October 27, 2023

Marija Ilic, P.Eng.
Manager, Development Engineering
North York District
Attention: Yelena Akselord

RE: 230 & 240 the Donway West
Zoning By-law Amendment Application No. 22 124524 NNY 16 OZ
Transportation Update and Response to Comments

Dear Yelena:

BA Group has been retained by Donway Co-operative Development Corporation to provide transportation consulting services in relation to the proposed redevelopment on the lands municipally known as 230 & 240 the Donway West (herein referred to as "the site").

An initial Zoning By-law Amendment (ZBA) application for the Site was submitted to the City of Toronto in March 2022. As part of this submission, BA Group prepared an initial transportation report entitled "*230 & 240 The Donway West Proposed Redevelopment, Urban Transportation Considerations*", dated March 15, 2022. This report provided an assessment of the parking, loading, vehicular access, and traffic operations.

City staff have reviewed the March 2022 submission and have provided comments regarding the transportation components of the development proposal via memoranda from City Planning (October 14, 2022) and Development Engineering (November 14, 2022).

The development plan has since been refined and an updated ZBA application is being made to the City. This letter has been prepared to provide an update to key transportation components based on the current development plans and to respond directly to City Staff comments.

1.0 CHANGES TO THE DEVELOPMENT PROPOSAL

The current proposal has been refined as part of the ongoing design and development process. The current proposal includes an increase in the number of residential units (+37 units). The multi-purpose facility for the Donway Covenant United Church (DCUC) is 743 m^2, which includes a space for worship, as well as community services and programs. The general arrangement of the Site is consistent with the initial ZBA submission.

A comparison between the previous and current development programmes is provided in **Table 1**. Reduced scale architectural plans of the proposed development are provided in **Appendix A**.

TABLE 1 DEVELOPMENT PROGRAMME

Land Use		March 2022 Initial ZBA Submission	October 2023 ZBA Submission
Residential Uses	Studio	12 units (4%)	11 units (3.6%)
	1-Bedroom	149 units (55%)	149 units (48.4%)
	2-Bedroom	88 units (33%)	116 units (37.7%)
	3-Bedroom	22 units (8%)	32 units (10.4%)
	Total Units	**271 units**	**308 units**
Church (Donway Covenant United Church)	Total GFA	735 m^2	743 m^2
	Worship Area	152 m^2	152 m^2
Transportation Services	Parking Supply	**237 parking spaces** 1 Car-Share space 60 Non-Resident spaces 176 Resident spaces	**258 parking spaces** 40 Non-Resident spaces 218 Resident spaces
	Loading Supply	1 Type G loading space	1 Type G loading space
	Bicycle Parking Supply	234 bicycle parking spaces (214 long-term, 20 short-term)	232 bicycle parking spaces (210 long-term, 22 short-term)

Note:
1. Based on site statistics provided by Architecture Unfolded (October 24, 2023).

2.0 VEHICULAR PARKING CONSIDERATIONS

2.1 ZONING BY-LAW PARKING REQUIREMENTS

The Site is subject to the requirements of "All Other Areas of the City" (i.e., outside of Parking Zones A and B) of the City of Toronto Zoning By-law 569-2013, as amended by Zoning By-law 89-2022.

Application of the parking requirements to the current proposal is summarized in **Table 2**.

TABLE 2 ZONING BY-LAW 569-2013 FOR "ALL OTHER AREAS OF THE CITY"

Use	Units / GFA [1]	Minimum		Maximum	
		Rate	Requirement [2]	Rate	Requirement [2]
Residential					
Studio	11 units	No minimum	0 spaces	0.8 spaces / unit	8 spaces
1-Bedroom	149 units			0.9 spaces / unit	134 spaces
2-Bedroom	116 units			1.0 spaces / unit	116 spaces
3-Bedroom	32 units			1.2 spaces / unit	38 spaces
Subtotal Resident	**308 units**	**Minimum Requirement**	**0 spaces**	**Maximum Permission**	**296 spaces**
Non-Residential					
Residential Visitor	308 units	2 spaces + 0.05 spaces / unit	17 spaces	1.0 spaces / unit for first 5 units, 0.1 spaces / unit for units > 5 units	35 spaces
Church	743 m^2	No minimum	0 spaces	6 spaces / 100m^2 GFA	44 spaces
Subtotal Non-Resident		**Minimum Requirement**	**17 spaces**	**Maximum Permission**	**79 spaces**
TOTAL		**Minimum Requirement**	**17 spaces**	**Maximum Permission**	**375 spaces**

Notes:
1. Based upon site statistics provided by Architecture Unfolded (dated October 24, 2023).
2. If the number of required parking spaces results in a number with a fraction, the number is rounded down to the nearest whole number but there may not be less than one parking space.

Application of the City of Toronto Zoning By-law 569-2013 to the current proposal requires the minimum provision of 17 non-resident spaces and a maximum permission of 375 spaces (maximum 296 resident spaces and 79 non-resident parking spaces).

2.2 PROPOSED PARKING SUPPLY

A total of 258 parking spaces are proposed for the Site, including 218 resident spaces and 40 non-resident spaces.

Resident Parking

A total of 218 resident parking spaces are proposed for the Site. The effective resident parking rate is **0.71 spaces per unit**. Parking for the residents is provided on the P1, P2, and P3 levels of the proposed parking garage.

The proposed resident parking supply meets the requirements of Zoning By-law 569-2013, as amended by Zoning By-law 89-2022.

Non-Resident Parking

A total of 40 non-resident parking spaces are proposed to support the parking needs of the Church and residential visitors to the Site. The non-resident parking is provided at-grade (4 spaces) and on the P1 level (36 spaces) of the underground parking garage. The proposed non-resident parking supply meets the requirements of Zoning By-law 569-2013, as amended by Zoning By-law 89-2022.

It is proposed that the non-resident spaces be dedicated as 20 church spaces and 20 shared visitor / church spaces. It is important to note that the DCUC is in agreement with this approach. The non-resident parking supply may be further refined as part of the design and feasibility process.

Accessible Parking

The current proposal includes 11 accessible parking spaces. The accessible parking supply meets the requirements of Zoning By-law 569-2013, as amended by Zoning By-law 89-2022.

These spaces are located in close proximity to the elevator core, allowing convenient pedestrian access to and from the space. The proposed accessible spaces meet the dimensional requirements set out in Zoning By-law 579-2017.

The proposed parking supply meets the requirements of City of Toronto Zoning By-law 569-2013, as amended by Zoning By-law 89-2022, and is therefore considered to be appropriate.

3.0 BICYCLE PARKING CONSIDERATIONS

3.1 ZONING BY-LAW BICYCLE PARKING REQUIREMENTS

The site is subject to City Zoning By-law 569-2013 for bicycle parking requirements and is located within Bicycle Zone 2. The Toronto Green Standard (TGS) version 3, Tier 1 requirements are consistent with the Zoning By-law 569-2013 requirements.

Application of the minimum bicycle parking requirements for the current proposal is summarized in **Table 3**.

TABLE 3 BICYCLE PARKING REQUIREMENTS (TORONTO GREEN STANDARD V3)

Use	Units / GFA [1,2]	Minimum Parking Rate	Minimum Parking Required [3]
Residential Long-Term	308 units	0.68 spaces / unit	210 spaces
Residential Short-Term		0.07 spaces / unit	22 spaces
Church Long-term	743 m^2	No Requirement [4]	0 spaces
Church Short-Term			0 spaces
Long-Term Bicycle Parking with Energized Outlet [5]			*32 spaces*
Total Minimum Bicycle Parking Requirement			**232 spaces**

Notes:
1. Based upon site statistics provided by Architecture Unfolded (dated October 24, 2023).
2. Interior Floor Area (IFA) is assumed to be equal to Gross Floor Area (GFA).
3. Zoning By-law 569-2013 [230.5.1.10 (2)] specifies that if the calculation of the number of required bicycle parking spaces results in a number with a fraction, the number is rounded up to the nearest whole number.
4. Zoning By-law 569-2013 [230.5.10.1 (3)] specifies that "if a bicycle parking space is required for uses on a lot, other than a dwelling unit, and the total interior floor area of all such uses on the lot is 2000 square metres or less, then no bicycle parking space is required"
5. The Toronto Green Standard V4 states that for residential spaces, "At least 15% of the required long-term bicycle parking spaces, or one parking space, whichever is greater, shall include an Energized Outlet (120 V) adjacent to the bicycle rack or parking space."

Application of the Toronto Green Standard and Zoning By-law 569-2013 requirements to the current proposal requires the provision of a minimum of **232 bicycle parking spaces** (210 long-term and 22 short-term). The Toronto Green Standard (TGS) version 4, Tier 1 minimum requirements are consistent with the Zoning By-Law requirements.

The TGS v4 for Tier 1 also requires that 15% of the long-term bicycle parking supply be designed for e-bike charging. For the current proposal, a total of 32 long-term bicycle parking spaces shall include an Energized Outlet (120V) adjacent to the bicycle rack or space.

City of Toronto By-law 89-2022 also specifies that a bike repair station must be provided where five or more long-term bicycle parking spaces are required. The bike repair station should have the minimum dimensions of 1.8 metres in length, 2.6 metres in width and 1.9 metres in vertical clearance.

3.2 PROPOSED BICYCLE PARKING SUPPLY

A total of 232 bicycle parking spaces are included in the current proposal, including 210 long-term residential bicycle parking spaces and 22 short-term visitor bicycle parking spaces.

The 210 long-term bicycle parking spaces for residents are located on the ground floor (120 spaces) and the P1 level (90 spaces) in secure, control-access bike rooms. A total of 32 long-term bicycle parking spaces are designed for e-bike charging.

The short-term visitor bicycle parking spaces are provided at-grade. The locations of the short-term bicycle parking spaces are illustrated in the architectural plans included with this submission.

A bicycle repair station has been included in the current proposal and is located in secure room at-grade, next to the long-term bicycle parking room.

The proposed bicycle parking supply meets and modestly exceeds the requirements set out in Zoning By-law 569-2013 and the Toronto Green Standard version 4, Tier 1.

4.0 LOADING CONSIDERATIONS

4.1 ZONING BY-LAW LOADING REQUIREMENTS

4.1.1 Former City of North York Zoning By-Law 7625 Loading Requirements

Application of the loading standards outlined in the Former City of North York Zoning By-Law 7625 to the proposed development programme requires the provision of one (1) loading space as summarized in **Table 4**.

TABLE 4 LOADING REQUIREMENTS – FORMER CITY OF NORTH YORK ZONING BY-LAW 7625

Use	Units / GFA [1]	Rate (Minimum)	Requirement (Minimum)
Residential	308 units	> 30 units	1
Church	743 m^2	No requirement	0
TOTAL			**1**

Notes:
1. Based upon site statistics provided by Architecture Unfolded (dated October 24, 2023).
2. Loading space shall have minimum dimensions of 11.0 m long, 3.6 m wide and a vertical clearance of 4.2 m in accordance to Zoning-By Law 7625 Section 6A(16)(b)(i)

4.1.2 City of Toronto Zoning By-law 569-2013

For comparison purposes, application of the City's consolidated Zoning By-law 569-2013 to the proposed development programme requires the provision of one (1) type G loading space, as summarized in **Table 5**.

TABLE 5 LOADING REQUIREMENTS - ZONING BY-LAW 569-2013

Use	Units / GFA [1]	Loading Criteria	Type of Loading Spaces[2]				
			A	B	C	G	Total
Residential	308 units	31 to 399 units	--	--	--	1	1
Church	743 m^2	No requirement [3]	--	--	--	--	--
TOTAL			**0**	**0**	**0**	**1**	**1**

Notes:
1. Based upon site statistics provided by Architecture Unfolded (dated October 24, 2023).
2. Zoning By-Law 569-2013 Section 220 – Loading Space Regulations does not list the loading requirements for "place of worship" land use

4.2 PROPOSED LOADING SUPPLY

The current proposal incorporates one (1) Type G loading space to support the servicing needs of the residential and church components of the proposed development.

The Type G loading space is provided within an enclosed ground floor loading facility on the west side of the site. The loading area is accessed from the site driveway and includes a minimum of 58 m^2 of staging area for the residential refuse collection. This exceeds the minimum requirement for 308 units (30.8 m^2) of the City of Toronto Solid Waste guidelines (dated May 2022).

The proposed Type G loading space has been designed to meet the manoeuvring needs of City of Toronto garbage and recycling collection vehicles. City collection vehicles will be able to enter and exit the Site in a forward motion with no more than a three point turn. The Type G loading space has also been designed to accommodate a Transportation Associated of Canada (TAC) Heavy Single Unit (HSU) and Single Unit (SU) trucks with no corrections. The respective vehicle manoeuvring diagrams are also provided in **Appendix B**.

The proposed loading supply meets the requirements set out in the Former City of North York Zoning By-Law 7625 and Zoning By-law 569-2013 and is therefore considered to be appropriate.

5.0 PICK-UP / DROP OFF CONSIDERATIONS

An emerging number of mobility options, such as car-share, taxi, and ride-hailing services, can help reduce the need for private vehicle ownership and overall reliance on the automobile for everyday needs. Although these mobility options reduce the need for private automobiles and their storage in parking facilities, they require space to allow for the pick-up / drop-off activities to occur in a safe and organized manner.

In order to accommodate the development's short-term parking needs (including pick-up / drop-off activity, taxis, and small residential deliveries such as food), a centralized pick-up / drop-off loop has been incorporated into the site plan. This centralized loop is located at-grade between the residential entrance and the church entrance and can accommodate up to approximately 4 vehicles parked along the curbside for a short period of time.

The provision of this centralized pick-up / drop-off loop at-grade, while not formally required, will respond to the practical needs of the development on-site and limit impacts to the area street network.

BA Group has recently conducted a pick-up / drop-off (short-term) parking accumulation study for residential and church uses, which are summarized in the following section.

5.1 RESIDENTIAL PICK-UP / DROP-OFF DEMAND STUDY

5.1.1 Residential Survey Details

To determine or estimate the number of appropriate pick-up / drop-off spaces (e.g., accumulation) needed for the site, BA Group undertook recent short-term parking demand surveys at two residential condominiums in the City of Toronto on Thursday, January 19, 2023. The survey details are summarized in **Table 6**.

TABLE 6 SHORT-TERM PARKING DEMAND SURVEY SITES

Proxy Site Location	Survey Date	Number of Units	Existing Pick-up / Drop-off Facility Type	Survey Time
75 & 85 The Donway West	January 15, 2023	276	Pick-up / drop off loop	7:00 a.m. – 6:00 p.m.
99 The Donway West		297		

These sites have been selected as suitable proxies for the proposed development due to its comparable development type, size / type, location, and access to transit.

The survey methodology defines "short-term" parking demand as vehicles associated with the building that are looking to park for a short period, such that they prefer not to utilize the building's visitor parking or loading spaces (e.g., vehicles picking-up or dropping-off passengers and packages near the building entrance). These vehicles include those related to merchandise delivery, private cars for hire, food deliveries, building service/maintenance, as well as private cars picking-up or dropping-off passengers.

5.1.2 Observed Residential Proxy Demand

The observed 95th percentile and peak short term parking demand (vehicle accumulation) at each of the surveyed buildings is summarized in **Table 7**.

TABLE 7 OBSERVED SHORT-TERM PARKING DEMAND AT RESIDENTIAL CONDOMINIUMS

Proxy Site	Survey Date	Number of Units	95th %ile Veh. Accumulation	95th %ile Accumulation Rate[1]	Peak Veh. Accumulation	Peak Accumulation Rate[1]
75 & 85 The Donway West	January 15, 2023	276	2	0.007	3	0.011
99 The Donway West		297	2	0.007	3	0.010
Observed Accumulation Rate Range				**0.007**	**-**	**0.010 – 0.011**

Notes:
1. Rate as vehicles per residential unit
2. All vehicle accumulation rate calculations have been rounded to the nearest thousandth decimal place.

Based on the all-day surveys undertaken, the observed 95th percentile short-term parking accumulation rate was observed to be 0.007 vehicles per unit. In addition, the observed peak short-term parking accumulation rate range was observed to be 0.010 – 0.011 vehicles per unit. The detailed survey data is provided in **Appendix C**.

5.1.3 Forecasted Residential Pick-Up / Drop-Off Demand

As a conservative approach, it is suitable to provide a pick-up / drop-off supply that is comparable to the 95th percentile and peak range observed for these comparable sites. Application of the observed range of peak pick-up / drop-off accumulation are presented in **Table 8**.

TABLE 8 FORECASTED ON-SITE RESIDENTIAL PICK-UP / DROP-OFF ACCUMULATION

Site	Number of Units	95th %ile Rate (Vehicles per Unit)	Estimated 95th Accumulation / Demand[1]	Peak Rate (Vehicle per Unit)	Estimated Peak Accumulation / Demand[1]
Proposed Site	308	0.007	2	0.010 – 0.011	3

Notes:
1. All estimated pick-up / drop-off accumulation calculations have been rounded up to the nearest whole number.

For the development proposal including 308 residential units, the estimated 95th percentile short-term parking accumulation is approximately two (2) vehicles at a given time on site. In addition, the observed peak short term parking accumulation is approximately three (3) vehicles at a given time on-site.

5.2 CHURCH PICK-UP / DROP-OFF DEMAND STUDY

As part of the proposed development, the existing Church will generally be maintained. By nature, churches are typically underutilized and generate very minimal traffic during the weekdays and are expected to be heavily utilized on a weekend, particularly on a Sunday. As such, BA Group has recently undertaken a short-term parking demand survey at the existing church located on-site on Sunday May 7, 2023.

Based on the all-day survey undertaken, the observed 95th percentile short-term parking was observed to be zero (0) vehicles. In addition, the observed peak short-term parking accumulation was observed to be two (2) vehicles. The detailed survey data is provided in **Appendix C.**

It is assumed that the future Church congregation will remain of similar size and population as the existing conditions. Therefore, the observed short-term parking demand will remain consistent.

5.3 PROPOSED PICK-UP / DROP-OFF SUPPLY

A centralized pick-up / drop-off loop has been incorporated into the site plan between the residential and church entrances. The proposed pick-up / drop-off loop is anticipated to accommodate up to 4 vehicles to facilitate short-term activities related to the site.

Based on the demand studies, it is anticipated that the site will accumulate up to a maximum of approximately 3 vehicles at any given time. Therefore, the provision of a pick-up / drop-off area is expected to meet the practical needs of the development on-site while limiting vehicular impacts on the area street network.

The supply and location of the pick-up / drop-off spaces within the site is illustrated in **Appendix A**.

6.0 TRANSPORTATION DEMAND MANAGEMENT

Transportation Demand Management (TDM) refers to a variety of strategies to reduce congestion, minimize the number of single-occupant vehicles, encourage non-auto modes of travel, and reduce vehicle dependency to create a sustainable transportation system.

TDM strategies have multiple benefits including the following:

- Reduced auto-related emissions to improve air quality;
- Decreased traffic congestion to reduce travel time;
- Reduced personal transportation costs and energy consumption; and
- Support the Official Plan (OP) policies and Provincial smart growth objectives.

The following section outlines measures that are currently incorporated within the site plan or are recommended to be implemented to support TDM. Revisions to the proposed TDM measures have been made to address challenging financial conditions facing the proposed development. It is, however, important to note that these TDM strategies will be refined throughout the design process in coordination between the Proponent and the City of Toronto Staff.

Table 9 provides a summary of proposed TDM measures for the current proposal.

TABLE 9 PROPOSED TRANSPORTATION DEMAND MANAGEMENT MEASURES

LAND USE INTEGRATION	**Intent:** A mixed-use area provides a variety of land uses that allow people to meet many needs within the vicinity of their residence. These local land uses provide a level of convenience that reduces the need to travel far off-site for typical daily activity.	**Implementation:** • The proposed development contains 308 residential units under the Options for Homes business model, known as "The Options Ready Program", and a 743 m^2 facility for the Donway Covenant United Church. • The site is within 500m of the intersection of Don Mills Road and Lawrence Avenue East, as well as the Shops at Don Mills, providing access to a number of services, entertainment, and retail centres
TRANSIT USE	**Intent:** Support for and the promotion of the use of area transit services for both short and long-distance travel by residents, visitors, and employees will reduce the overall use of a vehicle and the need to own one.	**Implementation:** • The Site is within 250m walk to Lawrence East bus and 400m walk to Don Mills bus. • The Site is within a 20 minute bus ride to Don Mills Station (Line 4); a 30 minute bus ride to Pape Station (Line 2) or Lawrence Station (Line 1); and a 15 minute bus ride to Ontario Science Centre Station (Eglinton Crosstown) • The Proponent will provide one pre-loaded PRESTO card (valued at $160) to each unit owner who does not purchase a parking space at the time of occupancy. • The Proponent will continue to review cost-effective alternatives to the Travel Information Screen ($5,000 for installation and $4,000 for annual costs) to reduce ongoing costs for the proposed building. Alternatives will be reviewed with City of Toronto Staff. • New residents will be made aware of the existing transit services in the vicinity of the site
BICYCLE FACILITIES	**Intent:** Provide cycling infrastructure that supports and promotes cycling as a convenient and viable travel alternative to the personal automobile.	**Implementation:** • The Proponent is proposing 210 long-term and 22 short-term residential bicycle parking spaces. • The current proposal includes a bicycle repair station at-grade accessible to long-term residential bicycle parking spaces. • New residents will be made aware of the existing active transportation facilities in the vicinity of the site
PEDESTRIAN CONNECTIVITY	**Intent:** A high-quality, safe, connection between the Site and transit stops, cycling network, and public street system encourages residents, employees, and visitors to travel around the Site area without a vehicle.	**Implementation:** • Pedestrian facilities (i.e., sidewalks) along the Donway West development frontage will be improved as part of the proposed development.
Continued on next page		
PARKING MANAGEMENT	**Intent:** Reduced parking standards within the proposed development encourages residents, visitors, and employees to re-consider the use or ownership of a vehicle.	**Implementation:** • Resident parking for the site is proposed to be supplied at a reduced rate of 0.71 spaces / unit. • The Proponent will provide unbundled parking (i.e., purchase of a parking space is separate from the purchase of a dwelling unit) for the development. This allows the purchaser to only pay for the amount of parking they require.

RIDE-SHARING	**Intent:** Alternative options to car ownership includes the use of ride-sharing services (e.g., Uber, Lyft). Facilitating pick-up and drop-off activities makes this alternative to car ownership attractive and convenient.	**Implementation:** • An on-site pick-up and drop-off facility has been incorporated into the ground floor plan to ensure that pick-up and drop-off activities can occur conveniently without negatively impacting adjacent land use activities or day-to-day vehicular activity on the Donway West.
CAR-SHARE	**Intent:** Car-share programs provide "on-demand" access to a fleet of vehicles located within the Site's vicinity. The convenience and easy access reduce the need to own a personal vehicle, and also encourages the use of other non-automobile commuting methods.	**Implementation:** • Information will be provided to residents related to the availability of area car-share options when purchasing a unit.

6.1 TORONTO GREEN STANDARD

The Toronto Green Standard (TGS) Version 4 is the City of Toronto's sustainable design requirements for new developments that aim to promote sustainable site and building design. The TGS consists of multiple tiers of sustainable performance measures (from Tier 1 to Tier 4); Tier 1 is a mandatory part of the planning approval process and Tiers 2 to 4 are voluntary.

The Tier 1 "Air Quality" measure AQ 1.1 for "Single-Occupant Vehicle Trips" requires the "[reduction of] single occupancy auto vehicle trips generated by the proposed development by 25% through a variety of multimodal infrastructure strategies and Transportation Demand Management (TDM) measures".

Proposed Parking Supply

To achieve the target reduction, the TDM measures outlined in **Section 6.0** and multi-modal infrastructure included in the current proposal (e.g., bicycle repair station, transit information screen, etc.) are most effective when implemented with reduced rates of available automobile parking.

The required parking supply for the former Zoning By-law 569-2013 was a minimum provision of 375 parking spaces. The current Zoning By-law 569-2013 (as amended by Zoning By-law 89-2022) has eliminated parking minimums for residential parking and the maximum number of spaces permitted is now 375 spaces. The current proposal includes a total of 258 parking spaces. Overall, this equates to a 31% parking supply reduction, exceeding the 25% trip reduction requirement.

Comparison of Forecast Trips

Another method of demonstrating the trip reduction is a comparison of two-way peak hour trips generated by the site using ITE Trip Generation Manual 11th Edition and the adopted trip rates based on a review of proxy site surveys. **Table 10** outlines a comparison of the two scenarios. The development is forecast to reduce two-way vehicle trips by approximately 28% to 35% during peak hours.

TABLE 10 TGS V4, AQ 1.1 – TRIP GENERATION RATE COMPARISON

	AM Peak Hour			PM Peak Hour		
	In	Out	2-Way	In	Out	2-Way
ITE 11th Edition Trips (LUC 221)	30	95	125	80	50	130
Adopted Site Traffic	30	60	90	50	35	85
Difference (%)	28%			35%		

By both analytical methods (i.e. parking reduction and trip generation rate comparison), TGS Requirement AQ 1.1. is satisfied.

7.0 MULTI-MODAL TRAVEL DEMAND FORECASTING

Multi-modal forecasts have been developed using the current unit count of 308 units, the total vehicle trip generation rates from the March 2022 Report and applying modal split assumptions provided by Transportation Tomorrow Survey (TTS).

See **Table 11** for multi-modal trips generated by the proposed development. Detailed TTS mode split queries can be found in **Appendix D**.

TABLE 11 MULTI-MODAL ANALYSIS

Parameters	AM PEAK HOUR			PM PEAK HOUR		
	IN	OUT	2-WAY	IN	OUT	2-WAY
Total Vehicle Trips	30	60	90	45	30	75
Mode Split[2]						
Auto Driver	61%			68%		
Auto Passenger	13%			13%		
PUDO	2%			1%		
Transit	18%			12%		
Cycle	1%			2%		
Walk	5%			4%		
Total Site Trips	150 Trips			110 Trips		
Auto Driver	30	60	90	45	30	75
Auto Passenger	7	13	20	8	6	14
PUDO	1	2	3	1	0	1
Transit	9	18	27	8	5	13
Cycle	1	1	2	1	1	2
Walk	30	5	8	3	2	5
Total	**51**	**99**	**150**	**66**	**44**	**110**

Notes:
1. Based on ITE Trip Generation Manual 11th Ed. inbound and outbound percentages for 221 Multifamily Housing (Mid-Rise) land use in a "general urban/suburban" setting.
2. Based on 2016 TTS data for condominium dwelling units in 2006 GTA Traffic Zone 236 and 238.
3. Related TTS queries are provided in **Appendix D**.

8.0 TRAFFIC VOLUME FORECAST

8.1 TRAFFIC ANALYSIS SCENARIOS AND DESIGN PERIODS

Traffic operations analyses has been undertaken during the weekday morning and afternoon street peak hours under the following conditions:

- Existing Traffic – traffic activity levels under current conditions;
- Future Background Traffic – traffic activity levels 5 years into the future which include allowances for corridor growth and background developments; and
- Future Total Traffic – traffic activity levels 5 years into the future with the site redeveloped and projected site generate traffic added to the road network.

Recognizing that the development proposal considers a church component, the City has requested that weekend (Sunday) peak hour analyzed be conducted as part of this study. Based on discussions with the City on February 22, 2023, the City confirmed that a full analysis of the weekend (Sunday) street peak hour will not be required for this study, given that site traffic generated on a Sunday will not be the determining factor for any infrastructure improvements in the study area. Therefore, a weekend (Sunday) mid-day street peak hour was analyzed under the existing and future total traffic conditions at The Donway W / Site Access intersection.

8.2 EXISTING TRAFFIC VOLUMES

8.2.1 Existing Baseline Traffic Volumes

Existing public street intersection peak hour traffic volumes have been established based on traffic counts undertaken by Spectrum Traffic Data on behalf of BA Group in October 2019 and December 2022. A listing of the count data and sources are provided in **Table 12**. Existing Turning Movement Counts (TMCs) are provided in **Appendix E**.

The March 2022 study was initiated during lockdown conditions implemented by the Province of Ontario. At that time, it was not possible to collect additional traffic counts. The March 2022 study therefore made use of available traffic counts from October 2019. BA Group adopted a conservative approach to the data by using the higher surveyed traffic volumes as the basis of the March 2022 study.

Following the initial submission, BA Group scheduled updated traffic counts that were completed in December 2022. We were also able to compare the traffic counts from 2019 and 2022 at the key intersections in the study area (i.e. Lawrence Ave E / Don Mills Rd, Don Mills Rd / The Donway W & The Donway E (North) and Lawrence Ave E / The Donway W). We found that the volumes along these major corridors have significantly decreased between the 2019 to 2022 traffic counts.

Due to the significant difference between the 2019 and 2022 counts, BA Group has decided to maintain the October 2019 traffic counts as the basis of the current study. This conservative approach is consistent with the March 2022 study.

The turning movement counts for both the 2019 and 2022 dates are provided in . The counts were reviewed in detail to ensure a general consistency in the traffic volumes on roadways between intersections. Where necessary, minor adjustments were made to balance traffic volumes between intersections to create a representative traffic volume base for the purposes of the traffic operations analyses.

The existing baseline area traffic volumes for the weekday AM and PM peak hours, as well as the weekend Sunday peak hour for The Donway W / Site Access intersection are provided in **Figure 1**.

TABLE 12 EXISTING TURNING MOVEMENT COUNT SUMMARY

Intersection	Count Date	Source	Time Periods
Don Mills Rd / the Donway W & the Donway E (north)	Tuesday, October 22, 2019 & Tuesday, December 20, 2022	Spectrum Traffic Data Inc.	7:30 to 9:30 am 4:00 to 6:00 pm
Lawrence Ave E / Don Mills Rd			
Lawrence Ave E / the Donway W			
The Donway W / Belton Rd			
The Donway W / Duncairn Rd			
The Donway W / Jocelyn Cres			
The Donway W / Langbourne Pl			
The Donway W / Overton Cres			
The Donway W / Site Access			

8.2.2 Existing Site Traffic Volumes

Existing site related traffic volumes were collected during the weekday morning and afternoon peak periods on Tuesday, October 22, 2019 and during the weekend Sunday peak periods on Sunday, December 18, 2022 by Spectrum Traffic Data Inc. on behalf of BA Group at the south driveway providing access to the parking lot. Existing Turning Movement Counts (TMCs) are provided in **Appendix E**.

The existing site, as surveyed, includes trips related to both the Brighton School and the Donway Covenant United Church. It generates approximately 120, 20 and 10 two-way vehicle trips during the weekday morning, afternoon, and Sunday peak hours, as summarized in **Table 13**.

TABLE 13 EXISTING SITE TRAFFIC VOLUMES

Site Access	AM Peak Hour			PM Peak Hour			Sunday Peak Hour		
	In	Out	2-Way	In	Out	2-Way	In	Out	2-Way
South Site Access	75	45	120	5	15	20	5	5	10
Total Site Traffic	**75**	**45**	**120**	**5**	**15**	**20**	**5**	**5**	**10**

Notes:
1. Vehicle trips rounded to the nearest 5 trips for each movement.

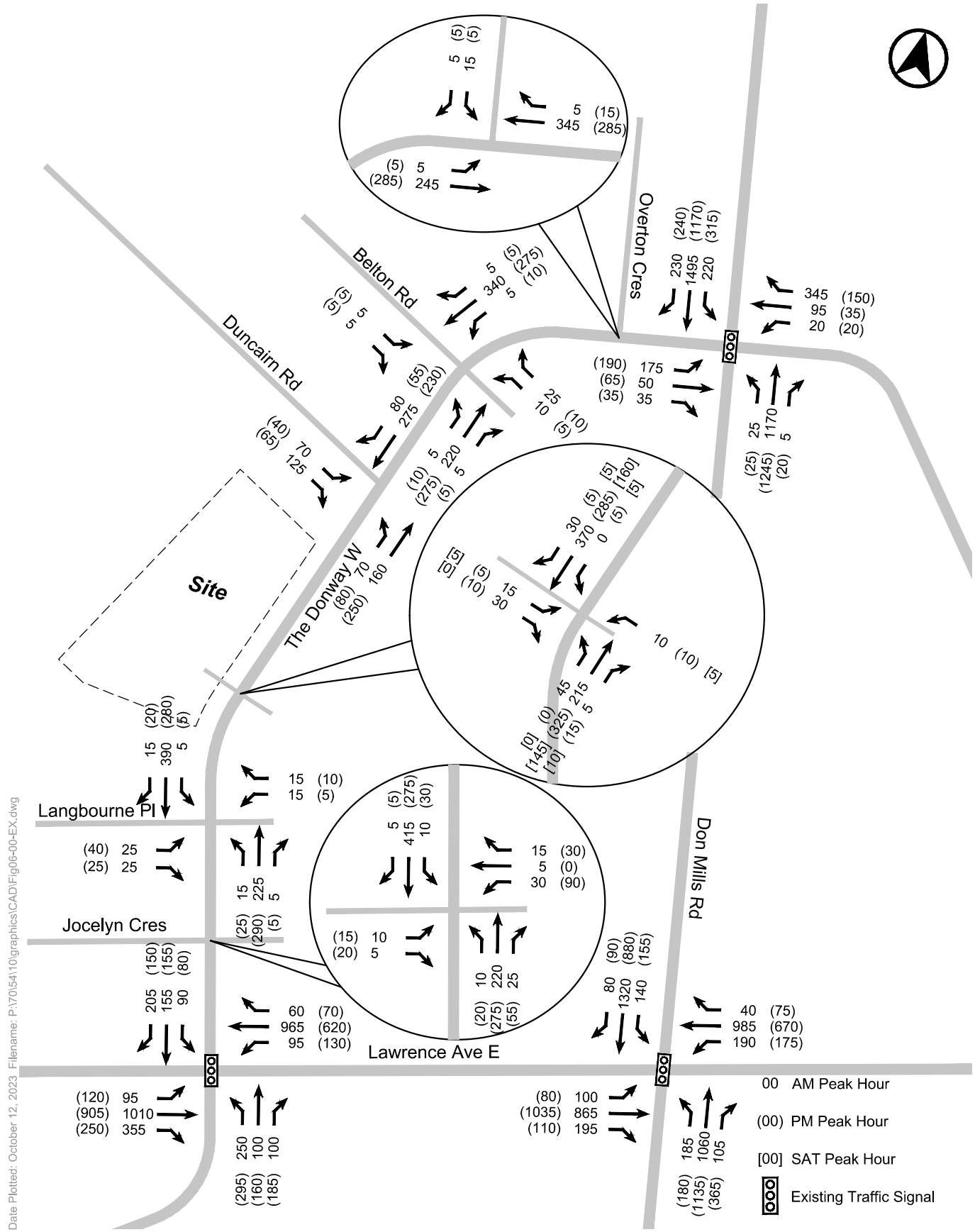


FIGURE 1 EXISTING TRAFFIC VOLUMES

8.3 FUTURE BACKGROUND TRAFFIC VOLUMES

Traffic growth in the site vicinity has been considered based upon an evaluation of traffic volume changes related to:

- general corridor growth on the area arterial roads (i.e. Don Mills Road and Lawrence Avenue East); and
- specific area development traffic (i.e. background development traffic).

8.3.1 Corridor Growth

Historic traffic volume counts at the surrounding intersections along Don Mills Road and Lawrence Ave corridors dating as far back as 2002 were reviewed to determine if there have been any changes in traffic activity due to general corridor traffic growth within the study area.

The observed trends indicated a slight upward growth on the east-west directions along Lawrence Avenue East and north-south directions along Don Mills Road during the weekday morning and afternoon peak hours. Given the slight sustained upward trend in vehicular traffic volumes along these corridors, allowances have been made in the analysis to account for general traffic growth on these corridors over and above the site specific traffic allowances made for other area developments.

Corridor growth rate calculation sheets are attached in **Appendix F** and the adopted corridor growth rates are summarized in **Table 14**.

TABLE 14 ADOPTED CORRIDOR GROWTH RATES

Corridor	Adopted Growth Rate	
	AM Peak	PM Peak
Don Mills Road	1%	1%
Lawrence Avenue East	1%	1%

8.3.2 Background Development Growth

Traffic allowances were made for other proposed or approved developments in the area, based on a review of the City of Toronto's list of current development projects as of May 2021. These sites represent approximately 1,369 residential units and 5,707 m^2 of retail.

Area background developments are summarized in **Table 15** together with a description of the key development statistics for each. Traffic allowances made for each development were based upon traffic impact studies submitted to the City of Toronto as part of the development application process, unless otherwise noted.

TABLE 15 AREA BACKGROUND DEVELOPMENT

Location	Development Statistics		Source / Trip Generation Notes
	Residential Units	Retail GFA (m^2)	
169 the Donway West	736	2,987	LEA Consulting, July, 2015
49 the Donway West[1]	633	2,720	LEA Consulting, May, 2017

Notes:
1. Site generated traffic information not available in source report. Site traffic estimated based on 230 & 240 the Donway West adopted trip generation rates and traffic distribution.

8.3.3 Future Background Traffic Volumes

The future background traffic volumes for the weekday morning and afternoon peak hours as well as the weekend Sunday peak hour for The Donway W / Site Access intersection are illustrated in **Figure 2**, which were developed by adding the abovementioned allowances for corridor traffic growth and the specific background development to base existing traffic volumes.

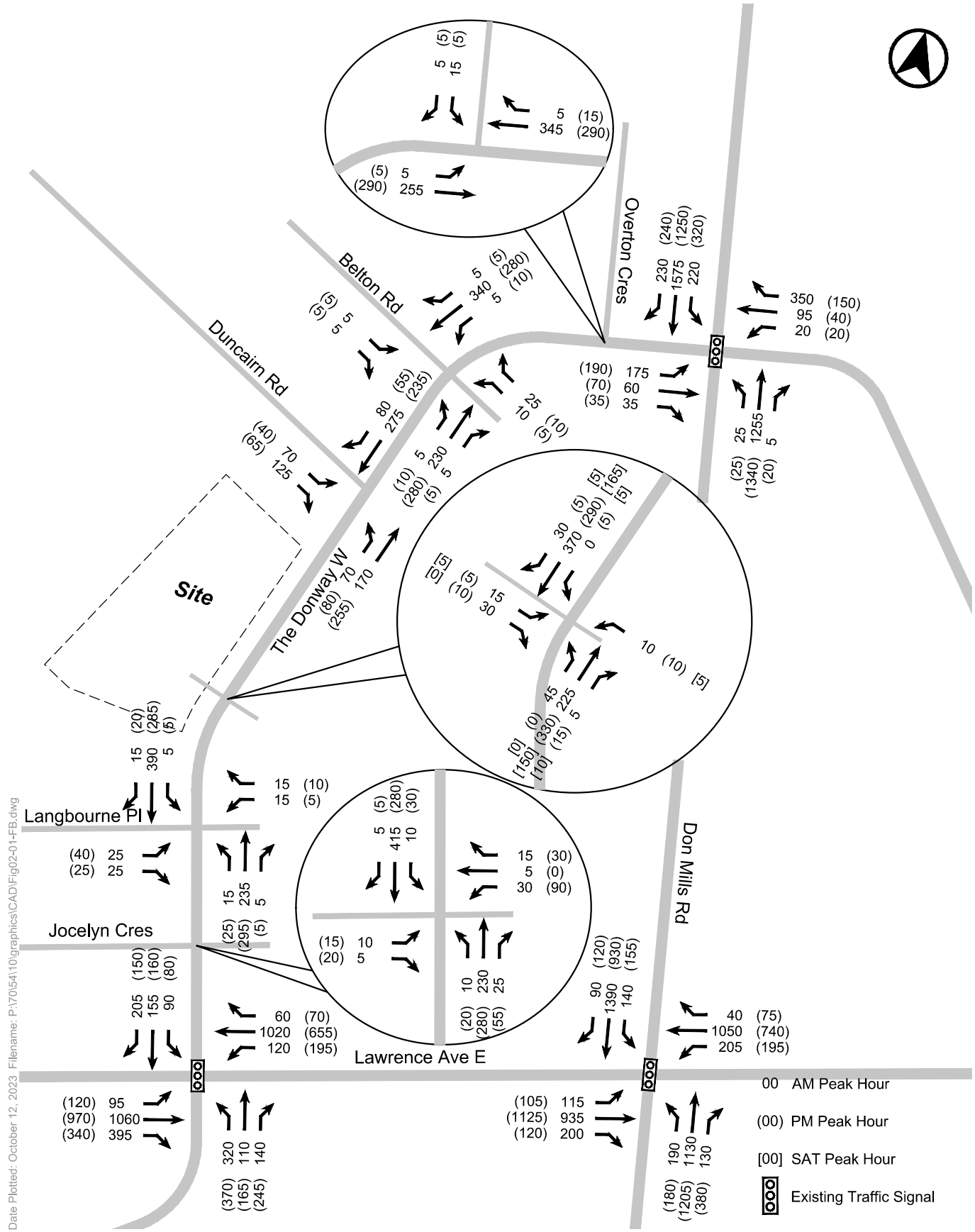


FIGURE 2 FUTURE BACKGROUND TRAFFIC VOLUMES

8.4 SITE TRAFFIC

8.4.1 Residential Trip Generation

Vehicular trip generation rates adopted for the new residential uses within the site were based upon a review of surveyed trip generation rates at other condominium developments within the City of Toronto sharing a similar transportation context. These rates were established for prior studies and are based upon a review of observed vehicular traffic at comparably located condominium developments.

Trip generation forecasts for the proposed residential development are summarized in **Table 16**.

TABLE 16 RESIDENTIAL TRIP GENERATION RATES

Proxy Site Location	Date	# of Units	AM Peak Hour			PM Peak Hour			Sunday Peak Hour		
			In	Out	2-Way	In	Out	2-Way	In	Out	2-Way
1101-1105 Leslie St	April 7, 2016	407	0.03	0.22	0.25	0.12	0.07	0.19	--	--	--
151 & 181 Village Green Square	April 16, 2015	603	0.06	0.2	0.26	0.13	0.11	0.24	--	--	--
3303 Don Mills Rd & 1555 Finch Ave E	December 14, 2011	540	0.08	0.15	0.23	0.14	0.12	0.26	--	--	--
55, 65 Skymark Dr	November 3, 2011	434	0.10	0.17	0.27	0.12	0.08	0.20	--	--	--
138, 168 Bonis Ave	November 30, 2010	532	0.09	0.23	0.32	0.18	0.08	0.26	--	--	--
75 & 85 The Donway West	January 15, 2023	276	--	--	--	--	--	--	0.12	0.13	0.25
75 & 85 The Donway West	January 22, 2023	276	--	--	--	--	--	--	0.11	0.12	0.23
99 The Donway West	January 15, 2023	297	--	--	--	--	--	--	0.16	0.12	0.28
99 The Donway West	January 22, 2023	297	--	--	--	--	--	--	0.15	0.17	0.32
Average Residential Trip Rate (Trips Per Unit)			0.07	0.19	0.26	0.14	0.09	0.23	0.14	0.13	0.27
Adopted Residential Trip Rate (Trips Per Unit)			**0.10**	**0.20**	**0.30**	**0.15**	**0.10**	**0.25**	**0.15**	**0.15**	**0.30**
Number of Residential Trips (308 Units)			**30**	**60**	**90**	**45**	**30**	**75**	**45**	**45**	**90**

Notes:
1. Vehicle trips rounded to the nearest 5 trips.

The proposed residential uses will generate approximately 90, 75, and 90 two-way vehicle trips during the weekday morning, afternoon, and weekend Sunday peak hours, respectively.

The total site traffic anticipated to be generated is reviewed in **Section 8.4.3**. The traffic operations analysis for the current proposal is detailed in **Section 9.0**.

8.4.2 Church Trip Generation

As previously described, the existing site includes the Brighton School and the Donway Covenant United Church (DCUC). The surveys of existing site traffic at the weekday morning and afternoon peak hours captured trips related to both of the existing uses.

As part of the proposed development, the DCUC will be relocated into a new multi-purpose facility on-site that includes approximate 735 m^2 GFA of Church uses. The Brighton School has moved to its new, permanent location as of the summer of 2021. As such, the Brighton School's site related traffic volumes will not be maintained following the redevelopment of the site.

In order to separate the surveyed existing site traffic into the two different land uses currently on-site, the existing site related Church trips were developed based on a review of trip generation rates outlined in the Institute of Transportation Engineers *Trip Generation Manual 10th Edition* for "Land Use Code 560 – Church". Trip generation forecasts for the existing and redeveloped church are summarized in **Table 17**.

TABLE 17 CHURCH SITE TRAFFIC VOLUMES

	AM Peak Hour			PM Peak Hour			Sunday Peak Hour[2]		
	In	Out	2-Way	In	Out	2-Way	In	Out	2-Way
ITE LUC 560 – Church Trip Rates (per 1,000 ft^2)	0.13	0.13	0.26	0.40	0.48	0.88	--	--	--
Total Church Site Trips (735 m^2 / 7,911 ft^2 GFA)	**0**	**0**	**0**	**5**	**5**	**10**	**5**	**5**	**10**

Notes:
1. Vehicle trips rounded to the nearest 5 trips.
2. Based on vehicle trips surveyed at the existing site driveway access onto The Donway West on Sunday, December 18, 2022.

Note that the ITE Trip Generation Manual does not provide trip generation rates a Sunday street peak period for LUC 560 – Church, it has been conservatively assumed that the existing site traffic surveyed for the Sunday will remain and no existing site traffic has been removed for the Sunday peak hour.

The existing church currently generates approximately 0, 10, and 10 two-way vehicle trips during the weekday morning, weekday afternoon, and Sunday peak hours, respectively. It is anticipated the church trips will remain consistent in the future.

The total site traffic anticipated to be generated is reviewed in **Section 8.4.3**. The traffic operations analysis for the current proposal is detailed in **Section 9.0**.

8.4.3 Overall Site Traffic

Table 18 summarizes the total site-related vehicle traffic anticipated to be generated by the proposed development.

TABLE 18 TOTAL SITE TRAFFIC VOLUMES

	AM Peak Hour			PM Peak Hour			Sunday Peak Hour		
	In	Out	2-Way	In	Out	2-Way	In	Out	2-Way
Existing Traffic									
Existing Church Site Traffic ***(To be maintained)***	**0**	**0**	**0**	**5**	**5**	**10**	**5**	**5**	**10**
Existing Private School Site Traffic ***(To be removed)***	**75**	**45**	**120**	**0**	**10**	**10**	**0**	**0**	**0**
Total Existing Site Traffic	**75**	**45**	**120**	**5**	**15**	**20**	**5**	**5**	**10**
Proposed Uses									
Residential Trips	30	60	90	45	30	75	45	45	90
Church Trips	0	0	0	5	5	10	5	5	10
Proposed Total Site Traffic	**30**	**60**	**90**	**50**	**35**	**85**	**50**	**50**	**100**
Total Site Traffic									
Total Site Traffic	**30**	**60**	**90**	**50**	**35**	**85**	**50**	**50**	**100**
Net-New Site Traffic	**-45**	**+15**	**-30**	**+45**	**+20**	**+65**	**+45**	**+45**	**+90**

Notes:
1. Vehicle trips rounded to the nearest 5 trips.

The proposed development is forecasted to generate in the order of -30, +65, and +90 net-new two-way vehicle trips during the weekday morning, weekday afternoon, and Sunday peak hours, respectively.

The traffic operations analysis for the current proposal is detailed in **Section 9.0**.

