	0	7	8	12	12	0	0	32	0	95	4	0	0	99	1	137	9	0	0	147	285	
06:45:00	3	17	0	0	0	20	20	14	12	0	0	46	4	71	1	0	0	76	0	109	8	0	0	117	259	946
07:00:00	6	15	1	0	0	22	16	19	8	0	1	43	6	114	8	0	0	128	1	106	12	0	0	119	312	1065
07:15:00	4	26	3	0	0	33	24	19	5	0	0	48	8	119	5	0	0	132	1	109	15	0	0	125	338	1194
07:30:00	3	32	2	0	0	37	21	20	12	0	0	53	4	124	5	0	0	133	1	104	23	0	0	128	351	1260
07:45:00	4	26	1	0	0	31	26	14	5	0	0	45	10	115	3	0	0	128	2	116	25	0	0	143	347	1348
08:00:00	7	30	1	0	0	38	28	30	12	0	0	70	13	124	4	0	0	141	0	140	23	0	0	163	412	1448
08:15:00	8	14	5	0	0	27	37	25	11	0	0	73	12	144	6	0	0	162	1	135	23	0	0	159	421	1531
08:30:00	7	17	0	0	0	24	34	20	15	0	0	69	9	116	7	0	0	132	0	119	20	0	0	139	364	1544
08:45:00	3	14	1	0	0	18	22	12	18	0	0	52	7	84	4	0	0	95	0	150	26	0	0	176	341	1538
09:00:00	3	4	3	0	0	10	22	15	21	0	0	58	4	136	6	0	0	146	0	153	17	0	0	170	384	1510
09:15:00	7	11	3	0	0	21	16	9	8	0	0	33	7	112	3	0	0	122	2	102	12	0	0	116	292	1381
09:30:00	1	7	1	0	0	9	24	13	11	0	0	48	5	89	2	0	0	96	0	92	22	0	0	114	267	1284
09:45:00	6	11	2	0	0	19	15	9	3	0	0	27	5	107	3	0	0	115	1	86	17	0	0	104	265	1208
BREAK																										
15:00:00	4	15	3	0	0	22	38	27	20	0	0	85	11	139	4	0	0	154	0	108	31	0	0	139	400	
15:15:00	0	14	2	0	0	16	27	20	15	0	0	62	12	146	4	0	0	162	3	121	32	0	0	156	396	
15:30:00	4	12	1	0	0	17	30	28	23	0	0	81	13	165	2	0	2	180	1	122	26	0	0	149	427	
15:45:00	12	29	2	0	0	43	25	22	18	0	1	65	21	164	7	0	2	192	3	112	25	0	1	140	440	1663
16:00:00	8	19	1	0	0	28	17	25	12	0	0	54	14	139	6	0	0	159	2	108	29	0	0	139	380	1643
16:15:00	3	34	2	0	0	39	32	28	15	0	0	75	9	128	2	0	0	139	1	104	32	0	0	137	390	1637
16:30:00	5	26	2	0	0	33	24	24	10	0	0	58	8	134	2	0	0	144	2	120	17	0	0	139	374	1584
16:45:00	8	24	4	0	0	36	28	17	14	0	2	59	12	140	5	0	0	157	0	94	31	0	0	125	377	1521
17:00:00	5	26	1	0	0	32	19	26	11	0	1	56	11	140	5	0	0	156	2	110	24	0	0	136	380	1521
17:15:00	4	30	2	0	0	36	32	18	11	0	0	61	10	148	7	0	0	165	3	102	31	0	0	136	398	1529
17:30:00	3	30	1	0	0	34	30	16	13	0	0	59	10	159	4	0	0	173	3	101	31	0	0	135	401	1556
17:45:00	2	24	2	0	0	28	26	14	9	0	0	49	12	144	1	0	0	157	2	101	41	0	0	144	378	1557
18:00:00	4	22	1	0	0	27	32	32	9	0	0	73	14	140	9	0	0	163	1	105	37	0	0	143	406	1583
18:15:00	6	32	1	0	0	39	28	14	12	0	0	54	7	155	2	0	0	164	4	102	31	0	0	137	394	1579
18:30:00	6	27	2	0	0	35	26	15	9	0	0	50	12	116	6	0	0	134	1	102	36	0	0	139	358	1536
18:45:00	7	12	3	0	0	22	36	26	7	0	1	69	13	114	3	0	0	130	1	84	31	0	0	116	337	1495
Grand Total	151	619	56	0	0	826	794	611	376	0	6	1781	291	3950	137	0	4	4378	41	3502	748	0	1	4291	11276	-
Approach%	18.3%	74.9%	6.8%	0%	-	-	44.6%	34.3%	21.1%	0%	-	-	6.6%	90.2%	3.1%	0%	-	-	1%	81.6%	17.4%	0%	-	-	-	-
Totals %	1.3%	5.5%	0.5%	0%	7.3%	7%	5.4%	3.3%	0%	15.8%	2.6%	35%	1.2%	0%	38.8%	0.4%	31.1%	6.6%	0%	38.1%	-	-	-	-	-	-
Heavy	4	14	6	0	-	-	40	15	32	0	-	-	21	256	4	0	-	-	2	249	37	0	-	-	-	-
Heavy %	2.6%	2.3%	10.7%	0%	-	-	5%	2.5%	8.5%	0%	-	-	7.2%	6.5%	2.9%	0%	-	-	4.9%	7.1%	4.9%	0%	-	-	-	-
Bicycles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycle %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Peak Hour: 07:45 AM - 08:45 AM Weather: Overcast Clouds (7.73 °C)

Start Time	N Approach CREDITVIEW RD						S Approach CREDITVIEW RD						W Approach MAYFIELD RD						E Approach MAYFIELD RD						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
07:45:00	4	26	1	0	0	31	26	14	5	0	0	45	10	115	3	0	0	128	2	116	25	0	0	143	347
08:00:00	7	30	1	0	0	38	28	30	12	0	0	70	13	124	4	0	0	141	0	140	23	0	0	163	412
08:15:00	8	14	5	0	0	27	37	25	11	0	0	73	12	144	6	0	0	162	1	135	23	0	0	159	421
08:30:00	7	17	0	0	0	24	34	20	15	0	0	69	9	116	7	0	0	132	0	119	20	0	0	139	364
Grand Total	26	87	7	0	0	120	125	89	43	0	0	257	44	499	20	0	0	563	3	510	91	0	0	604	1544
Approach%	21.7%	72.5%	5.8%	0%	-	-	48.6%	34.6%	16.7%	0%	-	-	7.8%	88.6%	3.6%	0%	-	-	0.5%	84.4%	15.1%	0%	-	-	-
Totals %	1.7%	5.6%	0.5%	0%	7.8%	8.1%	5.8%	2.8%	0%	16.6%	2.8%	32.3%	1.3%	0%	36.5%	0.2%	33%	5.9%	0%	39.1%	-	-	-		
PHF	0.81	0.73	0.35	0	0.79	0.84	0.74	0.72	0	0.88	0.85	0.87	0.71	0	0.87	0.38	0.91	0.91	0	0.93	-	-	-		
Heavy	1	1	2	0	4	8	2	5	0	15	2	39	0	0	41	0	35	6	0	41	-	-	-		
Heavy %	3.8%	1.1%	28.6%	0%	3.3%	6.4%	2.2%	11.6%	0%	5.8%	4.5%	7.8%	0%	0%	7.3%	0%	6.9%	6.6%	0%	6.8%	-	-	-		
Lights	25	86	5	0	116	117	87	38	0	242	42	460	20	0	522	3	475	85	0	563	-	-	-		
Lights %	96.2%	98.9%	71.4%	0%	96.7%	93.6%	97.8%	88.4%	0%	94.2%	95.5%	92.2%	100%	0%	92.7%	100%	93.1%	93.4%	0%	93.2%	-	-	-		
Single-Unit Trucks	0	0	0	0	0	3	0	0	0	3	0	27	0	0	27	0	17	3	0	20	-	-	-		
Single-Unit Trucks %	0%	0%	0%	0%	0%	2.4%	0%	0%	0%	1.2%	0%	5.4%	0%	0%	4.8%	0%	3.3%	3.3%	0%	3.3%	-	-	-		
Buses	0	1	2	0	3	5	2	4	0	11	2	8	0	0	10	0	8	3	0	11	-	-	-		
Buses %	0%	1.1%	28.6%	0%	2.5%	4%	2.2%	9.3%	0%	4.3%	4.5%	1.6%	0%	0%	1.8%	0%	1.6%	3.3%	0%	1.8%	-	-	-		
Articulated Trucks	1	0	0	0	1	0	0	1	0	1	0	4	0	0	4	0	10	0	0	10	-	-	-		
Articulated Trucks %	3.8%	0%	0%	0%	0.8%	0%	0%	2.3%	0%	0.4%	0%	0.8%	0%	0%	0.7%	0%	2%	0%	0%	1.7%	-	-	-		
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-		
Bicycles on Road %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-	-	-		
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-		
Pedestrians %	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	0%	-	-	-		
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-		
Bicycles on Crosswalk %	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	0%	-	-	-		