8.4.4 Trip Distribution and Assignment

The trip distribution pattern for the residential site traffic was established based upon a review of 2016 Transportation Tomorrow Survey (TTS) data for home-based vehicle trips to and from the study area during the weekday morning and afternoon peak periods. The distribution of inbound and outbound residential traffic adopted for the proposed development is outlined in **Table 19**.

TABLE 19 RESIDENTIAL SITE TRAFFIC DISTRIBUTION

Street	Direction	Inbound	Outbound
Don Mills Road	North	10%	15%
	South	15%	15%
Lawrence Avenue East	East	45%	45%
	West	30%	25%
	Total	**100%**	**100%**

Notes:
1. Trip assignment is based on a review of TTS data related to home-based trips during the weekday morning and afternoon peak periods to/from 2006 TTS Zones 238 and 242.

The removal of the school's site traffic volumes during the weekday morning and afternoon peak hours, as well as the weekend Sunday peak hour for The Donway W / Site Access intersection are illustrated in **Figure 3**. Total site generated traffic volumes assigned to the area road network are illustrated in **Figure 4**. Net-new site traffic volumes are illustrated in **Figure 5**.

Detailed TTS queries are attached in **Appendix D**.

8.5 FUTURE TOTAL TRAFFIC VOLUMES

The future total traffic forecasts comprising the future background traffic volume with the addition of the site generated traffic volumes are illustrated in **Figure 6**. The traffic operations analysis for the current proposal is detailed in **Section 9.0**.

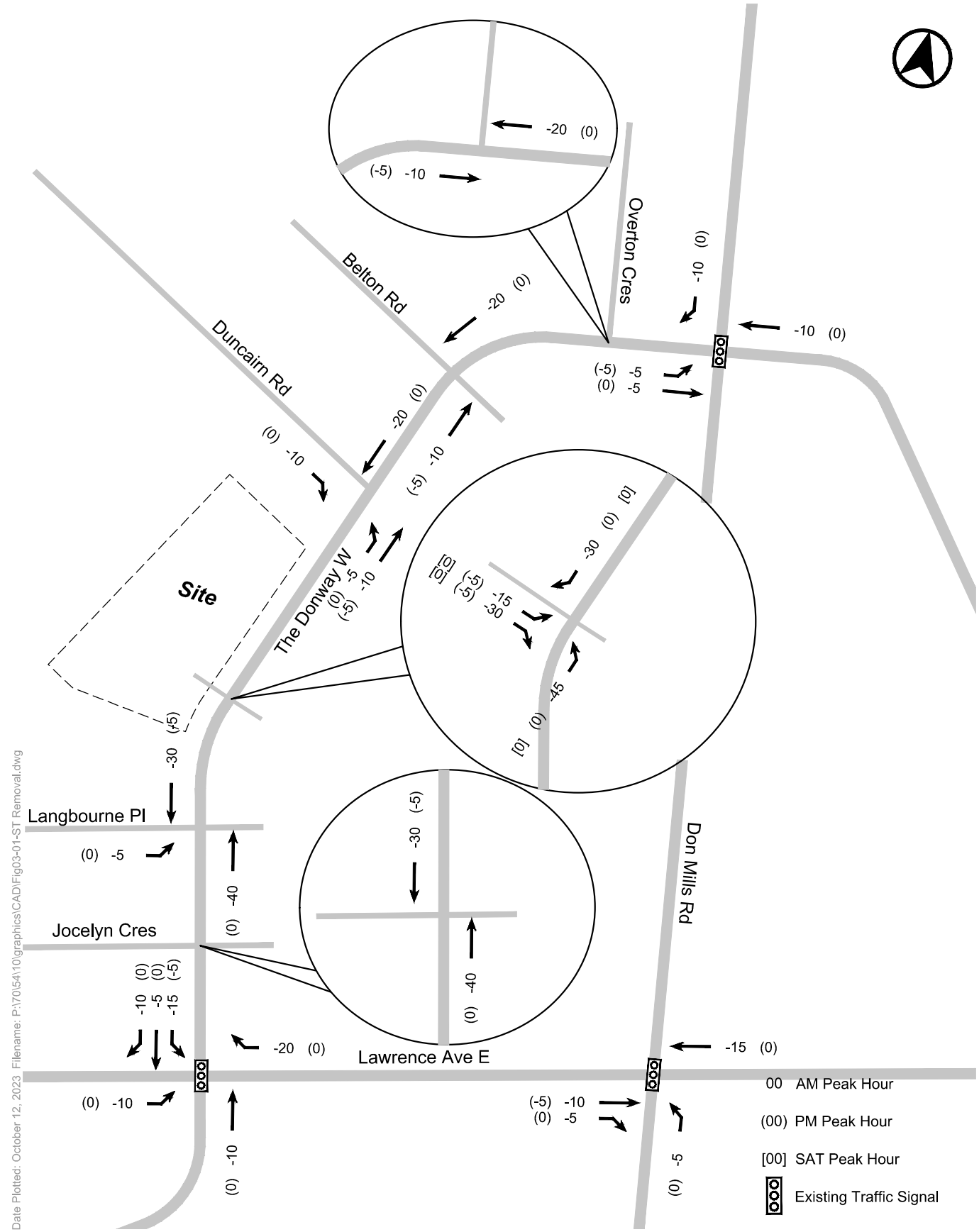


FIGURE 3 REMOVAL OF EXISTING SITE (NON-CHURCH) TRAFFIC VOLUMES

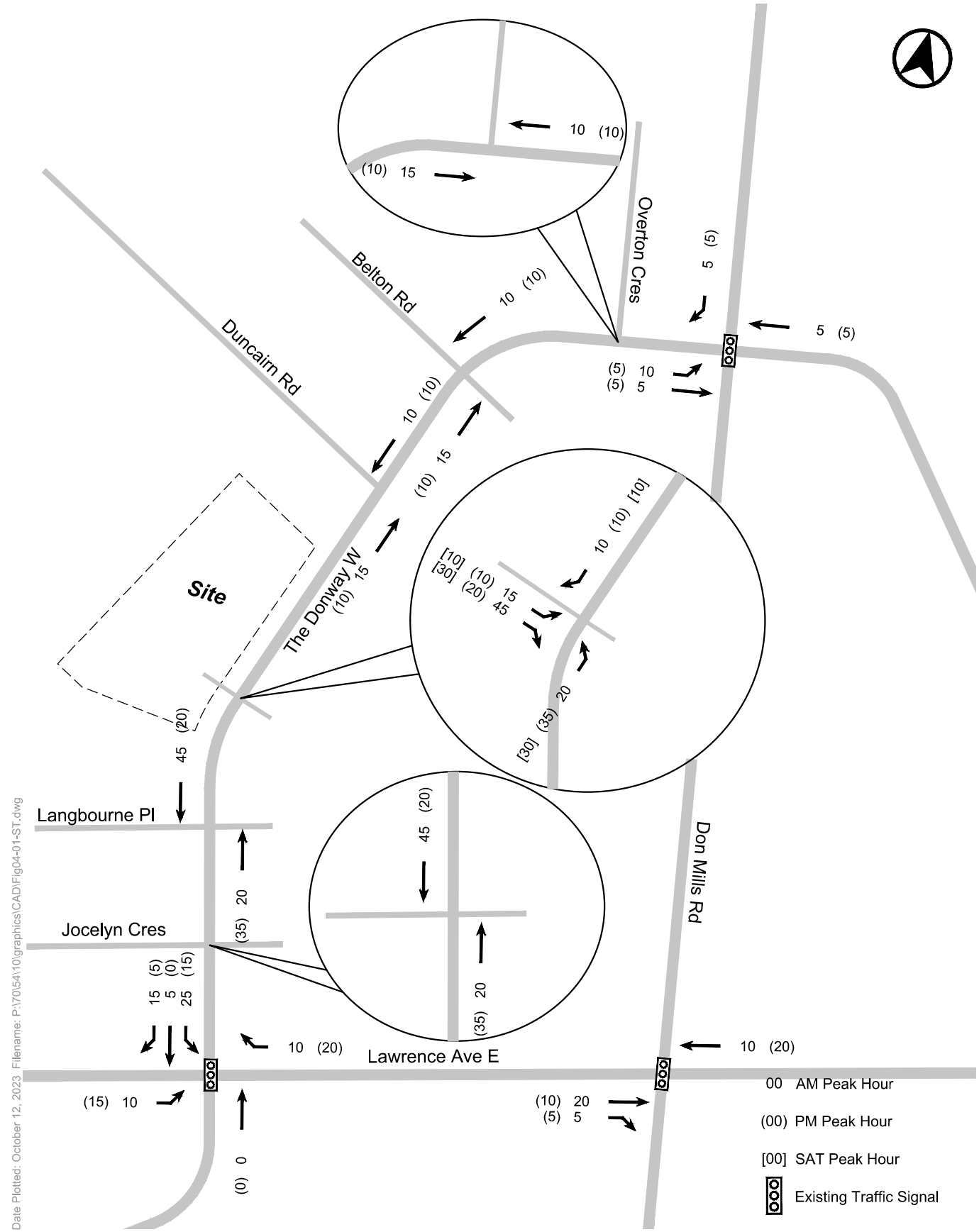


FIGURE 4 TOTAL SITE TRAFFIC VOLUMES

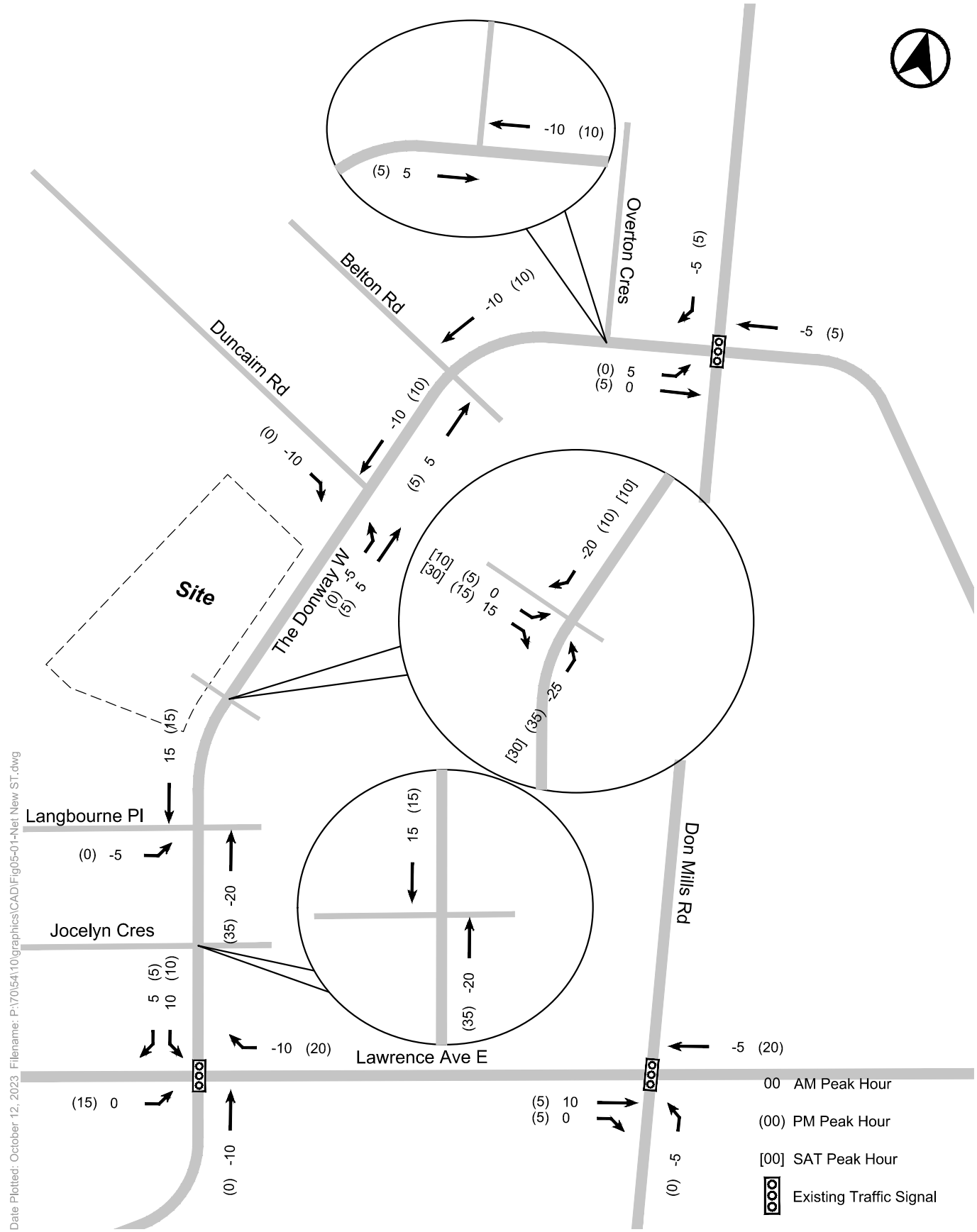


FIGURE 5 NET-NEW SITE TRAFFIC VOLUMES

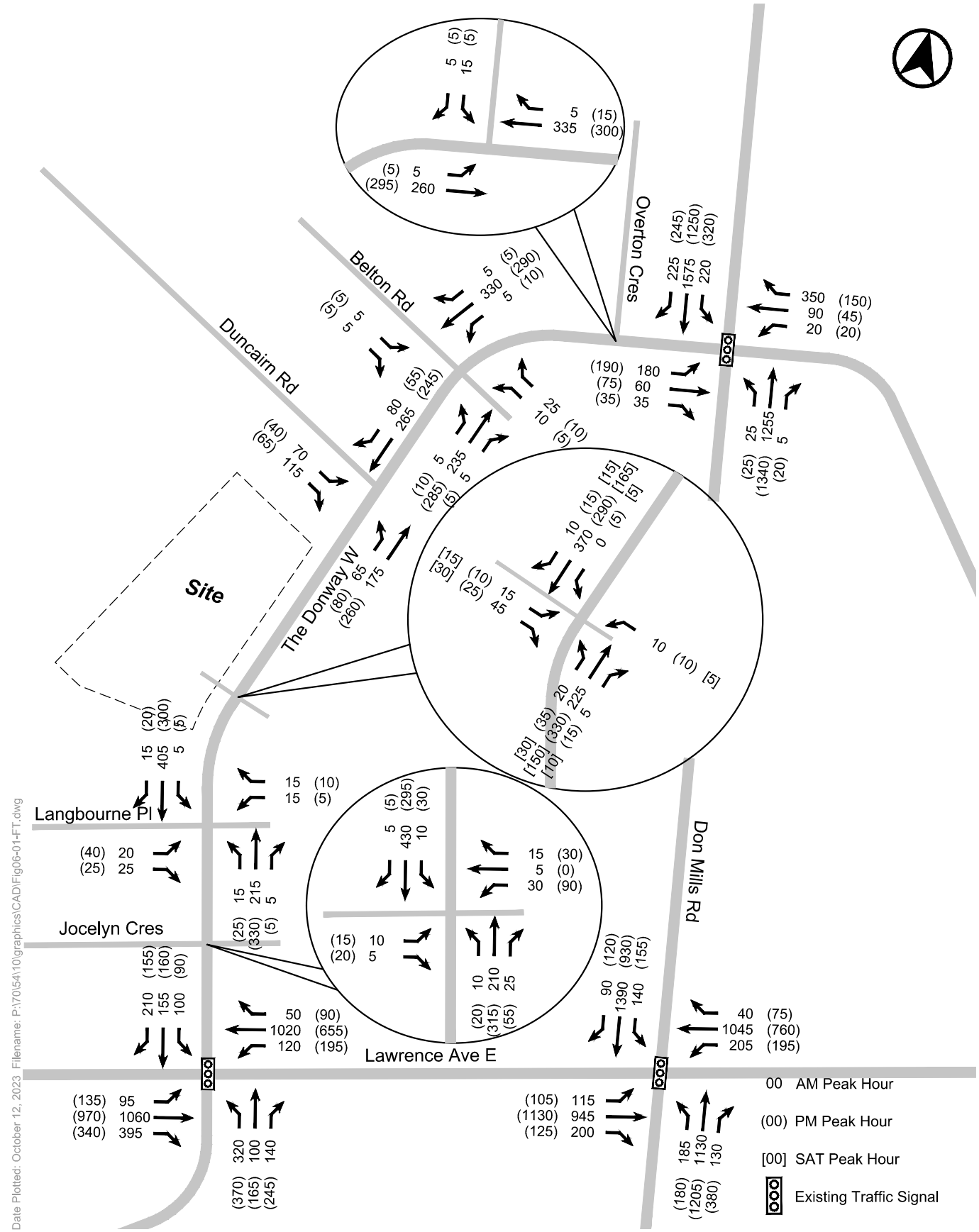


FIGURE 11 FUTURE TOTAL TRAFFIC VOLUMES

9.0 TRAFFIC OPERATIONS ANALYSIS

9.1 ANALYSIS METHODOLOGY AND ASSUMPTIONS

9.1.1 Intersection Capacity Analysis Methodology

Synchro Version 11 and the Highway Capacity Manual (HCM) methodology were used to analyze the study area intersections and site access points. All Synchro analyses performed conform to the requirements of the City of Toronto's Guidelines for Using Synchro 9, March 2016.

For signalized intersections, the volume-to-capacity ratio (v/c) is an indicator of the capacity utilization for the key movements in the intersection. A v/c of 1.00 indicates that a traffic movement through an intersection is operating at or near maximum capacity.

For unsignalized intersections, the level of service (LOS) characterizes operational conditions for key movements in terms of average delay experienced by vehicles attempting to complete a manoeuvre through the intersection. LOS 'A' represents a good level of service with short delays, while LOS 'F' represents a poor level of service with extended delays.

9.1.2 Analysis Assumptions

A base saturation flow of 1,900 passenger cars per hour of green time per lane was assumed and a lost time adjustment of -1.0 seconds (i.e. a total lost time per phase equal to the amber plus all-red time, minus 1 second) was utilized as per the City's Synchro guidelines unless otherwise noted. Peak hour factors and heavy vehicle percentages were calculated based on existing traffic volume data extracted from the traffic counts utilized in this study.

9.1.3 Analysis Calibrations

Synchro model calibrations for parameters discussed in the following, were used to adjust the model such that it more closely represents the existing conditions observed in the field.

9.1.3.1 Lane Utilization Factor (LUF)

A LUF of less than 1.00 reflects the inefficient use of lanes where vehicles may favour or avoid one lane over another. A lane utilization study was conducted along Don Mills Road to account for the unequal distribution of traffic between the through lanes along the study area due to the HOV lane in each direction. Lane utilization factors were adopted for Don Mils Rd & Lawrence Ave E and Don Mills Rd & The Donway W / The Donway E (north) intersections based on the surveyed data for the AM and PM peak hours for all analysis scenarios.

9.1.3.2 Saturation Flow Rate (RTOR)

The saturation flow rate (RTOR) accounts for the number of vehicles per hour, per lane that can make a right turn movement during red based on the inputted signal timing plan and volumes. The right turn on red saturation flow rate was adjusted for the WBR movement on Don Mills Rd & The Donway W / The Donway E (north) intersection to reflect the actual number of observed right turns on red during the AM & PM peak hour for all analysis scenarios.

9.1.3.3 Lost Time Adjustment (LTA)

The lost time adjustment accounts for the impact of vehicles completing their turns on an amber or all-red signal (known as sneakers). The LTA was adjusted for the WBL and NBL movements at the Don Mills Rd & Lawrence Ave E intersection according to the number sneakers observed per cycle on average over the AM and PM peak hours through an intergreen study. Each additional negative second of LTA was assumed to be equivalent to each observed intergreen sneaker and was adopted for all analysis scenarios.

9.1.3.4 Left Turn Factor (Permissive)

The permissive left turn factor adjusts the saturation flow rate for left turn lane based on the inputted signal timing plan and opposing volumes. The left turn factor has been adjusted for the SBL left turn movements at Don Mils Rd & Lawrence Ave E for the AM peak hour and at Don Mills Rd & The Donway W / The Donway E (north) intersection for the AM and PM peak hour, to bring the left turn movements to capacity as observed during the peak hour counts for the existing conditions. Further the left turn factor has been adjusted for the EBL turn movement at the Don Mills Rd & The Donway W / The Donway E (north) intersection during the AM peak hour to account for the actual observed opposing volume during the AM peak hour.

9.1.4 Signal Timings

Existing signal timing plans were obtained for all of the signalized intersections within the study area from the City of Toronto. These parameters were adopted for the analysis of existing conditions and under future conditions at all intersections, with the exception of the Don Mills Road and Lawrence Avenue East intersection.

The split times obtained from the City of Toronto for the Don Mills Road and Lawrence Avenue East intersection, were unrepresentative of what was observed in the field during the peak hours as the intersection is equipped with a SCOOT timing system. The adopted split times for this particular intersection were modified to reflect the average split times observed over the twenty-five (25) cycles occurring during each the AM and PM peak hour.

9.2 STUDY AREA INTERSECTIONS

Traffic operations and new site traffic related impacts have been reviewed at the following area intersections through capacity analysis:

Signalized Intersections

- Don Mills Road / the Donway West & The Donway East (north)
- Don Mills Road / Lawrence Avenue East
- Lawrence Avenue East / The Donway West
- The Donway West / Duncairn Road

Unsignalized Intersections

- The Donway West / Jocelyn Crescent
- The Donway West / Langbourne Place
- The Donway West / Site Access
- The Donway West / Belton Road
- The Donway West / Overton Crescent

9.3 TRAFFIC ANALYSIS SUMMARY

A summary of the traffic analysis results for the signalized and unsignalized intersections within the study area is provided herein. Detailed Synchro analysis output sheets are included in **Appendix G**.

9.3.1 Signalized Intersection Analysis

9.3.1.1 Don Mills Road / The Donway West & The Donway East (North)

The Don Mills Road / The Donway West & The Donway East (north) intersection operates under traffic signal control with a cycle length of 144 seconds in the weekday morning and afternoon peak periods. The existing cycle length was maintained in all analysis scenarios. An adjustment was made to the signal timings in the future analysis scenarios. A summary of traffic analysis results for the intersection is summarized in **Table 20**.

TABLE 20 DON MILLS RD / THE DONWAY W & THE DONWAY E CAPACITY ANALYSIS SUMMARY

Key Movements	Existing		Future Background		Future Total	
	v/c	LOS	v/c	LOS	v/c	LOS
EBL	0.89 (0.57)	F (D)	0.83 (0.68)	E (E)	0.84 (0.70)	E (E)
EBTR	0.21 (0.16)	D (D)	0.24 (0.19)	D (D)	0.23 (0.20)	D (D)
WBL	0.09 (0.05)	D (C)	0.08 (0.06)	D (C)	0.08 (0.06)	D (C)
WBTR	0.85 (0.15)	E (C)	0.83 (0.17)	E (D)	0.80 (0.18)	E (D)
NBL	0.31 (0.40)	B (C)	0.37 (0.39)	C (B)	0.38 (0.39)	D (B)
NBTR	0.44 (0.81)	A (B)	0.56 (0.81)	C (B)	0.57 (0.81)	C (B)
SBL	0.99 (0.99)	E (E)	0.67 (0.92)	B (D)	0.67 (0.92)	B (D)
SBTR	0.59 (0.66)	B (C)	0.63 (0.65)	B (C)	0.63 (0.65)	B (B)
Overall	**0.97 (0.84)**	**C (C)**	**0.72 (0.85)**	**C (C)**	**0.73 (0.86)**	**C (C)**

Notes:
1. XX (XX) – Weekday Morning Peak Hour (Weekday Afternoon Peak Hour)

Under existing traffic conditions, the intersection operates at acceptable overall v/c ratios of 0.97 and 0.84 during the weekday morning and afternoon peak hours, respectively.

Under future background conditions, with the addition of specific area development, the intersection will continue to operate at acceptable overall v/c ratios of 0.72 and 0.85 during the weekday morning and afternoon peak hours, respectively.

Under future total conditions, with the addition of site traffic, the intersection will continue to operate at acceptable overall v/c ratios of 0.73 and 0.86 during the weekday morning and afternoon peak hours, respectively.

Based on the foregoing, the traffic generated by the proposed development can be acceptably accommodated this intersection. No mitigation measures or improvements are recommended at this intersection.

9.3.1.2 Don Mills Road / Lawrence Avenue East

The Don Mills Road / Lawrence Avenue East intersection operates under traffic signal control with a cycle length of 144 seconds in the weekday morning and afternoon peak periods. The existing cycle length was maintained in all analysis scenarios. A slight adjustment was made to the signal timings in the future analysis scenarios. A summary of traffic analysis results for the intersection is summarized in **Table 21**.

TABLE 21 DON MILLS ROAD / LAWRENCE AVENUE EAST CAPACITY ANALYSIS SUMMARY

Key Movements	Existing		Future Background		Future Total	
	v/c	LOS	v/c	LOS	v/c	LOS
EBL	0.60 (0.31)	D (B)	0.68 (0.42)	D (C)	0.68 (0.43)	D (C)
EBT	0.79 (0.86)	D (C)	0.87 (0.93)	E (D)	0.89 (0.94)	E (D)
EBR	0.28 (0.11)	D (C)	0.35 (0.12)	E (E)	0.35 (0.12)	E (E)
WBL	0.93 (0.99)	E (F)	0.97 (0.93)	F (F)	0.98 (0.93)	F (F)
WBT	0.88 (0.54)	E (D)	0.92 (0.56)	E (D)	0.91 (0.57)	E (D)
WBR	0.04 (0.06)	C (C)	0.04 (0.06)	C (C)	0.04 (0.06)	C (C)
NBL	1.00 (0.81)	F (D)	0.96 (0.96)	F (F)	0.93 (0.96)	F (F)
NBTR	0.63 (0.88)	C (D)	0.82 (0.94)	D (E)	0.82 (0.94)	D (E)
SBL	0.99 (0.80)	F (F)	0.63 (0.98)	D (F)	0.63 (0.98)	D (F)
SBTR	0.82 (0.72)	C (D)	0.91 (0.82)	E (D)	0.91 (0.82)	E (D)
Overall	**0.95 (0.88)**	**D (D)**	**0.95 (0.96)**	**E (D)**	**0.95 (0.96)**	**E (D)**

Notes:
1. XX (XX) – Weekday Morning Peak Hour (Weekday Afternoon Peak Hour)

Under existing traffic conditions, the intersection operates at acceptable overall v/c ratios of 0.95 and 0.88 during the weekday morning and afternoon peak hours, respectively.

Under future background conditions, with the addition of specific area development, the intersection will continue to operate at acceptable overall v/c ratios of 0.95 and 0.96 during the weekday morning and afternoon peak hours, respectively.

Under future total conditions, with the addition of site traffic, the intersection will continue to operate at acceptable overall v/c ratios of 0.95 and 0.96 during the weekday morning and afternoon peak hours, respectively.

Based on the foregoing, the traffic generated by the proposed development can be acceptably accommodated this intersection. No mitigation measures or improvements are recommended at this intersection.

9.3.1.3 Lawrence Avenue East / The Donway West

The Lawrence Avenue East / The Donway West intersection operates under traffic signal control with a cycle length of 144 seconds in the weekday morning and afternoon peak periods. The existing cycle length and signal timings were maintained in all analysis scenarios. A summary of traffic analysis results for the intersection is summarized in **Table 22**.

TABLE 22 LAWRENCE AVENUE EAST / THE DONWAY WEST CAPACITY ANALYSIS SUMMARY

Key Movements	Existing		Future Background		Future Total	
	v/c	LOS	v/c	LOS	v/c	LOS
EBL	0.42 (0.44)	C (C)	0.48 (0.49)	C (D)	0.47 (0.54)	C (D)
EBT	0.51 (0.61)	B (C)	0.55 (0.70)	B (D)	0.54 (0.70)	B (D)
EBR	0.39 (0.44)	B (C)	0.45 (0.66)	B (D)	0.45 (0.66)	B (D)
WBL	0.44 (0.47)	A (C)	0.63 (0.70)	C (E)	0.63 (0.70)	C (E)
WBT	0.49 (0.34)	A (B)	0.53 (0.36)	C (B)	0.53 (0.36)	C (B)
WBR	0.05 (0.07)	A (A)	0.05 (0.07)	D (A)	0.04 (0.10)	D (A)
NBL	0.69 (0.70)	D (D)	0.83 (0.87)	D (E)	0.84 (0.88)	D (E)
NBT	0.17 (0.24)	C (C)	0.18 (0.24)	C (C)	0.16 (0.24)	C (C)
NBR	0.10 (0.22)	C (C)	0.20 (0.36)	C (C)	0.21 (0.37)	C (C)
SBL	0.52 (0.45)	E (E)	0.52 (0.45)	E (E)	0.57 (0.51)	E (E)
SBT	0.56 (0.45)	E (E)	0.56 (0.47)	E (E)	0.54 (0.47)	E (E)
SBR	0.57 (0.12)	E (F)	0.65 (0.18)	E (E)	0.66 (0.20)	E (E)
Overall	**0.58 (0.65)**	**C (D)**	**0.72 (0.81)**	**C (D)**	**0.72 (0.81)**	**C (D)**

Notes:
1. XX (XX) – Weekday Morning Peak Hour (Weekday Afternoon Peak Hour)

Under existing traffic conditions, the intersection operates at acceptable overall v/c ratios of 0.58 and 0.65 during the weekday morning and afternoon peak hours, respectively.

Under future background conditions, with the addition of specific area development, the intersection will continue to operate at acceptable overall v/c ratios of 0.72 and 0.81 during the weekday morning and afternoon peak hours, respectively.

Under future total conditions, with the addition of site traffic, the intersection will continue to operate at acceptable overall v/c ratios of 0.72 and 0.81 during the weekday morning and afternoon peak hours, respectively.

Based on the foregoing, the traffic generated by the proposed development can be acceptably accommodated this intersection. No mitigation measures or improvements are recommended at this intersection.

9.3.1.4 The Donway West / Duncairn Road

The Donway West / Duncairn Road intersection operates under a pedestrian signal control with an existing pedestrian crosswalk on the south intersection approach. A summary of traffic analysis results for the intersection is summarized in **Table 23**.

TABLE 23 THE DONWAY WEST / DUNCAIRN ROAD CAPACITY ANALYSIS SUMMARY

Key Movements	Existing		Future Background		Future Total	
	v/c	LOS	v/c	LOS	v/c	LOS
EBLR	0.47 (0.25)	C (C)	0.47 (0.25)	C (C)	0.46 (0.25)	C (C)
NBLT	0.29 (0.31)	A (A)	0.30 (0.31)	A (A)	0.29 (0.32)	A (A)
SBTR	0.36 (0.23)	A (A)	0.36 (0.23)	A (A)	0.35 (0.24)	A (A)
Overall	**0.39 (0.30)**	**B (A)**	**0.39 (0.31)**	**B (A)**	**0.38 (0.31)**	**B (A)**

Notes:
1. XX (XX) – Weekday Morning Peak Hour (Weekday Afternoon Peak Hour)

Under existing traffic conditions, the intersection operates at acceptable overall v/c ratios of 0.39 and 0.30 during the weekday morning and afternoon peak hours, respectively.

Under future background conditions, with the addition of specific area development, the intersection will continue to operate at acceptable overall v/c ratios of 0.39 and 0.31 during the weekday morning and afternoon peak hours, respectively.

Under future total conditions, with the addition of site traffic, the intersection will continue to operate at acceptable overall v/c ratios of 0.38 and 0.31 during the weekday morning and afternoon peak hours, respectively.

Based on the foregoing, the traffic generated by the proposed development can be acceptably accommodated this intersection. No mitigation measures or improvements are recommended at this intersection.

9.3.2 Unsignalized Intersection Analysis

Traffic operations at all unsignalized intersections within the study area are acceptable under all scenarios without any need for road improvements or mitigation measures. All movements will function at LOS A to LOS C in the future total scenario.

The results of the capacity analysis undertaken at the unsignalized intersections within the study area are summarized in **Table 24**.

TABLE 24 PEAK HOUR ANALYSIS RESULTS: UNSIGNALIZED INTERSECTIONS

Lane Group	Existing		Future Background		Future Total	
	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS
The Donway West / Jocelyn Crescent						
EBLTR	16.5 (14.3)	C (B)	16.6 (14.5)	C (B)	16.6 (15.2)	C (C)
WBLTR	17.2 (23.2)	C (C)	17.5 (23.6)	C (C)	17.3 (26.5)	C (D)
NBL	8.5 (8.0)	A (A)	8.5 (8.1)	A (A)	8.5 (8.1)	A (A)
SBLTR	0.3 (1.1)	A (A)	0.3 (1.0)	A (A)	0.3 (1.0)	A (A)
The Donway West / Langbourne Place						
EBLTR	16.7 (16.8)	C (C)	16.8 (17.0)	C (C)	16.1 (18.1)	C (C)
WBLTR	15.3 (13.0)	C (B)	15.4 (13.1)	C (B)	15.3 (13.7)	C (B)
NBL	8.4 (8.2)	A (A)	8.4 (8.2)	A (A)	8.5 (8.2)	A (A)
SBL	7.9 (8.0)	A (A)	7.9 (8.1)	A (A)	7.8 (8.2)	A (A)
The Donway West / Belton Road						
EBLTR	14.6 (12.6)	B (B)	14.7 (12.7)	B (B)	14.6 (12.8)	B (B)
WBLTR	12.1 (11.6)	B (B)	12.2 (11.7)	B (B)	12.2 (11.8)	B (B)
NBL	8.3 (7.9)	A (A)	8.3 (7.9)	A (A)	8.3 (7.9)	A (A)
SBL	7.8 (7.9)	A (A)	7.9 (7.9)	A (A)	7.9 (7.9)	A (A)
The Donway West / Overton Crescent						
EBLT	0.2 (0.2)	A (A)	0.2 (0.2)	A (A)	0.2 (0.2)	A (A)
SBLR	14.0 (11.8)	B (B)	14.1 (11.9)	B (B)	14.1 (12.0)	B (B)

Notes:
1. XX (XX) – Weekday Morning Peak Hour (Weekday Afternoon Peak Hour)

9.3.3 Site Driveway Analysis

The results of the capacity analysis undertaken at The Donway West / Site Driveway (230 The Donway West) during the weekend peak periods are summarized in **Table 25**.

TABLE 25 THE DONWAY WEST / SITE DRIVEWAY (230 THE DONWAY WEST)

Key Movements	Existing		Future Background		Future Total	
	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS
EBLTR	14.5 (12.1) [11.5]	B (B) [B]	14.6 (12.2) [11.6]	B (B) [B]	13.6 (12.7) [10.8]	B (B) [B]
WBLTR	20.2 (15.8) [11.5]	C (C) [B]	20.5 (16.0) [11.6]	C (C) [B]	19.5 (18.2) [13.1]	C (C) [B]
NBL	8.6 (0.0) [0.0]	A (A) [A]	8.6 (0.0) [0.0]	A (A) [A]	8.4 (8.1) [7.7]	A (A) [A]
SBL	0.0 (8.1) [7.6]	A (A) [A]	0.0 (8.1) [7.6]	A (A) [A]	0.0 (8.1) [7.6]	A (A) [A]

Notes:
1. XX (XX) [XX] – Weekday Morning Peak Hour (Weekday Afternoon Peak Hour) [Weekend Sunday Peak Hour]

Traffic operations at The Donway West / Site Driveway (230 The Donway West) unsignalized intersection is acceptable under all scenarios during the weekday and weekend peak hours without the need for road improvements or mitigation measures. All movements are expected to function at LOS C or better.

10.0 RESPONSE TO COMMENTS

City of Toronto staff provided comments on the March 2022 submission as follows:

> **Memorandum:** From: Luigi Nicolucci, Manager, Development Planning and Review, Area 2, Attention: Homayoun Harirforoush; To: Marija Ilic, P.Eng., Manager, Development Engineering, North York District, Attention: Yene Akselord; dated April 14, 2022, revised November 24, 2022.
>
> **Memorandum:** From: John Andreevski, Manager, Community Planning; To: Geoffrey McGrath, Options for Homes; dated October 14, 2022.

A copy of these comments is provided in **Appendix J**. The following provides responses to transportation-related comments for the March 2022 submission.

10.1 DEVELOPMENT ENGINEERING COMMENTS (NOVEMBER 24, 2022)

PART A: REVISIONS AND ADDITIONAL INFORMATION REQUIRED FOR ZONING BY-LAW AMENDMENT

Transportation Services

Comment 1: Provide an updated Transportation Impact Study Addendum to address the comments outlined in “Traffic Assessment – Section D”.

> **Response:** Noted. The traffic analysis for the proposed Site has been updated and provided herein. Please refer to **Sections 8.0** and **9.0** for additional information.

Comment 2: Include a notation on the site plan and landscape plan stating that “The 0.40m wide strip of land along The Donway West frontage of the site will be conveyed to the City in an unencumbered manner for a nominal sum, to the satisfaction of the City”.

> **Response:** Noted. The architectural plans included in the current submission have been revised to illustrate the 0.4m road widening along the Donway West development frontage. A reduced scale version of the architectural plans is included in **Appendix A**.

Comment 3: Revise the site plans and landscape plans to show the provision of minimum 2.1m wide linear paths of concrete public sidewalks along all development site frontages,

> **Response:** Noted. The architectural plans included in the current submission have been revised to illustrate the concrete sidewalks along the Donway West development frontage. A reduced scale version of the architectural plans is included in **Appendix A**.

Comment 5: Demonstrate compliance with the requirements of the Toronto Green Standard (TGS) version 4.0, as further discussed in Section D.

Response: Noted. The current proposal meets the requirements of the Toronto Green Standard version 4 for Tier 1. The TGS checklist is provided under separate cover in this submission.

Comment 6: Please label the dimension of all parking spaces. Clearly identify the distance of the parking spaces from walls and obstructions. The minimum dimensions of a parking space are 2.6m wide by 5.6m long by 2.0m high. The width must be increased by 0.3m for each side of the parking space that is obstructed more than 1.0m from the front or back of a parking space.

Response: The current architectural plans have been updated to provide a legend of the typical parking stalls (standard and accessible spaces) with details regarding the dimensions of the spaces. Any parking spaces with obstructions have been identified on the architectural plans. A reduced scale version of the architectural plans is included in **Appendix A**.

PART B: ZONING BY-LAW AMENDMENT CONDITIONS

Comment 1: Provide parking in accordance with the following minimum requirements:

Visitor Residential

Visitor Spaces: 2.0 + 0.05 spaces/unit

Response: Noted. The proposed parking supply meets the requirements of the City of Toronto Zoning By-law 569-2013, as amended by Zoning By-law 89-2022.

Comment 2: Provide Parking in accordance with the following maximum requirements:

Residential Condominium Use

Bachelor Units:	0.8 spaces per unit;
1-Bedroom Units:	0.9 spaces per unit;
2-Bedroom Units:	1.0 spaces per unit;
3+Bedroom Units:	1.2 spaces per unit;
Visitor Spaces:	1.0 per unit up to 5 units, 0.1 per unit thereafter;
Church:	6.0 for each 100m2 of GFA;

Response: Noted. The proposed parking supply meets the requirements of the City of Toronto Zoning By-law 569-2013, as amended by Zoning By-law 89-2022.

Comment 3: The subject site is required to provide a minimum of 1 Type “G” loading space.

Response: Noted. The current proposal provides one (1) Type G loading space within an enclosed loading facility. The proposed loading facility meets the requirements of the City’s Solid Waste guidelines.

Comment 5: Provide accessible parking in accordance with the following minimum requirements:

(i) 5 accessible spaces plus 1 space for every 50 parking spaces in excess of 100 parking spaces are required to be dedicated as accessible spaces.

Response: Noted. The current proposal includes 11 accessible parking spaces within the proposed parking supply. This meets the requirements of Zoning By-law 569-2013, as amended by Zoning By-law 89-2022.

PART D: BACKGROUND

Traffic Assessment Comments

Comment 1, Traffic Counts: Any traffic volumes that are greater than 3 years old must be bumped-up to estimate 2022 levels using an appropriate derived growth rate. All data and all calculations used to obtain this growth rate must be included in the appendices of the study. Traffic analysis shall be revised to reflect the updated traffic counts.

Response: Traffic volume data for the study area was collected on Tuesday December 20th, 2022 by Spectrum Traffic Data Inc. on behalf of BA Group. A comparison between the prior 2019 data used for traffic analysis in the March 2022 Report and the new 2022 data was conducted at the three main intersections as part of the study area: Don Mills Rd / The Donway W, Lawrence Ave E / Don Mills Rd, and Lawrence Ave E / The Donway W, and summarized in **Table 26, Table 27, Table 28**.

Results show that during the morning and afternoon peak hours, the overall intersection volumes in 2022 counts are lower than 2019 counts for all three intersections. During the morning peak hours, 2022 counts are around 700 – 900 cars lower overall and during the afternoon peak hours, 2022 counts were around 25 – 40 cars lower overall.

Examining individual movements on each approach, it is observed that when through movements in 2022 have decreased compared to 2019 volumes, turning movements have usually increased. This likely occurs because with less throughs happening, more left turning movements can be served. Similarly, it is also observed that when through movements in 2022 have increased compared to 2019 volumes, turning movements have usually decreased. This also occurs because when there are more through movements happening, less left turning movement can be served.

Based on the above, it is determined that the 2019 traffic volumes used in the analysis submitted in March 2022 Report are higher than 2022 traffic volumes. Therefore, the traffic operations as assessed in BA Group's March 2022 submission is considered conservative.

TABLE 26 DON MILLS ROAD / THE DONWAY WEST

Date	S Approach				N Approach				W Approach				E Approach				Total
	Don Mills Road				Don Mills Road				The Donway West				The Donway West				
Movement	L	T	R	App. Total	L	T	R	App. Total	L	T	R	App. Total	L	T	R	App. Total	
Spectrum (BA Group) Tuesday, October 22, 2019 (AM)	24	1133	7	1164	222	1493	218	1933	152	45	29	226	19	84	343	446	3769
Spectrum (BA Group) Tuesday, December 20, 2022 (AM)	29	478	11	518	130	1544	207	1881	94	45	51	190	13	67	193	273	2862
▲ AM	+5	-655	+4	-646	-92	+51	-11	-52	-58	0	+22	-36	-6	-17	-150	-173	-907
Spectrum (BA Group) Tuesday, October 22, 2019 (PM)	25	1216	21	1262	314	1172	214	1700	177	66	34	277	21	32	148	201	3440
Spectrum (BA Group) Tuesday, December 20, 2022 (PM)	12	1219	20	1251	189	1251	197	1637	196	62	47	305	15	28	165	208	3401
▲ PM	-13	+3	-1	-11	-125	+79	-17	-63	+19	-4	+13	+28	-6	-4	+17	+7	-39

TABLE 27 LAWRENCE AVENUE EAST / DON MILLS ROAD

Date	S Approach				N Approach				W Approach				E Approach				Total
	Don Mills Road				Don Mills Road				Lawrence Avenue East				Lawrence Avenue East				
Movement	L	T	R	App. Total	L	T	R	App. Total	L	T	R	App. Total	L	T	R	App. Total	
Spectrum (BA Group) Tuesday, October 22, 2019 (AM)	187	1059	104	1350	138	1313	79	1530	102	864	197	1163	192	983	40	1215	5258
Spectrum (BA Group) Tuesday, December 20, 2022 (AM)	148	409	108	665	160	1279	103	1542	71	709	133	913	231	936	54	1221	4341
▲ AM	-39	-650	+4	-685	+22	-34	+24	+12	-31	-155	-64	-250	+39	-47	+14	+6	-917
Spectrum (BA Group) Tuesday, October 22, 2019 (PM)	180	1135	364	1679	154	879	88	1121	78	1037	111	1226	173	670	73	916	4942
Spectrum (BA Group) Tuesday, December 20, 2022 (PM)	143	1075	411	1629	200	865	96	1161	91	1065	106	1262	166	619	68	853	4905
▲ PM	-37	-60	+47	-50	+46	-14	+8	+40	+13	+28	-5	+36	-7	-51	-5	-63	-37

TABLE 28 LAWRENCE AVENUE EAST / THE DONWAY WEST

Date	S Approach				N Approach				W Approach				E Approach				Total
	The Donway East				The Donway East				Lawrence Avenue East				Lawrence Avenue East				
Movement	L	T	R	App. Total	L	T	R	App. Total	L	T	R	App. Total	L	T	R	App. Total	
Spectrum (BA Group) Tuesday, October 22, 2019 (AM)	252	91	98	441	91	157	203	451	97	1010	357	1464	95	963	58	1116	3472
Spectrum (BA Group) Tuesday, December 20, 2022 (AM)	178	85	90	353	87	126	175	388	96	707	176	979	101	884	62	1047	2767
▲ AM	-74	-6	-8	-88	-4	-31	-28	-63	-1	-303	-181	-485	+6	-79	+4	-69	-705
Spectrum (BA Group) Tuesday, October 22, 2019 (PM)	293	160	185	638	81	155	148	384	118	907	251	1276	129	620	69	818	3116
Spectrum (BA Group) Tuesday, December 20, 2022 (PM)	264	162	180	606	97	142	147	386	162	891	296	1349	159	508	83	750	3091
▲ PM	-29	+2	-5	-32	+16	-13	-1	+2	+44	-16	+45	+73	+30	-112	+14	-68	-25

Comment #2, Peak Hour Analysis: The analysis must include the weekend (Sunday) peak period for the proposed Church development.

> **Response:** A driveway analysis during the weekday and weekend (Sunday) peak periods has been completed, see Sections 9.3.3. Traffic operations at The Donway West / Site Driveway (230 The Donway West) unsignalized intersection is acceptable under all scenarios during the weekday and weekend Sunday peak periods without the need for road improvements or mitigation measures. All movements are expected to function at LOS C or better.

Comment #3, Traffic Analysis Adjustment Factors: Section 8.1.3 of the study discusses the parameters (lane utilization factor, saturation flow rate, lost time adjustment, and left turn factor) that were used to adjust the model such that it more closely represents existing conditions observed in the field. This is acceptable in principle, however, given that a different value was used, a field survey must be undertaken and documents to support this calibration in the study.

> **Response:** Calibration studies for lane utilization factor, RTOR saturation flow adjustment and lost time adjustment have been provided in **Appendix I**. Additional calibration to the left turn permissive factor had to be applied to the analysis in order for the intersection to operate at capacity of 1.00 or better under existing conditions. Recognizing that traffic count surveys conducted at signalized intersections will only process vehicles crossing the intersection, signalized intersection need to operate at or below capacity (i.e. v/c ratio of 1.00 or better). Therefore, additional calibrations that cannot be observed through field studies needed to be applied to the signalized intersections in order for the capacity at the intersection to operate at capacity of 1.00 or better under existing conditions.

Comment #4, Signal Timing Plans: In order to accommodate future traffic volumes, the consultant modifies the signal timing plans at the signalized study area intersections. A summary of all changes in this regard must be provided in separate tables. If deemed acceptable, the applicant is responsible for any associated costs.

> **Response:** Noted, see **Table 29** and **Table 30** for the existing and proposed signal timing plans Don Mills Road / The Donway West and The Donway West / Lawrence Avenue East intersections.