Peak Hour: 03:00 PM - 04:00 PM Weather: Overcast Clouds (14.32 °C)

Start Time	N Approach CREDITVIEW RD						S Approach CREDITVIEW RD						W Approach MAYFIELD RD						E Approach MAYFIELD RD						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
15:00:00	4	15	3	0	0	22	38	27	20	0	0	85	11	139	4	0	0	154	0	108	31	0	0	139	400
15:15:00	0	14	2	0	0	16	27	20	15	0	0	62	12	146	4	0	0	162	3	121	32	0	0	156	396
15:30:00	4	12	1	0	0	17	30	28	23	0	0	81	13	165	2	0	2	180	1	122	26	0	0	149	427
15:45:00	12	29	2	0	0	43	25	22	18	0	1	65	21	164	7	0	2	192	3	112	25	0	1	140	440
Grand Total	20	70	8	0	0	98	120	97	76	0	1	293	57	614	17	0	4	688	7	463	114	0	1	584	1663
Approach%	20.4%	71.4%	8.2%	0%	-	-	41%	33.1%	25.9%	0%	-	-	8.3%	89.2%	2.5%	0%	-	-	1.2%	79.3%	19.5%	0%	-	-	-
Totals %	1.2%	4.2%	0.5%	0%	5.9%	5.9%	7.2%	5.8%	4.6%	0%	17.6%	17.6%	3.4%	36.9%	1%	0%	41.4%	41.4%	0.4%	27.8%	6.9%	0%	35.1%	-	-
PHF	0.42	0.6	0.67	0	0.57	0.57	0.79	0.87	0.83	0	0.86	0.86	0.68	0.93	0.61	0	0.9	0.9	0.58	0.95	0.89	0	0.94	-	-
Heavy	1	0	2	0	3	3	6	2	15	0	23	23	4	77	1	0	82	82	1	33	5	0	39	-	-
Heavy %	5%	0%	25%	0%	3.1%	3.1%	5%	2.1%	19.7%	0%	7.8%	7.8%	7%	12.5%	5.9%	0%	11.9%	11.9%	14.3%	7.1%	4.4%	0%	6.7%	-	-
Lights	19	70	6	0	95	95	114	95	61	0	270	270	53	537	16	0	606	606	6	430	109	0	545	-	-
Lights %	95%	100%	75%	0%	96.9%	96.9%	95%	97.9%	80.3%	0%	92.2%	92.2%	93%	87.5%	94.1%	0%	88.1%	88.1%	85.7%	92.9%	95.6%	0%	93.3%	-	-
Single-Unit Trucks	0	0	1	0	1	1	1	0	1	0	2	2	1	27	0	0	28	28	0	14	1	0	15	-	-
Single-Unit Trucks %	0%	0%	12.5%	0%	1%	1%	0.8%	0%	1.3%	0%	0.7%	0.7%	1.8%	4.4%	0%	0%	4.1%	4.1%	0%	3%	0.9%	0%	2.6%	-	-
Buses	1	0	1	0	2	2	5	2	14	0	21	21	3	36	1	0	40	40	1	15	4	0	20	-	-
Buses %	5%	0%	12.5%	0%	2%	2%	4.2%	2.1%	18.4%	0%	7.2%	7.2%	5.3%	5.9%	5.9%	0%	5.8%	5.8%	14.3%	3.2%	3.5%	0%	3.4%	-	-
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	14	14	0	4	0	0	4	-	-
Articulated Trucks %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2.3%	0%	0%	2%	2%	0%	0.9%	0%	0%	0.7%	-	-
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
Bicycles on Road %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	4	-	-	-	-	-	1	-	-
Pedestrians %	-	-	-	-	0%	-	-	-	-	-	16.7%	-	-	-	-	-	66.7%	-	-	-	-	-	16.7%	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
Bicycles on Crosswalk %	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-

Peak Hour: 07:45 AM - 08:45 AM Weather: Overcast Clouds (7.73 °C)



Peak Hour: 03:00 PM - 04:00 PM Weather: Overcast Clouds (14.32 °C)





Turning Movement Count (10 . MAYFIELD RD & ROBERT PARKINSON DR) CustID: 01421014

Start Time	E Approach MAYFIELD RD					S Approach ROBERT PARKINSON DR					W Approach MAYFIELD RD					Int. Total (15 min)	Int. Total (1 hr)
	Thru E:W	Left E:S	UTurn E:E	Peds E:	Approach Total	Right S:E	Left S:W	UTurn S:S	Peds S:	Approach Total	Right W:S	Thru W:E	UTurn W:W	Peds W:	Approach Total		
06:00:00	74	6	0	0	80	16	6	0	0	22	1	51	0	0	52	154	
06:15:00	87	5	0	0	92	14	7	0	0	21	2	65	0	0	67	180	
06:30:00	138	6	0	0	144	9	6	0	0	15	1	89	0	0	90	249	
06:45:00	118	7	0	0	125	14	8	0	0	22	0	66	0	0	66	213	796
07:00:00	110	7	0	0	117	22	6	0	0	28	4	107	0	0	111	256	898
07:15:00	113	4	0	0	117	21	3	0	0	24	3	110	0	0	113	254	972
07:30:00	112	3	0	0	115	16	5	0	0	21	5	115	0	0	120	256	979
07:45:00	124	4	0	0	128	15	10	0	0	25	4	126	0	0	130	283	1049
08:00:00	153	7	0	0	160	17	4	0	0	21	2	121	0	0	123	304	1097
08:15:00	141	10	0	0	151	24	7	0	0	31	8	144	0	0	152	334	1177
08:30:00	140	7	0	0	147	26	7	0	0	33	5	104	0	0	109	289	1210
08:45:00	161	7	0	0	168	19	7	0	0	26	5	86	0	0	91	285	1212
09:00:00	168	10	0	0	178	19	9	0	0	28	12	127	0	0	139	345	1253
09:15:00	112	6	0	0	118	14	2	0	0	16	5	113	0	0	118	252	1171
09:30:00	95	8	0	0	103	10	2	0	0	12	3	87	0	0	90	205	1087
09:45:00	87	8	0	0	95	25	4	0	0	29	5	93	0	0	98	222	1024
BREAK																	
15:00:00	129	9	0	0	138	19	9	0	0	28	9	148	0	0	157	323	
15:15:00	126	17	0	0	143	20	10	0	0	30	12	141	0	0	153	326	
15:30:00	128	17	0	0	145	15	3	0	0	18	9	182	0	0	191	354	
15:45:00	121	24	0	0	145	17	5	0	0	22	16	185	0	0	201	368	1371
16:00:00	106	29	0	0	135	12	1	0	0	13	12	146	0	0	158	306	1354
16:15:00	111	11	0	0	122	21	6	0	0	27	4	131	0	0	135	284	1312
16:30:00	119	20	0	0	139	17	7	0	0	24	7	134	0	0	141	304	1262
16:45:00	108	14	0	0	122	18	6	0	0	24	8	147	0	0	155	301	1195
17:00:00	108	18	0	0	126	23	5	0	0	28	5	141	0	0	146	300	1189
17:15:00	107	19	0	0	126	10	2	0	0	12	11	165	0	0	176	314	1219
17:30:00	99	16	0	0	115	19	11	0	0	30	8	169	0	0	177	322	1237
17:45:00	110	14	0	0	124	9	10	0	0	19	15	152	0	0	167	310	1246
18:00:00	103	15	0	0	118	25	9	0	2	34	9	152	0	0	161	313	1259
18:15:00	102	21	0	0	123	18	13	0	0	31	12	160	0	0	172	326	1271
18:30:00	92	31	0	0	123	15	7	0	0	22	12	133	0	0	145	290	1239
18:45:00	91	9	0	0	100	14	6	0	1	20	10	120	0	0	130	250	1179