TABLE 29 DON MILLS ROAD / THE DONWAY WEST EXISTING AND PROPOSED SIGNAL TIMING PLANS

Phases	Movements	Phase Mode	Existing		Future	
			AM	PM	AM	PM
1	SBL	WLK FDW MIN AMB ALR SPLIT	-	- - 5 3 1 10	- - 5 3 1 10	- - 5 3 1 20
2	NBLTR	WLK FDW MIN AMB ALR SPLIT	56 20 56 4 2 106	45 20 45 4 2 96	56 20 56 4 2 96	45 20 45 4 2 86
4	EBLTR	WLK FDW MIN AMB ALR SPLIT	7 24 7 4 3 38	7 24 7 4 3 38	7 24 7 4 3 38	7 24 7 4 3 38
6	SBLTR	WLK FDW MIN AMB ALR SPLIT	56 20 56 4 2 106	45 20 45 4 2 106	56 20 56 4 2 106	45 20 45 4 2 106
8	WBLTR	WLK FDW MIN AMB ALR SPLIT	7 24 7 4 3 38	7 24 7 4 3 38	7 24 7 4 3 38	7 24 7 4 3 38
Cycle Length (s)			**144**	**144**	**144**	**144**

TABLE 30 THE DONWAY WEST / LAWRENCE AVE EAST EXISTING AND PROPOSED SIGNAL TIMING PLANS

Phases	Movements	Phase Mode	Existing		Future	
			AM	PM	AM	PM
1	WBL	WLK FDW MIN AMB ALR SPLIT	- - 6 3 1 14	- - 6 3 1 11	- - 6 3 1 16	- - 6 3 1 16
2	EBTLR	WLK FDW MIN AMB ALR SPLIT	7 28 6 4 3 55	7 28 6 4 3 63	7 28 6 4 3 53	7 28 6 4 3 58
3	NBL	WLK FDW MIN AMB ALR SPLIT	- - 6 3 1 12	- - 6 3 1 10	- - 6 3 1 14	- - 6 3 1 14
4	SBTLR	WLK FDW MIN AMB ALR SPLIT	7 28 6 4 3 63	7 28 6 4 3 60	7 28 6 4 3 61	7 28 6 4 3 56
5	EBL	WLK FDW MIN AMB ALR SPLIT	- - 6 3 1 14	- - 6 3 1 11	- - 6 3 1 14	- - 6 3 1 11
6	WBTLR	WLK FDW MIN AMB ALR SPLIT	7 28 6 4 3 55	7 28 6 4 3 63	7 28 6 4 3 55	7 28 6 4 3 63
7	SBL	WLK FDW MIN AMB ALR SPLIT	-	- - 6 3 1 10	- - 6 3 1 10	- - 6 3 1 12
8	NBTLR	WLK FDW MIN AMB ALR SPLIT	7 28 6 4 3 75	7 28 6 4 3 60	7 28 6 4 3 66	7 28 6 4 3 58
Cycle Length (s)			**144**	**144**	**144**	**144**

Comment #5, Synchro Summary Tables: In addition to the level-of-service and v/c information provided in the study, separate tables must also be provided which summarize delay and 50th & 95th percentile queues and available storage areas for all intersections and for each movement under all assessed traffic scenarios. Available storage areas for all applicable movements must also be provided in the tables. This information must not include any application taper areas. Mitigation measures should be recommended where required.

Response: Synchro summary tables of queues and available storage lengths for each intersection are provided in **Appendix H**.

It is observed that queues are expected to extend past the storage length of some movements at Don Mills Rd / The Donway West / The Donway East and The Donway West / Lawrence Ave East intersections. These expected queues are similar or identical during future background and future total scenarios. Therefore, prior to the proposed development, the background developments and growth around the area already contributes to longer queues. We do recognize that the site does contribute to queues however, this is only about one car.

Comment #6, Pick-up / Drop-off Activity: The consultant must provide an assessment of the projected pick-up/drop-off demand for the proposed uses in order to determine if the subject pick-up/drop-off facilities are adequate.

Response: Based on the all-day surveys undertaken, the observed 95th percentile short-term parking accumulation rate range was observed to be 0.007 vehicles per unit. The provision of a pick-up / drop-off area is expected to meet the practical needs of the development on-site while limiting vehicular impacts on the area street network. Please see **Section 5.0** for the residential pick-up/drop-off demand study.

Comment #7, Sight-Line Analysis: The consultant should evaluate the safe stopping and corner sight distances for St. Dennis/New Public Road and Grenoble Drive/New Public Road intersections, to ensure there is sufficient stopping sight distance to allow drivers to stop their vehicles completely prior to reaching the back of queue waiting at the intersection.

Response: City to please clarify and confirm that this comment is related to a different development application.

Comment #8, On-Site Signage and Wayfinding: The retained transportation consultant must submit an acceptable on-site signage and wayfinding plan to help facilitate the safe movement of traffic and regulate the parking, loading and pick-up/drop-off activity that is intended to accommodate by the site.

Response: Noted. A detailed pavement marking, and signage plan will be prepared and submitted to the City of Toronto for review as part of the Site Plan Approval process.

Comment #9, Digital Synchro File: In order to fully access the traffic impacts, digital Synchro/SimTraffic files must be provided. Additional comments pertaining to the Synchro/SimTraffic analysis may be provided upon further review.

> **Response:** Noted. A compressed file including the digital Synchro files will be provided with the current submission.

Comment #10, Multi-modal Analysis and Transportation Demand Management: Multi-modal analysis and transportation demand management - Please contact Transportation Planning unit of the City's Planning Division to confirm the exact requirements.

> **Response:** Please refer to **Sections 6.0** and **7.0** for transportation demand management and multi-modal analysis, respectively.

10.2 CITY PLANNING COMMENTS (OCTOBER 14, 2022)

Comment #28: In order to satisfy the 27.0 m right of way requirement as outlined in the City of Toronto Official Plan, a property conveyance of 0.40m+/- is required.

> **Response:** Noted. The architectural plans included in the current submission have been revised to illustrate the 0.4m road widening along the Donway West development frontage. A reduced scale version of the architectural plans is included in **Appendix A**.

Comment 30.a) Parking Reduction: further reduce the number of parking spaces. This could be augmented by significantly enhancing other TDM measures.

> **Response:** The proposed parking supply meets the requirements of the City of Toronto Zoning By-law 569-2013, as amended by Zoning By-law 89-2022. The parking supply will continue to be refined as part of the ongoing design and development process.

Comment 30.b) Bike Share: This is an area that has be identified for the expansion of Bike Share. To meet TGS v.3 TDM requirements, a financial contribution equivalent to the value of one typical 19-space Bike Share Station valued at $50,000 should be provided.

> **Response:** Noted. The current proposed TDM Plan is included in **Section 6.0**. Revisions to the proposed TDM measures have been made to address challenging financial conditions facing the proposed development. Therefore, the current TDM plan does not include a financial contribution for a bikeshare station (valued at $50,000). It is, however, important to note that these TDM strategies will be refined throughout the design process in coordination between the Proponent and the City of Toronto Staff.

Comment 30.c) Pre-loaded Presto Card: The proposed value of the pre-loaded Presto Card at a value of $500 for each unit without a parking space is acceptable. In addition, each residential unit with one or more parking space should be provided a pre-loaded Presto Card at the typical value of a TTC monthly pass.

Response: The current proposed TDM Plan is included in **Section 6.0**. Revisions to the proposed TDM measures have been made to address challenging financial conditions facing the proposed development. The current TDM plan includes the provision of one (1) PRESTO Card preloaded with the equivalent of a one-month pass for the TTC (valued at $160) to all unit owners who do not purchase parking at the time of occupancy. It is, however, important to note that these TDM strategies will be refined throughout the design process in coordination between the Proponent and the City of Toronto Staff.

Comment 30.d) Bicycle Parking:

i. The TGS requires long-term bicycle parking to be provided in secure controlled access bicycle parking facilities or purpose-built lockers. The proposed long-term parking is scattered around the parking area which creates concerns regarding navigation and access. Some bicycle parking also requires accessing the bike stand within the 6m drive aisle, which poses safety concerns. The applicant is requested to consolidate the proposed bicycle parking in enclosed rooms for ease of access and navigation.
ii. There is an opportunity to provide additional on-site bicycle parking as a TDM measure.
iii. Cycling is integral to the site, given its location along the Duncairn Park Trail and its close proximity to Lawrence Ave East which will both include cycling infrastructure and connections to the Don Mills Trail.

Response: The current proposal has revised the location of long-term bicycle parking spaces; they are now provided in secure, control-access bicycle parking rooms on the ground floor, P1, and P2 level of the underground parking garage.

The current bicycle parking supply meets the requirements set out in Zoning By-law 569-2013 and the Toronto Green Standard version 4, Tier 1. The Proponent will continue to review the feasibility of providing additional bicycle parking as part of the ongoing design and development process.

Comment 30.e) Bicycle Repair Station: Please indicate location of bicycle repair station on site plan and architectural drawings.

Response: A bicycle repair station has been included in the current proposal and is located in a secure room at-grade next to the proposed long-term bicycle parking room. A reduced scale version of the architectural plans is included in **Appendix A**.

Comment 30.f) Travel Information Screen: Please indicate the location of the travel information screen on site plan and architectural drawings.

Response: Noted. A Travel Information Screen has been shown in the Church entrance area and in the residential lobby on the ground floor. It is annotated on the architectural plans as "T.I.S." with a preliminary screen location indicated. A reduced scale version of the architectural plans is included in **Appendix A**.

The current proposed TDM Plan is included in **Section 6.0**. Revisions to the proposed TDM measures have been made to address challenging financial conditions facing the proposed development. The Proponent will continue to review cost-effective alternatives to the Travel Information Screen ($5,000 for installation and $4,000 annual costs) to reduce the ongoing costs for the proposed building. Alternatives will be reviewed with City of Toronto Staff.

Comment 30.g) Sidewalk: Improving the condition of the sidewalk along The Donway West with a 2.1m sidewalk is required and cannot be considered as a TDM measure.

Response: Please refer to **Section 6.0** for details regarding the current Transportation Demand Management (TDM) Plan for the proposed development. The current proposal includes industry accepted TDM practices, including improvements to the pedestrian facilities adjacent to the Site, unbundled parking sales, and bicycle parking facilities. Although these measures may be considered to be "required" as part of the development process in Toronto, they are demonstrated TDM measures that support alternative non-auto means of transportation. These measures are therefore referenced in the comprehensive overview of all TDM measures included in the current proposal.

Comment #31 Pedestrian/Multi-use Connections:

a) Provide a 3.0m-4.0m multi-use path surrounding the site to improve accessible access.
b) Provide a 4.0m multi-use path connecting to Duncairn Park Trail.

Response: The Proponent and project team have reviewed the feasibility of providing multi-use paths around the Site and connecting to the Duncairn Park Trail. The current proposal incorporates walkways on the north, east, and west sides of the Site, as illustrated in the current architectural plans. The feasibility of a connection to the Duncairn Park Traill will be reviewed with City staff in subsequent submissions. A reduced scale version of the architectural plans is included in **Appendix A**.

Comment #32 Car-Share Space:

a) Consider having the car-share spot located in a marked surface-level parking space rather than in the surface-level lay-by spot.
b) The provision of an annual car-share membership to all residents is acceptable.

Response: No car-share space is included in the current proposal. The lay-by area in front of the residential lobby (on the east side of the Site driveway) has been removed in the current proposal. The Proponent will continue to review the feasibility of providing one (1) car-share space at-grade or in the publicly accessible portion of the underground parking garage.

Comment #33 EV Charging Stations and Spaces:

The applicant has achieve the 20% provision of electric vehicle charging stations under EVSE.
The applicant must ensure the remaining spaces includes the conduit to provide EVSE as per Toronto Green Standards

Response: The current proposal has been updated to meet the requirements of TGS version 4. All resident spaces and 25% of non-resident spaces (10 spaces) have been equipped with an energized outlet capable of Level 2 charging. A reduced scale version of the architectural plans is included in **Appendix A**.

Comment #34 Curb Radii:

a) Include curb radii on Site Plans
b) Reduce curb radii
    i. Encourage the use of minimum requirement

Response: Noted. The curb radii have been reduced where possible in the current proposal to limit the paved area for vehicles. The architectural plans have been updated to annotate the radius where required. A reduced scale version of the architectural plans is included in **Appendix A**.

Comment #35 Driveway:

a) Investigate the opportunity to reduce the size of the turn-around area and expand pedestrian walkways and landscaping.
b) Delineate the pedestrian crossing area between to provide clear and safe access for pedestrians.

Response: The current proposal has been revised to remove the lay-by parking area previously proposed in front of the residential lobby (on the east side of the driveway). The location of the central turnaround area has been adjusted to ensure 2.1m-wide pedestrian clearways are provided throughout the Site. The size of the turnaround area has been maintained in order to accommodate 4 to 6 vehicles for short-term pick-up / drop-off activities anticipated for the Site. The detail design of the driveway and turnaround area (including pedestrian crossings) will be reviewed with City staff as part of the ongoing design and development process.

* * * * *

We trust that the above project update and responses to the City's comments are satisfactory. If you have any questions or comments, please feel free to contact us.

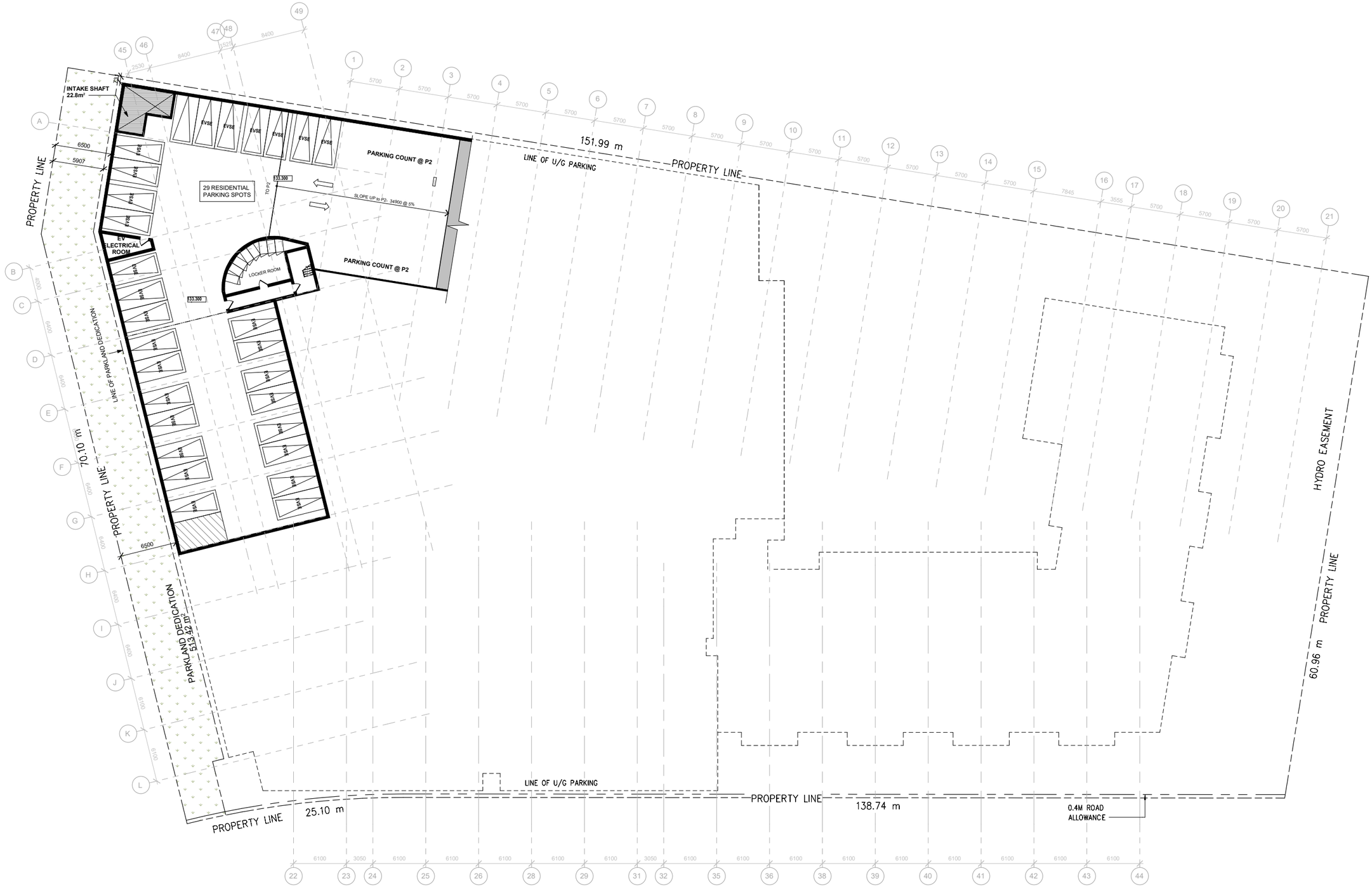
Sincerely,
BA Consulting Group Ltd.

Claudia M. Sánchez, P.Eng.
Associate

Tony Chao-Wei Shih, P.Eng.
Associate

cc. Stephanie A. Hardes, P.Eng., BA Group
Victoria Lane, BA Group
Liana Carnevale, Options for Homes
Geoffrey McGrath, Options for Homes

Appendix A:
Reduced Scale Architectural Drawings



P3 Total Parking
29

notes:

1. All residential parking spaces provided for dwelling units located in an apartment building, mixed use building, multiple dwelling unit building, excluding visitor parking spaces, will include an energized outlet capable of providing Level 2 charging or higher to the parking space. Specify which strategy is used: a dedicated electrical outlet, receptacle, or EVSE supplied by a separate branch circuit or using Electric Vehicle Energy Management Systems (EVEMS) load sharing technologies.
2. Level 2 Charging means a Level 2 electric vehicle charging level as defined by SAE International's J1772 standard, as amended (208V to 240V single-phase power, with maximum current of 80A).
3. 25% of all visitor residential spaces and non-residential parking spaces in a building must include an energized outlet capable of providing Level 2 charging or higher.
4. Energized Outlet means a connected point in an electrical wiring installation at which current is taken to supply utilization equipment for electric vehicle charging.

architecture unfolded
tel: (416) 601 5416 info@unfolded.ca
368 dufferin street, toronto, on. M6K 1Z8

12	ISSUED FOR REZONING	2023.10.24
11	ISSUED FOR REZONING	2022.03.09
10	DRAFT REZONING SUBMISSION	2022.01.18
9	DRAFT REZONING SUBMISSION	2021.05.21
8	SUBMISSION FOR CONSULTANTS COORDINATION	2021.04.20
7	SUBMISSION FOR CONSULTANTS COORDINATION	2021.01.21
6	SUBMISSION FOR CONSULTANTS COORDINATION	2020.12.23
5	ISSUED FOR CLIENT REVIEW	2020.11.27
4	PRE-APPLICATION CONSUTATION WITH COMMUNITY PLANNING	2019.11.08
3	ISSUED FOR CLIENT	2019.10.20
2	ISSUED FOR CLIENT REVIEW	2019.09.30
1	FEASIBILITY SUBMISSION	2018.03.20
revisions:		dd-mm-yy

architectural team :

Eduardo Ortiz

interior design:

planning:
BOUSFIELDS INC
structural:

electrical:

mechanical:

landscape:
O2 DESIGN (FORMELY NAK DESIGN GROUP)
site services:
EXP
owner:
DONWAY CO-OPERATIVE DEVELOPMENT CORPORATION AND THE DONWAY COVENANT UNITED CHURCH

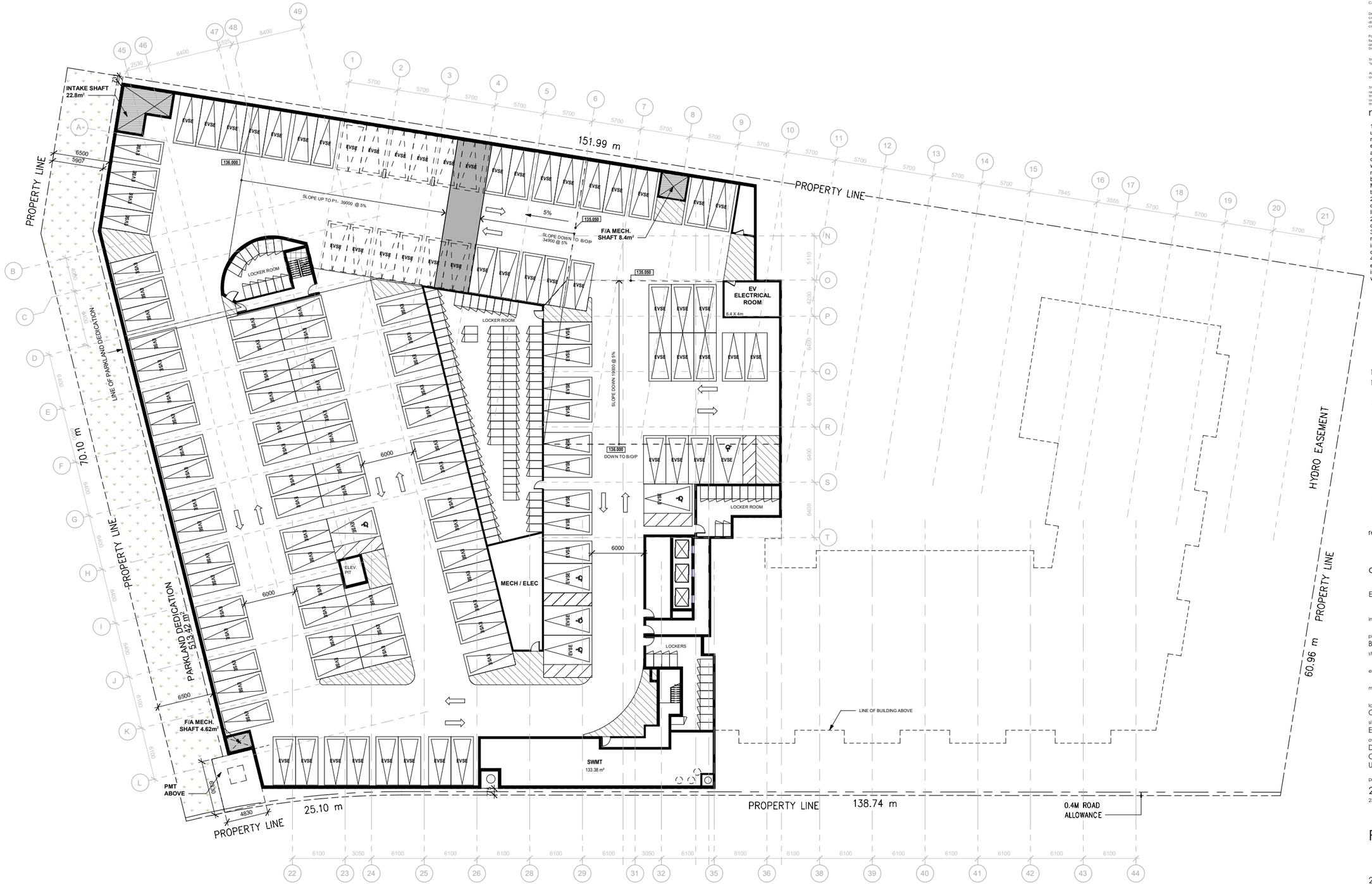
project:
230 THE DONWAY WEST
230 The Donway W., North York, ON

P3 PARKING PLAN

2023.10.24	date:
1 : 200	scale:
18-16	project:
Author	drawn by:

true north / project north

drawning number:
A201



P2 Total Parking
128

notes:

1. All residential parking spaces provided for dwelling units located in an apartment building, mixed use building, multiple dwelling unit building, excluding visitor parking spaces, will include an energized outlet capable of providing Level 2 charging or higher to the parking space. Specify which strategy is used: a dedicated electrical outlet, receptacle, or EVSE supplied by a separate branch circuit or using Electric Vehicle Energy Management Systems (EVEMS) load sharing technologies.
2. Level 2 Charging means a Level 2 electric vehicle charging level as defined by SAE International's J1772 standard, as amended (208V to 240V single-phase power, with maximum current of 80A).
3. 25% of all visitor residential spaces and non-residential parking spaces in a building must include an energized outlet capable of providing Level 2 charging or higher.
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architecture unfolded
info@unfolded.ca
tel: (416) 601 5416
368 dufferin street - toronto, on. M6K 1Z8

11	ISSUED FOR REZONING	2022.03.09
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3	ISSUED FOR CLIENT	2019.10.20
2	ISSUED FOR CLIENT REVIEW	2019.09.30
1	FEASIBILITY SUBMISSION	2018.03.20

revisions: dd-mm-yy

architectural team :

Eduardo Ortiz

interior design:

planning:
BOUSFIELDS INC
structural:

electrical:

mechanical:

landscape:
O2 DESIGN (FORMELY NAK DESIGN GROUP)
site services:
EXP
owner:
DONWAY CO-OPERATIVE DEVELOPMENT CORPORATION AND THE DONWAY COVENANT UNITED CHURCH

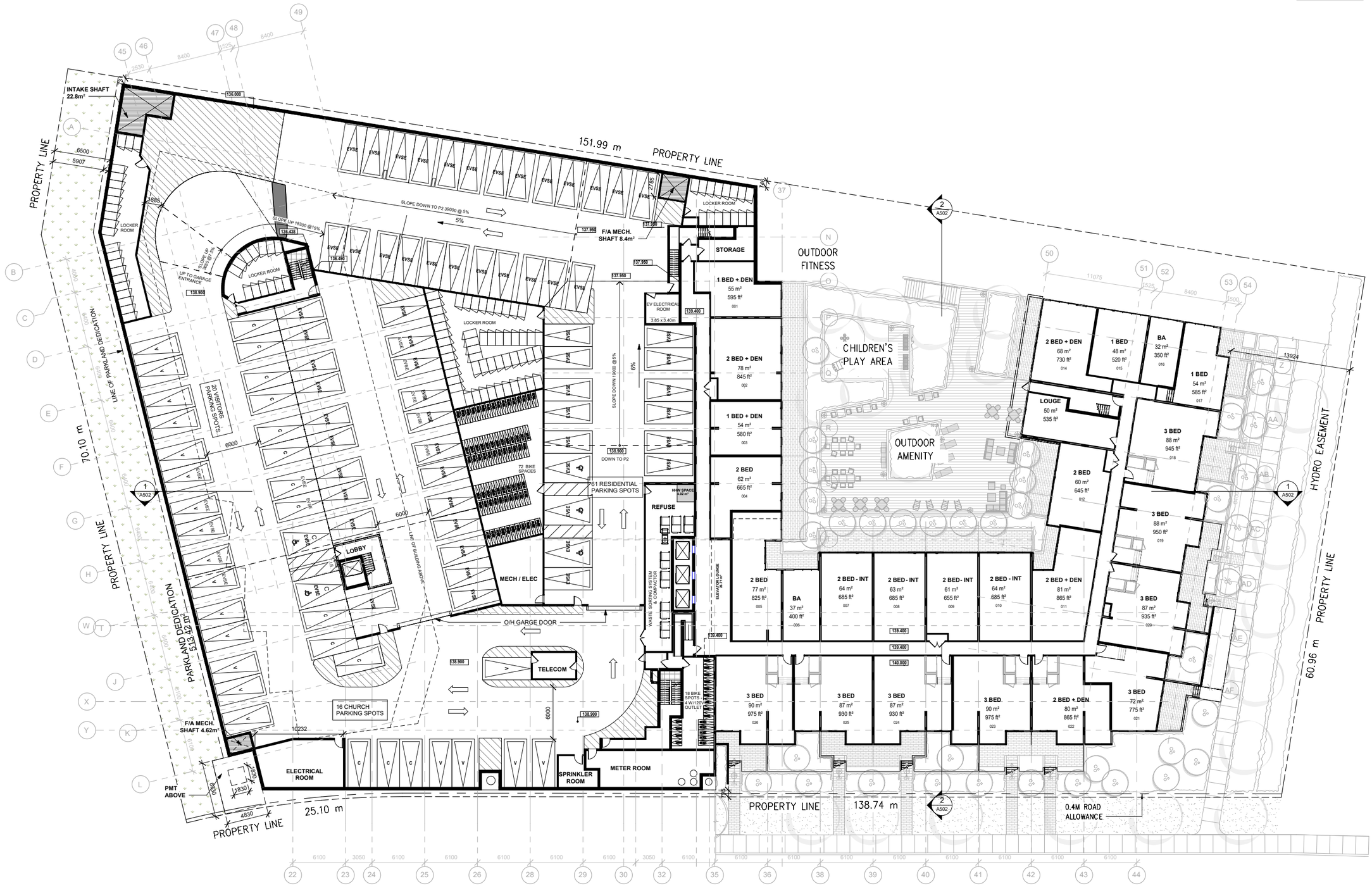
project:
230 THE DONWAY WEST
230 The Donway W., North York, ON

P2 PARKING PLAN

2023.10.24	date:
1 : 200	scale:
18-16	project:
Author	drawn by:

true north / project north

drawning number:
A202



P1 Total Parking
97

P1 Total Bicycle parking
90

notes:

1. All residential parking spaces provided for dwelling units located in an apartment building, mixed use building, multiple dwelling unit building, excluding visitor parking spaces, will include an energized outlet capable of providing Level 2 charging or higher to the parking space. Specify which strategy is used: a dedicated electrical outlet, receptacle, or EVSE supplied by a separate branch circuit or using Electric Vehicle Energy Management Systems (EVEMS) load sharing technologies.
2. Level 2 Charging means a Level 2 electric vehicle charging level as defined by SAE International's J1772 standard, as amended (208V to 240V single-phase power, with maximum current of 80A).
3. 25% of all visitor residential spaces and non-residential parking spaces in a building must include an energized outlet capable of providing Level 2 charging or higher.
4. Energized Outlet means a connected point in an electrical wiring installation at which current is taken to supply utilization equipment for electric vehicle charging.

architecture unfolded
info@unfolded.ca
tel: (416) 601 5416
368 dufferin street - toronto, on. M6K 1Z8

11	ISSUED FOR REZONING	2022.03.09
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8	SUBMISSION FOR CONSULTANTS COORDINATION	2021.04.20
7	SUBMISSION FOR CONSULTANTS COORDINATION	2021.01.21
6	SUBMISSION FOR CONSULTANTS COORDINATION	2020.12.23
5	ISSUED FOR CLIENT REVIEW	2020.11.27
4	PRE-APPLICATION CONSUTATION WITH COMMUNITY PLANNING	2019.11.08
3	ISSUED FOR CLIENT	2019.10.20
2	ISSUED FOR CLIENT REVIEW	2019.09.30
1	FEASIBILITY SUBMISSION	2018.03.20
revisions:		dd-mm-yy

architectural team :

Eduardo Ortiz

interior design:

planning:
BOUSFIELDS INC

structural:

electrical:

mechanical:

landscape:
O2 DESIGN (FORMELY NAK DESIGN GROUP)

site services:
EXP

owner:
DONWAY CO-OPERATIVE DEVELOPMENT CORPORATION AND THE DONWAY COVENANT UNITED CHURCH

project:
230 THE DONWAY WEST
230 The Donway W., North York, ON

WALKOUT UNITS & P1 PARKING PLAN

2023.10.24	date:
1 : 200	scale:
18-16	project:
Author	drawn by:

true north / project north

drawning number:
A203

notes:

P1 Total Bicycle parking
120

architecture unfolded
tel: (416) 601 5416 info@unfolded.ca
368 dufferin street - toronto, on. M6K 1Z8

12	ISSUED FOR REZONING	2023.10.24
11	ISSUED FOR REZONING	2022.03.09
10	DRAFT REZONING SUBMISSION	2022.01.18
9	DRAFT REZONING SUBMISSION	2021.05.21
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3	ISSUED FOR CLIENT	2019.10.20
2	ISSUED FOR CLIENT REVIEW	2019.09.30
1	FEASIBILITY SUBMISSION	2018.03.20

revisions: dd-mm-yy

architectural team :

Eduardo Ortiz

interior design:

planning:
BOUSFIELDS INC

structural:

electrical:

mechanical:

landscape:
O2 DESIGN (FORMELY NAK DESIGN GROUP)

site services:
EXP

owner:
DONWAY CO-OPERATIVE DEVELOPMENT CORPORATION AND THE DONWAY COVENANT UNITED CHURCH

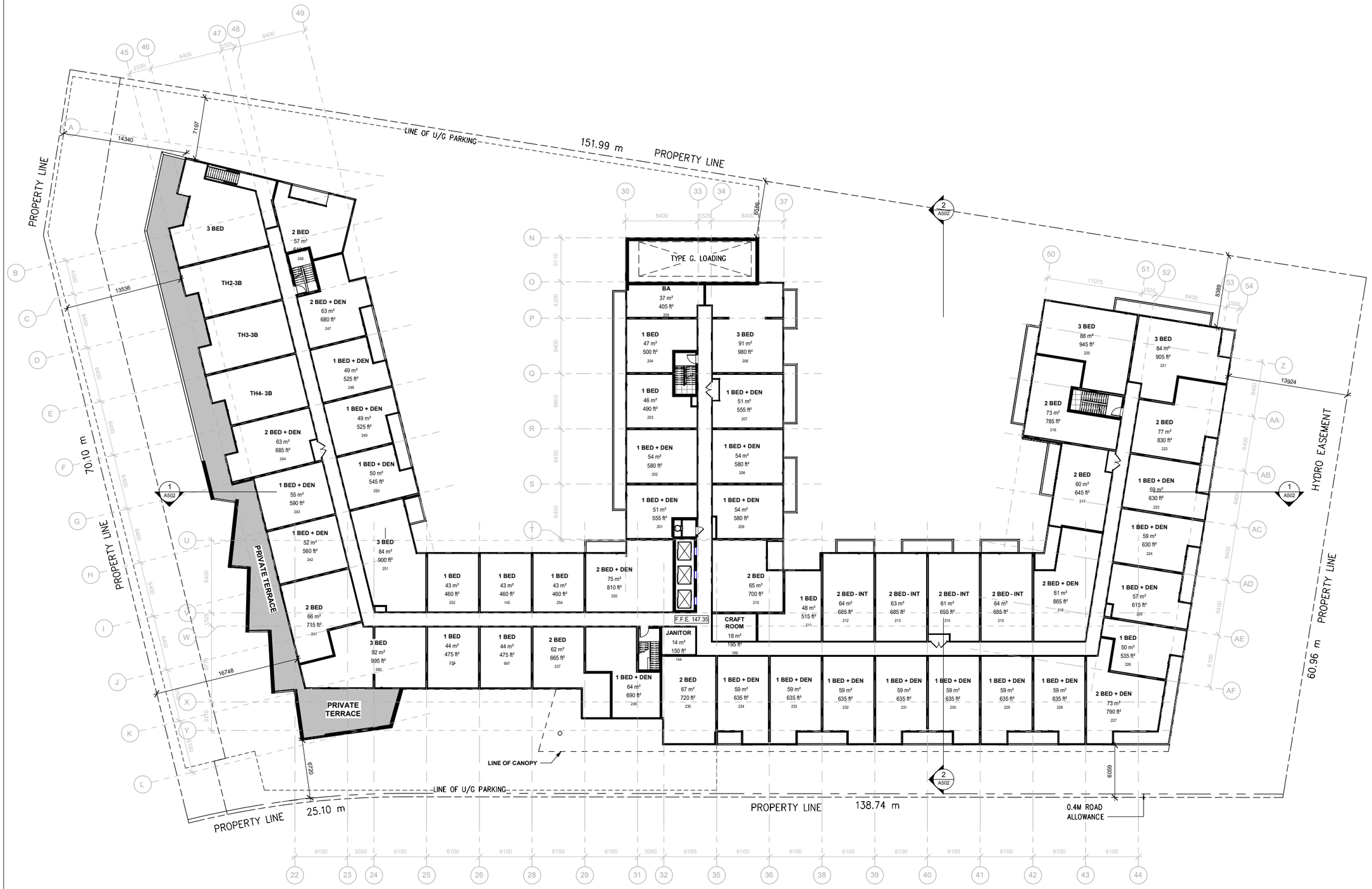
project:
230 THE DONWAY WEST
230 The Donway W., North York, ON

GROUND FLOOR PLAN

2023.10.24	date:
1 : 200	scale:
18-16	project:
Author	drawn by:

true north / project north

drawning number: A301



notes:

architecture unfolded

tel: (416) 601 5416 info@unfolded.ca

368 dufferin street, toronto, on. M6K 1Z8

12	ISSUED FOR REZONING	2023.10.24
11	ISSUED FOR REZONING	2022.03.09
10	DRAFT REZONING SUBMISSION	2022.01.18
9	DRAFT REZONING SUBMISSION	2021.05.21
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6	SUBMISSION FOR CONSULTANTS COORDINATION	2020.12.23
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4	PRE-APPLICATION CONSUTATION WITH COMMUNITY PLANNING	2019.11.08
3	ISSUED FOR CLIENT	2019.10.20
2	ISSUED FOR CLIENT REVIEW	2019.09.30
1	FEASIBILITY SUBMISSION	2018.03.20

revisions: dd-mm-yy

architectural team :

Eduardo Ortiz

interior design:

planning:
BOUSFIELDS INC

structural:

electrical:

mechanical:

landscape:
O2 DESIGN (FORMELY NAK DESIGN GROUP)

site services:
EXP

owner:
DONWAY CO-OPERATIVE DEVELOPMENT CORPORATION AND THE DONWAY COVENANT UNITED CHURCH

project:
230 THE DONWAY WEST
230 The Donway W., North York, ON

2ND FLOOR PLAN

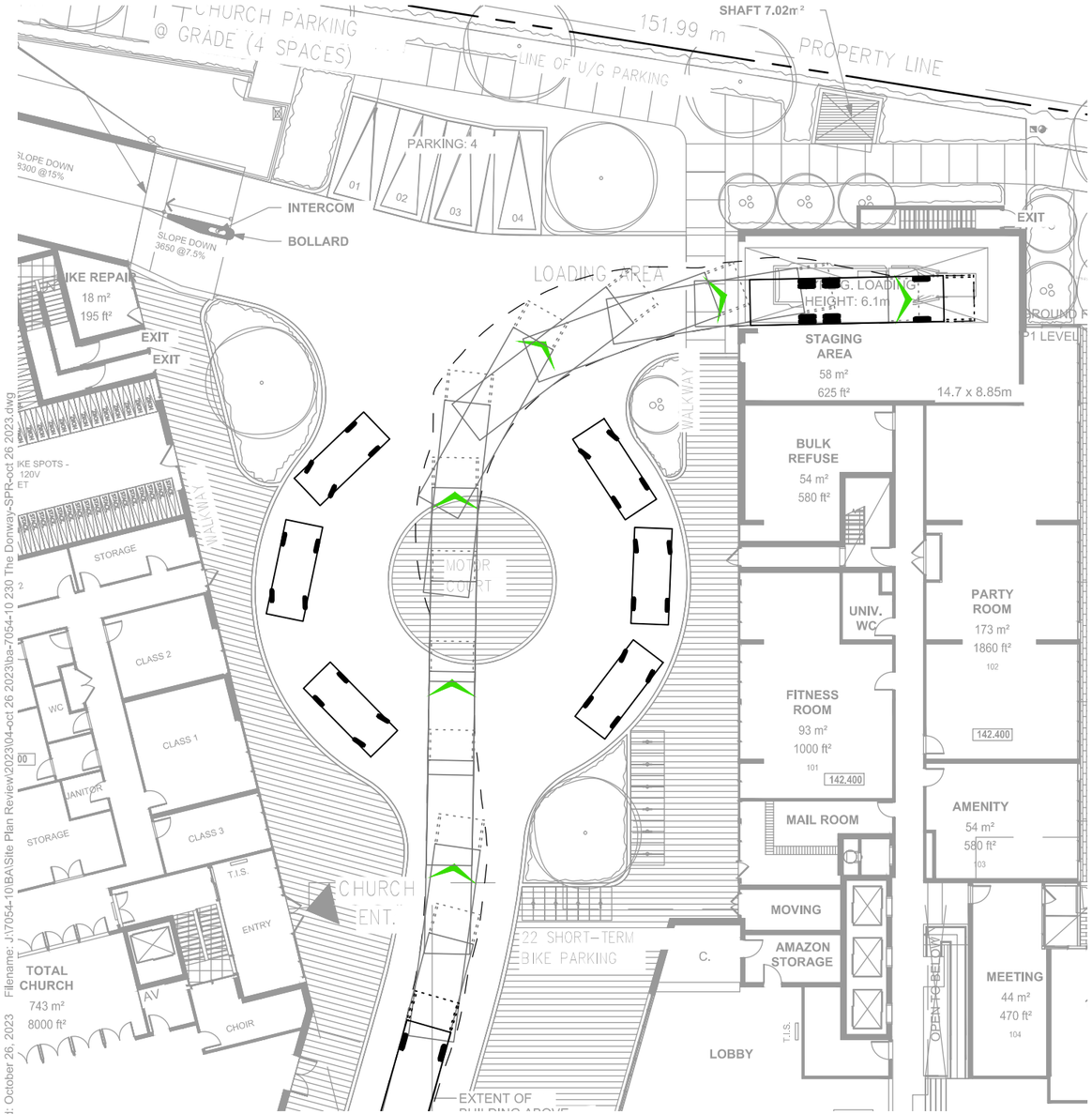
2023.10.24	date:
1 : 200	scale:
18-16	project:
Author	drawn by:

true north / project north

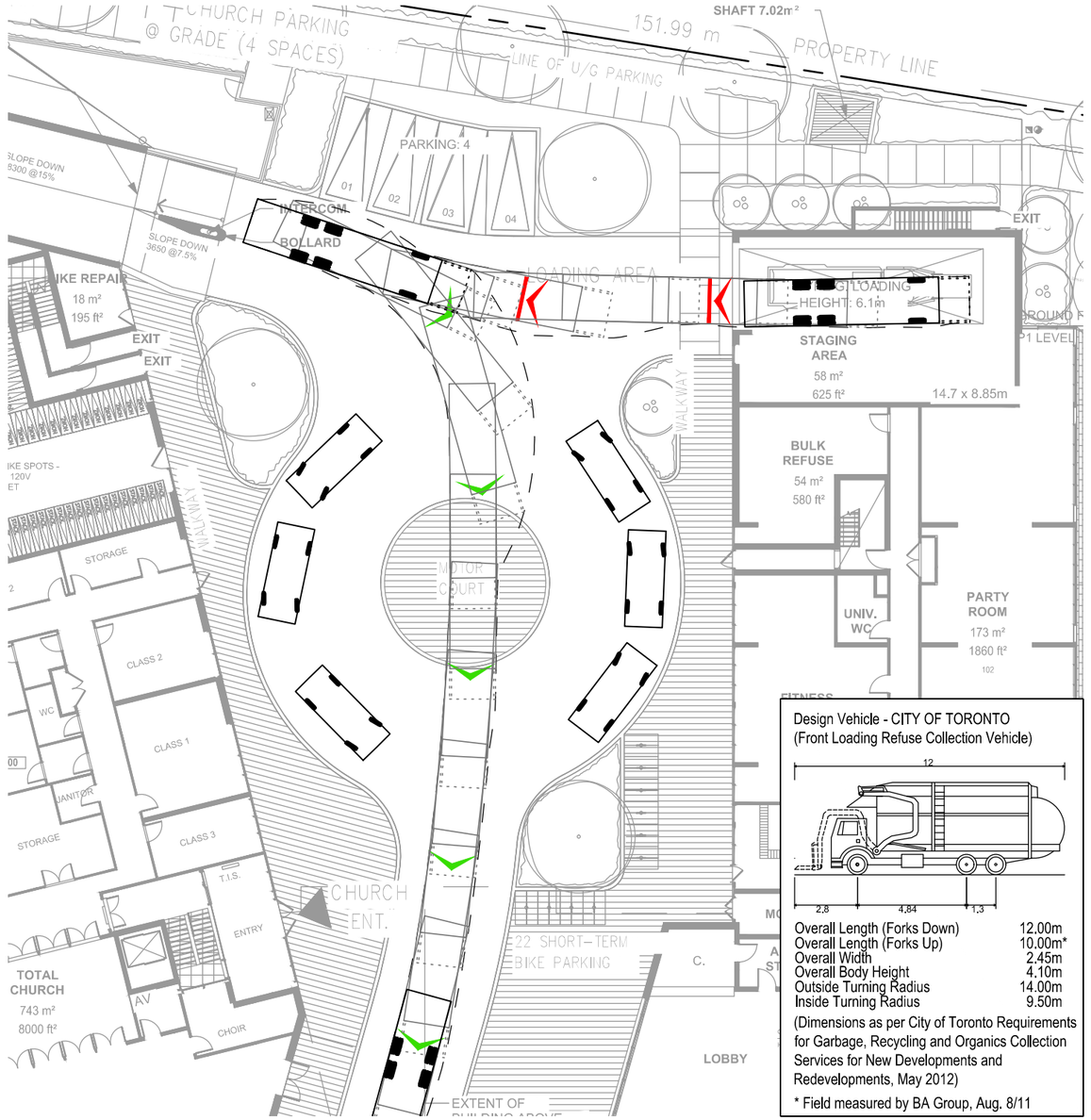
drawning number:
A302

Appendix B:
Vehicle Manoeuvring Diagrams

INBOUND



OUTBOUND



Design Vehicle - CITY OF TORONTO
(Front Loading Refuse Collection Vehicle)

Overall Length (Forks Down)	12.00m
Overall Length (Forks Up)	10.00m*
Overall Width	2.45m
Overall Body Height	4.10m
Outside Turning Radius	14.00m
Inside Turning Radius	9.50m

(Dimensions as per City of Toronto Requirements for Garbage, Recycling and Organics Collection Services for New Developments and Redevelopments, May 2012)

* Field measured by BA Group, Aug. 8/11

Filename: J:\17054-10\BA\Site Plan Review\2023\04-oct 26 2023\ba-7054-10 230 The Donway-SPR-oct 26 2023.dwg
Date Plotted: October 26, 2023