Grand Total	3693	389	0	0	4082	553	203	0	3	756	224	4010	0	0	4234	9072	-
Approach%	90.5%	9.5%	0%		-	73.1%	26.9%	0%		-	5.3%	94.7%	0%		-	-	-
Totals %	40.7%	4.3%	0%		45%	6.1%	2.2%	0%		8.3%	2.5%	44.2%	0%		46.7%	-	-
Heavy	263	21	0		-	25	4	0		-	13	258	0		-	-	-
Heavy %	7.1%	5.4%	0%		-	4.5%	2%	0%		-	5.8%	6.4%	0%		-	-	-
Bicycles	-	-	-		-	-	-	-		-	-	-	-		-	-	-
Bicycle %	-	-	-		-	-	-	-		-	-	-	-		-	-	-



Peak Hour: 08:15 AM - 09:15 AM Weather: Overcast Clouds (7.73 °C)

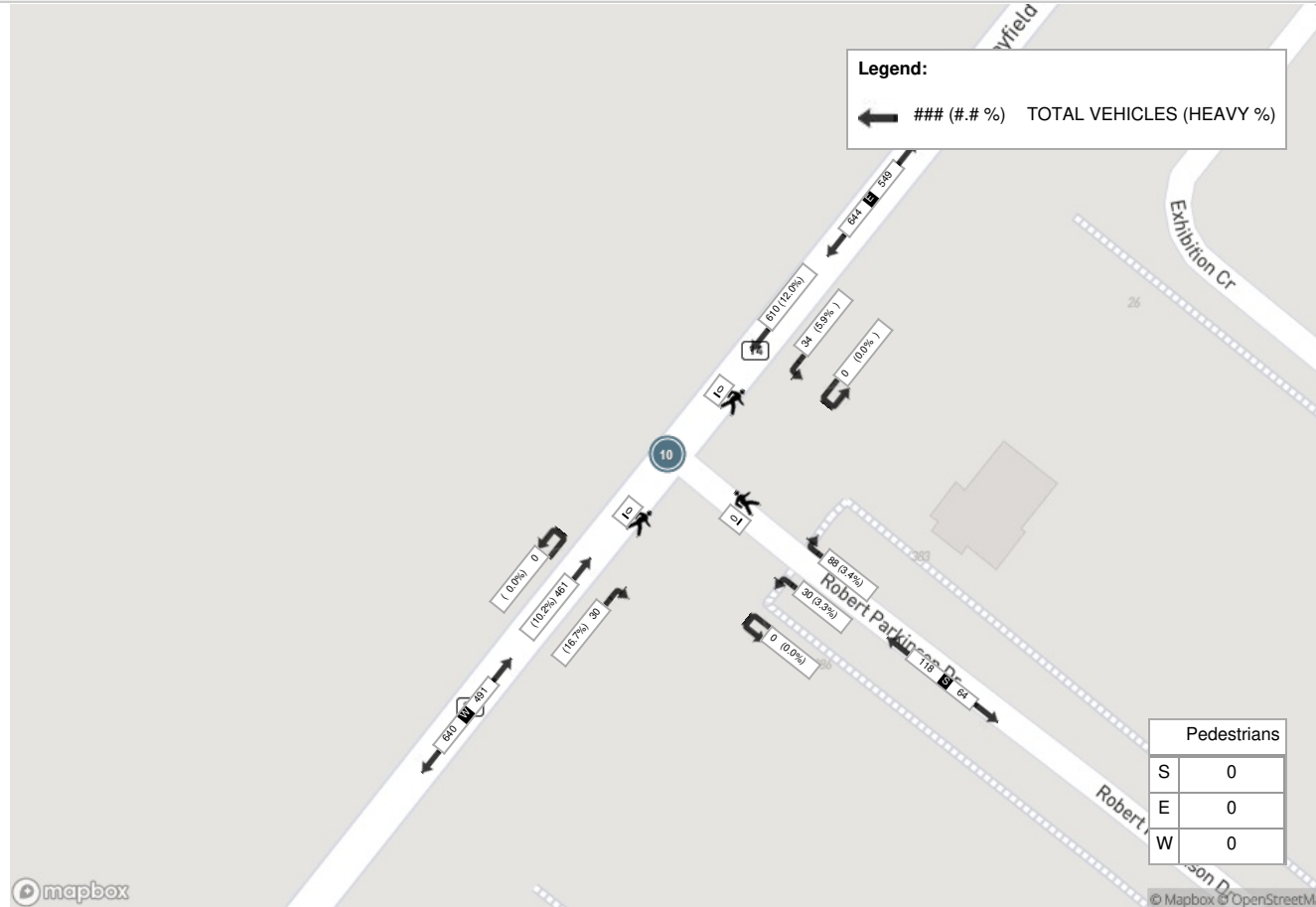
Start Time	E Approach MAYFIELD RD					S Approach ROBERT PARKINSON DR					W Approach MAYFIELD RD					Int. Total (15 min)
	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds	Approach Total	
08:15:00	141	10	0	0	151	24	7	0	0	31	8	144	0	0	152	334
08:30:00	140	7	0	0	147	26	7	0	0	33	5	104	0	0	109	289
08:45:00	161	7	0	0	168	19	7	0	0	26	5	86	0	0	91	285
09:00:00	168	10	0	0	178	19	9	0	0	28	12	127	0	0	139	345
Grand Total	610	34	0	0	644	88	30	0	0	118	30	461	0	0	491	1253
Approach%	94.7%	5.3%	0%		-	74.6%	25.4%	0%		-	6.1%	93.9%	0%		-	-
Totals %	48.7%	2.7%	0%		51.4%	7%	2.4%	0%		9.4%	2.4%	36.8%	0%		39.2%	-
PHF	0.91	0.85	0		0.9	0.85	0.83	0		0.89	0.63	0.8	0		0.81	-
Heavy	73	2	0		75	3	1	0		4	5	47	0		52	-
Heavy %	12%	5.9%	0%		11.6%	3.4%	3.3%	0%		3.4%	16.7%	10.2%	0%		10.6%	-
Lights	537	32	0		569	85	29	0		114	25	414	0		439	-
Lights %	88%	94.1%	0%		88.4%	96.6%	96.7%	0%		96.6%	83.3%	89.8%	0%		89.4%	-
Single-Unit Trucks	26	0	0		26	0	0	0		0	0	16	0		16	-
Single-Unit Trucks %	4.3%	0%	0%		4%	0%	0%	0%		0%	0%	3.5%	0%		3.3%	-
Buses	34	2	0		36	3	1	0		4	5	29	0		34	-
Buses %	5.6%	5.9%	0%		5.6%	3.4%	3.3%	0%		3.4%	16.7%	6.3%	0%		6.9%	-
Articulated Trucks	13	0	0		13	0	0	0		0	0	2	0		2	-
Articulated Trucks %	2.1%	0%	0%		2%	0%	0%	0%		0%	0%	0.4%	0%		0.4%	-
Bicycles on Road	0	0	0		0	0	0	0		0	0	0	0		0	-
Bicycles on Road %	0%	0%	0%		0%	0%	0%	0%		0%	0%	0%	0%		0%	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
Pedestrians%	-	-	-	0%	-	-	-	-	0%	-	-	-	-	0%	-	-



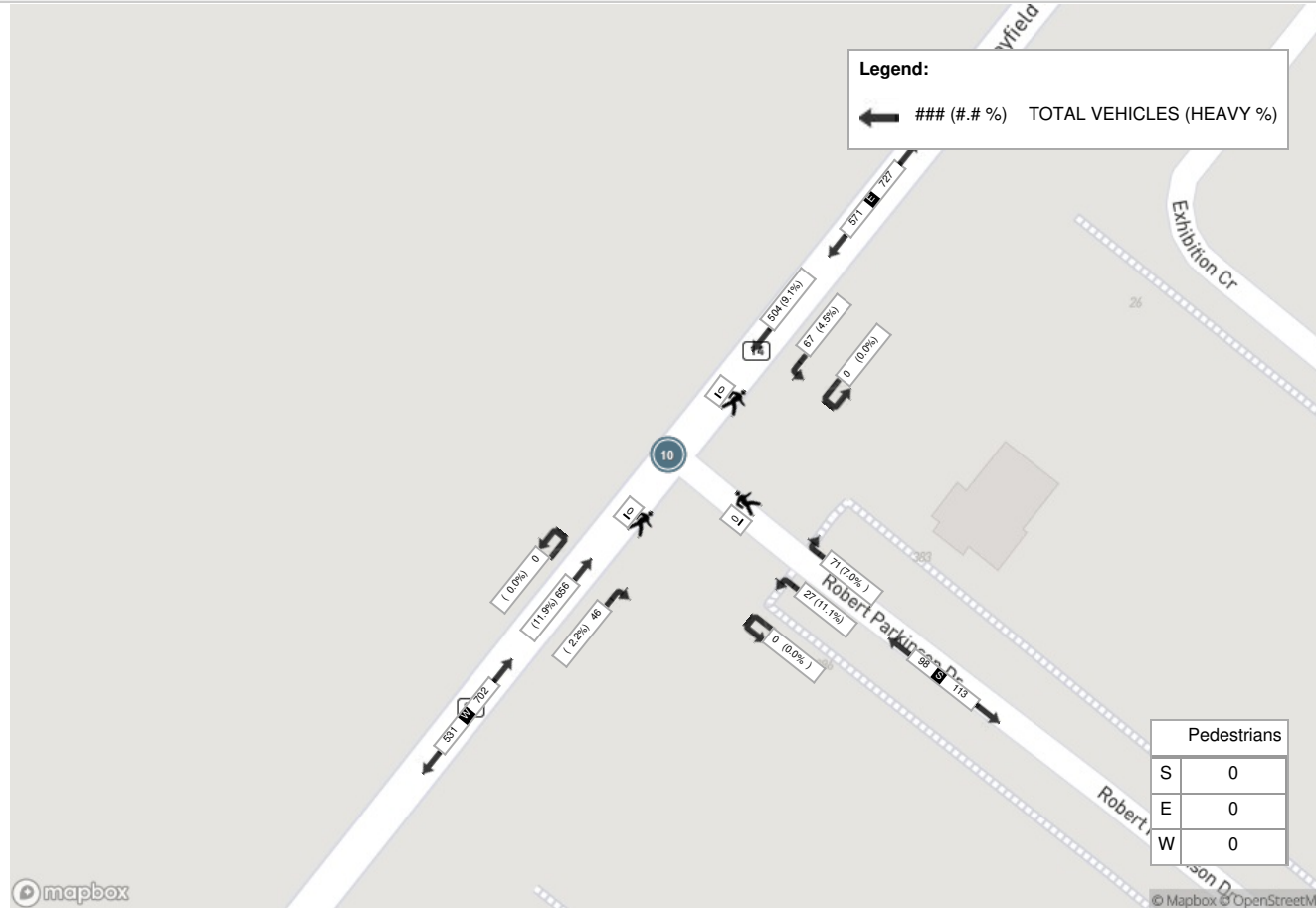
Peak Hour: 03:00 PM - 04:00 PM Weather: Overcast Clouds (14.32 °C)

Start Time	E Approach MAYFIELD RD					S Approach ROBERT PARKINSON DR					W Approach MAYFIELD RD					Int. Total (15 min)
	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds	Approach Total	
15:00:00	129	9	0	0	138	19	9	0	0	28	9	148	0	0	157	323
15:15:00	126	17	0	0	143	20	10	0	0	30	12	141	0	0	153	326
15:30:00	128	17	0	0	145	15	3	0	0	18	9	182	0	0	191	354
15:45:00	121	24	0	0	145	17	5	0	0	22	16	185	0	0	201	368
Grand Total	504	67	0	0	571	71	27	0	0	98	46	656	0	0	702	1371
Approach%	88.3%	11.7%	0%		-	72.4%	27.6%	0%		-	6.6%	93.4%	0%		-	-
Totals %	36.8%	4.9%	0%		41.6%	5.2%	2%	0%		7.1%	3.4%	47.8%	0%		51.2%	-
PHF	0.98	0.7	0		0.98	0.89	0.68	0		0.82	0.72	0.89	0		0.87	-
Heavy	46	3	0		49	5	3	0		8	1	78	0		79	-
Heavy %	9.1%	4.5%	0%		8.6%	7%	11.1%	0%		8.2%	2.2%	11.9%	0%		11.3%	-
Lights	458	64	0		522	66	24	0		90	45	578	0		623	-
Lights %	90.9%	95.5%	0%		91.4%	93%	88.9%	0%		91.8%	97.8%	88.1%	0%		88.7%	-
Single-Unit Trucks	15	0	0		15	1	0	0		1	0	26	0		26	-
Single-Unit Trucks %	3%	0%	0%		2.6%	1.4%	0%	0%		1%	0%	4%	0%		3.7%	-
Buses	27	3	0		30	4	3	0		7	1	36	0		37	-
Buses %	5.4%	4.5%	0%		5.3%	5.6%	11.1%	0%		7.1%	2.2%	5.5%	0%		5.3%	-
Articulated Trucks	4	0	0		4	0	0	0		0	0	16	0		16	-
Articulated Trucks %	0.8%	0%	0%		0.7%	0%	0%	0%		0%	0%	2.4%	0%		2.3%	-
Bicycles on Road	0	0	0		0	0	0	0		0	0	0	0		0	-
Bicycles on Road %	0%	0%	0%		0%	0%	0%	0%		0%	0%	0%	0%		0%	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
Pedestrians%	-	-	-	0%	-	-	-	-	0%	-	-	-	-	0%	-	-