BA Group

230 THE DONWAY WEST

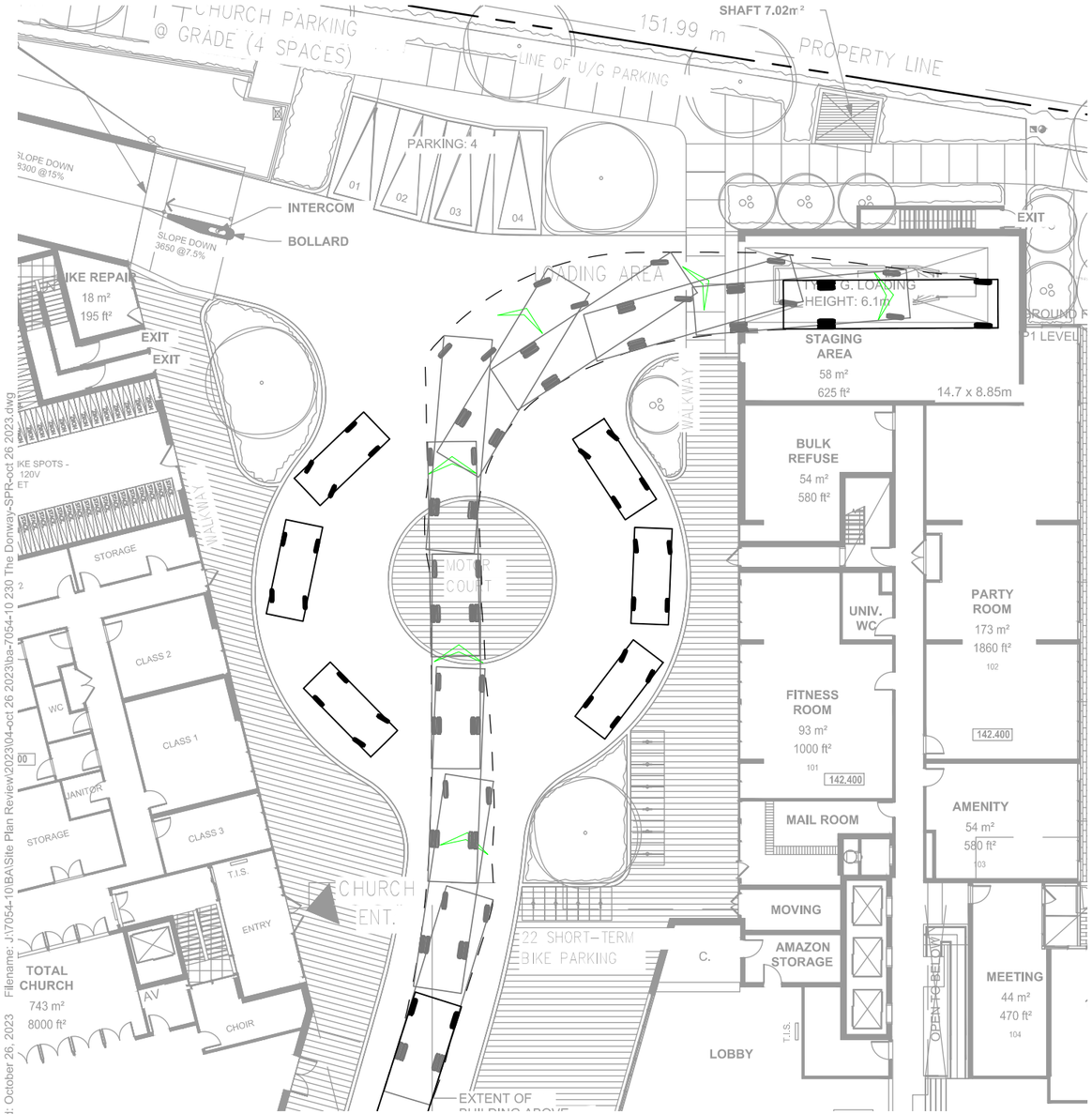
VEHICLE MANOEUVRING DIAGRAM
TYPE G LOADING SPACE
CITY OF TORONTO GARBAGE TRUCK

Project:	Description
Project No.	0000-00
Date:	FEBRUARY 10, 2023
Revised:	OCTOBER 26, 2023

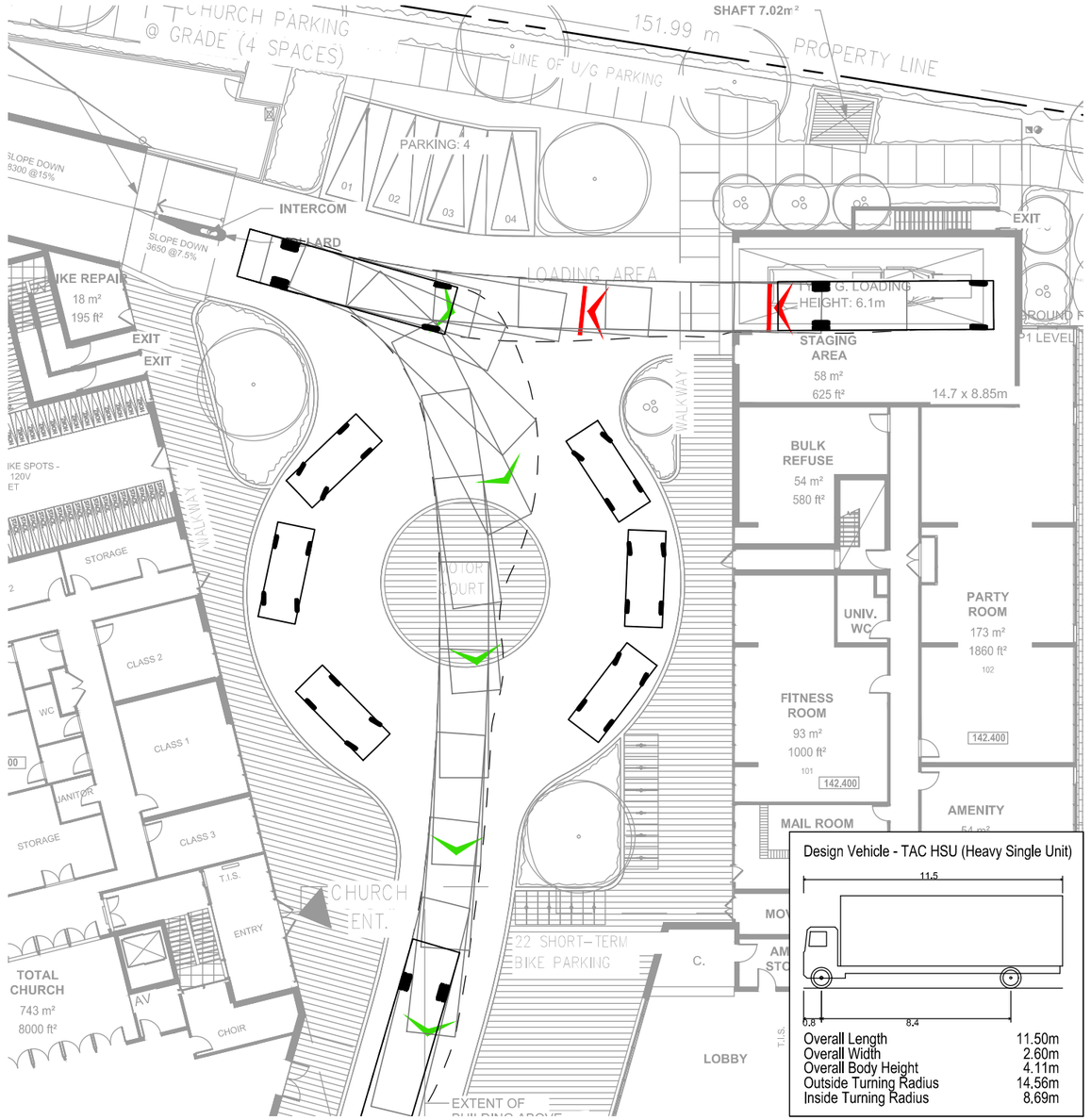
Scale 1:500 (0 5 10 15 20m)

Drawing No. VMD-01

INBOUND



OUTBOUND



Design Vehicle - TAC HSU (Heavy Single Unit)

Overall Length	11.50m
Overall Width	2.60m
Overall Body Height	4.11m
Outside Turning Radius	14.56m
Inside Turning Radius	8.69m

Filename: J:\17054-10\BA\Site Plan Review\2023\04-oct 26 2023\ba-7054-10 230 The Donway-SPR-oct 26 2023.dwg

Date Plotted: October 26, 2023

BA Group

230 THE DONWAY WEST

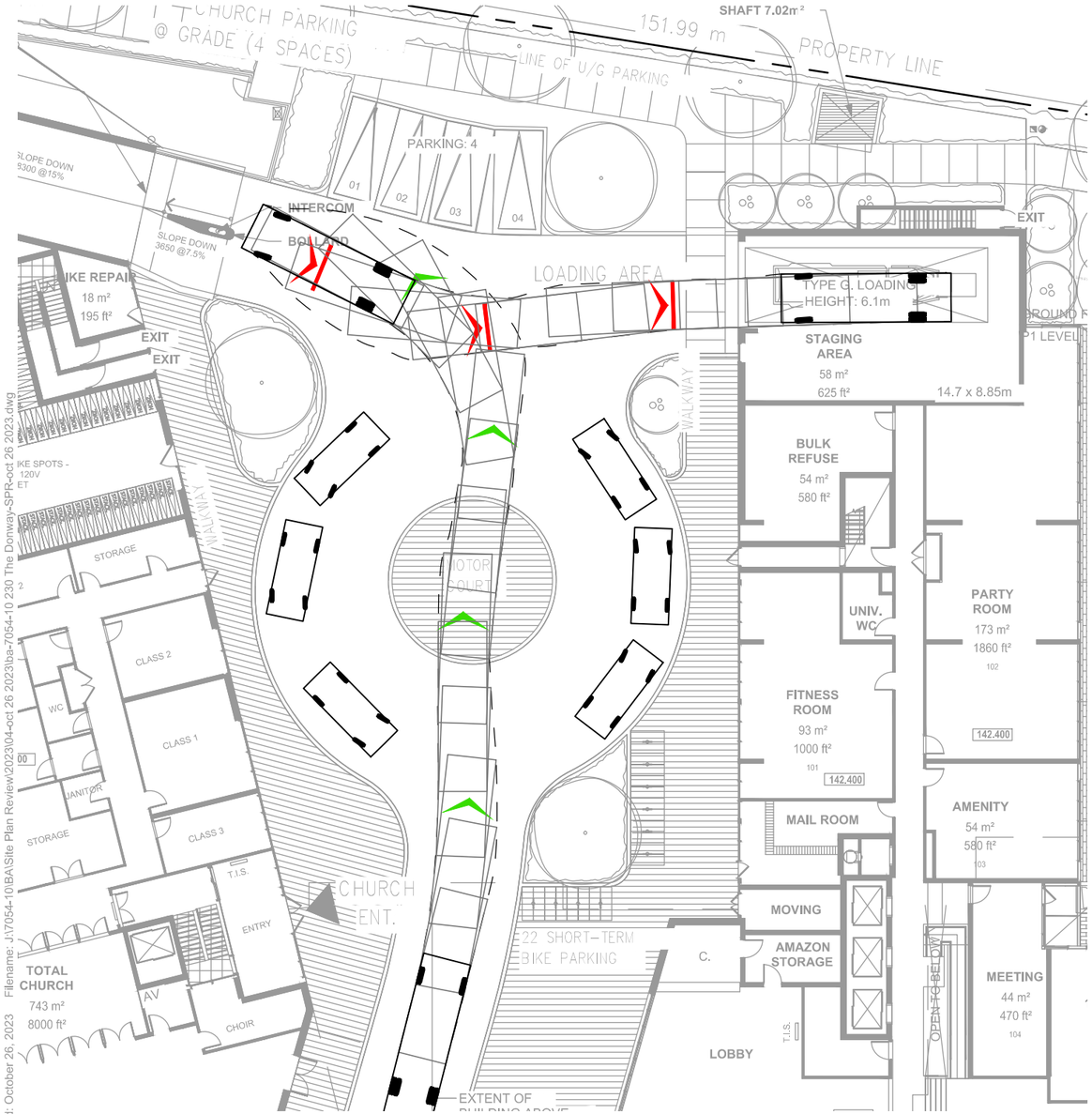
VEHICLE MANOEUVRING DIAGRAM
TYPE G LOADING SPACE
HEAVY SINGLE UNIT TRUCK

Project:	Description
Project No.	0000-00
Date:	FEBRUARY 10, 2023
Revised:	OCTOBER 26, 2023

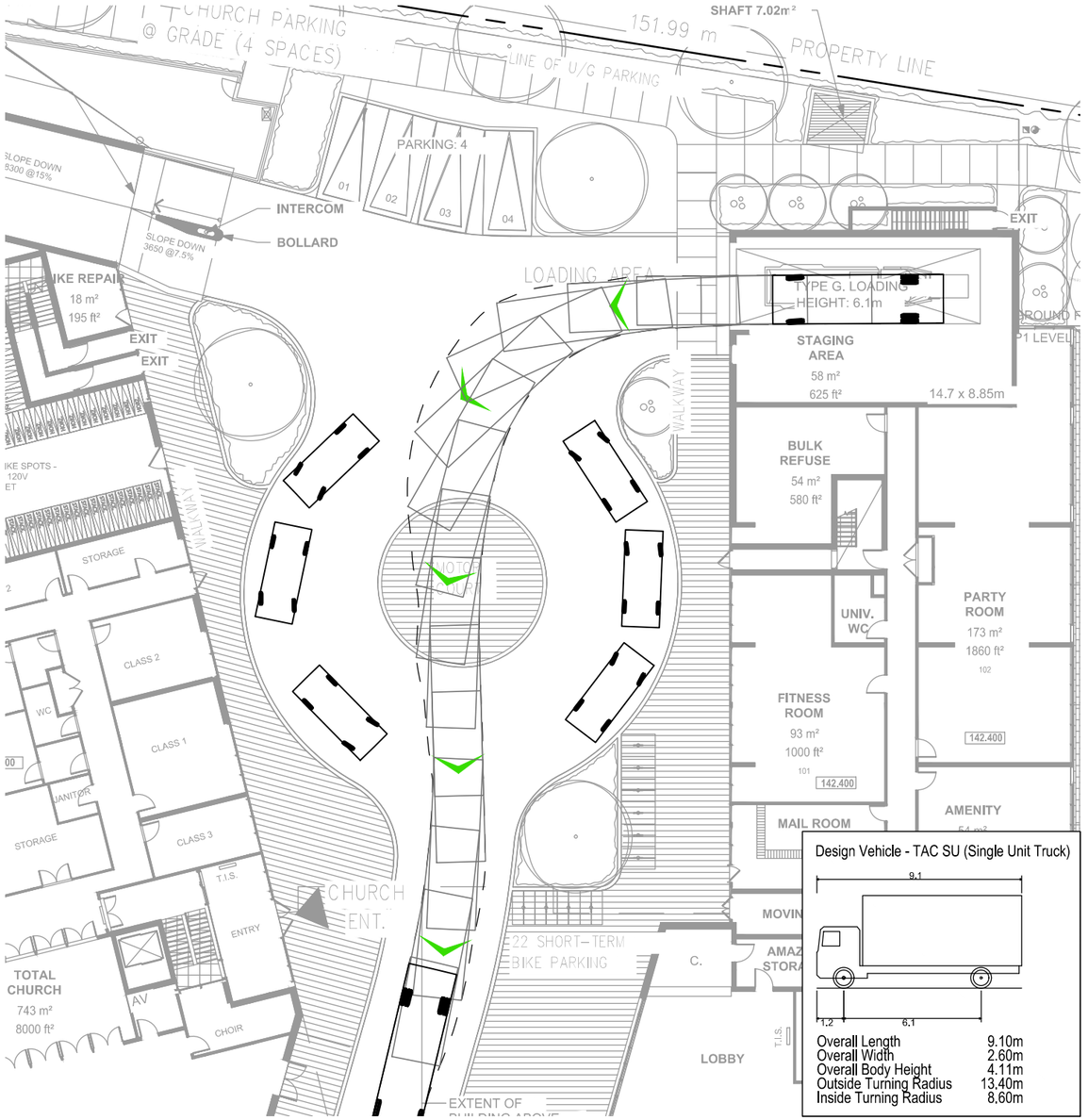
Scale 1:500 (0 5 10 15 20m)

Drawing No. VMD-02

INBOUND



OUTBOUND



Design Vehicle - TAC SU (Single Unit Truck)

Overall Length	9.10m
Overall Width	2.60m
Overall Body Height	4.11m
Outside Turning Radius	13.40m
Inside Turning Radius	8.60m

Filename: J:\17054-10\BA\Site Plan Review\2023\04-oct 26 2023\ba-7054-10 230 The Donway-SPR-oct 26 2023.dwg

Date Plotted: October 26, 2023

BA Group

230 THE DONWAY WEST

VEHICLE MANOEUVRING DIAGRAM
TYPE G LOADING SPACE
TAC SINGLE UNIT TRUCK

Project:	Description
Project No.	0000-00
Date:	FEBRUARY 10, 2023
Revised:	OCTOBER 26, 2023

Scale 1:500 (0 5 10 15 20m)

Drawing No. VMD-03

Appendix C:
Pick-Up / Drop-off (PUDO) Demand Studies

Project No.: 7054-10
Project Name: 230 The Donway West
Study Location: 75 & 85 The Donway W
Municipality: Toronto
Study Date: Thursday January 19, 20239
Study Time: 7:00 - 18:00

Pudo Study

Vehicle No.	Arrival Time	Departure Time	Duration of Stay (hh:mm)	Vehicle Type	C1 Type	C2 Type	B Type	A Type	G Type	Vehicle Classification	Vehicle Description	No of Passengers	Pick Up	Drop Off	unknown	taxi uber	friend family	Delivery
1	7:00	7:02	0:02	1	1					Type C1	Black Car							
2	7:23	7:24	0:01	1	1					Type C1	White Car							
3	9:58	10:11	0:13	1	1					Type C1	White Car							
4	10:31	10:45	0:14	2	1					Type C1	White Van							
5	10:38	10:46	0:08	4	1					Type C1	White Cargo Van							
6	10:39	10:41	0:02	15					1	Type G	Dumptruck							
7	10:47	10:55	0:08	2	1					Type C1	Black Van							
8	11:02	11:03	0:01	1	1					Type C1	Red Car							
9	11:19	11:35	0:16	1	1					Type C1	White Car							
10	11:24	11:26	0:02	1	1					Type C1	Black Car							
11	11:32	11:50	0:18	4	1					Type C1	Green Cargo							
12	11:58	12:00	0:02	8		1				Type C2	Purolator							
13	12:02	12:10	0:08	3	1					Type C1	White SUV							
14	12:12	12:20	0:08	3	1					Type C1	White SUV							
15	12:25	12:30	0:05	1	1					Type C1	White Car							
16	12:31	12:50	0:19	9			1			Type B	Truck							
17	12:18	12:33	0:15	3	1					Type C1	Black SUV							
18	12:39	12:42	0:03	1	1					Type C1	Black Car							
19	12:54	12:55	0:01	3	1					Type C1	Grey SUV							
20	12:58	13:16	0:18	8		1				Type C2	Canada Post							
21	12:58	13:00	0:02	1	1					Type C1	White Car							
22	12:58	12:59	0:01	4	1					Type C1	Grey Cargo Van							
23	13:01	13:03	0:02	1	1					Type C1	White Car							
24	13:04	13:05	0:01	5	1					Type C1	Grey PU							
25	13:05	13:11	0:06	4	1					Type C1	White Cargo Van							
26	13:07	13:26	0:19	5	1					Type C1	Grey PU							
27	13:11	13:14	0:03	4	1					Type C1	White Cargo Van							
28	13:27	13:32	0:05	4	1					Type C1	Cargo Van							
29	14:11	14:12	0:01	1	1					Type C1	White Car							
30	14:23	14:27	0:04	1	1					Type C1	White Car							
31	14:53	14:54	0:01	3	1					Type C1	Grey SUV							
32	15:10	15:28	0:18	1	1					Type C1	Black Car							
33	15:14	15:22	0:08	4	1					Type C1	Cargo Van							
34	15:24	15:25	0:01	3	1					Type C1	Grey SUV							
35	15:30	15:32	0:02	1	1					Type C1	Silver Car							
36	15:58	16:04	0:06	3	1					Type C1	Black SUV							
37	16:08	16:36	0:28	1	1					Type C1	White Car							
38	16:15	16:28	0:13	1	1					Type C1	Silver Car							
39	16:32	16:37	0:05	3	1					Type C1	Black SUV							
40	16:45	16:52	0:07	3	1					Type C1	White SUV							
41	16:46	16:50	0:04	3	1					Type C1	Blue SUV							
42	17:03	17:04	0:01	1	1					Type C1	White Car							
43	17:33	17:38	0:05	1	1					Type C1	Grey Car							
44	17:43	17:45	0:02	1	1					Type C1	Black Car							
45	17:43	17:46	0:03	1	1					Type C1	Black Car							
46	17:46	17:51	0:05	1	1					Type C1	White Car							
47	17:51	17:57	0:06	2	1					Type C1	Grey Van							
48	17:52	18:01	0:09	3	1					Type C1	White SUV							
												0	0	0	0	0	0	0

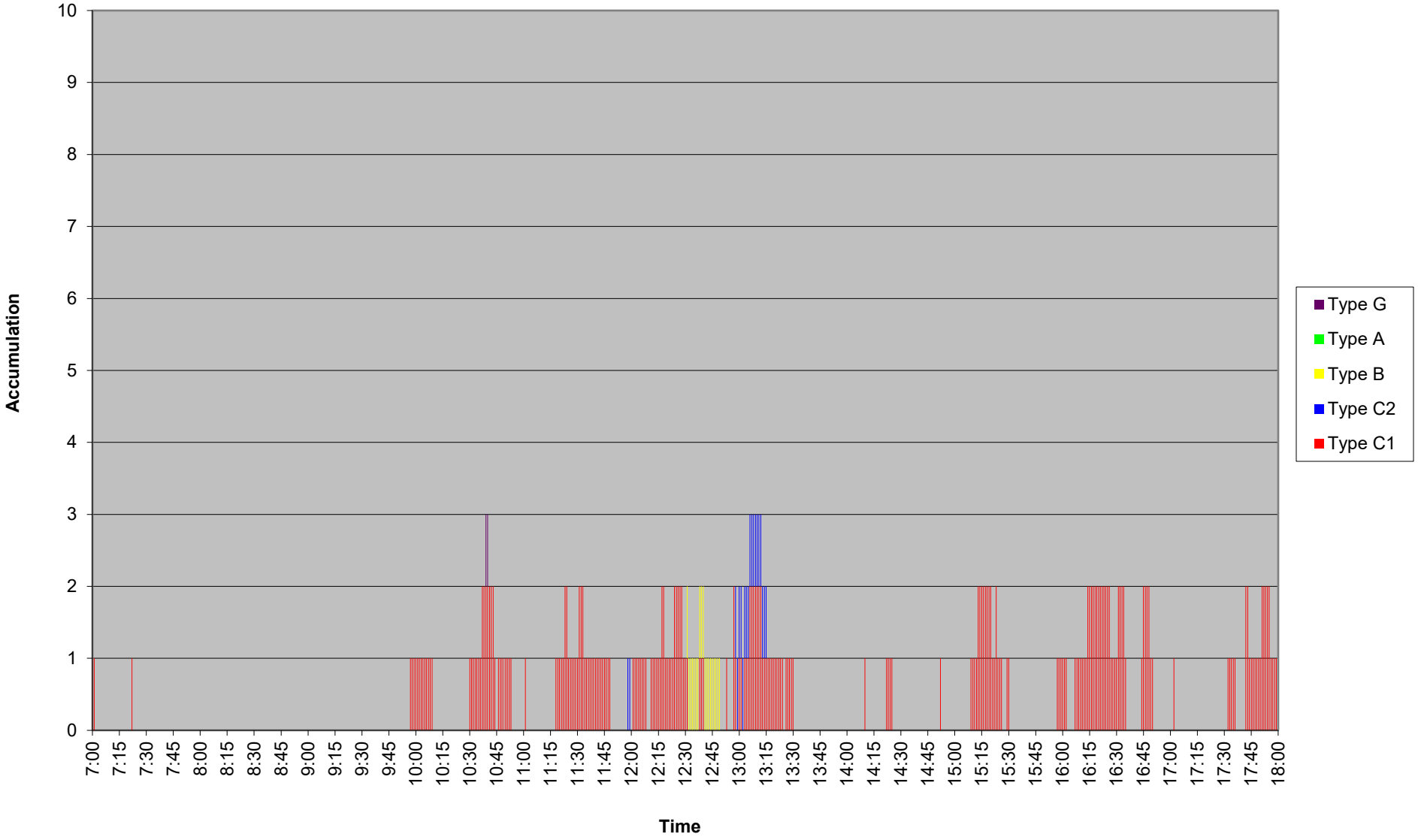
		Total	C1 Type	C2 Type	B Type	A Type	G Type
Total Vehicles		**48**	**44**	**2**	**1**	**0**	**1**
Vehicle Type %		**100%**	**92%**	**4%**	**2%**	**0%**	**2%**
	(hh:mm)						
Minimum Duration	**0:01**		**0:01**	**0:02**	**0:19**	-	**0:02**
Average Duration	**0:07**		**0:06**	**0:10**	**0:19**	-	**0:02**
85th Percentile	**0:16**		**0:13**	**0:15**	**0:19**	-	**0:02**
95th Percentile	**0:19**		**0:18**	**0:17**	**0:19**	-	**0:02**
Maximum Duration	**0:28**		**0:28**	**0:18**	**0:19**	-	**0:02**

Minimum Accumulation	**0**	**0**	**0**	**0**	-	**0**
Average Accumulation	**1**	**0**	**0**	**0**	-	**0**
85th Percentile Accumulation	**1**	**1**	**0**	**0**	-	**0**
95th Percentile Accumulation	**2**	**2**	**0**	**0**	-	**0**
Maximum Accumulation	**3**	**2**	**1**	**1**	-	**1**

Vehicle Types as they relate to City of Toronto Loading Spaces

Type C1	Passenger Car, Van, Pick-up (and modified pick-up truck), Security Van
Type C2	Cube Van, Step Van
Type B	Single Unit Truck
Type A	Tractor Trailer
Type G	Refuse Truck
Light Vehicles	Types C1, C2
Heavy Vehicles	Types B, A, G

75 & 85 The Donway W
Pick Up/Drop Off Accumulation
Thursday January 19, 2023



Project No.: 7054-10
Project Name: 230 The Donway West
Study Location: 99 The Donway W
Municipality: City of Toronto
Study Date: Thursday January 19, 2023
Study Time: 7:00 - 18:00

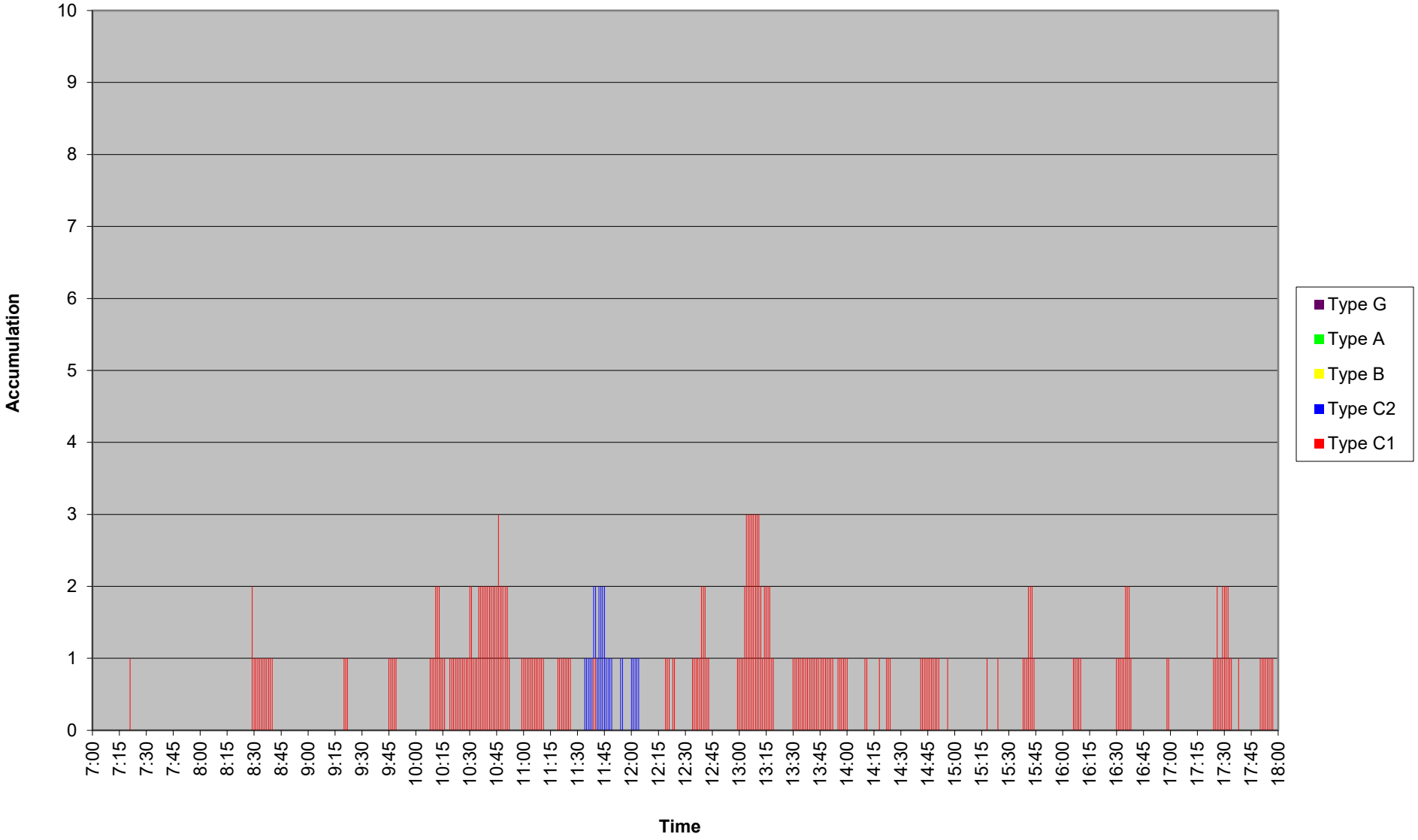
Pudo Study

Vehicle No.	Arrival Time	Departure Time	Duration of Stay (hh:mm)	Vehicle Type	C1 Type	C2 Type	B Type	A Type	G Type	Vehicle Classification	Vehicle Description	No of Passengers	Pick Up	Drop Off	unknown	Service	Delivery
1	7:22	7:23	0:01	3	1					Type C1	Grey SUV	1	1				
2	8:30	8:31	0:01	3	1					Type C1	Grey SUV	1	1				
3	8:30	8:42	0:12	1	1					Type C1	Black Car	0					1
4	9:21	9:24	0:03	2	1					Type C1	White Van	1		1			
5	9:46	9:50	0:04	1	1					Type C1	Silver Car	1	1				
6	9:50	9:51	0:01	6	1					Type C1	Taxi	1		1			
7	10:09	10:15	0:06	1	1					Type C1	Black Car	1	1				
8	10:12	10:18	0:06	1	1					Type C1	White Car	1		1			
9	10:20	10:54	0:34	4	1					Type C1	Cargo Van	0				1	
10	10:31	10:33	0:02	2	1					Type C1	Green Van	1	1				
11	10:36	10:53	0:17	3	1					Type C1	White SUV	1		1			
12	10:47	10:48	0:01	4	1					Type C1	Cargo Van	0					1
13	11:00	11:13	0:13	3	1					Type C1	Grey SUV	0					1
14	11:20	11:28	0:08	3	1					Type C1	Black SUV	1	1				
15	11:34	11:50	0:16	8		1				Type C2	Canada Post	0					1
16	11:40	11:42	0:02	6	1					Type C1	Taxi	1		1			
17	11:42	11:46	0:04	8		1				Type C2	Fedex	0					1
18	11:54	11:56	0:02	8		1				Type C2	Fedex	0					1
19	12:00	12:05	0:05	8		1				Type C2	Purolator	0					1
20	12:20	12:23	0:03	3	1					Type C1	Zebra SUV	1		1			
21	12:24	12:26	0:02	2	1					Type C1	Black Van	1		1			
22	12:35	12:43	0:08	3	1					Type C1	Grey SUV	0					1
23	12:40	12:45	0:05	3	1					Type C1	Grey SUV	0					1
24	13:00	13:12	0:12	4	1					Type C1	Grey Cargo Van	0				1	
25	13:04	13:14	0:10	1	1					Type C1	Red Car	0					1
26	13:05	13:13	0:08	1	1					Type C1	White Car	0					1
27	13:12	13:21	0:09	4	1					Type C1	Cargo Van	0					1
28	13:15	13:19	0:04	4	1					Type C1	Cargo Van	0					1
29	13:31	13:32	0:01	1	1					Type C1	White Car	1		1			
30	13:32	13:54	0:22	1	1					Type C1	Grey Car	0					1
31	13:56	14:02	0:06	1	1					Type C1	Grey Car	1	1				
32	14:11	14:13	0:02	3	1					Type C1	Grey SUV	1		1			
33	14:19	14:20	0:01	1	1					Type C1	Silver Car	1		1			
34	14:23	14:26	0:03	2	1					Type C1	Black Van	0					1
35	14:42	14:53	0:11	3	1					Type C1	Grey SUV	0					1
36	14:57	14:58	0:01	1	1					Type C1	White Car	1	1				
37	15:19	15:20	0:01	6	1					Type C1	Taxi	1		1			
38	15:25	15:26	0:01	3	1					Type C1	Black SUV	1		1			
39	15:39	15:45	0:06	1	1					Type C1	Black Car	1			1		
40	15:42	15:46	0:04	3	1					Type C1	White SUV	1		1			
41	16:07	16:12	0:05	1	1					Type C1	Silver Car	0					1
42	16:31	16:40	0:09	3	1					Type C1	Black SUV	0					1
43	16:36	16:39	0:03	3	1					Type C1	Black SUV	0					1
44	16:59	17:01	0:02	3	1					Type C1	White SUV	1		1			
45	17:25	17:34	0:09	1	1					Type C1	Red Car	0					1
46	17:27	17:28	0:01	3	1					Type C1	White SUV	1		1			
47	17:30	17:36	0:06	1	1					Type C1	White HB	0					1
48	17:39	17:40	0:01	2	1					Type C1	Silver Van	1		1			
49	17:51	17:57	0:06	1	1					Type C1	Black Car	0					1
50	17:57	17:59	0:02	3	1					Type C1	Black SUV	1	1				
												26	9	16	1	2	22

		Total	C1 Type	C2 Type	B Type	A Type	G Type
Total Vehicles		**50**	**46**	**4**	**0**	**0**	**0**
Vehicle Type %		**100%**	**92%**	**8%**	**0%**	**0%**	**0%**
	(hh:mm)						
Minimum Duration	**0:01**		**0:01**	**0:02**	**0:00**	**0:00**	**0:00**
Average Duration	**0:06**		**0:05**	**0:06**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**
85th Percentile	**0:10**		**0:10**	**0:11**	**#NUM!**	**#NUM!**	**#NUM!**
95th Percentile	**0:16**		**0:16**	**0:14**	**#NUM!**	**#NUM!**	**#NUM!**
Maximum Duration	**0:34**		**0:34**	**0:16**	**0:00**	**0:00**	**0:00**

Vehicle Types as they relate to City of Toronto Loading Spaces	
Type C1	Passenger Car, Van, Pick-up (and modified pick-up truck), Security Van
Type C2	Cube Van, Step Van
Type B	Single Unit Truck
Type A	Tractor Trailer
Type G	Refuse Truck
Light Vehicles	Types C1, C2
Heavy Vehicles	Types B, A, G

99 The Donway W
Pick Up/Drop Off Accumulation
Thursday January 19, 2023



Project No.: 7054-10
Project Name: 230 The Donway W
Study Location: 230 The Donway W
Municipality: City of Toronto
Study Date: Sunday May 7, 2023
Study Time: 7:00 - 17:00

Pudo Study

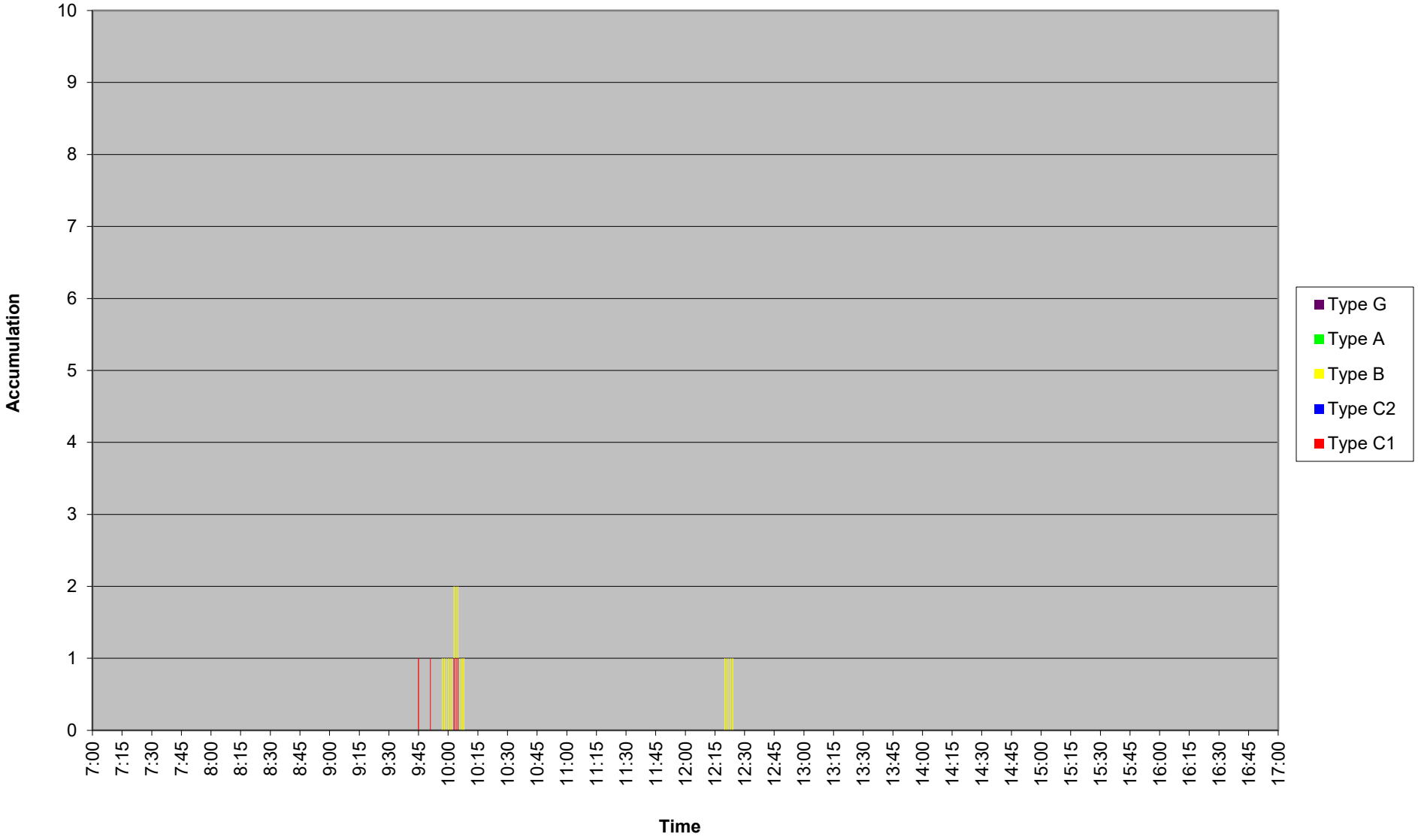
Vehicle No.	Arrival Time	Departure Time	Duration of Stay (hh:mm)	Vehicle Type	C1 Type	C2 Type	B Type	A Type	G Type	Vehicle Classification	Vehicle Description	No of Passengers	Pick Up	Drop Off	unknown	taxi uber	friend family	Delivery
1	9:46	9:47	0:01	1	1					Type C1	Honda	1		1				
2	9:52	9:53	0:01	1	1					Type C1	Toyota	3		1				
3	9:57	10:09	0:12	11			1			Type B	Wheel Trans	1		1				
4	10:04	10:07	0:03	6	1					Type C1	Taxi	2		1				
5	12:20	12:25	0:05	11			1			Type B	Wheel Trans	1	1					
												8	1	4	0	0	0	0

	Total	C1 Type	C2 Type	B Type	A Type	G Type
Total Vehicles	**5**	**3**	**0**	**2**	**0**	**0**
Vehicle Type %	**100%**	**60%**	**0%**	**40%**	**0%**	**0%**
	(hh:mm)					
Minimum Duration	**0:01**	**0:01**	**-**	**0:05**	**-**	**-**
Average Duration	**0:04**	**0:01**	**-**	**0:08**	**-**	**-**
85th Percentile	**0:07**	**0:02**	**-**	**0:10**	**-**	**-**
95th Percentile	**0:10**	**0:02**	**-**	**0:11**	**-**	**-**
Maximum Duration	**0:12**	**0:03**	**-**	**0:12**	**-**	**-**

Minimum Duration	**0**	**0**	**-**	**0**	**-**	**-**
Average Duration	**0**	**0**	**-**	**0**	**-**	**-**
85th Percentile	**0**	**0**	**-**	**0**	**-**	**-**
95th Percentile	**0**	**0**	**-**	**0**	**-**	**-**
Maximum Duration	**2**	**1**	**-**	**1**	**-**	**-**

Vehicle Types as they relate to City of Toronto Loading Spaces	
Type C1	Passenger Car, Van, Pick-up (and modified pick-up truck), Security Van
Type C2	Cube Van, Step Van
Type B	Single Unit Truck
Type A	Tractor Trailer
Type G	Refuse Truck
Light Vehicles	Types C1, C2
Heavy Vehicles	Types B, A, G

230 The Donway (Church)
Pick Up/Drop Off Accumulation
Sunday May 7, 2023



Appendix D:
Transportation Tomorrow Survey (TTS) Queries

AM

Thu Apr 13 2023 12:53:23 GMT-0400 (Eastern Daylight Time)

Frequency Distribution Query Form - Trip - 2016 v1.1

Field: Primary travel mode of trip - mode_prime

Filters:

Trip purpose of origin - purp_orig In H	
and	
Start time of trip - start_time In 600-859	
and	
2006 GTA zone of origin - gta06_orig In 238	236
or	
Trip purpose of destination - purp_dest In H	
and	
Start time of trip - start_time In 600-859	
and	
2006 GTA zone of destination - gta06_dest In 238	236

Table: Trip 2016

Row:	Count:	Expanded:		
Transit excluding GO rail	22	494	18.4%	18%
Cycle	2	35	1.3%	1%
Auto driver	70	1632	60.7%	61%
GO rail only	1	13	0.5%	0%
Auto passenger	13	335	12.5%	13%
School bus	1	23	0.9%	1%
Taxi passenger	1	26	1.0%	1%
Walk	8	131	4.9%	5%
Total:	118	2689	100%	

PM

Thu Apr 13 2023 12:55:35 GMT-0400 (Eastern Daylight Time)

Frequency Distribution Query Form - Trip - 2016 v1.1

Field: Primary travel mode of trip - mode_prime

Filters:

Trip purpose of origin - purp_orig In H	
and	
Start time of trip - start_time In 1600-1859	
and	
2006 GTA zone of origin - gta06_orig In 238	236
or	
Trip purpose of destination - purp_dest In H	
and	
Start time of trip - start_time In 1600-1859	
and	
2006 GTA zone of destination - gta06_dest In 238	236

Table: Trip 2016

Row:	Count:	Expanded:		
Transit excluding GO rail	13	322	12.0%	12%
Cycle	4	68	2.5%	2%
Auto driver	84	1824	67.9%	68%
GO rail only	1	13	0.5%	0%
Auto passenger	16	345	12.8%	13%
Paid rideshare	1	16	0.6%	1%
Walk	5	98	3.6%	4%
Total:	124	2688	100%	

Tue Jan 21 2020 09:52:24 GMT-0500 (Eastern Standard Time) - Run Time: 2299ms

Cross Tabulation Query Form - Trip - 2016 v1.1

Row: Planning district of destination - pd_dest
Column: 2006 GTA zone of origin - gta06_orig

Filters:
Start time of trip - start_time In 600-859
and
Trip purpose of origin - purp_orig In H
and
Primary travel mode of trip - mode_prime In D, M, P, T, U
and
2006 GTA zone of origin - gta06_orig In 238, 242

Trip 2016
Table:

		238	242	Total
PD 1 of Toronto		277	101	378
PD 2 of Toronto		23	0	23
PD 3 of Toronto		77	0	77
PD 4 of Toronto		314	151	465
PD 5 of Toronto		**314**	**334**	648
	223	22	24	46
	224	0	18	18
	225	0	13	13
	228	0	16	16
	231	84	30	114
	233	13	0	13
	236	27	0	27
	237	10	23	33
	238	16	49	65
	239	62	4	66
	241	0	119	119
	242	14	0	14
	243	67	25	92
	246	0	14	14
PD 6 of Toronto		0	12	12
PD 9 of Toronto		0	13	13
PD 10 of Toronto		13	17	30
PD 11 of Toronto		16	0	16
PD 12 of Toronto		83	11	94
PD 13 of Toronto		50	88	138
PD 16 of Toronto		34	0	34
Pickering		0	10	10
Clarington		0	6	6
Aurora		0	16	16
Richmond Hill		11	15	26
Markham		14	15	29
Vaughan		**0**	**16**	16
Brampton		21	0	21
Mississauga		116	0	116

Tue Jan 21 2020 09:53:46 GMT-0500 (Eastern Standard Time) - Run Time: 2351ms

Cross Tabulation Query Form - Trip - 2016 v1.1

Row: 2006 GTA zone of destination - gta06_dest
Column: 2006 GTA zone of origin - gta06_orig

Filters:
Start time of trip - start_time In 600-859
and
Trip purpose of origin - purp_orig In H
and
Primary travel mode of trip - mode_prime In D, M, P, T, U
and
2006 GTA zone of origin - gta06_orig In 238, 242
and
Planning district of destination - pd_dest In 5

Trip 2016
Table:

	238	242
223	22	24
224	0	18
225	0	13
228	0	16
231	84	30
233	13	0
236	27	0
237	10	23
238	16	49
239	62	4
241	0	119
242	14	0
243	67	25
246	0	14

Tue Jan 21 2020 10:16:09 GMT-0500 (Eastern Standard Time) - Run Time: 2658ms

Cross Tabulation Query Form - Trip - 2016 v1.1

Row: Planning district of origin - pd_orig
Column: 2006 GTA zone of destination - gta06_dest

Filters:
Start time of trip - start_time In 1500-1759
and
Trip purpose of destination - purp_dest In H
and
Primary travel mode of trip - mode_prime In D, M, P, T, U
and
2006 GTA zone of destination - gta06_dest In 238,242

Trip 2016
Table:

		238	242	
PD 1 of Toronto		214	101	315
PD 2 of Toronto		23	0	23
PD 3 of Toronto		104	21	125
PD 4 of Toronto		223	120	343
PD 5 of Toronto		**372**	**232**	604
	223	22	39	61
	224	16	18	34
	225	0	8	8
	228	0	8	8
	231	24	25	49
	233	13	0	13
	235	18	0	18
	237	0	11	11
	238	114	15	129
	239	0	31	31
	241	0	21	21
	242	131	21	152
	243	36	34	70
PD 6 of Toronto		14	12	26
PD 9 of Toronto		0	13	13
PD 10 of Toronto		13	44	57
PD 11 of Toronto		57	18	75
PD 12 of Toronto		30	11	41
PD 13 of Toronto		149	31	180
PD 16 of Toronto		34	0	34
Pickering		0	10	10
Newmarket		0	10	10
Aurora		0	16	16
Richmond Hill		11	0	11
Markham		**14**	**29**	43
Vaughan		0	42	42
Mississauga		80	12	92

Tue Jan 21 2020 10:23:00 GMT-0500 (Eastern Standard Time) - Run Time: 2146ms

Cross Tabulation Query Form - Trip - 2016 v1.1

Row: 2006 GTA zone of origin - gta06_orig
Column: 2006 GTA zone of destination - gta06_dest

Filters:
Start time of trip - start_time In 1500-1759
and
Trip purpose of destination - purp_dest In H
and
Primary travel mode of trip - mode_prime In D, M, P, T, U
and
2006 GTA zone of destination - gta06_dest In 238,242
and
Planning district of origin - pd_orig In 5

Trip 2016
Table:

	238	242
223	22	39
224	16	18
225	0	8
228	0	8
231	24	25
233	13	0
235	18	0
237	0	11
238	114	15
239	0	31
241	0	21
242	131	21
243	36	34

AM Peak Hour
Residential Outbound
2021-05-11

Zone	Trips	%	Traffic Volume Allocation NORTH Don Mills	SOUTH Don Mills	EAST Lawrence	WEST Lawrence	TOTAL	Route Split Totals NORTH Don Mills	SOUTH Don Mills	EAST Lawrence	WEST Lawrence	TOTAL
PD 1 of Toronto	378	17%		10%	90%		100.00%	0.00%	1.74%	15.68%	0.00%	17.4%
PD 2 of Toronto	23	1%		10%	90%		100.00%	0.00%	0.11%	0.95%	0.00%	1.1%
PD 3 of Toronto	77	4%	40%			60%	100.00%	1.42%	0.00%	0.00%	2.13%	3.5%
PD 4 of Toronto	465	21%				100%	100.00%	0.00%	0.00%	0.00%	21.43%	21.4%
223	46	2%		100%			100.00%	0.00%	2.12%	0.00%	0.00%	2.1%
224	18	1%		100%			100.00%	0.00%	0.83%	0.00%	0.00%	0.8%
225	13	1%				100%	100.00%	0.00%	0.00%	0.00%	0.60%	0.6%
228	16	1%	80%		20%		100.00%	0.59%	0.00%	0.15%	0.00%	0.7%
231	114	5%	100%				100.00%	5.25%	0.00%	0.00%	0.00%	5.3%
233	13	1%	50%		50%		100.00%	0.30%	0.00%	0.30%	0.00%	0.6%
236	27	1%	100%				100.00%	1.24%	0.00%	0.00%	0.00%	1.2%
237	33	2%	50%			50%	100.00%	0.76%	0.00%	0.00%	0.76%	1.5%
238	65	3%	33%		33%	34%	100.00%	0.99%	0.00%	0.99%	1.02%	3.0%
239	66	3%			100%		100.00%	0.00%	0.00%	3.04%	0.00%	3.0%
241	119	5%		50%	50%		100.00%	0.00%	2.74%	2.74%	0.00%	5.5%
242	14	1%		50%		50%	100.00%	0.00%	0.32%	0.00%	0.32%	0.6%
243	92	4%		100%			100.00%	0.00%	4.24%	0.00%	0.00%	4.2%
246	14	1%		50%	50%		100.00%	0.00%	0.32%	0.32%	0.00%	0.6%
PD 6 of Toronto	12	1%		50%	50%		100.00%	0.00%	0.28%	0.28%	0.00%	0.6%
PD 9 of Toronto	13	1%			100%		100.00%	0.00%	0.00%	0.60%	0.00%	0.6%
PD 10 of Toronto	30	1%	30%		30%	40%	100.00%	0.41%	0.00%	0.41%	0.55%	1.4%
PD 11 of Toronto	16	1%	50%			50%	100.00%	0.37%	0.00%	0.00%	0.37%	0.7%
PD 12 of Toronto	94	4%	50%		50%		100.00%	2.17%	0.00%	2.17%	0.00%	4.3%
PD 13 of Toronto	138	6%			100%		100.00%	0.00%	0.00%	6.36%	0.00%	6.4%
PD 16 of Toronto	34	2%	10%		90%		100.00%	0.16%	0.00%	1.41%	0.00%	1.6%
Pickering	10	0%			100%		100.00%	0.00%	0.00%	0.46%	0.00%	0.5%
Clarington	6	0%			100%		100.00%	0.00%	0.00%	0.28%	0.00%	0.3%
Aurora	16	1%			100%		100.00%	0.00%	0.00%	0.74%	0.00%	0.7%
Richmond Hill	26	1%			100%		100.00%	0.00%	0.00%	1.20%	0.00%	1.2%
Markham	29	1%			100%		100.00%	0.00%	0.00%	1.34%	0.00%	1.3%
Vaughan	16	1%			100%		100.00%	0.00%	0.00%	0.74%	0.00%	0.7%
Brampton	21	1%			100%		100.00%	0.00%	0.00%	0.97%	0.00%	1.0%
Mississauga	116	5%			100%		100.00%	0.00%	0.00%	5.35%	0.00%	5.3%
TOTAL TRIPS	2170	100%						**14%**	**13%**	**46%**	**27%**	100.0%
							Assumed Split	**15.00%**	**15.00%**	**45.00%**	**25.00%**	100.00%

PM Peak Hour
Residential Inbound
2021-05-11

Zone	Trips	%	Traffic Volume Allocation NORTH Don Mills	SOUTH Don Mills	EAST Lawrence	WEST Lawrence	TOTAL	Route Split Totals NORTH Don Mills	SOUTH Don Mills	EAST Lawrence	WEST Lawrence	TOTAL
PD 1 of Toronto	315	15%		10%	90%		100.00%	0.00%	1.53%	13.76%	0.00%	15.3%
PD 2 of Toronto	23	1%		10%	90%		100.00%	0.00%	0.11%	1.00%	0.00%	1.1%
PD 3 of Toronto	125	6%	40%			60%	100.00%	2.43%	0.00%	0.00%	3.64%	6.1%
PD 4 of Toronto	343	17%				100%	100.00%	0.00%	0.00%	0.00%	16.64%	16.6%
223	61	3%		100%			100.00%	0.00%	2.96%	0.00%	0.00%	3.0%
224	34	2%		100%			100.00%	0.00%	1.65%	0.00%	0.00%	1.6%
225	8	0%				100%	100.00%	0.00%	0.00%	0.00%	0.39%	0.4%
228	8	0%	80%		20%		100.00%	0.31%	0.00%	0.08%	0.00%	0.4%
231	49	2%	100%				100.00%	2.38%	0.00%	0.00%	0.00%	2.4%
233	13	1%	50%		50%		100.00%	0.32%	0.00%	0.32%	0.00%	0.6%
235	18	1%	100%				100.00%	0.87%	0.00%	0.00%	0.00%	0.9%
237	11	1%	50%			50%	100.00%	0.27%	0.00%	0.00%	0.27%	0.5%
238	129	6%	33%		33%	34%	100.00%	2.07%	0.00%	2.07%	2.13%	6.3%
239	31	2%			100%		100.00%	0.00%	0.00%	1.50%	0.00%	1.5%
241	21	1%		50%	50%		100.00%	0.00%	0.51%	0.51%	0.00%	1.0%
242	152	7%		50%		50%	100.00%	0.00%	3.69%	0.00%	3.69%	7.4%
243	70	3%		100%			100.00%	0.00%	3.40%	0.00%	0.00%	3.4%
PD 6 of Toronto	26	1%		50%	50%		100.00%	0.00%	0.63%	0.63%	0.00%	1.3%
PD 9 of Toronto	13	1%			100%		100.00%	0.00%	0.00%	0.63%	0.00%	0.6%
PD 10 of Toronto	57	3%	30%		30%	40%	100.00%	0.83%	0.00%	0.83%	1.11%	2.8%
PD 11 of Toronto	75	4%	50%			50%	100.00%	1.82%	0.00%	0.00%	1.82%	3.6%
PD 12 of Toronto	41	2%	50%		50%		100.00%	0.99%	0.00%	0.99%	0.00%	2.0%
PD 13 of Toronto	180	9%			100%		100.00%	0.00%	0.00%	8.73%	0.00%	8.7%
PD 16 of Toronto	34	2%	10%		90%		100.00%	0.16%	0.00%	1.48%	0.00%	1.6%
Pickering	10	0%			100%		100.00%	0.00%	0.00%	0.49%	0.00%	0.5%
Newmarket	10	0%			100%		100.00%	0.00%	0.00%	0.49%	0.00%	0.5%
Aurora	16	1%			100%		100.00%	0.00%	0.00%	0.78%	0.00%	0.8%
Richmond Hill	11	1%			100%		100.00%	0.00%	0.00%	0.53%	0.00%	0.5%
Markham	43	2%			100%		100.00%	0.00%	0.00%	2.09%	0.00%	2.1%
Vaughan	42	2%			100%		100.00%	0.00%	0.00%	2.04%	0.00%	2.0%
Mississauga	92	4%			100%		100.00%	0.00%	0.00%	4.46%	0.00%	4.5%
TOTAL TRIPS	2061	100%						**12%**	**14%**	**43%**	**30%**	100.0%
							Assumed Split	**10.00%**	**15.00%**	**45.00%**	**30.00%**	100.00%

Appendix E:
Existing Turning Movement Counts

Spectrum

Turning Movement Count
Location Name: DON MILLS RD & THE DONWAY
Date: Sun, Dec 18, 2022 Deployment Lead: Peter Ilias

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Turning Movement Count (3 . DON MILLS RD & THE DONWAY)

Start Time	N Approach DON MILLS RD						E Approach THE DONWAY E						S Approach DON MILLS RD						W Approach THE DONWAY E						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		
11:00:00	12	86	11	0	2	109	17	7	2	0	0	26	0	110	2	1	1	113	11	5	10	0	2	26	274	
11:15:00	11	118	3	0	2	132	18	3	3	0	0	24	2	102	2	1	1	107	5	3	20	0	3	28	291	
11:30:00	24	114	9	0	0	147	11	5	4	0	0	20	1	95	3	0	2	99	11	6	19	0	0	36	302	
11:45:00	18	105	12	0	0	135	31	3	5	0	0	39	3	107	4	0	0	114	12	9	23	0	0	44	332	1199
12:00:00	20	106	7	0	1	133	14	6	1	0	0	21	3	94	3	0	2	100	4	9	21	0	2	34	288	1213
12:15:00	28	114	23	0	0	165	20	3	4	0	3	27	2	100	1	2	2	105	10	2	17	0	1	29	326	1248
12:30:00	14	120	14	1	2	149	20	9	4	0	2	33	1	119	4	0	4	124	9	4	13	0	2	26	332	1278
12:45:00	21	114	14	0	1	149	23	2	0	0	3	25	3	108	5	0	0	116	8	4	20	0	1	32	322	1268
13:00:00	30	139	19	2	4	190	28	8	2	0	2	38	5	155	2	0	2	162	10	9	16	0	1	35	425	1405
13:15:00	17	167	18	0	3	202	24	5	0	0	3	29	2	134	4	1	3	141	9	3	24	0	2	36	408	1487
13:30:00	30	176	17	2	6	225	19	4	2	0	4	25	2	157	1	0	3	160	9	7	31	0	1	47	457	1612
13:45:00	25	205	22	1	2	253	22	5	4	0	2	31	1	215	1	2	3	219	12	7	28	0	6	47	550	1840
14:00:00	26	218	31	1	3	276	28	7	2	0	2	37	3	218	4	0	5	225	9	11	21	0	6	41	579	1994
14:15:00	24	260	30	0	0	314	21	9	2	0	0	32	3	212	8	0	2	223	9	8	18	0	6	35	604	2190
14:30:00	28	278	29	0	3	335	23	0	0	0	1	23	7	241	5	0	3	253	6	11	8	0	4	25	636	2369
14:45:00	30	280	24	0	3	334	22	9	3	0	0	34	2	223	5	0	0	230	10	11	28	0	3	49	647	2466
Grand Total	358	2600	283	7	32	3248	341	85	38	0	22	464	40	2390	54	7	33	2491	144	109	317	0	40	570	**6773**	-
Approach%	11%	80%	8.7%	0.2%		-	73.5%	18.3%	8.2%	0%		-	1.6%	95.9%	2.2%	0.3%		-	25.3%	19.1%	55.6%	0%		-	**-**	-
Totals %	5.3%	38.4%	4.2%	0.1%		48%	5%	1.3%	0.6%	0%		6.9%	0.6%	35.3%	0.8%	0.1%		36.8%	2.1%	1.6%	4.7%	0%		8.4%	**-**	-
Heavy	1	57	2	0		-	2	2	0	0		-	1	57	0	0		-	1	9	2	0		-	**-**	-
Heavy %	0.3%	2.2%	0.7%	0%		-	0.6%	2.4%	0%	0%		-	2.5%	2.4%	0%	0%		-	0.7%	8.3%	0.6%	0%		-	**-**	-
Bicycles	1	0	0	0		-	0	0	0	0		-	0	0	0	0		-	0	0	0	0		-	**-**	-
Bicycle %	0.3%	0%	0%	0%		-	0%	0%	0%	0%		-	0%	0%	0%	0%		-	0%	0%	0%	0%		-	**-**	-

Spectrum

Turning Movement Count
Location Name: DON MILLS RD & THE DONWAY
Date: Sun, Dec 18, 2022 Deployment Lead: Peter Ilias

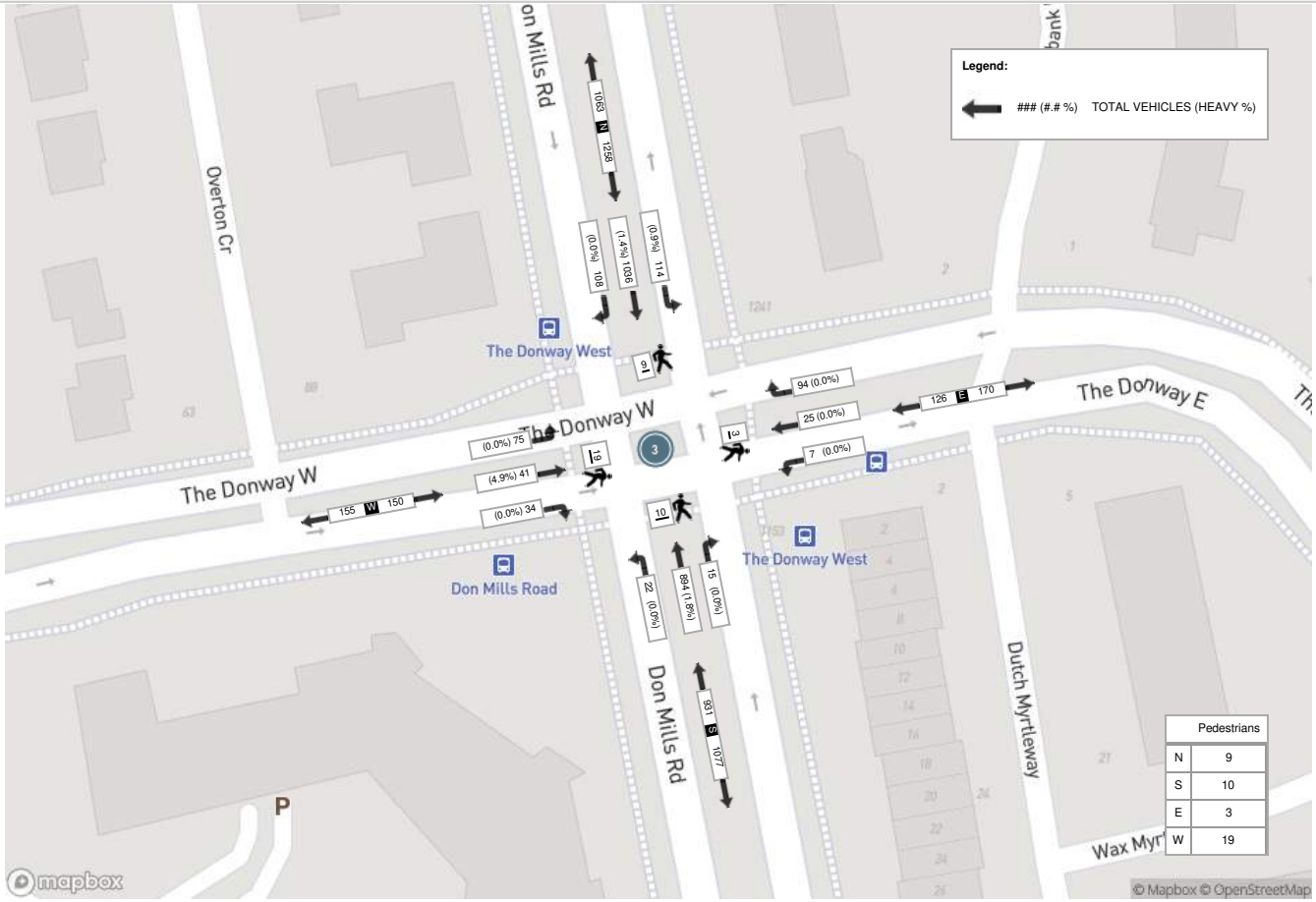
BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 02:00 PM - 03:00 PM Weather: Overcast Clouds (-0.34 °C)

Start Time	N Approach DON MILLS RD						E Approach THE DONWAY E						S Approach DON MILLS RD						W Approach THE DONWAY E						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	
14:00:00	26	218	31	1	3	276	28	7	2	0	2	37	3	218	4	0	5	225	9	11	21	0	6	41	579
14:15:00	24	260	30	0	0	314	21	9	2	0	0	32	3	212	8	0	2	223	9	8	18	0	6	35	604
14:30:00	28	278	29	0	3	335	23	0	0	0	1	23	7	241	5	0	3	253	6	11	8	0	4	25	636
14:45:00	30	280	24	0	3	334	22	9	3	0	0	34	2	223	5	0	0	230	10	11	28	0	3	49	647
Grand Total	108	1036	114	1	9	1259	94	25	7	0	3	126	15	894	22	0	10	931	34	41	75	0	19	150	**2466**
Approach%	8.6%	82.3%	9.1%	0.1%		-	74.6%	19.8%	5.6%	0%		-	1.6%	96%	2.4%	0%		-	22.7%	27.3%	50%	0%		-	**-**
Totals %	4.4%	42%	4.6%	0%		51.1%	3.8%	1%	0.3%	0%		5.1%	0.6%	36.3%	0.9%	0%		37.8%	1.4%	1.7%	3%	0%		6.1%	**-**
PHF	0.9	0.93	0.92	0.25		0.94	0.84	0.69	0.58	0		0.85	0.54	0.93	0.69	0		0.92	0.85	0.93	0.67	0		0.77	**-**
Heavy	0	14	1	0		15	0	0	0	0		0	0	16	0	0		16	0	2	0	0		2	**-**
Heavy %	0%	1.4%	0.9%	0%		1.2%	0%	0%	0%	0%		0%	0%	1.8%	0%	0%		1.7%	0%	4.9%	0%	0%		1.3%	**-**
Lights	108	1022	113	1		1244	94	25	7	0		126	15	878	22	0		915	34	39	75	0		148	**-**
Lights %	100%	98.6%	99.1%	100%		98.8%	100%	100%	100%	0%		100%	100%	98.2%	100%	0%		98.3%	100%	95.1%	100%	0%		98.7%	**-**
Single-Unit Trucks	0	0	1	0		1	0	0	0	0		0	0	3	0	0		3	0	0	0	0		0	**-**
Single-Unit Trucks %	0%	0%	0.9%	0%		0.1%	0%	0%	0%	0%		0%	0%	0.3%	0%	0%		0.3%	0%	0%	0%	0%		0%	**-**
Buses	0	14	0	0		14	0	0	0	0		0	0	13	0	0		13	0	2	0	0		2	**-**
Buses %	0%	1.4%	0%	0%		1.1%	0%	0%	0%	0%		0%	0%	1.5%	0%	0%		1.4%	0%	4.9%	0%	0%		1.3%	**-**
Articulated Trucks	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	**-**
Articulated Trucks %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	-	9	-	-	-	-	-	3	-	-	-	-	-	10	-	-	-	-	-	19	-	**-**
Pedestrians%	-	-	-	-	22%		-	-	-	-	7.3%		-	-	-	-	24.4%		-	-	-	-	46.3%		**-**
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%		**-**

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 02:00 PM - 03:00 PM Weather: Overcast Clouds (-0.34 °C)



Spectrum

Turning Movement Count
Location Name: DON MILLS RD & THE DONWAY
Date: Tue, Dec 20, 2022 Deployment Lead: Peter Ilias

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Turning Movement Count (3 . DON MILLS RD & THE DONWAY)

Start Time	N Approach DON MILLS RD						E Approach THE DONWAY E						S Approach DON MILLS RD						W Approach THE DONWAY E						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		
07:30:00	18	212	18	0	1	248	26	5	1	0	0	32	0	78	2	1	0	81	7	8	19	0	1	34	395	
07:45:00	32	242	21	1	4	296	28	3	4	0	3	35	3	94	4	0	2	101	10	9	9	0	3	28	460	
08:00:00	33	317	21	0	1	371	38	17	2	0	0	57	2	122	2	0	3	126	8	3	22	0	5	33	587	
08:15:00	49	274	34	0	2	357	66	8	4	0	1	78	2	127	2	1	4	132	6	8	23	0	4	37	604	2046
08:30:00	44	424	36	0	5	504	52	14	4	0	6	70	3	112	1	0	2	116	8	9	23	0	5	40	730	2381
08:45:00	57	415	50	0	4	522	59	13	1	0	4	73	2	157	7	0	4	166	10	8	16	0	1	34	795	2716
09:00:00	61	373	22	0	4	456	46	28	4	0	2	78	3	113	11	0	4	127	12	9	28	0	2	49	710	2839
09:15:00	45	332	22	0	1	399	36	12	4	0	1	52	3	96	10	0	2	109	21	19	27	0	3	67	627	2862
BREAK																										
16:00:00	31	243	32	0	3	306	38	8	7	0	4	53	3	287	4	1	4	295	21	18	57	0	6	96	750	
16:15:00	43	291	58	2	3	394	32	8	3	0	6	43	5	321	4	2	1	332	10	10	49	0	6	69	838	
16:30:00	54	280	37	0	2	371	35	5	3	0	2	43	6	312	5	0	8	323	11	13	42	0	4	66	803	
16:45:00	60	305	33	1	4	399	34	5	5	0	3	44	3	264	2	0	0	269	15	14	53	0	3	82	794	3185
17:00:00	41	300	53	0	2	394	38	7	6	0	2	51	2	302	2	1	0	307	13	13	58	0	2	84	836	3271
17:15:00	50	289	50	0	1	389	53	7	3	0	8	63	12	315	3	0	4	330	10	16	45	0	1	71	853	3286
17:30:00	59	329	42	0	2	430	41	9	3	0	2	53	2	306	3	0	1	311	12	22	55	0	1	89	883	3366
17:45:00	47	333	44	1	1	425	33	5	3	0	1	41	4	296	4	0	4	304	12	11	38	0	2	61	831	3403
Grand Total	724	4959	573	5	40	6261	655	154	57	0	45	866	55	3302	66	6	43	3429	186	190	564	0	49	940	**11496**	-
Approach%	11.6%	79.2%	9.2%	0.1%		-	75.6%	17.8%	6.6%	0%		-	1.6%	96.3%	1.9%	0.2%		-	19.8%	20.2%	60%	0%		-	**-**	-
Totals %	6.3%	43.1%	5%	0%		54.5%	5.7%	1.3%	0.5%	0%		7.5%	0.5%	28.7%	0.6%	0.1%		29.8%	1.6%	1.7%	4.9%	0%		8.2%	**-**	-
Heavy	12	158	10	0		-	9	7	0	0		-	1	124	1	0		-	3	12	11	0		-	**-**	-
Heavy %	1.7%	3.2%	1.7%	0%		-	1.4%	4.5%	0%	0%		-	1.8%	3.8%	1.5%	0%		-	1.6%	6.3%	2%	0%		-	**-**	-
Bicycles	0	1	0	0		-	1	0	0	0		-	0	1	0	0		-	0	0	0	0		-	**-**	-
Bicycle %	0%	0%	0%	0%		-	0.2%	0%	0%	0%		-	0%	0%	0%	0%		-	0%	0%	0%	0%		-	**-**	-

Spectrum

Turning Movement Count
Location Name: DON MILLS RD & THE DONWAY
Date: Tue, Dec 20, 2022 Deployment Lead: Peter Ilias

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 08:30 AM - 09:30 AM Weather: Broken Clouds (-4.7 °C)

Start Time	N Approach DON MILLS RD						E Approach THE DONWAY E						S Approach DON MILLS RD						W Approach THE DONWAY E						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	
08:30:00	44	424	36	0	5	504	52	14	4	0	6	70	3	112	1	0	2	116	8	9	23	0	5	40	730
08:45:00	57	415	50	0	4	522	59	13	1	0	4	73	2	157	7	0	4	166	10	8	16	0	1	34	795
09:00:00	61	373	22	0	4	456	46	28	4	0	2	78	3	113	11	0	4	127	12	9	28	0	2	49	710
09:15:00	45	332	22	0	1	399	36	12	4	0	1	52	3	96	10	0	2	109	21	19	27	0	3	67	627
Grand Total	207	1544	130	0	14	1881	193	67	13	0	13	273	11	478	29	0	12	518	51	45	94	0	11	190	**2862**
Approach%	11%	82.1%	6.9%	0%		-	70.7%	24.5%	4.8%	0%		-	2.1%	92.3%	5.6%	0%		-	26.8%	23.7%	49.5%	0%		-	**-**
Totals %	7.2%	53.9%	4.5%	0%		65.7%	6.7%	2.3%	0.5%	0%		9.5%	0.4%	16.7%	1%	0%		18.1%	1.8%	1.6%	3.3%	0%		6.6%	**-**
PHF	0.85	0.91	0.65	0		0.9	0.82	0.6	0.81	0		0.88	0.92	0.76	0.66	0		0.78	0.61	0.59	0.84	0		0.71	**-**
Heavy	4	57	1	0		62	4	3	0	0		7	0	27	1	0		28	2	3	2	0		7	**-**
Heavy %	1.9%	3.7%	0.8%	0%		3.3%	2.1%	4.5%	0%	0%		2.6%	0%	5.6%	3.4%	0%		5.4%	3.9%	6.7%	2.1%	0%		3.7%	**-**
Lights	203	1487	129	0		1819	189	64	13	0		266	11	451	28	0		490	49	42	92	0		183	**-**
Lights %	98.1%	96.3%	99.2%	0%		96.7%	97.9%	95.5%	100%	0%		97.4%	100%	94.4%	96.6%	0%		94.6%	96.1%	93.3%	97.9%	0%		96.3%	**-**
Single-Unit Trucks	2	34	0	0		36	0	1	0	0		1	0	7	0	0		7	2	0	1	0		3	**-**
Single-Unit Trucks %	1%	2.2%	0%	0%		1.9%	0%	1.5%	0%	0%		0.4%	0%	1.5%	0%	0%		1.4%	3.9%	0%	1.1%	0%		1.6%	**-**
Buses	2	21	1	0		24	4	2	0	0		6	0	20	1	0		21	0	3	1	0		4	**-**
Buses %	1%	1.4%	0.8%	0%		1.3%	2.1%	3%	0%	0%		2.2%	0%	4.2%	3.4%	0%		4.1%	0%	6.7%	1.1%	0%		2.1%	**-**
Articulated Trucks	0	2	0	0		2	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	**-**
Articulated Trucks %	0%	0.1%	0%	0%		0.1%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	-	14	-	-	-	-	-	13	-	-	-	-	-	12	-	-	-	-	-	11	-	**-**
Pedestrians%	-	-	-	-	28%		-	-	-	-	26%		-	-	-	-	24%		-	-	-	-	22%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	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%		**-**

Spectrum

Turning Movement Count
Location Name: DON MILLS RD & THE DONWAY
Date: Tue, Dec 20, 2022 Deployment Lead: Peter Ilias

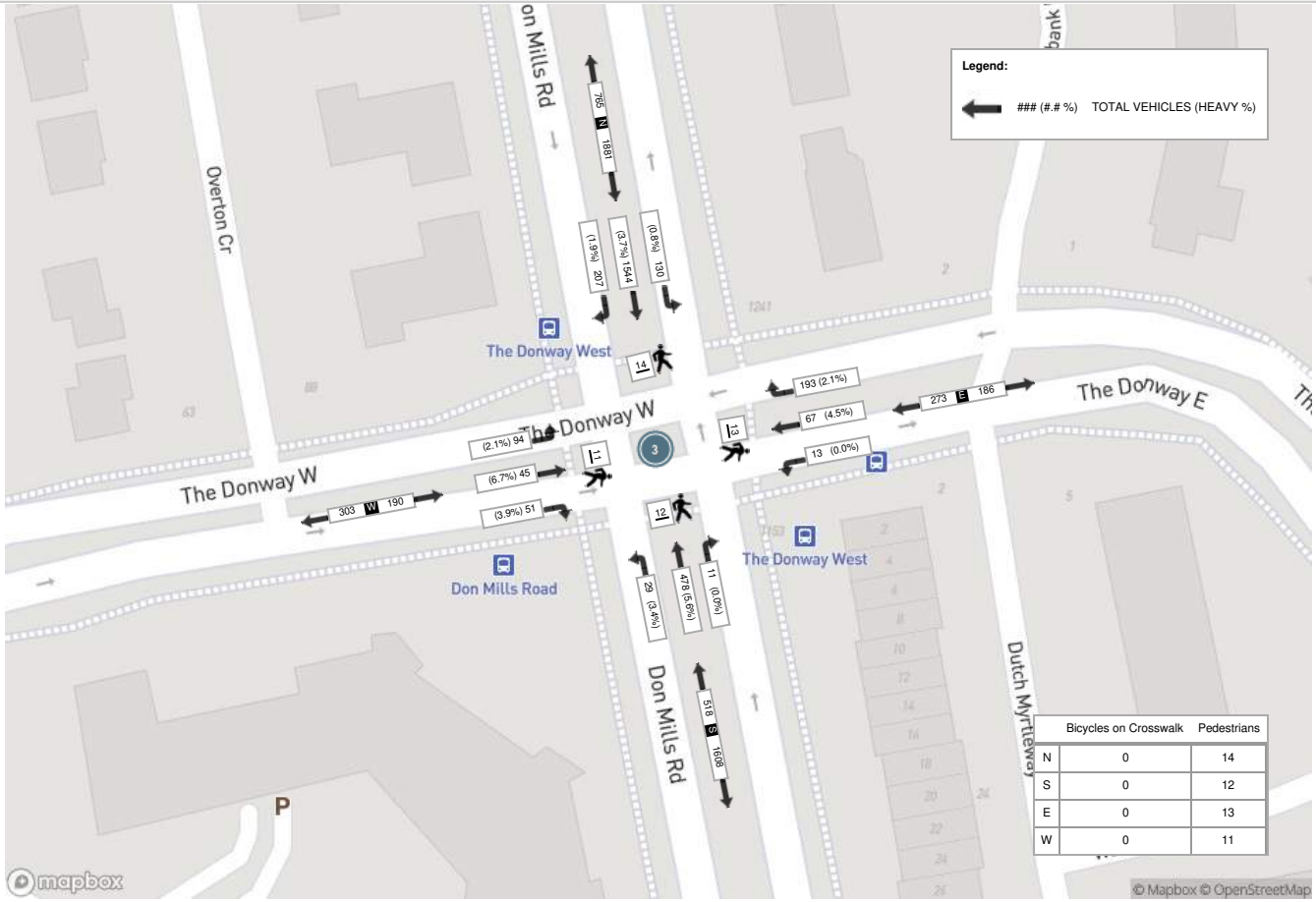
BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 05:00 PM - 06:00 PM Weather: Overcast Clouds (0.21 °C)

Start Time	N Approach DON MILLS RD						E Approach THE DONWAY E						S Approach DON MILLS RD						W Approach THE DONWAY E						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	
17:00:00	41	300	53	0	2	394	38	7	6	0	2	51	2	302	2	1	0	307	13	13	58	0	2	84	836
17:15:00	50	289	50	0	1	389	53	7	3	0	8	63	12	315	3	0	4	330	10	16	45	0	1	71	853
17:30:00	59	329	42	0	2	430	41	9	3	0	2	53	2	306	3	0	1	311	12	22	55	0	1	89	883
17:45:00	47	333	44	1	1	425	33	5	3	0	1	41	4	296	4	0	4	304	12	11	38	0	2	61	831
Grand Total	197	1251	189	1	6	1638	165	28	15	0	13	208	20	1219	12	1	9	1252	47	62	196	0	6	305	**3403**
Approach%	12%	76.4%	11.5%	0.1%		-	79.3%	13.5%	7.2%	0%		-	1.6%	97.4%	1%	0.1%		-	15.4%	20.3%	64.3%	0%		-	**-**
Totals %	5.8%	36.8%	5.6%	0%		48.1%	4.8%	0.8%	0.4%	0%		6.1%	0.6%	35.8%	0.4%	0%		36.8%	1.4%	1.8%	5.8%	0%		9%	**-**
PHF	0.83	0.94	0.89	0.25		0.95	0.78	0.78	0.63	0		0.83	0.42	0.97	0.75	0.25		0.95	0.9	0.7	0.84	0		0.86	**-**
Heavy	1	22	1	0		24	3	0	0	0		3	0	36	0	0		36	1	2	3	0		6	**-**
Heavy %	0.5%	1.8%	0.5%	0%		1.5%	1.8%	0%	0%	0%		1.4%	0%	3%	0%	0%		2.9%	2.1%	3.2%	1.5%	0%		2%	**-**
Lights	196	1229	188	1		1614	162	28	15	0		205	20	1183	12	1		1216	46	60	193	0		299	**-**
Lights %	99.5%	98.2%	99.5%	100%		98.5%	98.2%	100%	100%	0%		98.6%	100%	97%	100%	100%		97.1%	97.9%	96.8%	98.5%	0%		98%	**-**
Single-Unit Trucks	1	7	1	0		9	3	0	0	0		3	0	17	0	0		17	1	0	2	0		3	**-**
Single-Unit Trucks %	0.5%	0.6%	0.5%	0%		0.5%	1.8%	0%	0%	0%		1.4%	0%	1.4%	0%	0%		1.4%	2.1%	0%	1%	0%		1%	**-**
Buses	0	15	0	0		15	0	0	0	0		0	0	19	0	0		19	0	2	1	0		3	**-**
Buses %	0%	1.2%	0%	0%		0.9%	0%	0%	0%	0%		0%	0%	1.6%	0%	0%		1.5%	0%	3.2%	0.5%	0%		1%	**-**
Articulated Trucks	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	**-**
Articulated Trucks %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	-	6	-	-	-	-	-	13	-	-	-	-	-	8	-	-	-	-	-	6	-	**-**
Pedestrians%	-	-	-	-	17.6%		-	-	-	-	38.2%		-	-	-	-	23.5%		-	-	-	-	17.6%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	2.9%		-	-	-	-	0%		**-**
Bicycles on Road	0	1	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%		**-**

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

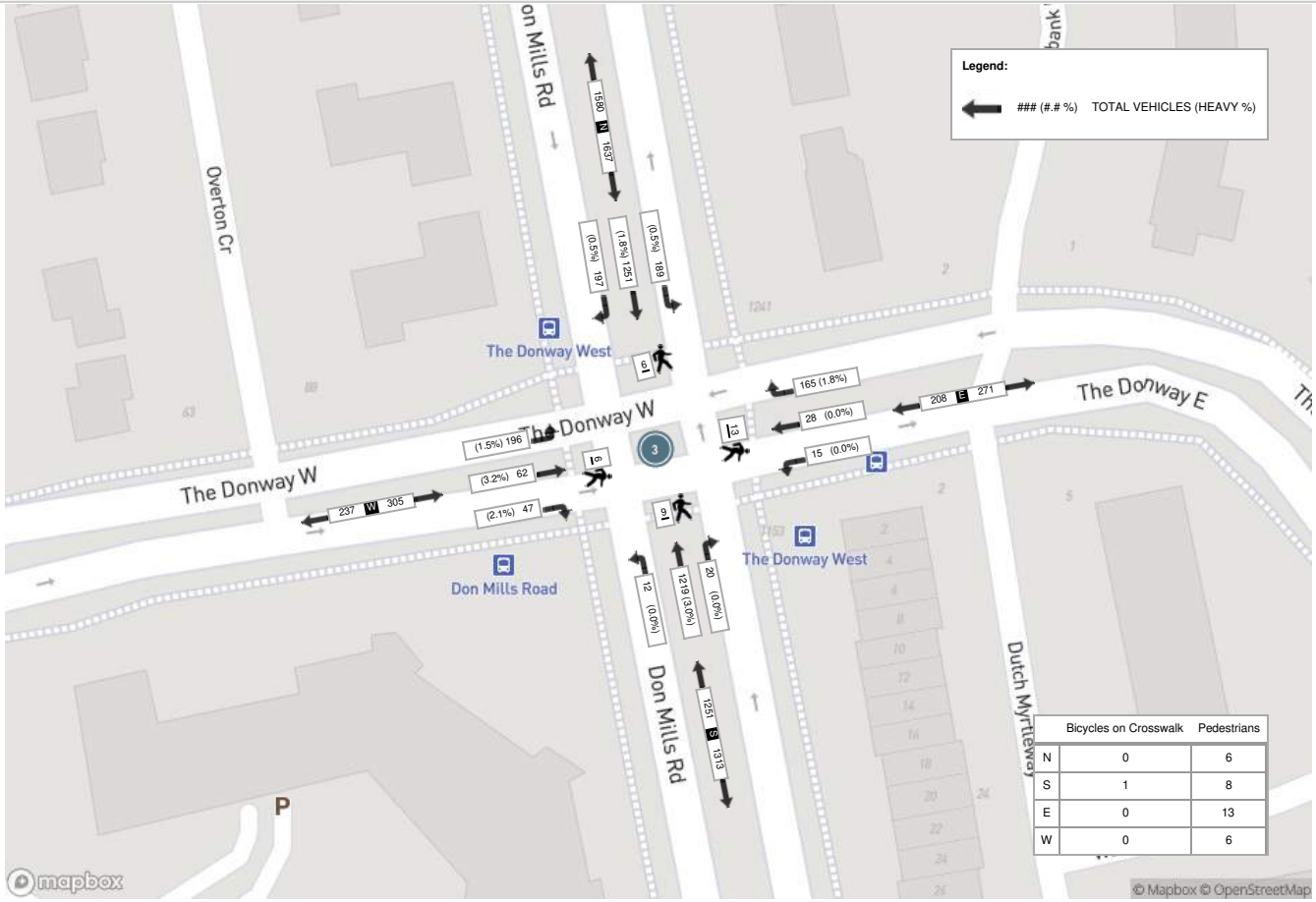
Peak Hour: 08:30 AM - 09:30 AM **Weather: Broken Clouds (-4.7 °C)**



	Bicycles on Crosswalk	Pedestrians
N	0	14
S	0	12
E	0	13
W	0	11

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 05:00 PM - 06:00 PM **Weather: Overcast Clouds (0.21 °C)**



	Bicycles on Crosswalk	Pedestrians
N	0	6
S	1	8
E	0	13
W	0	6

Spectrum

Turning Movement Count
Location Name: LAWRENCE AVE E & DON MILLS RD
Date: Sun, Dec 18, 2022 Deployment Lead: Peter Ilias

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Turning Movement Count (2 . LAWRENCE AVE E & DON MILLS RD)

Start Time	N Approach DON MILLS RD						E Approach LAWRENCE AVE E						S Approach DON MILLS RD						W Approach LAWRENCE AVE E						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		
11:00:00	16	75	17	2	15	110	10	98	38	0	9	146	20	99	22	0	16	141	20	90	9	0	19	119	516	
11:15:00	19	92	18	0	13	129	4	112	43	0	8	159	33	84	25	1	16	143	19	105	15	0	14	139	570	
11:30:00	24	82	16	0	24	122	21	110	42	2	11	175	22	73	24	0	23	119	22	111	11	0	14	144	560	
11:45:00	13	73	25	1	13	112	11	132	45	0	6	188	41	95	27	3	11	166	23	104	7	2	15	136	602	2248
12:00:00	10	93	22	0	27	125	11	115	50	0	21	176	25	82	16	1	12	124	28	118	18	0	17	164	589	2321
12:15:00	16	86	24	0	17	126	19	118	50	0	17	187	27	73	22	0	21	122	25	102	11	1	15	139	574	2325
12:30:00	15	96	18	0	24	129	14	113	48	1	15	176	37	95	33	1	11	166	16	109	11	0	12	136	607	2372
12:45:00	10	101	24	0	14	135	16	106	42	0	16	164	37	91	23	0	29	151	21	105	11	0	11	137	587	2357
13:00:00	13	92	26	0	19	131	26	159	45	0	14	230	39	127	21	2	19	189	42	145	11	0	14	198	748	2516
13:15:00	8	140	34	1	13	183	24	132	56	0	14	212	39	112	36	0	29	187	36	130	15	0	15	181	763	2705
13:30:00	21	135	24	0	10	180	16	144	51	0	16	211	52	131	25	1	20	209	22	117	14	0	21	153	753	2851
13:45:00	23	173	35	0	9	231	14	111	48	0	6	173	55	185	41	0	25	281	35	158	19	1	13	213	898	3162
14:00:00	14	181	35	0	15	230	24	127	62	1	15	214	47	184	38	1	29	270	43	171	18	1	32	233	947	3361
14:15:00	13	172	51	0	13	236	24	130	47	0	12	201	59	187	39	0	19	285	38	198	17	0	30	253	975	3573
14:30:00	17	203	52	0	19	272	18	128	52	1	17	199	43	231	33	0	39	307	35	173	24	0	20	232	1010	3830
14:45:00	25	233	62	0	21	320	22	139	50	0	10	211	58	195	33	0	17	286	30	171	17	0	26	218	1035	3967
Grand Total	257	2027	483	4	266	2771	274	1974	769	5	207	3022	634	2044	458	10	336	3146	455	2107	228	5	288	2795	**11734**	-
Approach%	9.3%	73.2%	17.4%	0.1%		-	9.1%	65.3%	25.4%	0.2%		-	20.2%	65%	14.6%	0.3%		-	16.3%	75.4%	8.2%	0.2%		-	-	-
Totals %	2.2%	17.3%	4.1%	0%		23.6%	2.3%	16.8%	6.6%	0%		25.8%	5.4%	17.4%	3.9%	0.1%		26.8%	3.9%	18%	1.9%	0%		23.8%	-	-
Heavy	1	51	4	0		-	0	37	2	0		-	2	56	4	0		-	5	35	2	0		-	-	-
Heavy %	0.4%	2.5%	0.8%	0%		-	0%	1.9%	0.3%	0%		-	0.3%	2.7%	0.9%	0%		-	1.1%	1.7%	0.9%	0%		-	-	-
Bicycles	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-
Bicycle %	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-	-	-

Spectrum

Turning Movement Count
Location Name: LAWRENCE AVE E & DON MILLS RD
Date: Sun, Dec 18, 2022 Deployment Lead: Peter Ilias

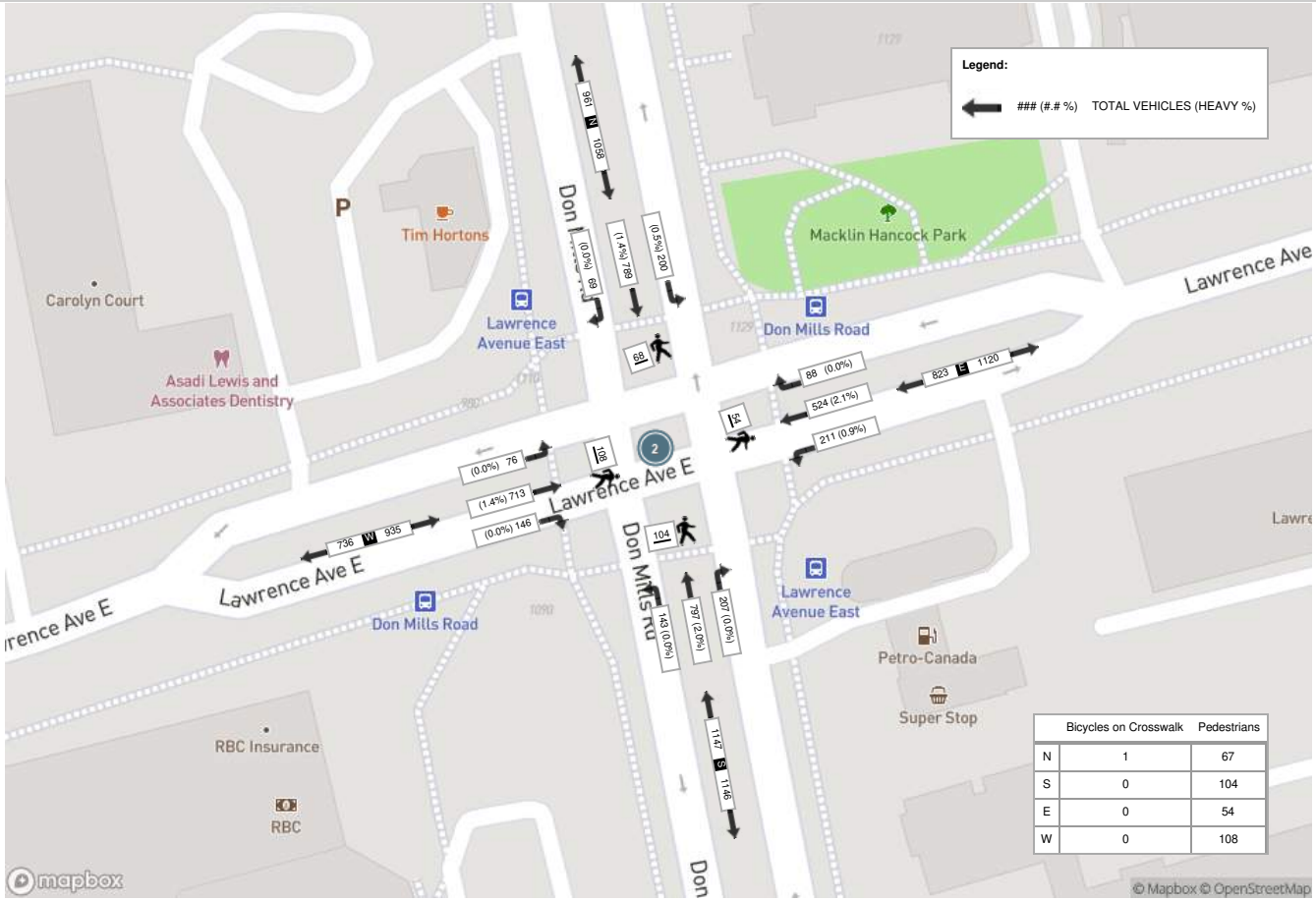
BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 02:00 PM - 03:00 PM Weather: Overcast Clouds (-0.34 °C)