Peak Hour: 08:15 AM - 09:15 AM Weather: Overcast Clouds (7.73 °C)



Peak Hour: 03:00 PM - 04:00 PM Weather: Overcast Clouds (14.32 °C)





Turning Movement Count (8 . MAYFIELD RD & THORNBUSH BLVD) CustID: 01420377

Start Time	E Approach MAYFIELD RD					S Approach THORNBUSH BLVD					W Approach MAYFIELD RD					Int. Total (15 min)	Int. Total (1 hr)
	Thru E:W	Left E:S	UTurn E:E	Peds E:	Approach Total	Right S:E	Left S:W	UTurn S:S	Peds S:	Approach Total	Right W:S	Thru W:E	UTurn W:W	Peds W:	Approach Total		
06:00:00	82	1	0	0	83	9	0	0	0	9	0	87	0	0	87	179	
06:15:00	83	0	0	0	83	10	1	0	0	11	0	86	0	0	86	180	
06:30:00	143	2	0	0	145	8	0	0	0	8	1	94	0	0	95	248	
06:45:00	114	3	0	0	117	6	0	0	0	6	0	94	0	0	94	217	824
07:00:00	119	1	0	0	120	10	2	0	0	12	0	130	0	0	130	262	907
07:15:00	128	5	0	0	133	17	1	0	0	18	0	147	0	0	147	298	1025
07:30:00	130	8	0	0	138	10	4	0	0	14	0	146	0	0	146	298	1075
07:45:00	144	5	0	0	149	6	2	0	0	8	0	148	0	0	148	305	1163
08:00:00	152	1	0	0	153	11	2	0	0	13	3	152	0	0	155	321	1222
08:15:00	154	5	0	0	159	7	2	0	0	9	0	185	0	0	185	353	1277
08:30:00	138	8	0	0	146	8	0	0	0	8	0	153	0	0	153	307	1286
08:45:00	183	3	0	0	186	14	3	0	0	17	1	111	0	0	112	315	1296
09:00:00	163	4	0	0	167	11	3	0	0	14	0	154	0	0	154	335	1310
09:15:00	101	2	0	0	103	11	2	0	0	13	0	138	0	0	138	254	1211
09:30:00	114	1	0	0	115	5	0	0	0	5	1	112	0	0	113	233	1137
09:45:00	99	7	0	0	106	6	2	0	0	8	2	122	0	0	124	238	1060
BREAK																	
15:00:00	147	9	0	0	156	7	2	0	0	9	1	180	0	0	181	346	
15:15:00	157	6	0	0	163	6	1	0	0	7	2	167	0	0	169	339	
15:30:00	143	10	0	0	153	5	1	0	0	6	2	189	0	0	191	350	
15:45:00	140	11	0	0	151	8	3	0	0	11	5	195	0	0	200	362	1397
16:00:00	137	17	0	0	154	10	1	0	0	11	1	157	0	0	158	323	1374
16:15:00	131	11	0	0	142	4	1	0	0	5	3	157	0	0	160	307	1342
16:30:00	139	13	0	0	152	4	2	0	0	6	3	157	0	0	160	318	1310
16:45:00	115	8	0	0	123	4	1	0	0	5	1	168	0	0	169	297	1245
17:00:00	134	10	0	0	144	12	2	0	0	14	2	161	0	0	163	321	1243
17:15:00	139	7	0	0	146	6	1	0	0	7	4	170	1	0	175	328	1264
17:30:00	137	11	0	0	148	4	3	0	0	7	6	192	0	0	198	353	1299
17:45:00	132	9	0	0	141	5	6	0	0	11	4	164	0	0	168	320	1322
18:00:00	145	10	0	0	155	8	0	0	0	8	3	167	0	0	170	333	1334
18:15:00	151	12	0	0	163	11	0	0	0	11	3	189	0	0	192	366	1372
18:30:00	119	6	0	0	125	10	1	0	1	11	6	136	0	0	142	278	1297
18:45:00	115	7	0	0	122	5	1	0	0	6	2	149	0	0	151	279	1256



Grand Total	4228	213	0	0	4441	258	50	0	1	308	56	4757	1	0	4814	9563	-
Approach%	95.2%	4.8%	0%		-	83.8%	16.2%	0%		-	1.2%	98.8%	0%		-	-	-
Totals %	44.2%	2.2%	0%		46.4%	2.7%	0.5%	0%		3.2%	0.6%	49.7%	0%		50.3%	-	-
Heavy	290	8	0		-	9	0	0		-	4	296	0		-	-	-
Heavy %	6.9%	3.8%	0%		-	3.5%	0%	0%		-	7.1%	6.2%	0%		-	-	-
Bicycles	-	-	-		-	-	-	-		-	-	-	-		-	-	-
Bicycle %	-	-	-		-	-	-	-		-	-	-	-		-	-	-



Peak Hour: 08:15 AM - 09:15 AM Weather: Overcast Clouds (7.73 °C)

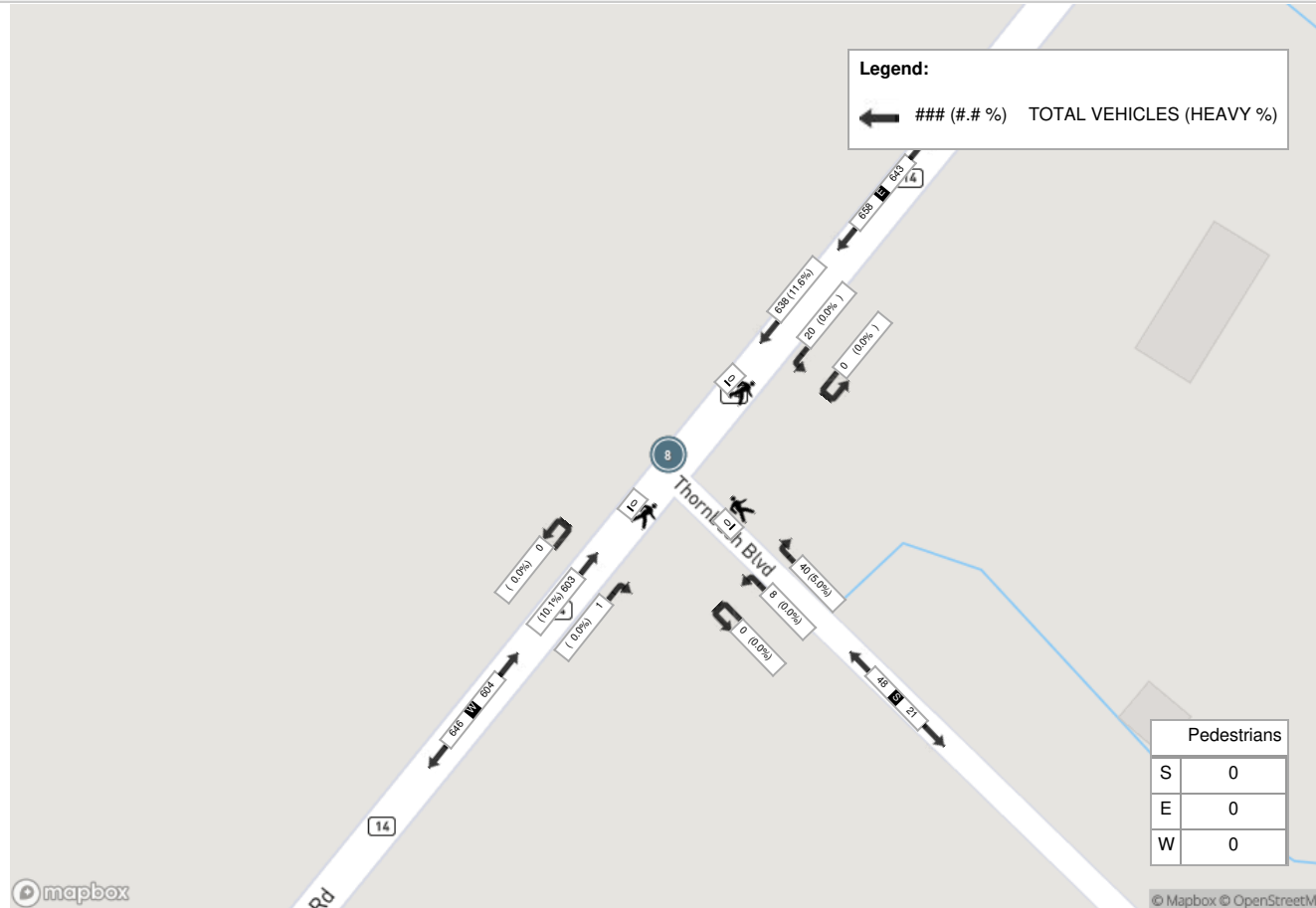
Start Time	E Approach MAYFIELD RD					S Approach THORNBUSH BLVD					W Approach MAYFIELD RD				Int. Total (15 min)	
	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds		Approach Total
08:15:00	154	5	0	0	159	7	2	0	0	9	0	185	0	0	185	353
08:30:00	138	8	0	0	146	8	0	0	0	8	0	153	0	0	153	307
08:45:00	183	3	0	0	186	14	3	0	0	17	1	111	0	0	112	315
09:00:00	163	4	0	0	167	11	3	0	0	14	0	154	0	0	154	335
Grand Total	638	20	0	0	658	40	8	0	0	48	1	603	0	0	604	1310
Approach%	97%	3%	0%		-	83.3%	16.7%	0%		-	0.2%	99.8%	0%		-	-
Totals %	48.7%	1.5%	0%		50.2%	3.1%	0.6%	0%		3.7%	0.1%	46%	0%		46.1%	-
PHF	0.87	0.63	0		0.88	0.71	0.67	0		0.71	0.25	0.81	0		0.82	-
Heavy	74	0	0		74	2	0	0		2	0	61	0		61	-
Heavy %	11.6%	0%	0%		11.2%	5%	0%	0%		4.2%	0%	10.1%	0%		10.1%	-
Lights	564	20	0		584	38	8	0		46	1	542	0		543	-
Lights %	88.4%	100%	0%		88.8%	95%	100%	0%		95.8%	100%	89.9%	0%		89.9%	-
Single-Unit Trucks	31	0	0		31	0	0	0		0	0	18	0		18	-
Single-Unit Trucks %	4.9%	0%	0%		4.7%	0%	0%	0%		0%	0%	3%	0%		3%	-
Buses	32	0	0		32	2	0	0		2	0	40	0		40	-
Buses %	5%	0%	0%		4.9%	5%	0%	0%		4.2%	0%	6.6%	0%		6.6%	-
Articulated Trucks	11	0	0		11	0	0	0		0	0	3	0		3	-
Articulated Trucks %	1.7%	0%	0%		1.7%	0%	0%	0%		0%	0%	0.5%	0%		0.5%	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
Pedestrians%	-	-	-	0%	-	-	-	-	0%	-	-	-	-	0%	-	-



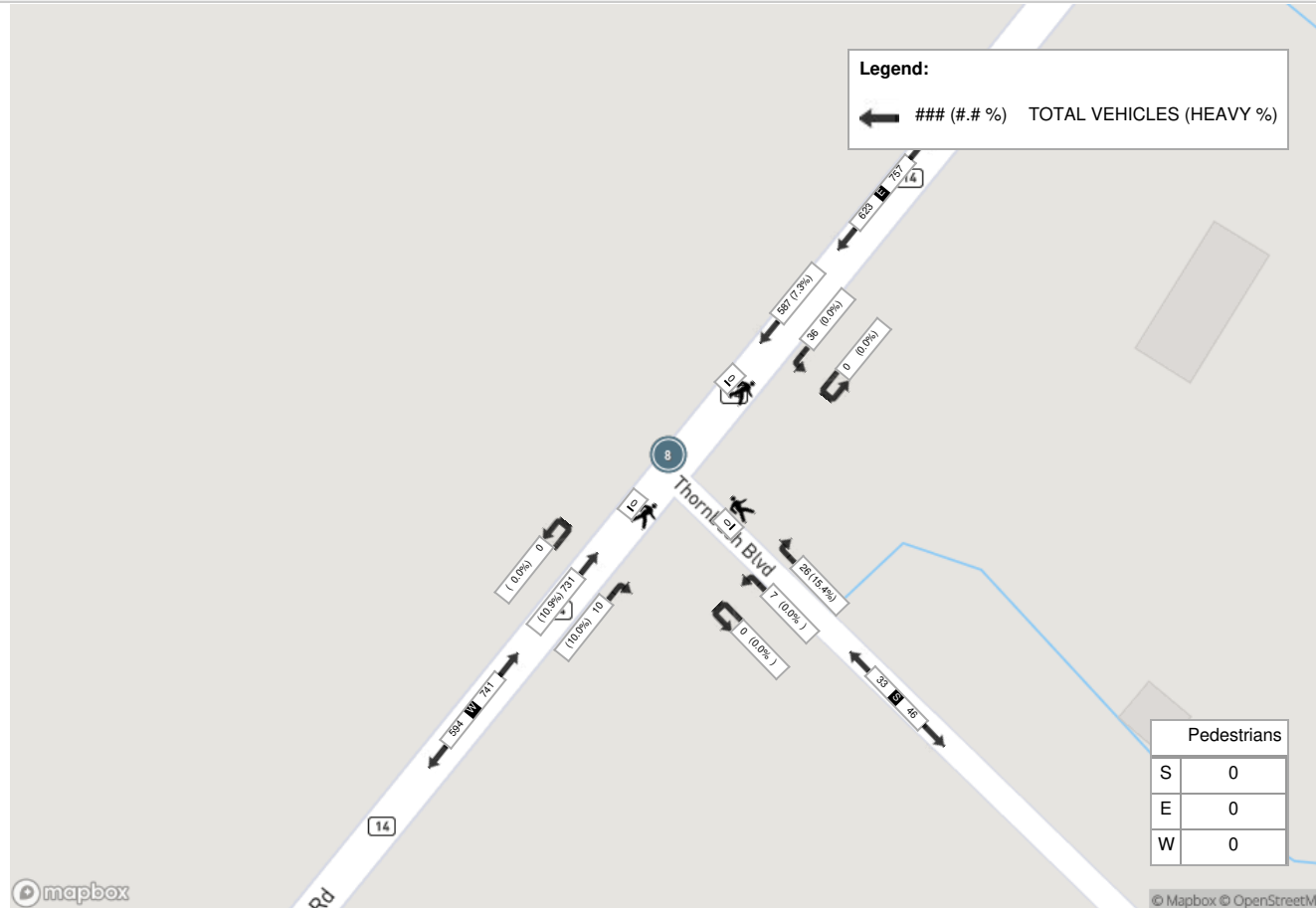
Peak Hour: 03:00 PM - 04:00 PM Weather: Overcast Clouds (14.32 °C)