Start Time	N Approach DON MILLS RD						E Approach LAWRENCE AVE E						S Approach DON MILLS RD						W Approach LAWRENCE AVE E						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	
14:00:00	14	181	35	0	15	230	24	127	62	1	15	214	47	184	38	1	29	270	43	171	18	1	32	233	947
14:15:00	13	172	51	0	13	236	24	130	47	0	12	201	59	187	39	0	19	285	38	198	17	0	30	253	975
14:30:00	17	203	52	0	19	272	18	128	52	1	17	199	43	231	33	0	39	307	35	173	24	0	20	232	1010
14:45:00	25	233	62	0	21	320	22	139	50	0	10	211	58	195	33	0	17	286	30	171	17	0	26	218	1035
Grand Total	69	789	200	0	68	1058	88	524	211	2	54	825	207	797	143	1	104	1148	146	713	76	1	108	936	**3967**
Approach%	6.5%	74.6%	18.9%	0%		-	10.7%	63.5%	25.6%	0.2%		-	18%	69.4%	12.5%	0.1%		-	15.6%	76.2%	8.1%	0.1%		-	**-**
Totals %	1.7%	19.9%	5%	0%		26.7%	2.2%	13.2%	5.3%	0.1%		20.8%	5.2%	20.1%	3.6%	0%		28.9%	3.7%	18%	1.9%	0%		23.6%	**-**
PHF	0.69	0.85	0.81	0		0.83	0.92	0.94	0.85	0.5		0.96	0.88	0.86	0.92	0.25		0.93	0.85	0.9	0.79	0.25		0.92	**-**
Heavy	0	11	1	0		12	0	11	2	0		13	0	16	0	0		16	0	10	0	0		10	**-**
Heavy %	0%	1.4%	0.5%	0%		1.1%	0%	2.1%	0.9%	0%		1.6%	0%	2%	0%	0%		1.4%	0%	1.4%	0%	0%		1.1%	**-**
Lights	69	778	199	0		1046	88	513	209	2		812	207	781	143	1		1132	146	703	76	1		926	**-**
Lights %	100%	98.6%	99.5%	0%		98.9%	100%	97.9%	99.1%	100%		98.4%	100%	98%	100%	100%		98.6%	100%	98.6%	100%	100%		98.9%	**-**
Single-Unit Trucks	0	0	0	0		0	0	4	1	0		5	0	3	0	0		3	0	3	0	0		3	**-**
Single-Unit Trucks %	0%	0%	0%	0%		0%	0%	0.8%	0.5%	0%		0.6%	0%	0.4%	0%	0%		0.3%	0%	0.4%	0%	0%		0.3%	**-**
Buses	0	11	1	0		12	0	7	0	0		7	0	13	0	0		13	0	7	0	0		7	**-**
Buses %	0%	1.4%	0.5%	0%		1.1%	0%	1.3%	0%	0%		0.8%	0%	1.6%	0%	0%		1.1%	0%	1%	0%	0%		0.7%	**-**
Articulated Trucks	0	0	0	0		0	0	0	1	0		1	0	0	0	0		0	0	0	0	0		0	**-**
Articulated Trucks %	0%	0%	0%	0%		0%	0%	0%	0.5%	0%		0.1%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	-	67	-	-	-	-	-	54	-	-	-	-	-	104	-	-	-	-	-	108	-	**-**
Pedestrians%	-	-	-	-	20.1%		-	-	-	-	16.2%		-	-	-	-	31.1%		-	-	-	-	32.3%		**-**
Bicycles on Crosswalk	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	0.3%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		**-**

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 02:00 PM - 03:00 PM **Weather: Overcast Clouds (-0.34 °C)**



	Bicycles on Crosswalk	Pedestrians
N	1	67
S	0	104
E	0	54
W	0	108

Spectrum

Turning Movement Count
Location Name: LAWRENCE AVE E & DON MILLS RD
Date: Tue, Dec 20, 2022 Deployment Lead: Peter Ilias

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Turning Movement Count (2 . LAWRENCE AVE E & DON MILLS RD)

Start Time	N Approach DON MILLS RD						E Approach LAWRENCE AVE E						S Approach DON MILLS RD						W Approach LAWRENCE AVE E						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		
07:30:00	12	170	35	1	20	218	13	186	53	0	12	252	15	62	24	0	17	101	13	116	5	0	18	134	705	
07:45:00	19	231	42	0	26	292	12	173	45	0	14	230	16	81	22	0	20	119	13	126	9	0	28	148	789	
08:00:00	20	247	57	1	7	325	17	173	31	0	17	221	22	106	22	0	21	150	23	159	10	0	17	192	888	
08:15:00	27	230	42	0	37	299	14	223	60	0	24	297	17	82	33	0	44	132	30	169	23	0	42	222	950	3332
08:30:00	25	323	41	0	31	389	11	244	50	0	25	305	35	86	34	0	39	155	41	204	20	0	44	265	1114	3741
08:45:00	23	362	33	0	44	418	17	243	61	0	32	321	33	138	45	0	54	216	34	173	17	0	43	224	1179	4131
09:00:00	28	364	44	0	20	436	12	226	60	0	19	298	23	103	36	1	31	163	28	163	11	4	26	206	1103	4346
09:15:00	40	303	33	1	14	377	16	192	50	0	17	258	18	79	31	0	25	128	27	135	12	0	31	174	937	4333
BREAK																										
16:00:00	22	203	54	0	33	279	16	162	42	0	26	220	112	279	32	2	39	425	30	274	13	0	57	317	1241	
16:15:00	32	232	39	0	17	303	15	129	37	0	22	181	94	303	30	2	44	429	25	267	23	1	25	316	1229	
16:30:00	22	218	48	1	30	289	17	168	46	0	24	231	106	264	38	1	43	409	26	246	31	0	41	303	1232	
16:45:00	20	212	59	0	28	291	20	160	41	0	15	221	99	229	43	0	36	371	25	278	24	0	34	327	1210	4912
17:00:00	33	223	61	0	16	317	18	131	41	1	15	191	125	285	33	0	34	443	17	228	20	1	44	266	1217	4888
17:15:00	24	234	48	0	21	306	25	127	38	0	25	190	123	305	38	0	43	466	19	233	17	2	34	271	1233	4892
17:30:00	20	265	59	0	32	344	24	142	42	0	24	208	97	265	32	1	41	395	29	235	9	0	30	273	1220	4880
17:45:00	18	234	48	0	19	300	27	130	37	0	15	194	96	249	35	0	38	380	33	280	20	2	37	335	1209	4879
Grand Total	385	4051	743	4	395	5183	274	2809	734	1	326	3818	1031	2916	528	7	569	4482	413	3286	264	10	551	3973	**17456**	-
Approach%	7.4%	78.2%	14.3%	0.1%		-	7.2%	73.6%	19.2%	0%		-	23%	65.1%	11.8%	0.2%		-	10.4%	82.7%	6.6%	0.3%		-	-	-
Totals %	2.2%	23.2%	4.3%	0%		29.7%	1.6%	16.1%	4.2%	0%		21.9%	5.9%	16.7%	3%	0%		25.7%	2.4%	18.8%	1.5%	0.1%		22.8%	-	-
Heavy	6	141	10	0		-	8	104	22	0		-	27	110	9	0		-	7	120	7	0		-	-	-
Heavy %	1.6%	3.5%	1.3%	0%		-	2.9%	3.7%	3%	0%		-	2.6%	3.8%	1.7%	0%		-	1.7%	3.7%	2.7%	0%		-	-	-
Bicycles	0	0	0	0		-	0	1	0	0		-	0	1	0	0		-	0	0	0	0		-	-	-
Bicycle %	0%	0%	0%	0%		-	0%	0%	0%	0%		-	0%	0%	0%	0%		-	0%	0%	0%	0%		-	-	-

Spectrum

Turning Movement Count
Location Name: LAWRENCE AVE E & DON MILLS RD
Date: Tue, Dec 20, 2022 Deployment Lead: Peter Ilias

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 08:15 AM - 09:15 AM Weather: Broken Clouds (-4.7 °C)

Start Time	N Approach DON MILLS RD						E Approach LAWRENCE AVE E						S Approach DON MILLS RD						W Approach LAWRENCE AVE E						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	
08:15:00	27	230	42	0	37	299	14	223	60	0	24	297	17	82	33	0	44	132	30	169	23	0	42	222	950
08:30:00	25	323	41	0	31	389	11	244	50	0	25	305	35	86	34	0	39	155	41	204	20	0	44	265	1114
08:45:00	23	362	33	0	44	418	17	243	61	0	32	321	33	138	45	0	54	216	34	173	17	0	43	224	1179
09:00:00	28	364	44	0	20	436	12	226	60	0	19	298	23	103	36	1	31	163	28	163	11	4	26	206	1103
Grand Total	103	1279	160	0	132	1542	54	936	231	0	100	1221	108	409	148	1	168	666	133	709	71	4	155	917	**4346**
Approach%	6.7%	82.9%	10.4%	0%		-	4.4%	76.7%	18.9%	0%		-	16.2%	61.4%	22.2%	0.2%		-	14.5%	77.3%	7.7%	0.4%		-	**-**
Totals %	2.4%	29.4%	3.7%	0%		35.5%	1.2%	21.5%	5.3%	0%		28.1%	2.5%	9.4%	3.4%	0%		15.3%	3.1%	16.3%	1.6%	0.1%		21.1%	**-**
PHF	0.92	0.88	0.91	0		0.88	0.79	0.96	0.95	0		0.95	0.77	0.74	0.82	0.25		0.77	0.81	0.87	0.77	0.25		0.87	**-**
Heavy	4	56	4	0		64	1	36	9	0		46	7	26	3	0		36	3	37	4	0		44	**-**
Heavy %	3.9%	4.4%	2.5%	0%		4.2%	1.9%	3.8%	3.9%	0%		3.8%	6.5%	6.4%	2%	0%		5.4%	2.3%	5.2%	5.6%	0%		4.8%	**-**
Lights	99	1223	156	0		1478	53	900	222	0		1175	101	383	145	1		630	130	672	67	4		873	**-**
Lights %	96.1%	95.6%	97.5%	0%		95.8%	98.1%	96.2%	96.1%	0%		96.2%	93.5%	93.6%	98%	100%		94.6%	97.7%	94.8%	94.4%	100%		95.2%	**-**
Single-Unit Trucks	2	32	4	0		38	1	14	8	0		23	4	5	2	0		11	0	5	2	0		7	**-**
Single-Unit Trucks %	1.9%	2.5%	2.5%	0%		2.5%	1.9%	1.5%	3.5%	0%		1.9%	3.7%	1.2%	1.4%	0%		1.7%	0%	0.7%	2.8%	0%		0.8%	**-**
Buses	1	20	0	0		21	0	21	1	0		22	3	21	1	0		25	1	29	2	0		32	**-**
Buses %	1%	1.6%	0%	0%		1.4%	0%	2.2%	0.4%	0%		1.8%	2.8%	5.1%	0.7%	0%		3.8%	0.8%	4.1%	2.8%	0%		3.5%	**-**
Articulated Trucks	1	4	0	0		5	0	1	0	0		1	0	0	0	0		0	2	3	0	0		5	**-**
Articulated Trucks %	1%	0.3%	0%	0%		0.3%	0%	0.1%	0%	0%		0.1%	0%	0%	0%	0%		0%	1.5%	0.4%	0%	0%		0.5%	**-**
Pedestrians	-	-	-	-	132	-	-	-	-	-	100	-	-	-	-	-	168	-	-	-	-	-	155	-	**-**
Pedestrians%	-	-	-	-	23.8%		-	-	-	-	18%		-	-	-	-	30.3%		-	-	-	-	27.9%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	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%		**-**

Spectrum

Turning Movement Count
Location Name: LAWRENCE AVE E & DON MILLS RD
Date: Tue, Dec 20, 2022 Deployment Lead: Peter Ilias

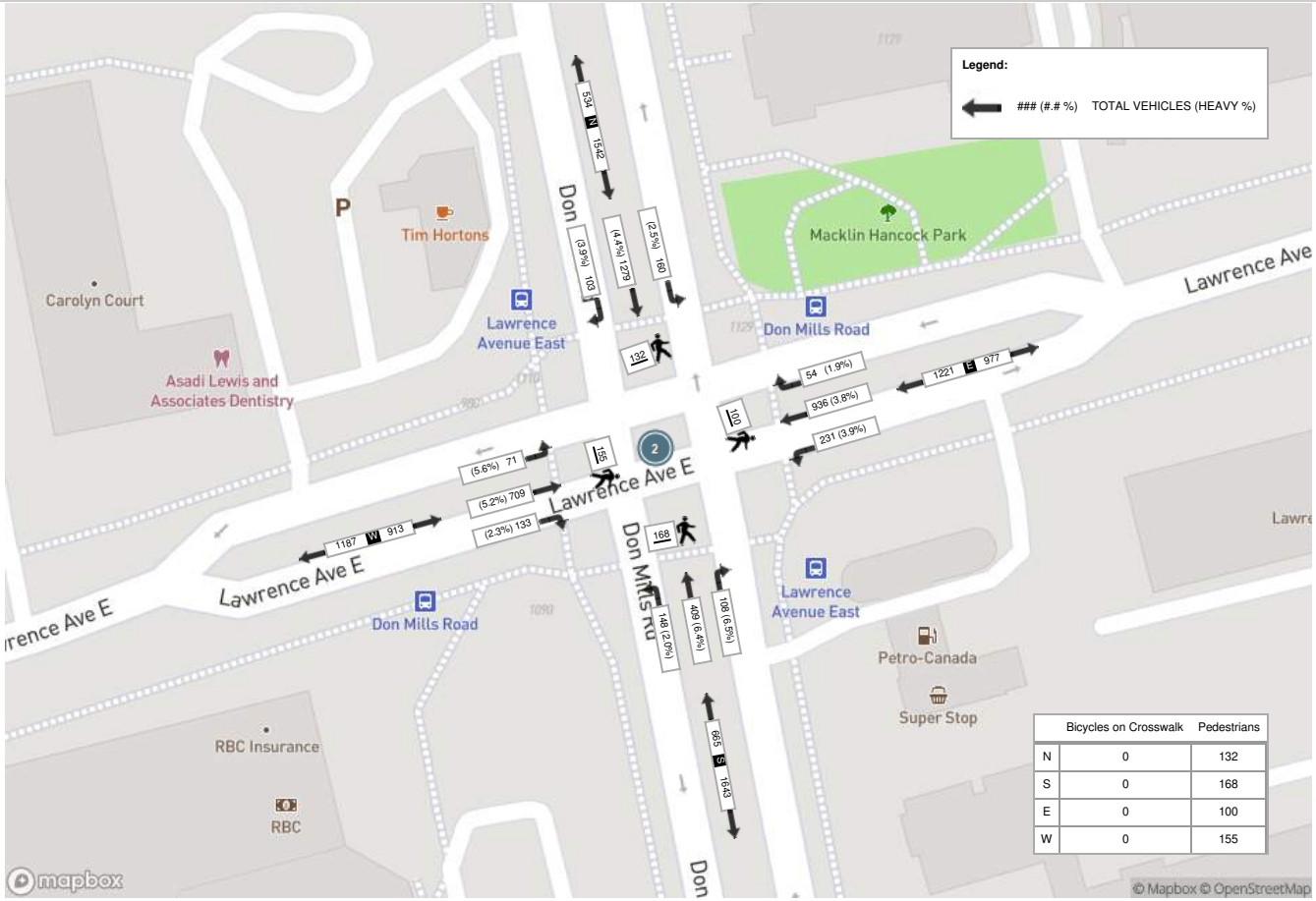
BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 04:00 PM - 05:00 PM Weather: Overcast Clouds (0.21 °C)

Start Time	N Approach DON MILLS RD						E Approach LAWRENCE AVE E						S Approach DON MILLS RD						W Approach LAWRENCE AVE E						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	
16:00:00	22	203	54	0	33	279	16	162	42	0	26	220	112	279	32	2	39	425	30	274	13	0	57	317	1241
16:15:00	32	232	39	0	17	303	15	129	37	0	22	181	94	303	30	2	44	429	25	267	23	1	25	316	1229
16:30:00	22	218	48	1	30	289	17	168	46	0	24	231	106	264	38	1	43	409	26	246	31	0	41	303	1232
16:45:00	20	212	59	0	28	291	20	160	41	0	15	221	99	229	43	0	36	371	25	278	24	0	34	327	1210
Grand Total	96	865	200	1	108	1162	68	619	166	0	87	853	411	1075	143	5	162	1634	106	1065	91	1	157	1263	**4912**
Approach%	8.3%	74.4%	17.2%	0.1%		-	8%	72.6%	19.5%	0%		-	25.2%	65.8%	8.8%	0.3%		-	8.4%	84.3%	7.2%	0.1%		-	**-**
Totals %	2%	17.6%	4.1%	0%		23.7%	1.4%	12.6%	3.4%	0%		17.4%	8.4%	21.9%	2.9%	0.1%		33.3%	2.2%	21.7%	1.9%	0%		25.7%	**-**
PHF	0.75	0.93	0.85	0.25		0.96	0.85	0.92	0.9	0		0.92	0.92	0.89	0.83	0.63		0.95	0.88	0.96	0.73	0.25		0.97	**-**
Heavy	1	24	1	0		26	1	19	0	0		20	10	27	2	0		39	1	29	2	0		32	**-**
Heavy %	1%	2.8%	0.5%	0%		2.2%	1.5%	3.1%	0%	0%		2.3%	2.4%	2.5%	1.4%	0%		2.4%	0.9%	2.7%	2.2%	0%		2.5%	**-**
Lights	95	841	199	1		1136	67	600	166	0		833	401	1048	141	5		1595	105	1036	89	1		1231	**-**
Lights %	99%	97.2%	99.5%	100%		97.8%	98.5%	96.9%	100%	0%		97.7%	97.6%	97.5%	98.6%	100%		97.6%	99.1%	97.3%	97.8%	100%		97.5%	**-**
Single-Unit Trucks	1	2	1	0		4	1	5	0	0		6	9	8	2	0		19	1	8	1	0		10	**-**
Single-Unit Trucks %	1%	0.2%	0.5%	0%		0.3%	1.5%	0.8%	0%	0%		0.7%	2.2%	0.7%	1.4%	0%		1.2%	0.9%	0.8%	1.1%	0%		0.8%	**-**
Buses	0	21	0	0		21	0	14	0	0		14	1	19	0	0		20	0	21	1	0		22	**-**
Buses %	0%	2.4%	0%	0%		1.8%	0%	2.3%	0%	0%		1.6%	0.2%	1.8%	0%	0%		1.2%	0%	2%	1.1%	0%		1.7%	**-**
Articulated Trucks	0	1	0	0		1	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	**-**
Articulated Trucks %	0%	0.1%	0%	0%		0.1%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	-	108	-	-	-	-	-	87	-	-	-	-	-	162	-	-	-	-	-	157	-	**-**
Pedestrians%	-	-	-	-	21%		-	-	-	-	16.9%		-	-	-	-	31.5%		-	-	-	-	30.5%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	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%		**-**

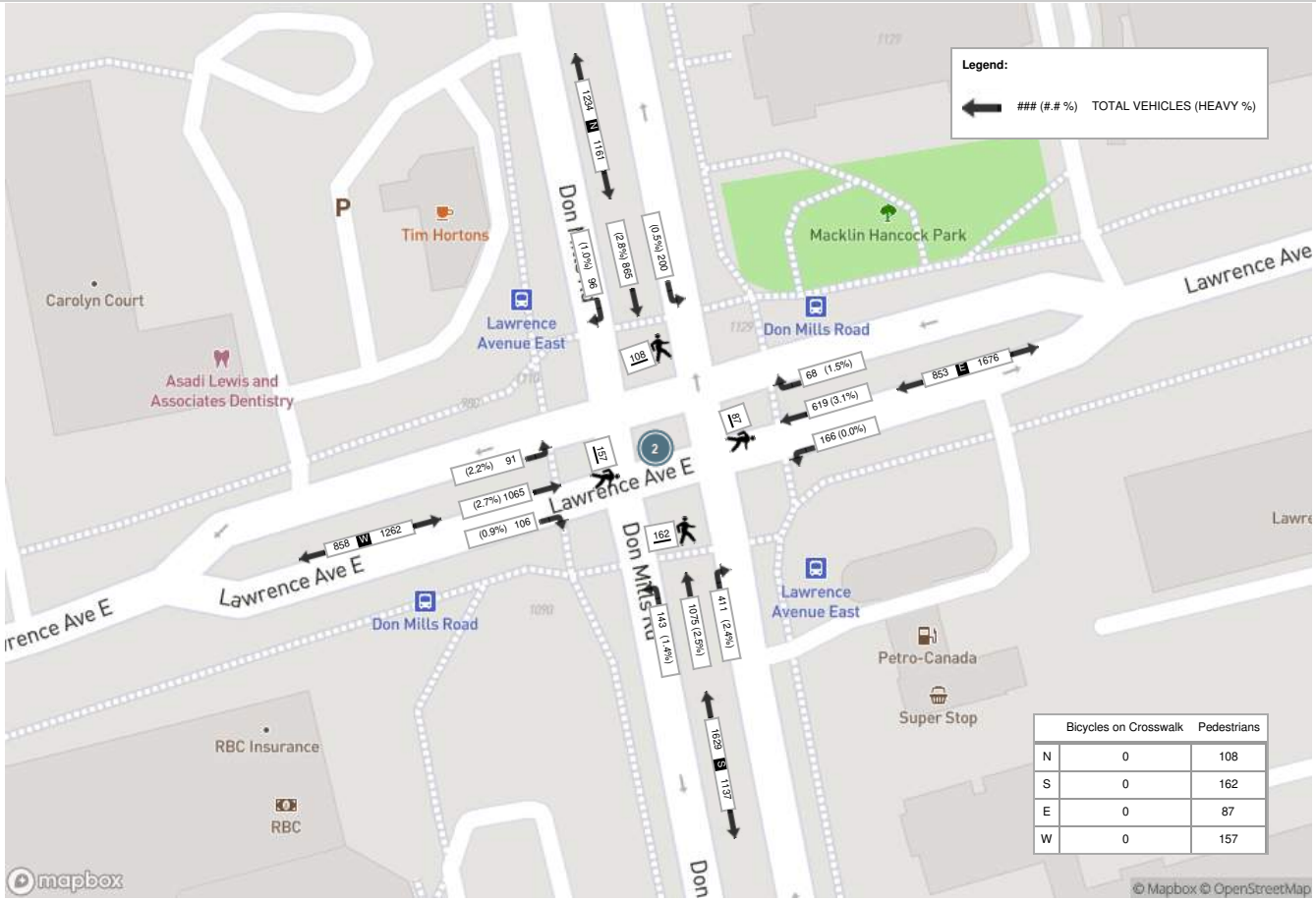
BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 08:15 AM - 09:15 AM **Weather: Broken Clouds (-4.7 °C)**



	Bicycles on Crosswalk	Pedestrians
N	0	132
S	0	168
E	0	100
W	0	155

Peak Hour: 04:00 PM - 05:00 PM **Weather: Overcast Clouds (0.21 °C)**



	Bicycles on Crosswalk	Pedestrians
N	0	108
S	0	162
E	0	87
W	0	157

Spectrum

Turning Movement Count
Location Name: LAWRENCE AVE E & THE DONWAY W
Date: Sun, Dec 18, 2022 Deployment Lead: Peter Ilias

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Turning Movement Count (1 . LAWRENCE AVE E & THE DONWAY W)

Start Time	N Approach THE DONWAY W						E Approach LAWRENCE AVE E						S Approach THE DONWAY W						W Approach LAWRENCE AVE E						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		
11:00:00	15	17	16	0	0	48	11	59	25	0	13	95	18	10	29	0	8	57	34	76	25	0	2	135	335	
11:15:00	10	15	20	0	7	45	12	66	27	0	17	105	28	11	27	0	3	66	31	78	13	0	5	122	338	
11:30:00	26	20	11	0	8	57	8	83	26	0	11	117	26	14	33	0	2	73	22	93	15	0	5	130	377	
11:45:00	18	12	12	0	4	42	6	100	29	0	11	135	30	21	37	0	9	88	25	95	13	0	5	133	398	1448
12:00:00	16	17	16	0	3	49	12	62	22	2	10	98	38	19	48	1	6	106	27	87	11	0	4	125	378	1491
12:15:00	18	19	15	0	5	52	10	79	24	0	12	113	30	14	33	0	8	77	28	84	12	0	7	124	366	1519
12:30:00	22	14	22	0	1	58	18	80	29	0	9	127	34	20	36	0	10	90	36	69	13	0	1	118	393	1535
12:45:00	16	20	6	0	3	42	10	74	23	0	14	107	32	22	33	0	6	87	35	99	17	0	5	151	387	1524
13:00:00	23	19	16	0	6	58	12	115	24	0	19	151	36	29	32	0	4	97	49	101	21	0	1	171	477	1623
13:15:00	25	19	20	0	15	64	13	97	33	0	22	143	51	20	47	0	10	118	34	117	19	0	9	170	495	1752
13:30:00	20	19	24	0	8	63	14	99	26	1	29	140	28	25	49	0	13	102	55	82	18	0	5	155	460	1819
13:45:00	28	10	27	0	13	65	13	89	41	0	19	143	47	24	51	0	21	122	39	123	23	0	8	185	515	1947
14:00:00	22	26	16	0	15	64	9	131	19	0	37	159	42	22	49	0	20	113	59	154	15	0	18	228	564	2034
14:15:00	23	22	21	0	22	66	10	102	25	0	45	137	41	20	54	0	12	115	53	145	14	0	11	212	530	2069
14:30:00	17	17	20	0	16	54	13	108	25	0	20	146	38	24	45	0	23	107	49	163	24	0	8	236	543	2152
14:45:00	28	30	20	0	8	78	8	135	19	0	35	162	36	34	51	0	17	121	46	155	19	0	12	220	581	2218
Grand Total	327	296	282	0	134	905	179	1479	417	3	323	2078	555	329	654	1	172	1539	622	1721	272	0	106	2615	**7137**	-
Approach%	36.1%	32.7%	31.2%	0%		-	8.6%	71.2%	20.1%	0.1%		-	36.1%	21.4%	42.5%	0.1%		-	23.8%	65.8%	10.4%	0%		-	**-**	-
Totals %	4.6%	4.1%	4%	0%		12.7%	2.5%	20.7%	5.8%	0%		29.1%	7.8%	4.6%	9.2%	0%		21.6%	8.7%	24.1%	3.8%	0%		36.6%	**-**	-
Heavy	2	2	1	0		-	1	36	2	0		-	2	1	10	0		-	4	37	12	0		-	**-**	-
Heavy %	0.6%	0.7%	0.4%	0%		-	0.6%	2.4%	0.5%	0%		-	0.4%	0.3%	1.5%	0%		-	0.6%	2.1%	4.4%	0%		-	**-**	-
Bicycles	0	1	0	0		-	0	1	0	0		-	0	0	0	0		-	0	1	0	0		-	**-**	-
Bicycle %	0%	0.3%	0%	0%		-	0%	0.1%	0%	0%		-	0%	0%	0%	0%		-	0%	0.1%	0%	0%		-	**-**	-

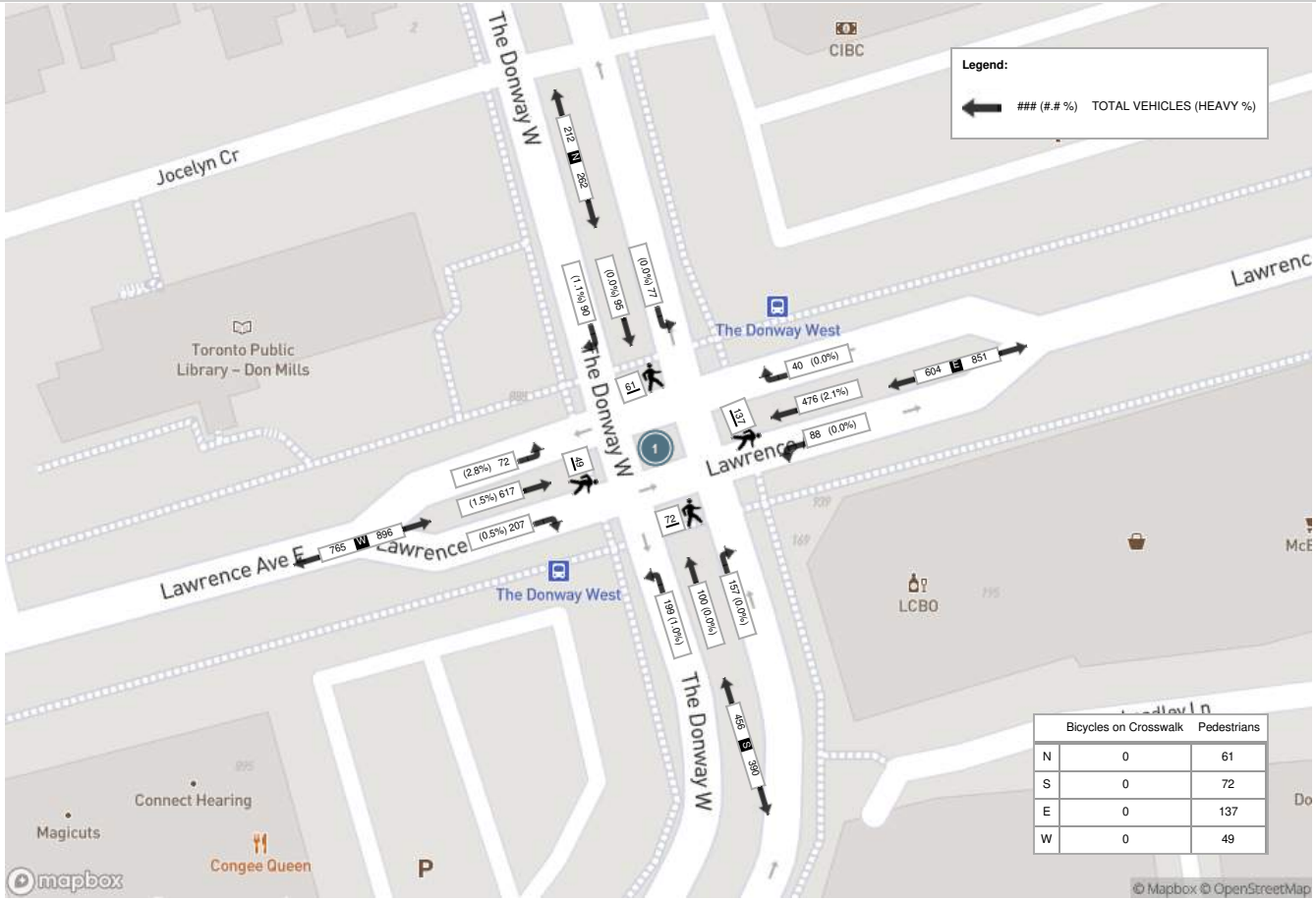
BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 02:00 PM - 03:00 PM Weather: Overcast Clouds (-0.34 °C)

Start Time	N Approach THE DONWAY W						E Approach LAWRENCE AVE E						S Approach THE DONWAY W						W Approach LAWRENCE AVE E						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	
14:00:00	22	26	16	0	15	64	9	131	19	0	37	159	42	22	49	0	20	113	59	154	15	0	18	228	564
14:15:00	23	22	21	0	22	66	10	102	25	0	45	137	41	20	54	0	12	115	53	145	14	0	11	212	530
14:30:00	17	17	20	0	16	54	13	108	25	0	20	146	38	24	45	0	23	107	49	163	24	0	8	236	543
14:45:00	28	30	20	0	8	78	8	135	19	0	35	162	36	34	51	0	17	121	46	155	19	0	12	220	581
Grand Total	90	95	77	0	61	262	40	476	88	0	137	604	157	100	199	0	72	456	207	617	72	0	49	896	**2218**
Approach%	34.4%	36.3%	29.4%	0%		-	6.6%	78.8%	14.6%	0%		-	34.4%	21.9%	43.6%	0%		-	23.1%	68.9%	8%	0%		-	**-**
Totals %	4.1%	4.3%	3.5%	0%		11.8%	1.8%	21.5%	4%	0%		27.2%	7.1%	4.5%	9%	0%		20.6%	9.3%	27.8%	3.2%	0%		40.4%	**-**
PHF	0.8	0.79	0.92	0		0.84	0.77	0.88	0.88	0		0.93	0.93	0.74	0.92	0		0.94	0.88	0.95	0.75	0		0.95	**-**
Heavy	1	0	0	0		1	0	10	0	0		10	0	0	2	0		2	1	9	2	0		12	**-**
Heavy %	1.1%	0%	0%	0%		0.4%	0%	2.1%	0%	0%		1.7%	0%	0%	1%	0%		0.4%	0.5%	1.5%	2.8%	0%		1.3%	**-**
Lights	89	95	77	0		261	40	466	88	0		594	157	100	197	0		454	206	608	70	0		884	**-**
Lights %	98.9%	100%	100%	0%		99.6%	100%	97.9%	100%	0%		98.3%	100%	100%	99%	0%		99.6%	99.5%	98.5%	97.2%	0%		98.7%	**-**
Single-Unit Trucks	1	0	0	0		1	0	3	0	0		3	0	0	0	0		0	1	2	0	0		3	**-**
Single-Unit Trucks %	1.1%	0%	0%	0%		0.4%	0%	0.6%	0%	0%		0.5%	0%	0%	0%	0%		0%	0.5%	0.3%	0%	0%		0.3%	**-**
Buses	0	0	0	0		0	0	7	0	0		7	0	0	2	0		2	0	7	2	0		9	**-**
Buses %	0%	0%	0%	0%		0%	0%	1.5%	0%	0%		1.2%	0%	0%	1%	0%		0.4%	0%	1.1%	2.8%	0%		1%	**-**
Pedestrians	-	-	-	-	61	-	-	-	-	-	137	-	-	-	-	-	72	-	-	-	-	-	49	-	**-**
Pedestrians%	-	-	-	-	19.1%		-	-	-	-	42.9%		-	-	-	-	22.6%		-	-	-	-	15.4%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	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%		**-**

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 02:00 PM - 03:00 PM Weather: Overcast Clouds (-0.34 °C)



	Bicycles on Crosswalk	Pedestrians
N	0	61
S	0	72
E	0	137
W	0	49

Spectrum

Turning Movement Count
Location Name: LAWRENCE AVE E & THE DONWAY W
Date: Tue, Dec 20, 2022 Deployment Lead: Peter Ilias

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Turning Movement Count (1 . LAWRENCE AVE E & THE DONWAY W)

Start Time	N Approach THE DONWAY W						E Approach LAWRENCE AVE E						S Approach THE DONWAY W						W Approach LAWRENCE AVE E						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		
07:30:00	20	6	13	0	0	39	7	178	12	1	4	198	8	6	20	0	2	34	15	109	10	0	1	134	405	
07:45:00	28	15	15	0	3	58	7	173	11	0	4	191	18	6	35	0	3	59	28	121	11	0	1	160	468	
08:00:00	33	23	22	0	0	78	5	172	9	0	6	186	25	11	42	0	4	78	31	138	11	0	1	180	522	
08:15:00	51	18	17	0	3	86	16	224	8	0	5	248	22	11	50	0	2	83	31	185	19	0	1	235	652	2047
08:30:00	44	20	28	0	10	92	11	244	28	0	14	283	23	19	44	0	4	86	44	196	27	0	4	267	728	2370
08:45:00	35	45	21	0	4	101	18	220	30	0	12	268	23	17	30	0	9	70	53	173	32	0	8	258	697	2599
09:00:00	45	43	21	0	14	109	17	196	35	0	10	248	22	38	54	0	7	114	48	153	18	1	10	220	691	2768
09:15:00	42	41	33	0	6	116	20	157	28	0	12	205	26	16	17	0	9	59	45	113	22	0	8	180	560	2676
BREAK																										
16:00:00	34	32	28	0	12	94	18	129	40	0	32	187	48	40	63	0	11	151	57	223	40	0	8	320	752	
16:15:00	31	36	31	0	17	98	19	113	38	0	32	170	44	40	72	0	23	156	94	218	42	0	10	354	778	
16:30:00	41	38	14	0	11	93	17	130	32	0	26	179	43	33	67	0	15	143	63	240	41	0	12	344	759	
16:45:00	41	36	24	0	10	101	29	136	49	0	25	214	45	49	62	0	14	156	82	210	39	0	6	331	802	3091
17:00:00	28	43	20	0	18	91	18	108	40	0	37	166	36	45	67	0	10	148	69	194	29	0	6	292	697	3036
17:15:00	25	47	23	0	13	95	13	109	30	0	43	152	34	39	66	0	13	139	66	180	28	0	16	274	660	2918
17:30:00	26	39	15	1	17	81	17	124	33	0	23	174	40	30	53	0	12	123	56	208	36	0	9	300	678	2837
17:45:00	14	27	30	0	7	71	14	103	38	0	29	155	36	24	42	0	21	102	73	217	44	0	8	334	662	2697
Grand Total	538	509	355	1	145	1403	246	2516	461	1	314	3224	493	424	784	0	159	1701	855	2878	449	1	109	4183	**10511**	-
Approach%	38.3%	36.3%	25.3%	0.1%		-	7.6%	78%	14.3%	0%		-	29%	24.9%	46.1%	0%		-	20.4%	68.8%	10.7%	0%		-	-	-
Totals %	5.1%	4.8%	3.4%	0%		13.3%	2.3%	23.9%	4.4%	0%		30.7%	4.7%	4%	7.5%	0%		16.2%	8.1%	27.4%	4.3%	0%		39.8%	-	-
Heavy	7	7	6	0		-	2	104	5	0		-	6	5	21	0		-	10	119	18	0		-	-	-
Heavy %	1.3%	1.4%	1.7%	0%		-	0.8%	4.1%	1.1%	0%		-	1.2%	1.2%	2.7%	0%		-	1.2%	4.1%	4%	0%		-	-	-
Bicycles	1	0	0	0		-	0	1	0	0		-	0	0	0	0		-	0	0	0	0		-	-	-
Bicycle %	0.2%	0%	0%	0%		-	0%	0%	0%	0%		-	0%	0%	0%	0%		-	0%	0%	0%	0%		-	-	-

Peak Hour: 08:15 AM - 09:15 AM Weather: Broken Clouds (-4.7 °C)

Start Time	N Approach THE DONWAY W						E Approach LAWRENCE AVE E						S Approach THE DONWAY W						W Approach LAWRENCE AVE E						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	
08:15:00	51	18	17	0	3	86	16	224	8	0	5	248	22	11	50	0	2	83	31	185	19	0	1	235	652
08:30:00	44	20	28	0	10	92	11	244	28	0	14	283	23	19	44	0	4	86	44	196	27	0	4	267	728
08:45:00	35	45	21	0	4	101	18	220	30	0	12	268	23	17	30	0	9	70	53	173	32	0	8	258	697
09:00:00	45	43	21	0	14	109	17	196	35	0	10	248	22	38	54	0	7	114	48	153	18	1	10	220	691
Grand Total	175	126	87	0	31	388	62	884	101	0	41	1047	90	85	178	0	22	353	176	707	96	1	23	980	**2768**
Approach%	45.1%	32.5%	22.4%	0%		-	5.9%	84.4%	9.6%	0%		-	25.5%	24.1%	50.4%	0%		-	18%	72.1%	9.8%	0.1%		-	**-**
Totals %	6.3%	4.6%	3.1%	0%		14%	2.2%	31.9%	3.6%	0%		37.8%	3.3%	3.1%	6.4%	0%		12.8%	6.4%	25.5%	3.5%	0%		35.4%	**-**
PHF	0.86	0.7	0.78	0		0.89	0.86	0.91	0.72	0		0.92	0.98	0.56	0.82	0		0.77	0.83	0.9	0.75	0.25		0.92	**-**
Heavy	4	2	1	0		7	0	39	1	0		40	0	1	7	0		8	4	41	8	0		53	**-**
Heavy %	2.3%	1.6%	1.1%	0%		1.8%	0%	4.4%	1%	0%		3.8%	0%	1.2%	3.9%	0%		2.3%	2.3%	5.8%	8.3%	0%		5.4%	**-**
Lights	171	124	86	0		381	62	845	100	0		1007	90	84	171	0		345	172	666	88	1		927	**-**
Lights %	97.7%	98.4%	98.9%	0%		98.2%	100%	95.6%	99%	0%		96.2%	100%	98.8%	96.1%	0%		97.7%	97.7%	94.2%	91.7%	100%		94.6%	**-**
Single-Unit Trucks	0	1	1	0		2	0	14	1	0		15	0	0	3	0		3	2	5	1	0		8	**-**
Single-Unit Trucks %	0%	0.8%	1.1%	0%		0.5%	0%	1.6%	1%	0%		1.4%	0%	0%	1.7%	0%		0.8%	1.1%	0.7%	1%	0%		0.8%	**-**
Buses	4	1	0	0		5	0	23	0	0		23	0	1	4	0		5	2	32	7	0		41	**-**
Buses %	2.3%	0.8%	0%	0%		1.3%	0%	2.6%	0%	0%		2.2%	0%	1.2%	2.2%	0%		1.4%	1.1%	4.5%	7.3%	0%		4.2%	**-**
Articulated Trucks	0	0	0	0		0	0	2	0	0		2	0	0	0	0		0	0	4	0	0		4	**-**
Articulated Trucks %	0%	0%	0%	0%		0%	0%	0.2%	0%	0%		0.2%	0%	0%	0%	0%		0%	0%	0.6%	0%	0%		0.4%	**-**
Pedestrians	-	-	-	-	31	-	-	-	-	-	41	-	-	-	-	-	22	-	-	-	-	-	22	-	**-**
Pedestrians%	-	-	-	-	26.5%		-	-	-	-	35%		-	-	-	-	18.8%		-	-	-	-	18.8%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	**-**
Bicycles on Crosswalk%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0.9%		**-**
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%		**-**

Spectrum

Turning Movement Count
Location Name: LAWRENCE AVE E & THE DONWAY W
Date: Tue, Dec 20, 2022 Deployment Lead: Peter Ilias

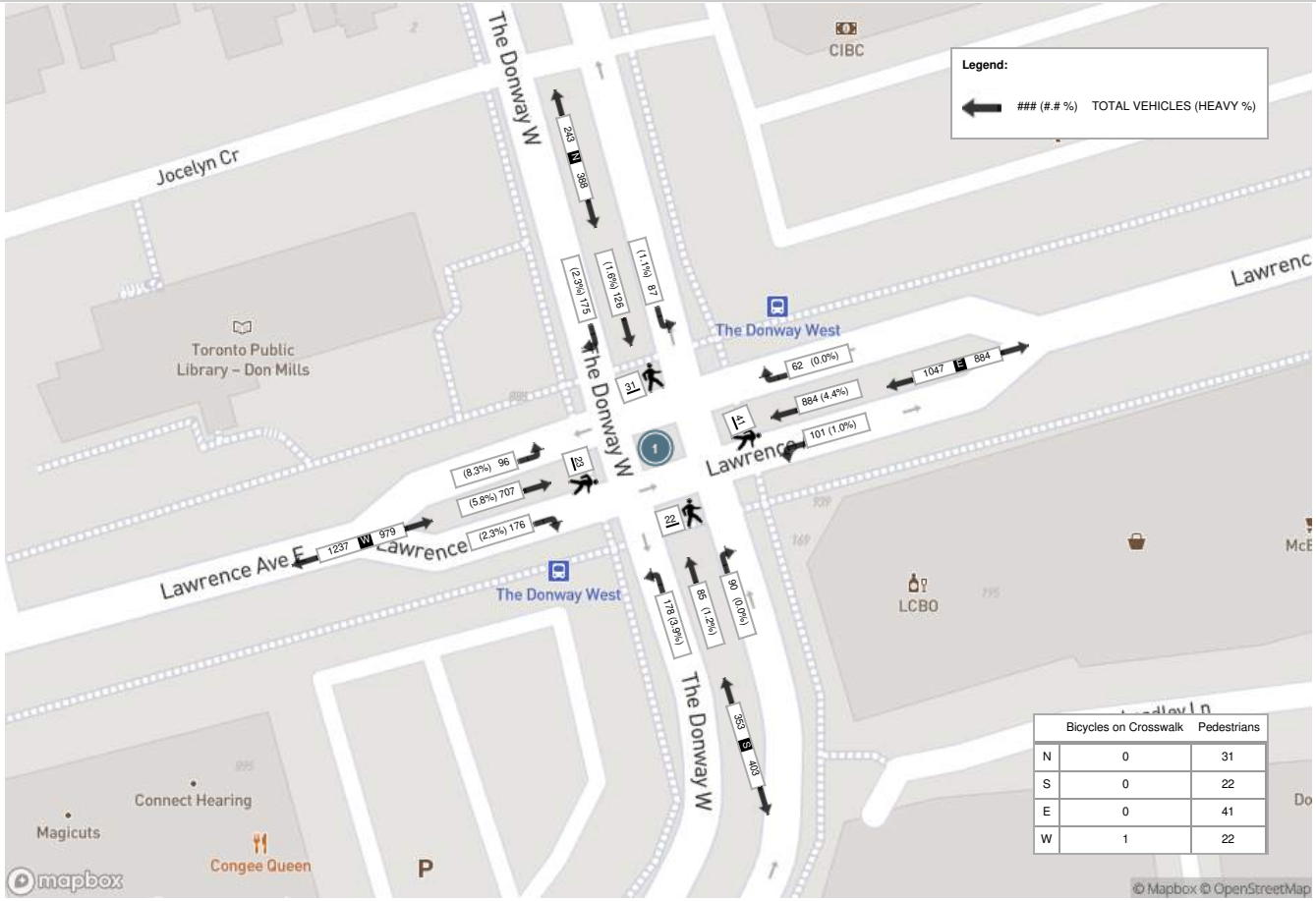
BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 04:00 PM - 05:00 PM Weather: Overcast Clouds (0.21 °C)

Start Time	N Approach THE DONWAY W						E Approach LAWRENCE AVE E						S Approach THE DONWAY W						W Approach LAWRENCE AVE E						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	
16:00:00	34	32	28	0	12	94	18	129	40	0	32	187	48	40	63	0	11	151	57	223	40	0	8	320	752
16:15:00	31	36	31	0	17	98	19	113	38	0	32	170	44	40	72	0	23	156	94	218	42	0	10	354	778
16:30:00	41	38	14	0	11	93	17	130	32	0	26	179	43	33	67	0	15	143	63	240	41	0	12	344	759
16:45:00	41	36	24	0	10	101	29	136	49	0	25	214	45	49	62	0	14	156	82	210	39	0	6	331	802
Grand Total	147	142	97	0	50	386	83	508	159	0	115	750	180	162	264	0	63	606	296	891	162	0	36	1349	**3091**
Approach%	38.1%	36.8%	25.1%	0%		-	11.1%	67.7%	21.2%	0%		-	29.7%	26.7%	43.6%	0%		-	21.9%	66%	12%	0%		-	**-**
Totals %	4.8%	4.6%	3.1%	0%		12.5%	2.7%	16.4%	5.1%	0%		24.3%	5.8%	5.2%	8.5%	0%		19.6%	9.6%	28.8%	5.2%	0%		43.6%	**-**
PHF	0.9	0.93	0.78	0		0.96	0.72	0.93	0.81	0		0.88	0.94	0.83	0.92	0		0.97	0.79	0.93	0.96	0		0.95	**-**
Heavy	1	3	1	0		5	0	20	2	0		22	2	3	7	0		12	2	32	4	0		38	**-**
Heavy %	0.7%	2.1%	1%	0%		1.3%	0%	3.9%	1.3%	0%		2.9%	1.1%	1.9%	2.7%	0%		2%	0.7%	3.6%	2.5%	0%		2.8%	**-**
Lights	146	139	96	0		381	83	488	157	0		728	178	159	257	0		594	294	859	158	0		1311	**-**
Lights %	99.3%	97.9%	99%	0%		98.7%	100%	96.1%	98.7%	0%		97.1%	98.9%	98.1%	97.3%	0%		98%	99.3%	96.4%	97.5%	0%		97.2%	**-**
Single-Unit Trucks	1	2	1	0		4	0	5	1	0		6	2	2	2	0		6	1	8	1	0		10	**-**
Single-Unit Trucks %	0.7%	1.4%	1%	0%		1%	0%	1%	0.6%	0%		0.8%	1.1%	1.2%	0.8%	0%		1%	0.3%	0.9%	0.6%	0%		0.7%	**-**
Buses	0	1	0	0		1	0	15	1	0		16	0	1	5	0		6	1	24	3	0		28	**-**
Buses %	0%	0.7%	0%	0%		0.3%	0%	3%	0.6%	0%		2.1%	0%	0.6%	1.9%	0%		1%	0.3%	2.7%	1.9%	0%		2.1%	**-**
Articulated Trucks	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	**-**
Articulated Trucks %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	-	50	-	-	-	-	-	115	-	-	-	-	-	63	-	-	-	-	-	36	-	**-**
Pedestrians%	-	-	-	-	18.9%		-	-	-	-	43.6%		-	-	-	-	23.9%		-	-	-	-	13.6%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	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%		**-**