Start Time	E Approach MAYFIELD RD					S Approach THORNBUSH BLVD					W Approach MAYFIELD RD					Int. Total (15 min)
	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds	Approach Total	
15:00:00	147	9	0	0	156	7	2	0	0	9	1	180	0	0	181	346
15:15:00	157	6	0	0	163	6	1	0	0	7	2	167	0	0	169	339
15:30:00	143	10	0	0	153	5	1	0	0	6	2	189	0	0	191	350
15:45:00	140	11	0	0	151	8	3	0	0	11	5	195	0	0	200	362
Grand Total	587	36	0	0	623	26	7	0	0	33	10	731	0	0	741	1397
Approach%	94.2%	5.8%	0%		-	78.8%	21.2%	0%		-	1.3%	98.7%	0%		-	-
Totals %	42%	2.6%	0%		44.6%	1.9%	0.5%	0%		2.4%	0.7%	52.3%	0%		53%	-
PHF	0.93	0.82	0		0.96	0.81	0.58	0		0.75	0.5	0.94	0		0.93	-
Heavy	43	0	0		43	4	0	0		4	1	80	0		81	-
Heavy %	7.3%	0%	0%		6.9%	15.4%	0%	0%		12.1%	10%	10.9%	0%		10.9%	-
Lights	544	36	0		580	22	7	0		29	9	651	0		660	-
Lights %	92.7%	100%	0%		93.1%	84.6%	100%	0%		87.9%	90%	89.1%	0%		89.1%	-
Single-Unit Trucks	17	0	0		17	0	0	0		0	0	27	0		27	-
Single-Unit Trucks %	2.9%	0%	0%		2.7%	0%	0%	0%		0%	0%	3.7%	0%		3.6%	-
Buses	21	0	0		21	4	0	0		4	1	41	0		42	-
Buses %	3.6%	0%	0%		3.4%	15.4%	0%	0%		12.1%	10%	5.6%	0%		5.7%	-
Articulated Trucks	5	0	0		5	0	0	0		0	0	12	0		12	-
Articulated Trucks %	0.9%	0%	0%		0.8%	0%	0%	0%		0%	0%	1.6%	0%		1.6%	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
Pedestrians%	-	-	-	0%	-	-	-	-	0%	-	-	-	-	0%	-	-

Peak Hour: 08:15 AM - 09:15 AM Weather: Overcast Clouds (7.73 °C)



Peak Hour: 03:00 PM - 04:00 PM Weather: Overcast Clouds (14.32 °C)



Jane Hu

From: Arash Olia <Arash.Olia@caledon.ca>
Sent: Monday, March 18, 2024 11:43 AM
To: Jane Hu
Cc: Seema Nagaraj
Subject: Re: Road Traffic Data Request (VCL: 1240062.000)

This Message Is From an Untrusted Sender

You have not previously corresponded with this sender.

Report Suspicious

Hi Jane,

Please arrange to collect the recent traffic data.

Thanks,

Arash Olia, Ph.D., P.Eng.
Manager, Transportation Engineering
Engineering, Public Works & Transportation

Office: [905.584.2272 x.4073](tel:905.584.2272)
Email: arash.olia@caledon.ca

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From: Jane Hu <jhu@valcoustics.com>
Sent: Monday, March 18, 2024 7:07:26 PM
To: Arash Olia <Arash.Olia@caledon.ca>
Cc: Seema Nagaraj <seema@valcoustics.com>
Subject: Road Traffic Data Request (VCL: 1240062.000)

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the contents to be safe.

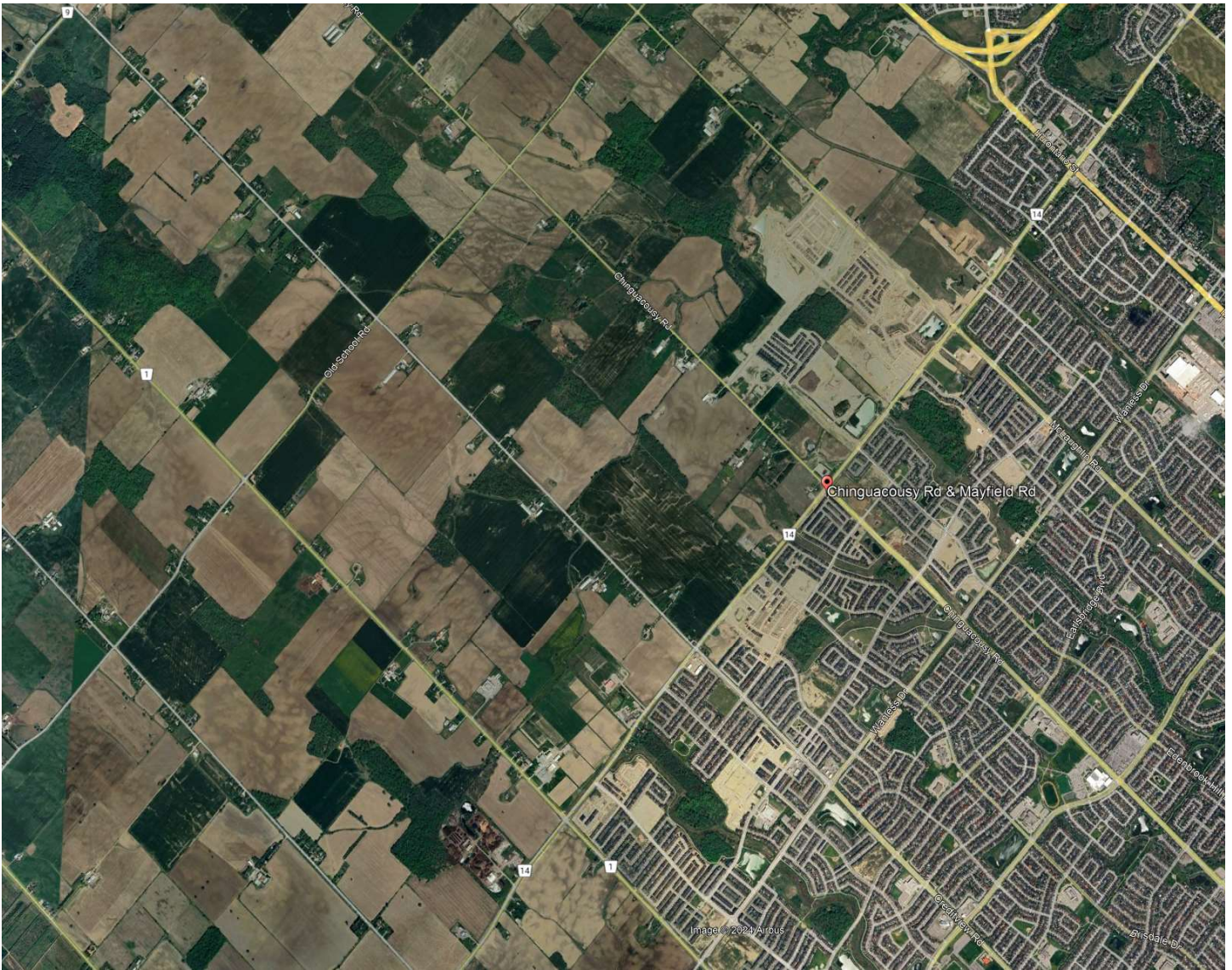
Hello,

We are currently preparing an environmental noise feasibility study for a proposed secondary plan in the vicinity of Chinguacousy Road and Mayfield Road (please see snippet below for exact location), in Caledon.

If available, could you please provide road traffic data for:

- Chinguacousy Road, north of Mayfield Road
- Creditview Road, north of Mayfield Road
- Heritage Road, north of Mayfield Road

We are looking for any available data for current and ultimate AADT, number of lanes, posted speed limit, medium/heavy truck percentages, day/night split, and road gradient.



Thank you,
Jane Hu



30 Wertheim Court, Unit 25
Richmond Hill, Ontario
Canada L4B 1B9
Tel: 905-764-5223 ext. 233
Fax: 905-764-6813
solutions@valcoustics.com

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automatically monitored and recorded and the content may be required to be disclosed by the Town to a third party in certain circumstances). Thank you.”

APPENDIX B

ENVIRONMENTAL NOISE GUIDELINES

APPENDIX B
ENVIRONMENTAL NOISE GUIDELINES
MINISTRY OF THE ENVIRONMENT, CONSERVATION AND PARKS (MECP)

Reference: MECP Publication NPC-300, October 2013: “*Environmental Noise Guideline, Stationary and Transportation Sources – Approval and Planning*”.

SPACE	SOURCE	TIME PERIOD	CRITERION
Living/dining, den areas of residences, hospitals, nursing homes, schools, daycare centres, etc.	Road	07:00 to 23:00	45 dBA
	Rail	07:00 to 23:00	40 dBA
	Aircraft	24-hour period	NEF/NEP 5
Living/dining, den areas of residences, hospitals, nursing homes, etc. (except schools or daycare centres)	Road	23:00 to 07:00	45 dBA
	Rail	23:00 to 07:00	40 dBA
	Aircraft	24-hour period	NEF/NEP 5
Sleeping quarters	Road	07:00 to 23:00	45 dBA
	Rail	07:00 to 23:00	40 dBA
	Aircraft	24-hour period	NEF/NEP 0
Sleeping quarters	Road	23:00 to 07:00	40 dBA
	Rail	23:00 to 07:00	35 dBA
	Aircraft	24-hour period	NEF/NEP 0
Outdoor Living Areas	Road and Rail	07:00 to 23:00	55 dBA
Outdoor Point of Reception	Aircraft	24-hour period	NEF/NEP 30#
	Stationary Source		
	Class 1 Area	07:00 to 19:00 ⁽¹⁾	50 ⁺ dBA
		19:00 to 23:00 ⁽¹⁾	50 ⁺ dBA
	Class 2 Area	07:00 to 19:00 ⁽²⁾	50 ⁺ dBA
		19:00 to 23:00 ⁽²⁾	45 ⁺ dBA
	Class 3 Area	07:00 to 19:00 ⁽³⁾	45 ⁺ dBA
		19:00 to 23:00 ⁽³⁾	40 ⁺ dBA
	Class 4 Area	07:00 to 19:00 ⁽⁴⁾	55 ⁺ dBA
		19:00 to 23:00 ⁽⁴⁾	55 ⁺ dBA

.../cont'd

SPACE	SOURCE	TIME PERIOD	CRITERION
Plane of a Window of Noise Sensitive Spaces	Stationary Source Class 1 Area	07:00 to 19:00 ⁽¹⁾	50 ⁺ dBA
		19:00 to 23:00 ⁽¹⁾	50 ⁺ dBA
		23:00 to 07:00 ⁽¹⁾	45 ⁺ dBA
	Class 2 Area	07:00 to 19:00 ⁽²⁾	50 ⁺ dBA
		19:00 to 23:00 ⁽²⁾	50 ⁺ dBA
		23:00 to 07:00 ⁽²⁾	45 ⁺ dBA
	Class 3 Area	07:00 to 19:00 ⁽³⁾	45 ⁺ dBA
		19:00 to 23:00 ⁽³⁾	45 ⁺ dBA
		23:00 to 07:00 ⁽³⁾	40 ⁺ dBA
	Class 4 Area	07:00 to 19:00 ⁽⁴⁾	60 ⁺ dBA
		19:00 to 23:00 ⁽⁴⁾	60 ⁺ dBA
		23:00 to 07:00 ⁽⁴⁾	55 ⁺ dBA

- # may not apply to in-fill or re-development.
 * or the minimum hourly background sound exposure $L_{eq(1)}$, due to road traffic, if higher.
- (1) Class 1 Area: Urban.
 (2) Class 2 Area: Urban during day; rural-like evening and night.
 (3) Class 3 Area: Rural.
 (4) Class 4 Area: Subject to land use planning authority's approval.

Reference: MECP Publication ISBN 0-7729-2804-5, 1987: "Environmental Noise Assessment in Land-Use Planning".

EXCESS ABOVE RECOMMENDED SOUND LEVEL LIMITS (dBA)	CHANGE IN SUBJECTIVE LOUDNESS ABOVE	MAGNITUDE OF THE NOISE PROBLEM	NOISE CONTROL MEASURES (OR ACTION TO BE TAKEN)
No excess (<55 dBA)	—	No expected noise problem	None
1 to 5 inclusive (56 to 60 dBA)	Noticeably louder	Slight noise impact	If no physical measures are taken, then prospective purchasers or tenants should be made aware by suitable warning clauses.
6 to 10 inclusive (61 - 65 dBA)	Almost twice as loud	Definite noise impact	Recommended.
11 to 15 inclusive (66 - 70 dBA)	Almost three times as loud	Serious noise impact	Strongly Recommended.
16 and over (>70 dBA)	Almost four times as loud	Very serious noise impact	Strongly Recommended (may be mandatory).

APPENDIX C

SAMPLE SOUND LEVEL CALCULATIONS - TRANSPORTATION SOURCES

STAMSON 5.04 NORMAL REPORT Date: 20-90-2024 12:50:13
MINISTRY OF ENVIRONMENT, CONSERVATION AND PARKS / NOISE ASSESSMENT

Filename: r3.te Time Period: Day/Night 16/8 hours
Description: **R3 - Block 497 - E Facade**

Road data, segment # 1: Chinguacousy (day/night)

Car traffic volume : 26910/2990 veh/TimePeriod *
Medium truck volume : 940/104 veh/TimePeriod *
Heavy truck volume : 626/70 veh/TimePeriod *
Posted speed limit : 70 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 31640
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 3.30
Heavy Truck % of Total Volume : 2.20
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Chinguacousy (day/night)

Angle1 Angle2 : -90.00 deg 85.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 35.00 / 35.00 m
Receiver height : 7.50 / 7.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 2: Tim Manley (day/night)

Car traffic volume : 9679/1075 veh/TimePeriod *
Medium truck volume : 306/34 veh/TimePeriod *
Heavy truck volume : 204/23 veh/TimePeriod *
Posted speed limit : 70 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 11320
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 3.00
Heavy Truck % of Total Volume : 2.00
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 2: Tim Manley (day/night)

Angle1 Angle2 : -90.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 18.00 / 18.00 m
Receiver height : 7.50 / 7.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Results segment # 1: Chinguacousy (day)

Source height = 1.22 m

ROAD (0.00 + 65.55 + 0.00) = 65.55 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	85	0.49	72.21	0.00	-5.48	-1.19	0.00	0.00	0.00	65.55

Segment Leq : 65.55 dBA

Results segment # 2: Tim Manley (day)

Source height = 1.19 m

ROAD (0.00 + 62.18 + 0.00) = 62.18 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.49	67.53	0.00	-1.18	-4.17	0.00	0.00	0.00	62.18

Segment Leq : 62.18 dBA

Total Leq All Segments: 67.19 dBA

Results segment # 1: Chinguacousy (night)

Source height = 1.22 m

ROAD (0.00 + 59.02 + 0.00) = 59.02 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	85	0.49	65.69	0.00	-5.48	-1.19	0.00	0.00	0.00	59.02

Segment Leq : 59.02 dBA

Results segment # 2: Tim Manley (night)

Source height = 1.19 m

ROAD (0.00 + 55.67 + 0.00) = 55.67 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.49	61.02	0.00	-1.18	-4.17	0.00	0.00	0.00	55.67

Segment Leq : 55.67 dBA

Total Leq All Segments: 60.67 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 67.19
(NIGHT): 60.67