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

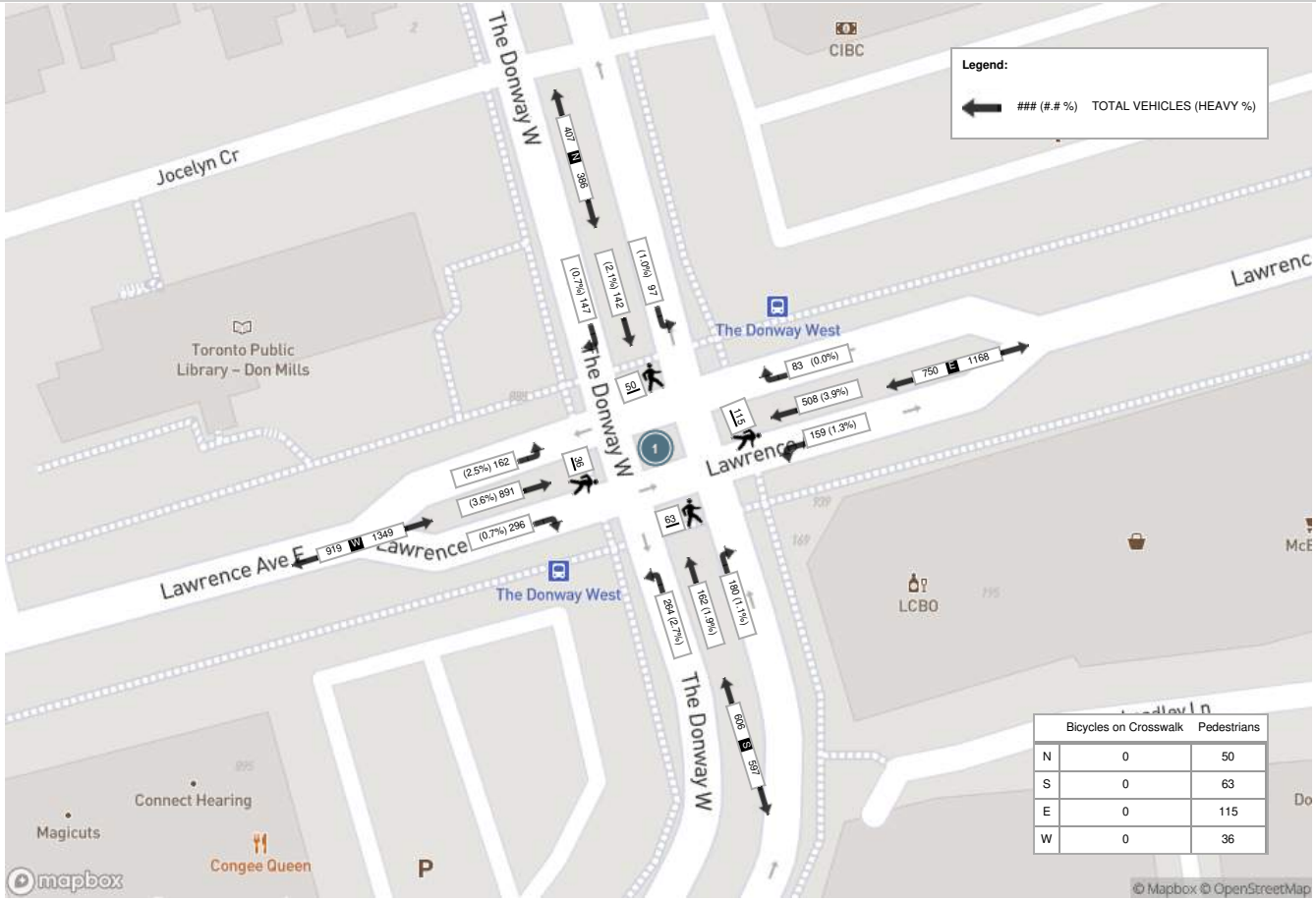
Peak Hour: 08:15 AM - 09:15 AM **Weather: Broken Clouds (-4.7 °C)**



	Bicycles on Crosswalk	Pedestrians
N	0	31
S	0	22
E	0	41
W	1	22

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 04:00 PM - 05:00 PM **Weather: Overcast Clouds (0.21 °C)**



Spectrum

Turning Movement Count
Location Name: THE DONWAY W & BELTON RD
Date: Sun, Dec 18, 2022 Deployment Lead: Peter Ilias

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Turning Movement Count (5 . THE DONWAY W & BELTON RD)

Start Time	N Approach THE DONWAY W						E Approach BELTON RD						S Approach THE DONWAY W						W Approach EAST 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		
11:00:00	1	20	0	1	0	22	5	0	1	0	0	6	1	18	2	0	0	21	0	0	0	0	0	0	49	
11:15:00	0	15	0	1	0	16	4	0	2	0	2	6	0	25	1	0	0	26	0	0	0	0	0	0	48	
11:30:00	0	24	3	0	0	27	6	0	3	0	3	9	6	29	0	0	0	35	0	0	0	0	0	0	71	
11:45:00	0	19	2	0	1	21	6	0	1	0	2	7	2	32	1	0	0	35	0	0	1	0	1	1	64	232
12:00:00	2	26	1	0	0	29	4	0	2	0	0	6	0	26	0	0	2	26	1	0	1	0	1	2	63	246
12:15:00	0	28	3	0	0	31	1	0	2	0	3	3	3	27	0	0	0	30	1	0	0	0	2	1	65	263
12:30:00	2	23	2	0	2	27	1	0	2	0	2	3	3	23	1	0	0	27	1	0	0	0	1	1	58	250
12:45:00	0	23	2	0	1	25	5	0	1	0	0	6	4	26	0	0	0	30	0	0	1	0	0	1	62	248
13:00:00	0	32	4	0	0	36	3	0	1	0	3	4	0	30	0	0	0	30	1	0	3	0	2	4	74	259
13:15:00	2	22	3	0	1	27	2	0	2	0	6	4	2	36	0	0	1	38	2	0	1	0	3	3	72	266
13:30:00	0	33	1	0	0	34	8	0	2	0	4	10	1	39	1	1	1	42	0	0	1	0	4	1	87	295
13:45:00	0	31	0	0	1	31	6	0	3	0	3	9	0	35	0	0	1	35	0	0	0	0	3	0	75	308
14:00:00	1	32	2	0	1	35	8	0	2	0	11	10	2	30	1	0	1	33	0	0	0	0	2	0	78	312
14:15:00	0	33	3	0	1	36	7	0	1	0	3	8	0	29	0	0	2	29	1	0	0	0	0	1	74	314
14:30:00	0	26	1	0	1	27	1	0	3	0	4	4	2	23	1	0	1	26	1	0	0	0	1	1	58	285
14:45:00	0	44	1	0	0	45	6	0	4	0	1	10	2	39	0	0	1	41	0	0	0	0	3	0	96	306
Grand Total	8	431	28	2	9	469	73	0	32	0	47	105	28	467	8	1	10	504	8	0	8	0	23	16	**1094**	-
Approach%	1.7%	91.9%	6%	0.4%		-	69.5%	0%	30.5%	0%		-	5.6%	92.7%	1.6%	0.2%		-	50%	0%	50%	0%		-	**-**	-
Totals %	0.7%	39.4%	2.6%	0.2%		42.9%	6.7%	0%	2.9%	0%		9.6%	2.6%	42.7%	0.7%	0.1%		46.1%	0.7%	0%	0.7%	0%		1.5%	**-**	-
Heavy	1	2	0	0		-	1	0	0	0		-	1	10	0	0		-	0	0	0	0		-	**-**	-
Heavy %	12.5%	0.5%	0%	0%		-	1.4%	0%	0%	0%		-	3.6%	2.1%	0%	0%		-	0%	0%	0%	0%		-	**-**	-
Bicycles	0	1	0	0		-	0	0	0	0		-	0	0	0	0		-	0	0	0	0		-	**-**	-
Bicycle %	0%	0.2%	0%	0%		-	0%	0%	0%	0%		-	0%	0%	0%	0%		-	0%	0%	0%	0%		-	**-**	-

Spectrum

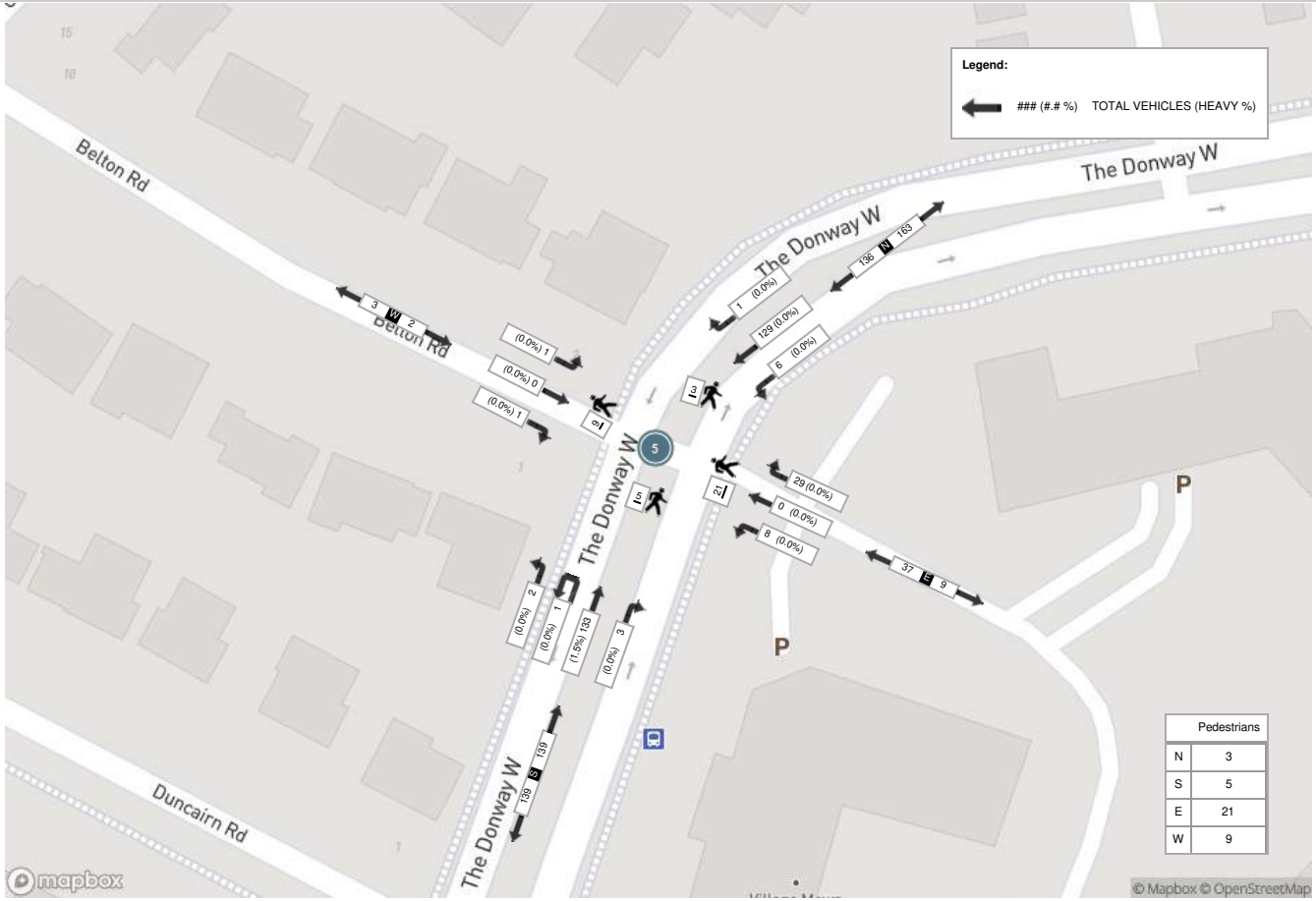
Turning Movement Count
Location Name: THE DONWAY W & BELTON RD
Date: Sun, Dec 18, 2022 Deployment Lead: Peter Ilias

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 01:30 PM - 02:30 PM Weather: Overcast Clouds (-0.34 °C)

Start Time	N Approach THE DONWAY W						E Approach BELTON RD						S Approach THE DONWAY W						W Approach EAST 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	
13:30:00	0	33	1	0	0	34	8	0	2	0	4	10	1	39	1	1	1	42	0	0	1	0	4	1	87
13:45:00	0	31	0	0	1	31	6	0	3	0	3	9	0	35	0	0	1	35	0	0	0	0	3	0	75
14:00:00	1	32	2	0	1	35	8	0	2	0	11	10	2	30	1	0	1	33	0	0	0	0	2	0	78
14:15:00	0	33	3	0	1	36	7	0	1	0	3	8	0	29	0	0	2	29	1	0	0	0	0	1	74
Grand Total	1	129	6	0	3	136	29	0	8	0	21	37	3	133	2	1	5	139	1	0	1	0	9	2	**314**
Approach%	0.7%	94.9%	4.4%	0%		-	78.4%	0%	21.6%	0%		-	2.2%	95.7%	1.4%	0.7%		-	50%	0%	50%	0%		-	**-**
Totals %	0.3%	41.1%	1.9%	0%		43.3%	9.2%	0%	2.5%	0%		11.8%	1%	42.4%	0.6%	0.3%		44.3%	0.3%	0%	0.3%	0%		0.6%	**-**
PHF	0.25	0.98	0.5	0		0.94	0.91	0	0.67	0		0.93	0.38	0.85	0.5	0.25		0.83	0.25	0	0.25	0		0.5	**-**
Heavy	0	0	0	0		0	0	0	0	0		0	0	2	0	0		2	0	0	0	0		0	**-**
Heavy %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	1.5%	0%	0%		1.4%	0%	0%	0%	0%		0%	**-**
Lights	1	129	6	0		136	29	0	8	0		37	3	131	2	1		137	1	0	1	0		2	**-**
Lights %	100%	100%	100%	0%		100%	100%	0%	100%	0%		100%	100%	98.5%	100%	100%		98.6%	100%	0%	100%	0%		100%	**-**
Single-Unit Trucks	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	**-**
Single-Unit Trucks %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Buses	0	0	0	0		0	0	0	0	0		0	0	2	0	0		2	0	0	0	0		0	**-**
Buses %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	1.5%	0%	0%		1.4%	0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	-	3	-	-	-	-	-	21	-	-	-	-	-	5	-	-	-	-	-	9	-	**-**
Pedestrians%	-	-	-	-	7.9%		-	-	-	-	55.3%		-	-	-	-	13.2%		-	-	-	-	23.7%		**-**
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%		**-**

Peak Hour: 01:30 PM - 02:30 PM Weather: Overcast Clouds (-0.34 °C)



Spectrum

Turning Movement Count
Location Name: THE DONWAY W & BELTON RD
Date: Tue, Dec 20, 2022 Deployment Lead: Peter Ilias

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Turning Movement Count (5 . THE DONWAY W & BELTON RD)

Start Time	N Approach THE DONWAY W						E Approach BELTON RD						S Approach THE DONWAY W						W Approach EAST 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		
07:30:00	0	23	0	0	1	23	5	0	2	0	1	7	0	26	0	0	1	26	0	0	0	0	0	0	56	
07:45:00	1	37	0	1	0	39	4	0	1	0	2	5	0	23	0	0	0	23	2	0	0	0	2	2	69	
08:00:00	0	46	4	0	0	50	2	0	1	0	4	3	1	30	0	0	0	31	0	0	1	0	0	1	85	
08:15:00	1	59	0	0	3	60	2	0	6	0	3	8	0	31	0	0	0	31	0	0	0	0	2	0	99	309
08:30:00	1	57	1	1	0	60	2	0	5	0	2	7	4	37	0	0	0	41	1	0	0	0	6	1	109	362
08:45:00	1	65	0	1	0	67	4	0	2	0	7	6	1	27	0	0	0	28	1	0	1	0	0	2	103	396
09:00:00	0	93	3	0	2	96	6	0	2	0	5	8	0	37	1	0	1	38	0	0	2	0	6	2	144	455
09:15:00	1	61	2	2	0	66	2	0	2	0	5	4	1	59	0	0	0	60	2	0	4	0	3	6	136	492
BREAK																										
16:00:00	1	36	3	0	0	40	7	0	2	0	2	9	1	84	2	0	1	87	1	0	1	0	0	2	138	
16:15:00	1	49	1	0	1	51	1	0	4	0	0	5	4	60	1	0	1	65	0	0	2	0	3	2	123	
16:30:00	2	58	4	2	1	66	3	0	3	0	4	6	2	58	2	0	1	62	0	0	1	0	3	1	135	
16:45:00	0	59	2	0	0	61	2	0	5	0	3	7	4	78	0	0	0	82	3	0	0	0	4	3	153	549
17:00:00	0	45	4	0	0	49	5	1	3	0	4	9	2	80	1	0	0	83	1	0	0	0	2	1	142	553
17:15:00	0	51	2	1	0	54	1	0	1	0	1	2	0	71	0	0	2	71	3	0	0	0	1	3	130	560
17:30:00	1	63	3	0	1	67	3	0	1	0	0	4	2	81	2	0	0	85	0	0	1	0	0	1	157	582
17:45:00	1	48	0	2	0	51	2	0	3	0	0	5	1	57	1	0	0	59	0	0	0	0	0	0	115	544
Grand Total	11	850	29	10	9	900	51	1	43	0	43	95	23	839	10	0	7	872	14	0	13	0	32	27	**1894**	-
Approach%	1.2%	94.4%	3.2%	1.1%		-	53.7%	1.1%	45.3%	0%		-	2.6%	96.2%	1.1%	0%		-	51.9%	0%	48.1%	0%		-	**-**	-
Totals %	0.6%	44.9%	1.5%	0.5%		47.5%	2.7%	0.1%	2.3%	0%		5%	1.2%	44.3%	0.5%	0%		46%	0.7%	0%	0.7%	0%		1.4%	**-**	-
Heavy	2	17	1	0		-	0	0	1	0		-	0	24	0	0		-	0	0	0	0		-	**-**	-
Heavy %	18.2%	2%	3.4%	0%		-	0%	0%	2.3%	0%		-	0%	2.9%	0%	0%		-	0%	0%	0%	0%		-	**-**	-
Bicycles	0	1	0	0		-	0	0	0	0		-	0	0	0	0		-	0	0	0	0		-	**-**	-
Bicycle %	0%	0.1%	0%	0%		-	0%	0%	0%	0%		-	0%	0%	0%	0%		-	0%	0%	0%	0%		-	**-**	-

Peak Hour: 08:30 AM - 09:30 AM Weather: Broken Clouds (-4.7 °C)

Start Time	N Approach THE DONWAY W						E Approach BELTON RD						S Approach THE DONWAY W						W Approach EAST 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	
08:30:00	1	57	1	1	0	60	2	0	5	0	2	7	4	37	0	0	0	41	1	0	0	0	6	1	109
08:45:00	1	65	0	1	0	67	4	0	2	0	7	6	1	27	0	0	0	28	1	0	1	0	0	2	103
09:00:00	0	93	3	0	2	96	6	0	2	0	5	8	0	37	1	0	1	38	0	0	2	0	6	2	144
09:15:00	1	61	2	2	0	66	2	0	2	0	5	4	1	59	0	0	0	60	2	0	4	0	3	6	136
Grand Total	3	276	6	4	2	289	14	0	11	0	19	25	6	160	1	0	1	167	4	0	7	0	15	11	**492**
Approach%	1%	95.5%	2.1%	1.4%		-	56%	0%	44%	0%		-	3.6%	95.8%	0.6%	0%		-	36.4%	0%	63.6%	0%		-	**-**
Totals %	0.6%	56.1%	1.2%	0.8%		58.7%	2.8%	0%	2.2%	0%		5.1%	1.2%	32.5%	0.2%	0%		33.9%	0.8%	0%	1.4%	0%		2.2%	**-**
PHF	0.75	0.74	0.5	0.5		0.75	0.58	0	0.55	0		0.78	0.38	0.68	0.25	0		0.7	0.5	0	0.44	0		0.46	**-**
Heavy	1	8	0	0		9	0	0	0	0		0	0	7	0	0		7	0	0	0	0		0	**-**
Heavy %	33.3%	2.9%	0%	0%		3.1%	0%	0%	0%	0%		0%	0%	4.4%	0%	0%		4.2%	0%	0%	0%	0%		0%	**-**
Lights	2	268	6	4		280	14	0	11	0		25	6	153	1	0		160	4	0	7	0		11	**-**
Lights %	66.7%	97.1%	100%	100%		96.9%	100%	0%	100%	0%		100%	100%	95.6%	100%	0%		95.8%	100%	0%	100%	0%		100%	**-**
Single-Unit Trucks	1	3	0	0		4	0	0	0	0		0	0	3	0	0		3	0	0	0	0		0	**-**
Single-Unit Trucks %	33.3%	1.1%	0%	0%		1.4%	0%	0%	0%	0%		0%	0%	1.9%	0%	0%		1.8%	0%	0%	0%	0%		0%	**-**
Buses	0	5	0	0		5	0	0	0	0		0	0	4	0	0		4	0	0	0	0		0	**-**
Buses %	0%	1.8%	0%	0%		1.7%	0%	0%	0%	0%		0%	0%	2.5%	0%	0%		2.4%	0%	0%	0%	0%		0%	**-**
Articulated Trucks	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	**-**
Articulated Trucks %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	-	2	-	-	-	-	-	19	-	-	-	-	-	1	-	-	-	-	-	15	-	**-**
Pedestrians%	-	-	-	-	5.4%		-	-	-	-	51.4%		-	-	-	-	2.7%		-	-	-	-	40.5%		**-**
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%		**-**

Spectrum

Turning Movement Count
Location Name: THE DONWAY W & BELTON RD
Date: Tue, Dec 20, 2022 Deployment Lead: Peter Ilias

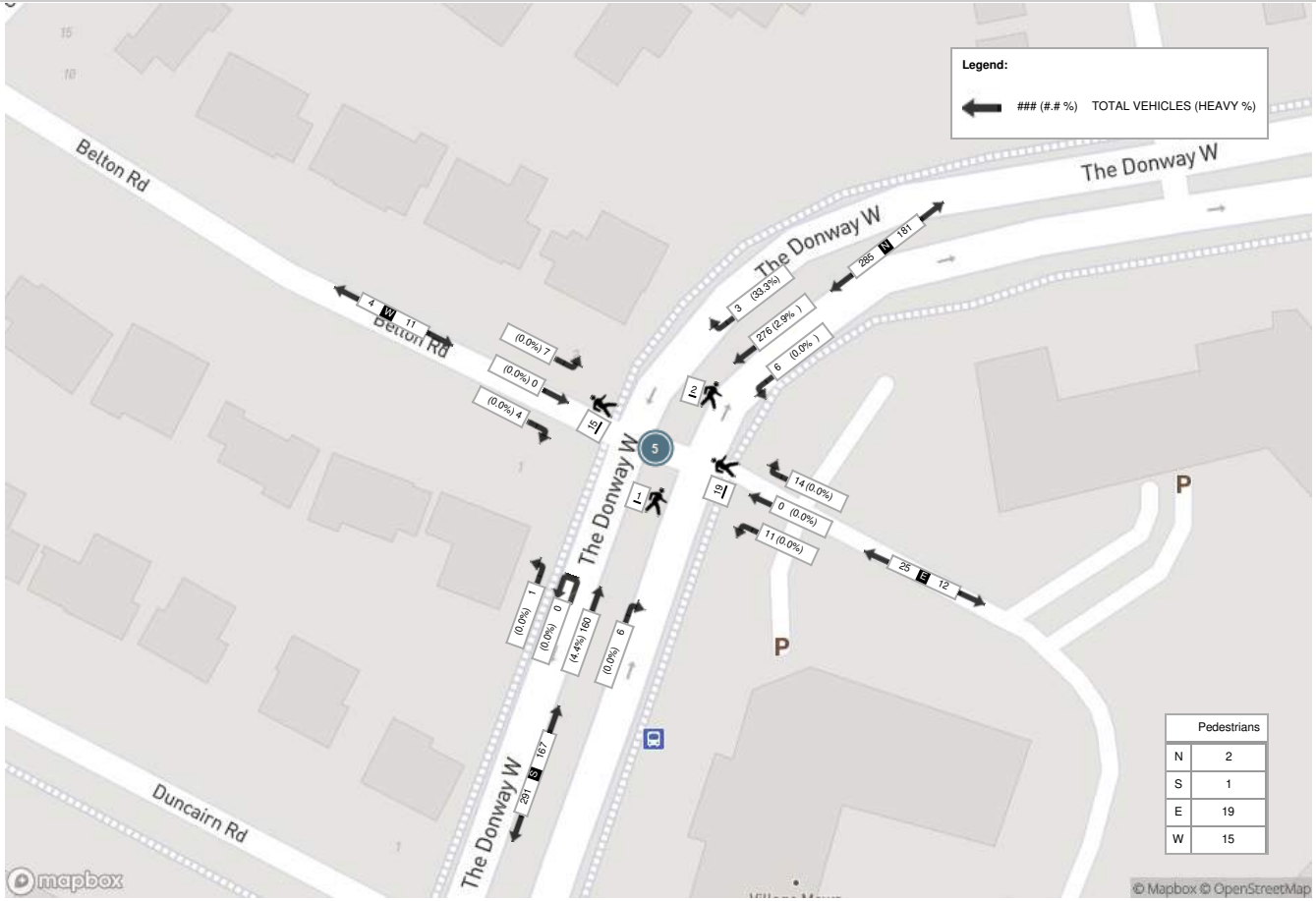
BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 04:45 PM - 05:45 PM Weather: Overcast Clouds (0.21 °C)

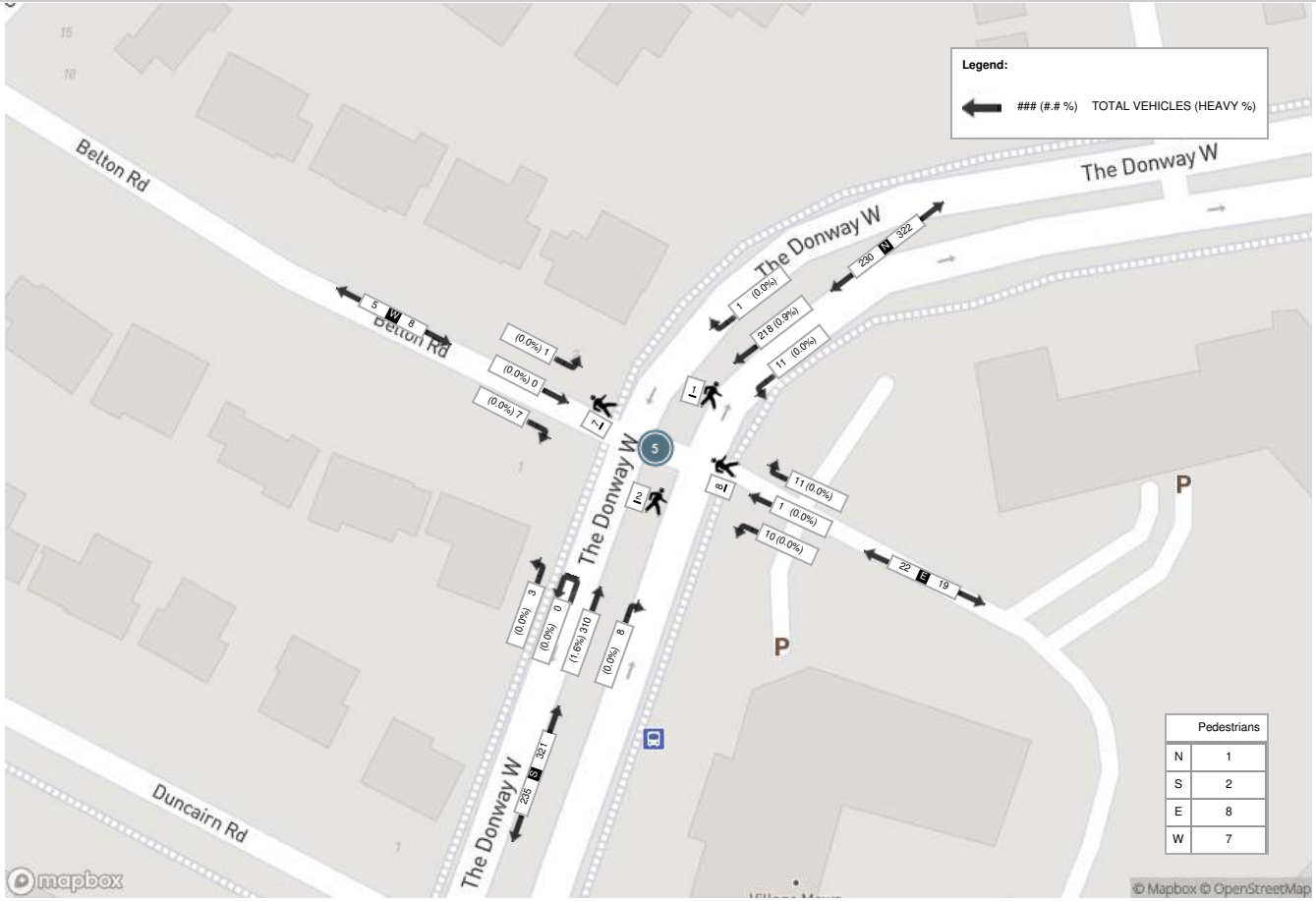
Start Time	N Approach THE DONWAY W						E Approach BELTON RD						S Approach THE DONWAY W						W Approach EAST DRIVEWAY						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
16:45:00	0	59	2	0	0	61	2	0	5	0	3	7	4	78	0	0	0	82	3	0	0	0	4	3	153
17:00:00	0	45	4	0	0	49	5	1	3	0	4	9	2	80	1	0	0	83	1	0	0	0	2	1	142
17:15:00	0	51	2	1	0	54	1	0	1	0	1	2	0	71	0	0	2	71	3	0	0	0	1	3	130
17:30:00	1	63	3	0	1	67	3	0	1	0	0	4	2	81	2	0	0	85	0	0	1	0	0	1	157
Grand Total	1	218	11	1	1	231	11	1	10	0	8	22	8	310	3	0	2	321	7	0	1	0	7	8	**582**
Approach%	0.4%	94.4%	4.8%	0.4%		-	50%	4.5%	45.5%	0%		-	2.5%	96.6%	0.9%	0%		-	87.5%	0%	12.5%	0%		-	**-**
Totals %	0.2%	37.5%	1.9%	0.2%		39.7%	1.9%	0.2%	1.7%	0%		3.8%	1.4%	53.3%	0.5%	0%		55.2%	1.2%	0%	0.2%	0%		1.4%	**-**
PHF	0.25	0.87	0.69	0.25		0.86	0.55	0.25	0.5	0		0.61	0.5	0.96	0.38	0		0.94	0.58	0	0.25	0		0.67	**-**
Heavy	0	2	0	0		2	0	0	0	0		0	0	5	0	0		5	0	0	0	0		0	**-**
Heavy %	0%	0.9%	0%	0%		0.9%	0%	0%	0%	0%		0%	0%	1.6%	0%	0%		1.6%	0%	0%	0%	0%		0%	**-**
Lights	1	216	11	1		229	11	1	10	0		22	8	305	3	0		316	7	0	1	0		8	**-**
Lights %	100%	99.1%	100%	100%		99.1%	100%	100%	100%	0%		100%	100%	98.4%	100%	0%		98.4%	100%	0%	100%	0%		100%	**-**
Single-Unit Trucks	0	2	0	0		2	0	0	0	0		0	0	2	0	0		2	0	0	0	0		0	**-**
Single-Unit Trucks %	0%	0.9%	0%	0%		0.9%	0%	0%	0%	0%		0%	0%	0.6%	0%	0%		0.6%	0%	0%	0%	0%		0%	**-**
Buses	0	0	0	0		0	0	0	0	0		0	0	3	0	0		3	0	0	0	0		0	**-**
Buses %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	1%	0%	0%		0.9%	0%	0%	0%	0%		0%	**-**
Articulated Trucks	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	**-**
Articulated Trucks %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	-	1	-	-	-	-	-	8	-	-	-	-	-	2	-	-	-	-	-	7	-	**-**
Pedestrians%	-	-	-	-	5.6%		-	-	-	-	44.4%		-	-	-	-	11.1%		-	-	-	-	38.9%		**-**
Bicycles on Road	0	1	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%		**-**

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 08:30 AM - 09:30 AM **Weather: Broken Clouds (-4.7 °C)**



Peak Hour: 04:45 PM - 05:45 PM Weather: Overcast Clouds (0.21 °C)



Spectrum

Turning Movement Count
Location Name: THE DONWAY W & DUNCAIRN RD
Date: Sun, Dec 18, 2022 Deployment Lead: Peter Ilias

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Turning Movement Count (6 . THE DONWAY W & DUNCAIRN RD)

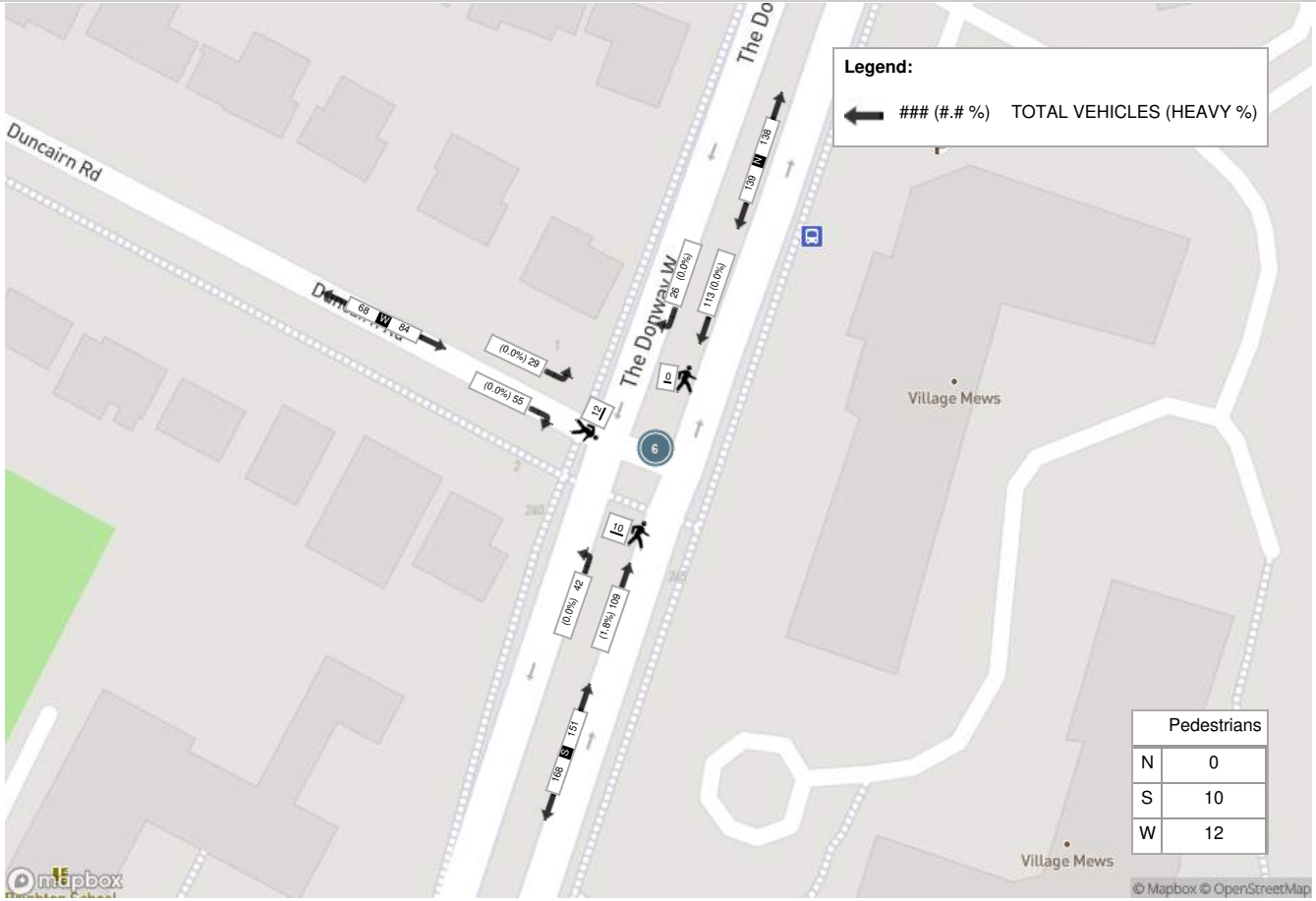
Start Time	N Approach THE DONWAY W					S Approach THE DONWAY W					W Approach EASTBOUND APPROACH					Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Thru N:S	UTurn N:N	Peds N:	Approach Total	Thru S:N	Left S:W	UTurn S:S	Peds S:	Approach Total	Right W:S	Left W:N	UTurn W:W	Peds W:	Approach Total		
11:00:00	6	15	0	0	21	16	11	0	2	27	13	5	0	0	18	66	
11:15:00	4	12	0	0	16	25	8	0	0	33	12	4	0	0	16	65	
11:30:00	4	24	0	0	28	27	4	0	2	31	10	7	0	1	17	76	
11:45:00	6	14	0	0	20	27	9	0	1	36	6	6	0	5	12	68	275
12:00:00	7	21	0	0	28	22	11	0	0	33	16	5	0	1	21	82	291
12:15:00	5	26	0	0	31	23	10	0	0	33	10	6	0	5	16	80	306
12:30:00	5	22	0	0	27	24	11	0	1	35	11	3	0	1	14	76	306
12:45:00	3	20	0	0	23	25	7	0	0	32	6	5	0	0	11	66	304
13:00:00	7	27	0	0	34	24	6	0	1	30	13	6	0	1	19	83	305
13:15:00	5	22	0	0	27	33	11	0	1	44	9	6	0	4	15	86	311
13:30:00	7	28	1	0	36	33	7	0	1	40	13	8	0	3	21	97	332
13:45:00	6	29	0	0	35	26	17	0	5	43	14	9	0	5	23	101	367
14:00:00	4	29	0	0	33	27	10	0	1	37	14	7	0	3	21	91	375
14:15:00	9	27	0	0	36	23	8	0	3	31	14	5	0	1	19	86	375
14:30:00	4	26	0	0	30	25	10	0	3	35	9	3	0	1	12	77	355
14:45:00	10	38	0	0	48	31	10	0	0	41	11	8	0	4	19	108	362
Grand Total	92	380	1	0	473	411	150	0	21	561	181	93	0	35	274	**1308**	-
Approach%	19.5%	80.3%	0.2%		-	73.3%	26.7%	0%		-	66.1%	33.9%	0%		-	**-**	-
Totals %	7%	29.1%	0.1%		36.2%	31.4%	11.5%	0%		42.9%	13.8%	7.1%	0%		20.9%	**-**	-
Heavy	1	1	0		-	9	3	0		-	3	3	0		-	**-**	-
Heavy %	1.1%	0.3%	0%		-	2.2%	2%	0%		-	1.7%	3.2%	0%		-	**-**	-
Bicycles	1	0	0		-	0	0	0		-	1	0	0		-	**-**	-
Bicycle %	1.1%	0%	0%		-	0%	0%	0%		-	0.6%	0%	0%		-	**-**	-

Peak Hour: 01:30 PM - 02:30 PM Weather: Overcast Clouds (-0.34 °C)

Start Time	N Approach THE DONWAY W					S Approach THE DONWAY W					W Approach EASTBOUND APPROACH					Int. Total (15 min)
	Right	Thru	UTurn	Peds	Approach Total	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	
13:30:00	7	28	1	0	36	33	7	0	1	40	13	8	0	3	21	97
13:45:00	6	29	0	0	35	26	17	0	5	43	14	9	0	5	23	101
14:00:00	4	29	0	0	33	27	10	0	1	37	14	7	0	3	21	91
14:15:00	9	27	0	0	36	23	8	0	3	31	14	5	0	1	19	86
Grand Total	26	113	1	0	140	109	42	0	10	151	55	29	0	12	84	**375**
Approach%	18.6%	80.7%	0.7%		-	72.2%	27.8%	0%		-	65.5%	34.5%	0%		-	**-**
Totals %	6.9%	30.1%	0.3%		37.3%	29.1%	11.2%	0%		40.3%	14.7%	7.7%	0%		22.4%	**-**
PHF	0.72	0.97	0.25		0.97	0.83	0.62	0		0.88	0.98	0.81	0		0.91	**-**
Heavy	0	0	0		0	2	0	0		2	0	0	0		0	**-**
Heavy %	0%	0%	0%		0%	1.8%	0%	0%		1.3%	0%	0%	0%		0%	**-**
Lights	26	113	1		140	107	42	0		149	55	29	0		84	**-**
Lights %	100%	100%	100%		100%	98.2%	100%	0%		98.7%	100%	100%	0%		100%	**-**
Single-Unit Trucks	0	0	0		0	0	0	0		0	0	0	0		0	**-**
Single-Unit Trucks %	0%	0%	0%		0%	0%	0%	0%		0%	0%	0%	0%		0%	**-**
Buses	0	0	0		0	2	0	0		2	0	0	0		0	**-**
Buses %	0%	0%	0%		0%	1.8%	0%	0%		1.3%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	0	-	-	-	-	10	-	-	-	-	12	-	**-**
Pedestrians%	-	-	-	0%		-	-	-	45.5%		-	-	-	54.5%		**-**
Bicycles on Road	0	0	0	0	-	0	0	0	0	-	1	0	0	0	-	**-**
Bicycles on Road%	-	-	-	0%		-	-	-	0%		-	-	-	0%		**-**

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 01:30 PM - 02:30 PM Weather: Overcast Clouds (-0.34 °C)



	Pedestrians
N	0
S	10
W	12

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Turning Movement Count (6 . THE DONWAY W & DUNCAIRN RD)

Start Time	N Approach THE DONWAY W					S Approach THE DONWAY W					W Approach EASTBOUND APPROACH					Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Thru N:S	UTurn N:N	Peds N:	Approach Total	Thru S:N	Left S:W	UTurn S:S	Peds S:	Approach Total	Right W:S	Left W:N	UTurn W:W	Peds W:	Approach Total		
07:30:00	6	18	0	0	24	21	6	0	2	27	7	5	0	0	12	63	
07:45:00	6	35	0	0	41	13	6	0	2	19	17	10	0	2	27	87	
08:00:00	7	40	0	0	47	25	6	0	0	31	21	8	0	0	29	107	
08:15:00	8	57	0	0	65	21	13	0	2	34	25	9	0	2	34	133	390
08:30:00	12	51	0	0	63	30	18	0	2	48	28	10	0	2	38	149	476
08:45:00	14	54	0	0	68	21	25	0	5	46	27	7	0	1	34	148	537
09:00:00	39	55	0	1	94	30	28	0	9	58	29	7	0	6	36	188	618
09:15:00	14	49	0	0	63	28	22	1	3	51	42	34	0	3	76	190	675
BREAK																	
16:00:00	14	25	0	0	39	68	18	0	1	86	16	20	0	0	36	161	
16:15:00	12	40	0	0	52	59	23	0	2	82	17	9	0	3	26	160	
16:30:00	9	52	1	0	62	55	17	0	3	72	23	6	0	3	29	163	
16:45:00	10	57	0	0	67	72	28	0	4	100	21	8	0	5	29	196	680
17:00:00	8	41	0	0	49	72	22	0	1	94	16	11	0	2	27	170	689
17:15:00	9	46	0	0	55	66	18	0	3	84	12	4	0	0	16	155	684
17:30:00	9	55	0	0	64	75	11	0	0	86	13	11	0	2	24	174	695
17:45:00	12	39	0	0	51	50	22	0	0	72	13	10	0	1	23	146	645
Grand Total	189	714	1	1	904	706	283	1	39	990	327	169	0	32	496	**2390**	-
Approach%	20.9%	79%	0.1%		-	71.3%	28.6%	0.1%		-	65.9%	34.1%	0%		-	**-**	-
Totals %	7.9%	29.9%	0%		37.8%	29.5%	11.8%	0%		41.4%	13.7%	7.1%	0%		20.8%	**-**	-
Heavy	7	11	0		-	21	5	0		-	10	3	0		-	**-**	-
Heavy %	3.7%	1.5%	0%		-	3%	1.8%	0%		-	3.1%	1.8%	0%		-	**-**	-
Bicycles	0	1	0		-	0	0	0		-	0	0	0		-	**-**	-
Bicycle %	0%	0.1%	0%		-	0%	0%	0%		-	0%	0%	0%		-	**-**	-

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 08:30 AM - 09:30 AM Weather: Broken Clouds (-4.7 °C)

Start Time	N Approach THE DONWAY W					S Approach THE DONWAY W					W Approach EASTBOUND APPROACH					Int. Total (15 min)
	Right	Thru	UTurn	Peds	Approach Total	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	
08:30:00	12	51	0	0	63	30	18	0	2	48	28	10	0	2	38	149
08:45:00	14	54	0	0	68	21	25	0	5	46	27	7	0	1	34	148
09:00:00	39	55	0	1	94	30	28	0	9	58	29	7	0	6	36	188
09:15:00	14	49	0	0	63	28	22	1	3	51	42	34	0	3	76	190
Grand Total	79	209	0	1	288	109	93	1	19	203	126	58	0	12	184	**675**
Approach%	27.4%	72.6%	0%		-	53.7%	45.8%	0.5%		-	68.5%	31.5%	0%		-	**-**
Totals %	11.7%	31%	0%		42.7%	16.1%	13.8%	0.1%		30.1%	18.7%	8.6%	0%		27.3%	**-**
PHF	0.51	0.95	0		0.77	0.91	0.83	0.25		0.88	0.75	0.43	0		0.61	**-**
Heavy	6	2	0		8	7	2	0		9	7	0	0		7	**-**
Heavy %	7.6%	1%	0%		2.8%	6.4%	2.2%	0%		4.4%	5.6%	0%	0%		3.8%	**-**
Lights	73	207	0		280	102	91	1		194	119	58	0		177	**-**
Lights %	92.4%	99%	0%		97.2%	93.6%	97.8%	100%		95.6%	94.4%	100%	0%		96.2%	**-**
Single-Unit Trucks	2	1	0		3	3	0	0		3	1	0	0		1	**-**
Single-Unit Trucks %	2.5%	0.5%	0%		1%	2.8%	0%	0%		1.5%	0.8%	0%	0%		0.5%	**-**
Buses	4	1	0		5	4	2	0		6	6	0	0		6	**-**
Buses %	5.1%	0.5%	0%		1.7%	3.7%	2.2%	0%		3%	4.8%	0%	0%		3.3%	**-**
Articulated Trucks	0	0	0		0	0	0	0		0	0	0	0		0	**-**
Articulated Trucks %	0%	0%	0%		0%	0%	0%	0%		0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	1	-	-	-	-	19	-	-	-	-	12	-	**-**
Pedestrians%	-	-	-	3.1%		-	-	-	59.4%		-	-	-	37.5%		**-**
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	0%		-	-	-	0%		-	-	-	0%		**-**
Bicycles on Road	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	**-**
Bicycles on Road%	-	-	-	0%		-	-	-	0%		-	-	-	0%		**-**

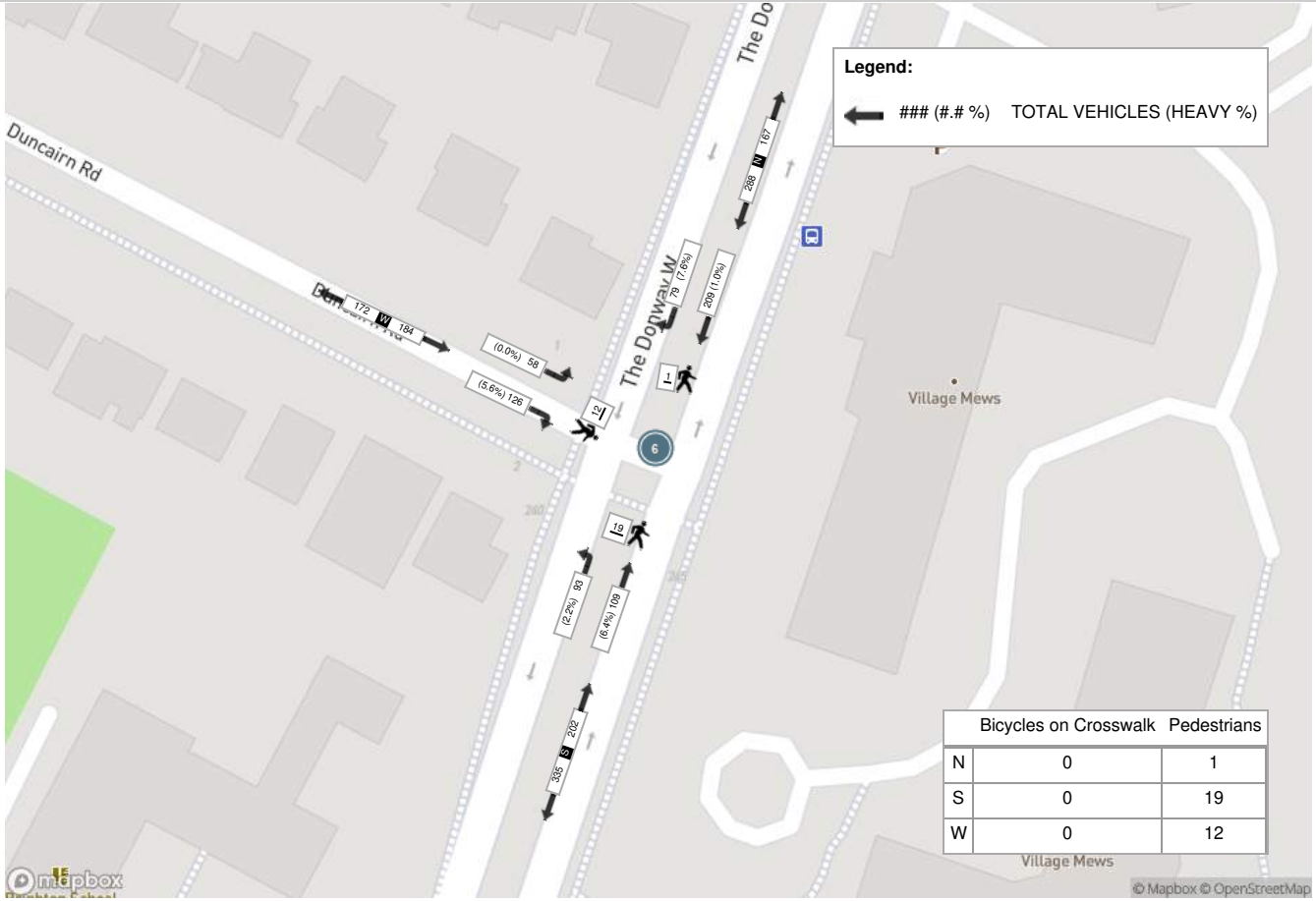
BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 04:45 PM - 05:45 PM Weather: Overcast Clouds (0.21 °C)

Start Time	N Approach THE DONWAY W					S Approach THE DONWAY W					W Approach EASTBOUND APPROACH					Int. Total (15 min)
	Right	Thru	UTurn	Peds	Approach Total	Thru	Left	UTurn	Peds	Approach Total	Right	Left	UTurn	Peds	Approach Total	
16:45:00	10	57	0	0	67	72	28	0	4	100	21	8	0	5	29	196
17:00:00	8	41	0	0	49	72	22	0	1	94	16	11	0	2	27	170
17:15:00	9	46	0	0	55	66	18	0	3	84	12	4	0	0	16	155
17:30:00	9	55	0	0	64	75	11	0	0	86	13	11	0	2	24	174
Grand Total	36	199	0	0	235	285	79	0	8	364	62	34	0	9	96	**695**
Approach%	15.3%	84.7%	0%		-	78.3%	21.7%	0%		-	64.6%	35.4%	0%		-	**-**
Totals %	5.2%	28.6%	0%		33.8%	41%	11.4%	0%		52.4%	8.9%	4.9%	0%		13.8%	**-**
PHF	0.9	0.87	0		0.88	0.95	0.71	0		0.91	0.74	0.77	0		0.83	**-**
Heavy	0	2	0		2	5	1	0		6	0	0	0		0	**-**
Heavy %	0%	1%	0%		0.9%	1.8%	1.3%	0%		1.6%	0%	0%	0%		0%	**-**
Lights	36	197	0		233	280	78	0		358	62	34	0		96	**-**
Lights %	100%	99%	0%		99.1%	98.2%	98.7%	0%		98.4%	100%	100%	0%		100%	**-**
Single-Unit Trucks	0	2	0		2	2	1	0		3	0	0	0		0	**-**
Single-Unit Trucks %	0%	1%	0%		0.9%	0.7%	1.3%	0%		0.8%	0%	0%	0%		0%	**-**
Buses	0	0	0		0	3	0	0		3	0	0	0		0	**-**
Buses %	0%	0%	0%		0%	1.1%	0%	0%		0.8%	0%	0%	0%		0%	**-**
Articulated Trucks	0	0	0		0	0	0	0		0	0	0	0		0	**-**
Articulated Trucks %	0%	0%	0%		0%	0%	0%	0%		0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	0	-	-	-	-	8	-	-	-	-	8	-	**-**
Pedestrians%	-	-	-	0%		-	-	-	47.1%		-	-	-	47.1%		**-**
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	1	-	**-**
Bicycles on Crosswalk%	-	-	-	0%		-	-	-	0%		-	-	-	5.9%		**-**
Bicycles on Road	0	1	0	0	-	0	0	0	0	-	0	0	0	0	-	**-**
Bicycles on Road%	-	-	-	0%		-	-	-	0%		-	-	-	0%		**-**

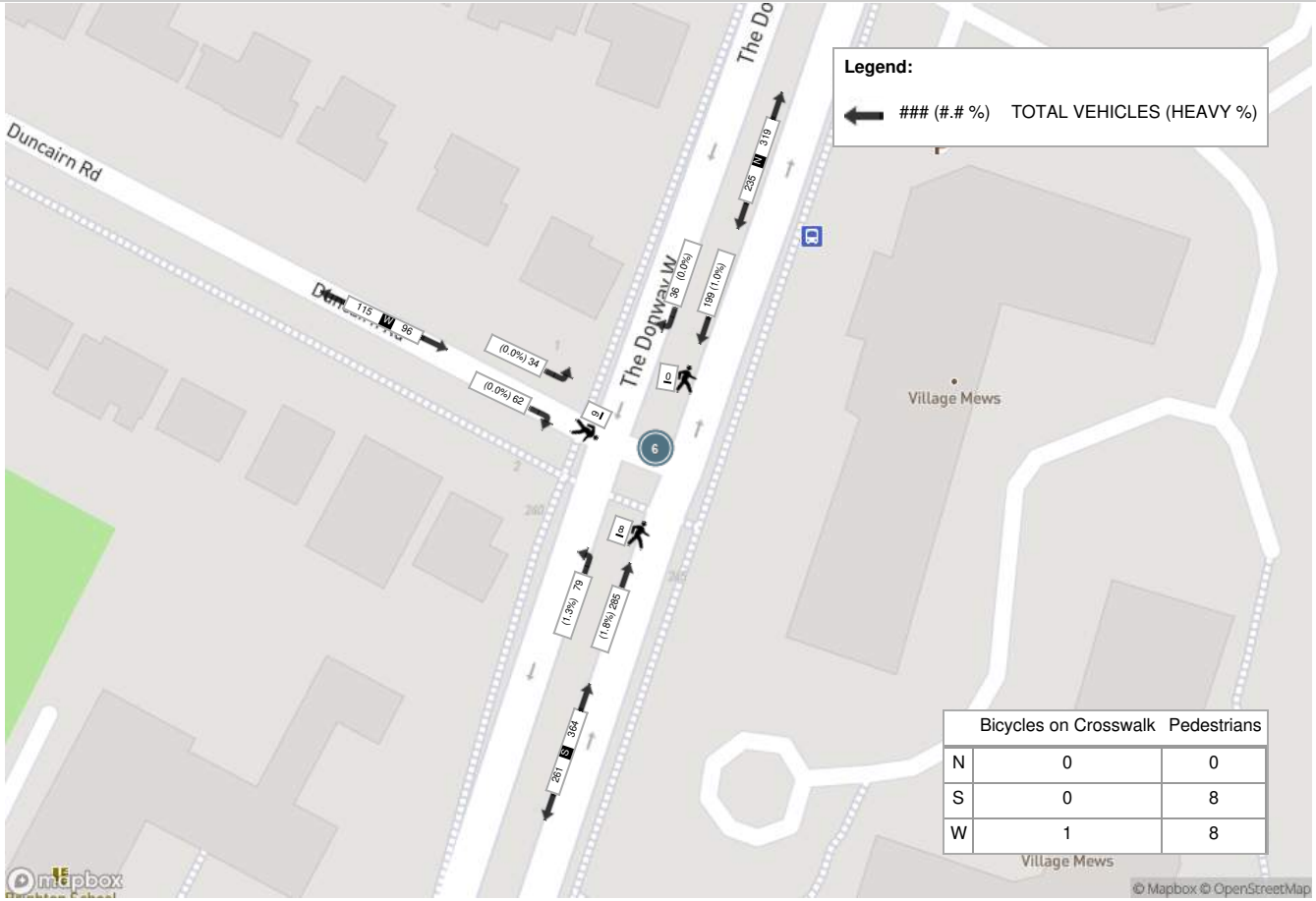
BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 08:30 AM - 09:30 AM Weather: Broken Clouds (-4.7 °C)



BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 04:45 PM - 05:45 PM Weather: Overcast Clouds (0.21 °C)



Spectrum

Turning Movement Count
Location Name: THE DONWAY W & JOCELYN CRES
Date: Sun, Dec 18, 2022 Deployment Lead: Peter Ilias

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Turning Movement Count (9 . THE DONWAY W & JOCELYN CRES)

Start Time	N Approach THE DONWAY W						E Approach EAST DRIVEWAY						S Approach THE DONWAY W						W Approach JOCELYN CRES						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		
11:00:00	0	31	3	0	0	34	4	1	16	0	3	21	17	28	0	0	0	45	0	0	1	0	2	1	101	
11:15:00	0	27	3	0	1	30	7	0	17	0	2	24	12	25	0	0	0	37	0	0	0	0	2	0	91	
11:30:00	1	40	7	0	0	48	7	0	16	0	9	23	11	23	0	0	0	34	2	0	1	0	2	3	108	
11:45:00	0	28	2	0	0	30	5	0	17	0	6	22	11	32	0	0	1	43	1	0	1	0	1	2	97	397
12:00:00	0	31	4	0	0	35	6	0	15	0	5	21	14	27	1	0	0	42	1	0	1	0	1	2	100	396
12:15:00	0	39	1	0	0	40	5	0	16	0	3	21	10	25	1	0	1	36	2	0	0	0	7	2	99	404
12:30:00	2	32	6	0	0	40	6	0	22	0	1	28	17	33	1	0	0	51	1	0	0	0	1	1	120	416
12:45:00	0	24	3	0	0	27	4	0	12	0	4	16	16	32	0	1	0	49	3	0	0	0	3	3	95	414
13:00:00	1	42	9	0	0	52	6	0	18	0	9	24	20	35	3	2	0	60	2	0	1	0	3	3	139	453
13:15:00	2	29	11	0	1	42	9	2	24	0	7	35	13	35	5	0	1	53	5	0	0	0	2	5	135	489
13:30:00	1	38	4	0	0	43	6	0	24	0	6	30	16	39	1	0	1	56	1	0	0	0	6	1	130	499
13:45:00	1	42	8	0	1	51	6	1	23	0	3	30	19	40	3	0	0	62	2	0	1	0	6	3	146	550
14:00:00	0	36	8	1	2	45	9	1	23	0	11	33	19	27	0	0	1	46	2	0	2	0	4	4	128	539
14:15:00	2	38	4	0	0	44	8	0	27	0	7	35	17	24	3	0	0	44	5	1	1	0	4	7	130	534
14:30:00	0	32	7	0	0	39	6	1	19	0	4	26	21	36	3	0	0	60	3	1	2	0	2	6	131	535
14:45:00	2	53	4	0	2	59	7	1	21	0	6	29	22	37	1	0	1	60	1	1	1	0	12	3	151	540
Grand Total	12	562	84	1	7	659	101	7	310	0	86	418	255	498	22	3	6	778	31	3	12	0	58	46	**1901**	-
Approach%	1.8%	85.3%	12.7%	0.2%		-	24.2%	1.7%	74.2%	0%		-	32.8%	64%	2.8%	0.4%		-	67.4%	6.5%	26.1%	0%		-	-	-
Totals %	0.6%	29.6%	4.4%	0.1%		34.7%	5.3%	0.4%	16.3%	0%		22%	13.4%	26.2%	1.2%	0.2%		40.9%	1.6%	0.2%	0.6%	0%		2.4%	-	-
Heavy	1	1	0	0		-	0	0	3	0		-	4	10	0	0		-	1	0	0	0		-	-	-
Heavy %	8.3%	0.2%	0%	0%		-	0%	0%	1%	0%		-	1.6%	2%	0%	0%		-	3.2%	0%	0%	0%		-	-	-
Bicycles	0	1	0	0		-	0	1	0	0		-	0	0	0	0		-	0	1	0	0		-	-	-
Bicycle %	0%	0.2%	0%	0%		-	0%	14.3%	0%	0%		-	0%	0%	0%	0%		-	0%	33.3%	0%	0%		-	-	-

Peak Hour: 01:00 PM - 02:00 PM Weather: Overcast Clouds (-0.34 °C)

Start Time	N Approach THE DONWAY W						E Approach EAST DRIVEWAY						S Approach THE DONWAY W						W Approach JOCELYN CRES						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	
13:00:00	1	42	9	0	0	52	6	0	18	0	9	24	20	35	3	2	0	60	2	0	1	0	3	3	139
13:15:00	2	29	11	0	1	42	9	2	24	0	7	35	13	35	5	0	1	53	5	0	0	0	2	5	135
13:30:00	1	38	4	0	0	43	6	0	24	0	6	30	16	39	1	0	1	56	1	0	0	0	6	1	130
13:45:00	1	42	8	0	1	51	6	1	23	0	3	30	19	40	3	0	0	62	2	0	1	0	6	3	146
Grand Total	5	151	32	0	2	188	27	3	89	0	25	119	68	149	12	2	2	231	10	0	2	0	17	12	**550**
Approach%	2.7%	80.3%	17%	0%		-	22.7%	2.5%	74.8%	0%		-	29.4%	64.5%	5.2%	0.9%		-	83.3%	0%	16.7%	0%		-	**-**
Totals %	0.9%	27.5%	5.8%	0%		34.2%	4.9%	0.5%	16.2%	0%		21.6%	12.4%	27.1%	2.2%	0.4%		42%	1.8%	0%	0.4%	0%		2.2%	**-**
PHF	0.63	0.9	0.73	0		0.9	0.75	0.38	0.93	0		0.85	0.85	0.93	0.6	0.25		0.93	0.5	0	0.5	0		0.6	**-**
Heavy	0	0	0	0		0	0	0	1	0		1	1	3	0	0		4	0	0	0	0		0	**-**
Heavy %	0%	0%	0%	0%		0%	0%	0%	1.1%	0%		0.8%	1.5%	2%	0%	0%		1.7%	0%	0%	0%	0%		0%	**-**
Lights	5	151	32	0		188	27	3	88	0		118	67	146	12	2		227	10	0	2	0		12	**-**
Lights %	100%	100%	100%	0%		100%	100%	100%	98.9%	0%		99.2%	98.5%	98%	100%	100%		98.3%	100%	0%	100%	0%		100%	**-**
Single-Unit Trucks	0	0	0	0		0	0	0	1	0		1	1	1	0	0		2	0	0	0	0		0	**-**
Single-Unit Trucks %	0%	0%	0%	0%		0%	0%	0%	1.1%	0%		0.8%	1.5%	0.7%	0%	0%		0.9%	0%	0%	0%	0%		0%	**-**
Buses	0	0	0	0		0	0	0	0	0		0	0	2	0	0		2	0	0	0	0		0	**-**
Buses %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	1.3%	0%	0%		0.9%	0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	-	2	-	-	-	-	-	25	-	-	-	-	-	2	-	-	-	-	-	17	-	**-**
Pedestrians%	-	-	-	-	4.3%		-	-	-	-	54.3%		-	-	-	-	4.3%		-	-	-	-	37%		**-**
Bicycles on Road	0	1	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%		**-**

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 01:00 PM - 02:00 PM Weather: Overcast Clouds (-0.34 °C)

Spectrum

Turning Movement Count
Location Name: THE DONWAY W & JOCELYN CRES
Date: Tue, Dec 20, 2022 Deployment Lead: Peter Ilias

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Turning Movement Count (9 . THE DONWAY W & JOCELYN CRES)

Start Time	N Approach THE DONWAY W						E Approach EAST DRIVEWAY						S Approach THE DONWAY W						W Approach JOCELYN CRES						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		
07:30:00	0	30	3	0	0	33	6	1	8	0	4	15	3	20	0	0	0	23	0	1	1	0	1	2	73	
07:45:00	0	50	3	0	0	53	1	0	10	0	2	11	3	19	0	2	1	24	0	0	0	0	0	0	88	
08:00:00	0	65	3	0	0	68	4	0	9	0	4	13	3	24	0	0	1	27	0	0	1	0	1	1	109	
08:15:00	0	76	5	0	0	81	2	0	9	0	2	11	8	32	2	1	0	43	2	1	0	0	2	3	138	408
08:30:00	1	78	7	0	0	86	7	0	16	0	5	23	19	40	1	0	0	60	1	0	1	0	4	2	171	506
08:45:00	0	78	7	0	0	85	6	0	16	0	6	22	17	46	2	0	1	65	0	0	0	0	4	0	172	590
09:00:00	0	83	11	0	0	94	10	3	15	0	6	28	15	55	3	1	0	74	2	0	0	0	6	2	198	679
09:15:00	0	96	9	0	2	105	5	1	17	0	4	23	14	44	0	0	0	58	3	1	0	0	6	4	190	731
BREAK																										
16:00:00	1	55	8	0	2	64	10	1	31	0	11	42	19	71	6	0	2	96	6	0	4	0	11	10	212	
16:15:00	1	57	5	0	1	63	5	0	32	0	7	37	27	71	2	2	1	102	4	0	5	0	6	9	211	
16:30:00	3	70	6	0	3	79	13	1	25	0	14	39	27	62	1	1	1	91	0	1	4	0	5	5	214	
16:45:00	0	73	8	0	0	81	9	0	24	0	9	33	27	83	6	0	0	116	3	2	3	0	7	8	238	875
17:00:00	1	54	15	0	1	70	12	1	36	0	3	49	18	69	3	2	0	92	5	0	2	0	5	7	218	881
17:15:00	0	56	7	0	1	63	12	0	26	0	9	38	13	66	2	0	1	81	4	2	2	0	5	8	190	860
17:30:00	1	64	5	0	1	70	14	0	20	0	18	34	19	62	2	0	3	83	2	0	5	0	6	7	194	840
17:45:00	1	38	7	0	2	46	11	1	26	0	8	38	20	61	1	1	0	83	6	1	3	0	4	10	177	779
Grand Total	9	1023	109	0	13	1141	127	9	320	0	112	456	252	825	31	10	11	1118	38	9	31	0	73	78	**2793**	-
Approach%	0.8%	89.7%	9.6%	0%		-	27.9%	2%	70.2%	0%		-	22.5%	73.8%	2.8%	0.9%		-	48.7%	11.5%	39.7%	0%		-	**-**	-
Totals %	0.3%	36.6%	3.9%	0%		40.9%	4.5%	0.3%	11.5%	0%		16.3%	9%	29.5%	1.1%	0.4%		40%	1.4%	0.3%	1.1%	0%		2.8%	**-**	-
Heavy	0	18	0	0		-	0	2	0	0		-	0	24	0	0		-	1	0	1	0		-	**-**	-
Heavy %	0%	1.8%	0%	0%		-	0%	22.2%	0%	0%		-	0%	2.9%	0%	0%		-	2.6%	0%	3.2%	0%		-	**-**	-
Bicycles	0	1	1	0		-	0	0	0	0		-	0	0	0	0		-	0	0	0	0		-	**-**	-
Bicycle %	0%	0.1%	0.9%	0%		-	0%	0%	0%	0%		-	0%	0%	0%	0%		-	0%	0%	0%	0%		-	**-**	-

Spectrum

Turning Movement Count
Location Name: THE DONWAY W & JOCELYN CRES
Date: Tue, Dec 20, 2022 Deployment Lead: Peter Ilias

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 08:30 AM - 09:30 AM Weather: Broken Clouds (-4.7 °C)

Start Time	N Approach THE DONWAY W						E Approach EAST DRIVEWAY						S Approach THE DONWAY W						W Approach JOCELYN CRES						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	
08:30:00	1	78	7	0	0	86	7	0	16	0	5	23	19	40	1	0	0	60	1	0	1	0	4	2	171
08:45:00	0	78	7	0	0	85	6	0	16	0	6	22	17	46	2	0	1	65	0	0	0	0	4	0	172
09:00:00	0	83	11	0	0	94	10	3	15	0	6	28	15	55	3	1	0	74	2	0	0	0	6	2	198
09:15:00	0	96	9	0	2	105	5	1	17	0	4	23	14	44	0	0	0	58	3	1	0	0	6	4	190
Grand Total	1	335	34	0	2	370	28	4	64	0	21	96	65	185	6	1	1	257	6	1	1	0	20	8	**731**
Approach%	0.3%	90.5%	9.2%	0%		-	29.2%	4.2%	66.7%	0%		-	25.3%	72%	2.3%	0.4%		-	75%	12.5%	12.5%	0%		-	**-**
Totals %	0.1%	45.8%	4.7%	0%		50.6%	3.8%	0.5%	8.8%	0%		13.1%	8.9%	25.3%	0.8%	0.1%		35.2%	0.8%	0.1%	0.1%	0%		1.1%	**-**
PHF	0.25	0.87	0.77	0		0.88	0.7	0.33	0.94	0		0.86	0.86	0.84	0.5	0.25		0.87	0.5	0.25	0.25	0		0.5	**-**
Heavy	0	8	0	0		8	0	1	0	0		1	0	8	0	0		8	0	0	0	0		0	**-**
Heavy %	0%	2.4%	0%	0%		2.2%	0%	25%	0%	0%		1%	0%	4.3%	0%	0%		3.1%	0%	0%	0%	0%		0%	**-**
Lights	1	327	34	0		362	28	3	64	0		95	65	177	6	1		249	6	1	1	0		8	**-**
Lights %	100%	97.6%	100%	0%		97.8%	100%	75%	100%	0%		99%	100%	95.7%	100%	100%		96.9%	100%	100%	100%	0%		100%	**-**
Single-Unit Trucks	0	1	0	0		1	0	1	0	0		1	0	1	0	0		1	0	0	0	0		0	**-**
Single-Unit Trucks %	0%	0.3%	0%	0%		0.3%	0%	25%	0%	0%		1%	0%	0.5%	0%	0%		0.4%	0%	0%	0%	0%		0%	**-**
Buses	0	7	0	0		7	0	0	0	0		0	0	7	0	0		7	0	0	0	0		0	**-**
Buses %	0%	2.1%	0%	0%		1.9%	0%	0%	0%	0%		0%	0%	3.8%	0%	0%		2.7%	0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	-	2	-	-	-	-	-	21	-	-	-	-	-	1	-	-	-	-	-	19	-	**-**
Pedestrians%	-	-	-	-	4.5%		-	-	-	-	47.7%		-	-	-	-	2.3%		-	-	-	-	43.2%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	**-**
Bicycles on Crosswalk%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	2.3%		**-**
Bicycles on Road	0	0	1	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	**-**
Bicycles on Road%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		**-**

Spectrum

Turning Movement Count
Location Name: THE DONWAY W & JOCELYN CRES
Date: Tue, Dec 20, 2022 Deployment Lead: Peter Ilias

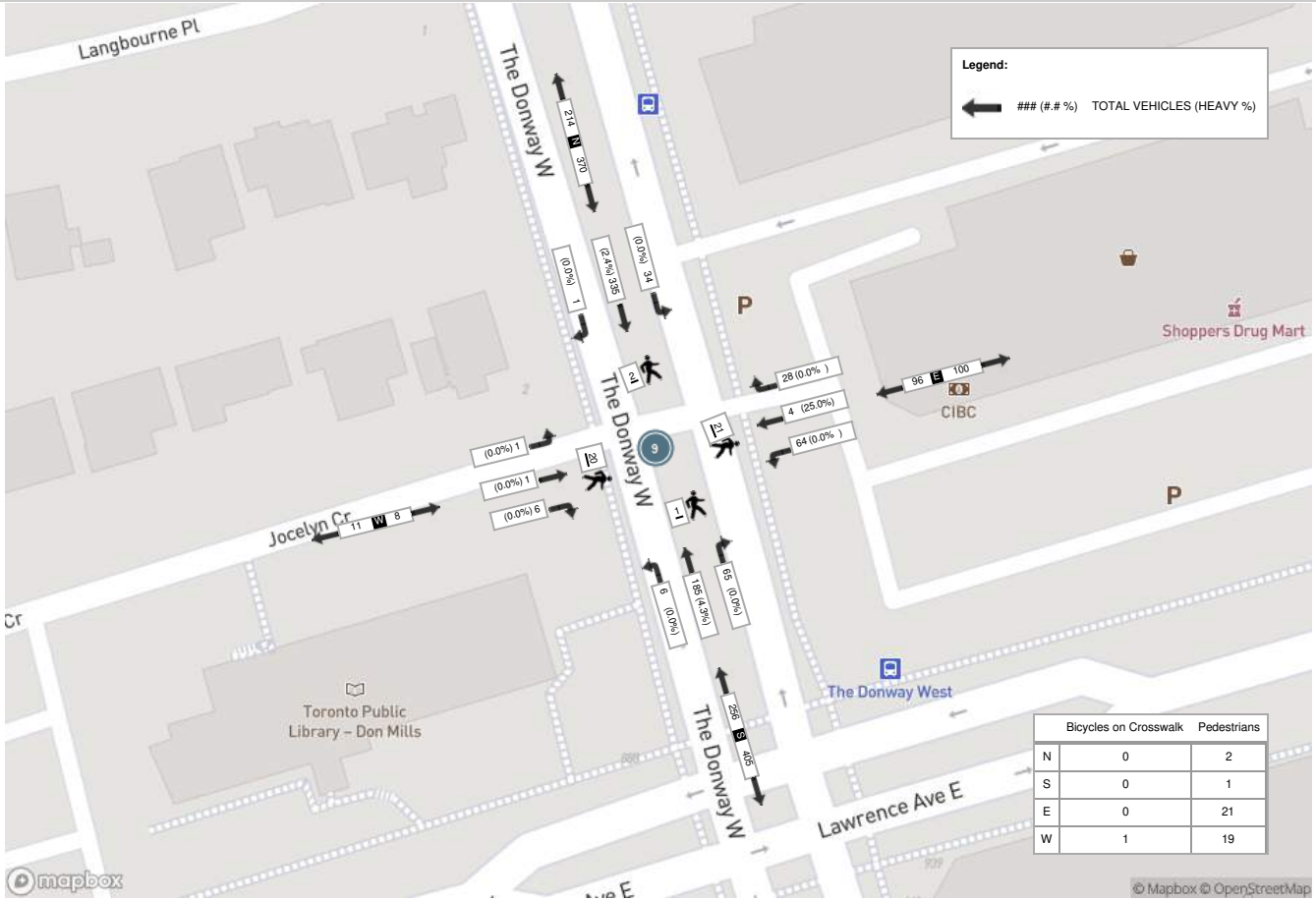
BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 04:15 PM - 05:15 PM Weather: Overcast Clouds (0.21 °C)

Start Time	N Approach THE DONWAY W						E Approach EAST DRIVEWAY						S Approach THE DONWAY W						W Approach JOCELYN CRES						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	
16:15:00	1	57	5	0	1	63	5	0	32	0	7	37	27	71	2	2	1	102	4	0	5	0	6	9	211
16:30:00	3	70	6	0	3	79	13	1	25	0	14	39	27	62	1	1	1	91	0	1	4	0	5	5	214
16:45:00	0	73	8	0	0	81	9	0	24	0	9	33	27	83	6	0	0	116	3	2	3	0	7	8	238
17:00:00	1	54	15	0	1	70	12	1	36	0	3	49	18	69	3	2	0	92	5	0	2	0	5	7	218
Grand Total	5	254	34	0	5	293	39	2	117	0	33	158	99	285	12	5	2	401	12	3	14	0	23	29	**881**
Approach%	1.7%	86.7%	11.6%	0%		-	24.7%	1.3%	74.1%	0%		-	24.7%	71.1%	3%	1.2%		-	41.4%	10.3%	48.3%	0%		-	**-**
Totals %	0.6%	28.8%	3.9%	0%		33.3%	4.4%	0.2%	13.3%	0%		17.9%	11.2%	32.3%	1.4%	0.6%		45.5%	1.4%	0.3%	1.6%	0%		3.3%	**-**
PHF	0.42	0.87	0.57	0		0.9	0.75	0.5	0.81	0		0.81	0.92	0.86	0.5	0.63		0.86	0.6	0.38	0.7	0		0.81	**-**
Heavy	0	4	0	0		4	0	0	0	0		0	0	5	0	0		5	0	0	0	0		0	**-**
Heavy %	0%	1.6%	0%	0%		1.4%	0%	0%	0%	0%		0%	0%	1.8%	0%	0%		1.2%	0%	0%	0%	0%		0%	**-**
Lights	5	250	34	0		289	39	2	117	0		158	99	280	12	5		396	12	3	14	0		29	**-**
Lights %	100%	98.4%	100%	0%		98.6%	100%	100%	100%	0%		100%	100%	98.2%	100%	100%		98.8%	100%	100%	100%	0%		100%	**-**
Single-Unit Trucks	0	3	0	0		3	0	0	0	0		0	0	3	0	0		3	0	0	0	0		0	**-**
Single-Unit Trucks %	0%	1.2%	0%	0%		1%	0%	0%	0%	0%		0%	0%	1.1%	0%	0%		0.7%	0%	0%	0%	0%		0%	**-**
Buses	0	1	0	0		1	0	0	0	0		0	0	2	0	0		2	0	0	0	0		0	**-**
Buses %	0%	0.4%	0%	0%		0.3%	0%	0%	0%	0%		0%	0%	0.7%	0%	0%		0.5%	0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	-	5	-	-	-	-	-	33	-	-	-	-	-	2	-	-	-	-	-	23	-	**-**
Pedestrians%	-	-	-	-	7.9%		-	-	-	-	52.4%		-	-	-	-	3.2%		-	-	-	-	36.5%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	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%		**-**

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 08:30 AM - 09:30 AM **Weather: Broken Clouds (-4.7 °C)**



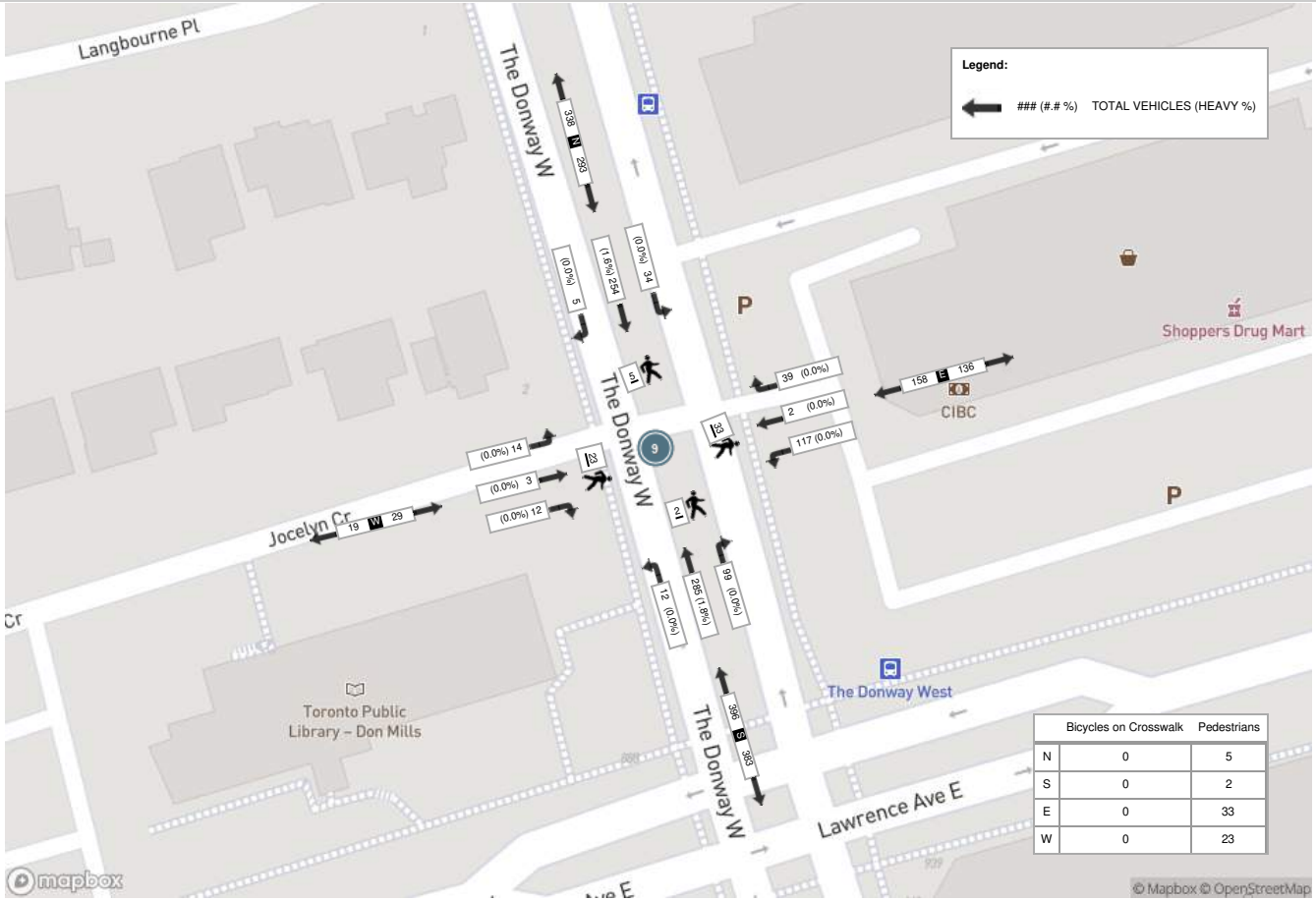
	Bicycles on Crosswalk	Pedestrians
N	0	2
S	0	1
E	0	21
W	1	19

Spectrum

Turning Movement Count
Location Name: THE DONWAY W & JOCELYN CRES
Date: Tue, Dec 20, 2022 Deployment Lead: Peter Ilias

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 04:15 PM - 05:15 PM Weather: Overcast Clouds (0.21 °C)



	Bicycles on Crosswalk	Pedestrians
N	0	5
S	0	2
E	0	33
W	0	23

Spectrum

Turning Movement Count
Location Name: THE DONWAY W & LANGBOURNE PL
Date: Sun, Dec 18, 2022 Deployment Lead: Peter Ilias

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Turning Movement Count (8 . THE DONWAY W & LANGBOURNE PL)

Start Time	N Approach THE DONWAY W						E Approach EAST DRIVEWAY						S Approach THE DONWAY W						W Approach LANGBOURNE PL						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		
11:00:00	1	27	1	0	2	29	2	0	1	0	5	3	3	26	4	0	2	33	4	0	2	0	2	6	71	
11:15:00	2	22	0	0	0	24	1	0	4	0	1	5	0	27	5	0	2	32	5	0	1	0	0	6	67	
11:30:00	0	43	2	0	3	45	2	0	3	0	6	5	2	28	1	0	6	31	1	0	0	0	2	1	82	
11:45:00	1	25	0	0	1	26	0	0	2	0	5	2	1	34	3	0	0	38	4	1	1	0	0	6	72	292
12:00:00	2	33	1	0	0	36	2	0	0	0	2	2	3	27	4	0	0	34	3	0	0	0	1	3	75	296
12:15:00	2	36	2	0	1	40	1	0	1	0	4	2	0	27	3	0	3	30	1	0	4	0	6	5	77	306
12:30:00	3	35	0	0	2	38	1	0	3	0	3	4	2	34	2	0	2	38	1	0	1	0	2	2	82	306
12:45:00	3	25	0	0	2	28	1	0	2	0	1	3	1	34	0	0	5	35	1	0	0	0	4	1	67	301
13:00:00	0	40	0	0	1	40	3	0	3	0	4	6	4	33	5	1	4	43	8	0	0	0	3	8	97	323
13:15:00	1	35	0	0	0	36	2	0	1	0	6	3	1	41	4	0	2	46	7	0	3	0	4	10	95	341
13:30:00	4	34	2	0	6	40	1	0	2	0	7	3	1	40	4	0	2	45	6	0	2	0	5	8	96	355
13:45:00	0	44	2	0	2	46	0	0	0	0	12	0	3	38	6	0	0	47	7	0	2	0	5	9	102	390
14:00:00	2	40	0	0	1	42	4	1	1	0	14	6	2	35	1	0	3	38	4	0	0	0	4	4	90	383
14:15:00	2	39	3	0	4	44	1	0	2	0	5	3	0	33	1	0	8	34	2	0	0	0	6	2	83	371
14:30:00	3	31	0	1	1	35	0	0	4	0	4	4	6	39	0	0	1	45	4	0	2	0	1	6	90	365
14:45:00	4	47	0	0	7	51	1	0	6	0	11	7	1	41	3	0	1	45	7	0	1	0	11	8	111	374
Grand Total	30	556	13	1	33	600	22	1	35	0	90	58	30	537	46	1	41	614	65	1	19	0	56	85	**1357**	-
Approach%	5%	92.7%	2.2%	0.2%		-	37.9%	1.7%	60.3%	0%		-	4.9%	87.5%	7.5%	0.2%		-	76.5%	1.2%	22.4%	0%		-	-	-
Totals %	2.2%	41%	1%	0.1%		44.2%	1.6%	0.1%	2.6%	0%		4.3%	2.2%	39.6%	3.4%	0.1%		45.2%	4.8%	0.1%	1.4%	0%		6.3%	-	-
Heavy	1	2	0	0		-	1	0	0	0		-	0	10	0	0		-	0	0	0	0		-	-	-
Heavy %	3.3%	0.4%	0%	0%		-	4.5%	0%	0%	0%		-	0%	1.9%	0%	0%		-	0%	0%	0%	0%		-	-	-
Bicycles	0	1	0	0		-	0	0	0	0		-	0	0	0	0		-	0	0	0	0		-	-	-
Bicycle %	0%	0.2%	0%	0%		-	0%	0%	0%	0%		-	0%	0%	0%	0%		-	0%	0%	0%	0%		-	-	-

Spectrum

Turning Movement Count
Location Name: THE DONWAY W & LANGBOURNE PL
Date: Sun, Dec 18, 2022 Deployment Lead: Peter Ilias

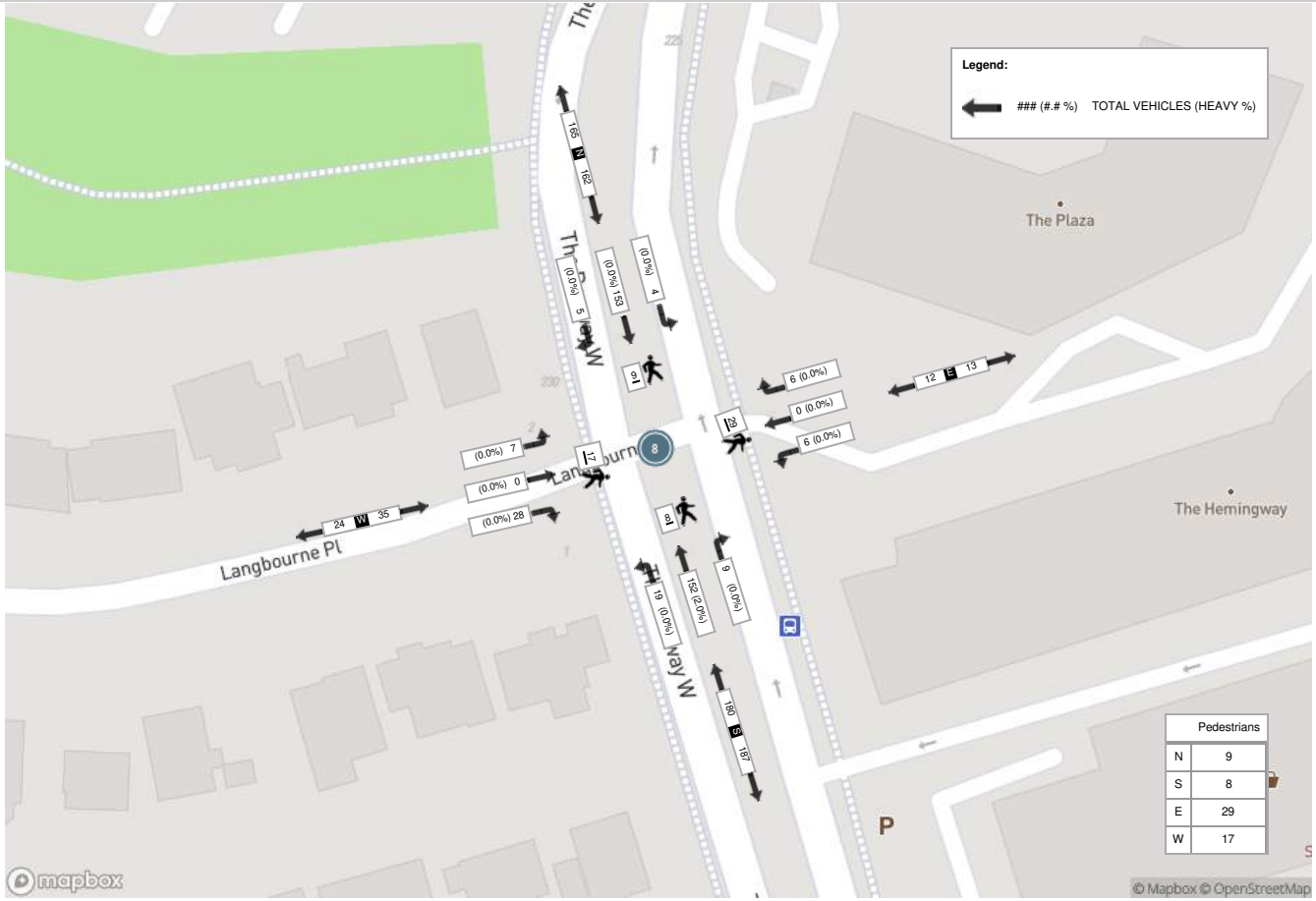
BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 01:00 PM - 02:00 PM Weather: Overcast Clouds (-0.34 °C)

Start Time	N Approach THE DONWAY W						E Approach EAST DRIVEWAY						S Approach THE DONWAY W						W Approach LANGBOURNE PL						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	
13:00:00	0	40	0	0	1	40	3	0	3	0	4	6	4	33	5	1	4	43	8	0	0	0	3	8	97
13:15:00	1	35	0	0	0	36	2	0	1	0	6	3	1	41	4	0	2	46	7	0	3	0	4	10	95
13:30:00	4	34	2	0	6	40	1	0	2	0	7	3	1	40	4	0	2	45	6	0	2	0	5	8	96
13:45:00	0	44	2	0	2	46	0	0	0	0	12	0	3	38	6	0	0	47	7	0	2	0	5	9	102
Grand Total	5	153	4	0	9	162	6	0	6	0	29	12	9	152	19	1	8	181	28	0	7	0	17	35	**390**
Approach%	3.1%	94.4%	2.5%	0%		-	50%	0%	50%	0%		-	5%	84%	10.5%	0.6%		-	80%	0%	20%	0%		-	**-**
Totals %	1.3%	39.2%	1%	0%		41.5%	1.5%	0%	1.5%	0%		3.1%	2.3%	39%	4.9%	0.3%		46.4%	7.2%	0%	1.8%	0%		9%	**-**
PHF	0.31	0.87	0.5	0		0.88	0.5	0	0.5	0		0.5	0.56	0.93	0.79	0.25		0.96	0.88	0	0.58	0		0.88	**-**
Heavy	0	0	0	0		0	0	0	0	0		0	0	3	0	0		3	0	0	0	0		0	**-**
Heavy %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	2%	0%	0%		1.7%	0%	0%	0%	0%		0%	**-**
Lights	5	153	4	0		162	6	0	6	0		12	9	149	19	1		178	28	0	7	0		35	**-**
Lights %	100%	100%	100%	0%		100%	100%	0%	100%	0%		100%	100%	98%	100%	100%		98.3%	100%	0%	100%	0%		100%	**-**
Single-Unit Trucks	0	0	0	0		0	0	0	0	0		0	0	1	0	0		1	0	0	0	0		0	**-**
Single-Unit Trucks %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0.7%	0%	0%		0.6%	0%	0%	0%	0%		0%	**-**
Buses	0	0	0	0		0	0	0	0	0		0	0	2	0	0		2	0	0	0	0		0	**-**
Buses %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	1.3%	0%	0%		1.1%	0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	-	9	-	-	-	-	-	29	-	-	-	-	-	8	-	-	-	-	-	17	-	**-**
Pedestrians%	-	-	-	-	14.3%		-	-	-	-	46%		-	-	-	-	12.7%		-	-	-	-	27%		**-**
Bicycles on Road	0	1	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%		**-**

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 01:00 PM - 02:00 PM **Weather: Overcast Clouds (-0.34 °C)**



Spectrum

Turning Movement Count
Location Name: THE DONWAY W & LANGBOURNE PL
Date: Tue, Dec 20, 2022 Deployment Lead: Peter Ilias

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Turning Movement Count (8 . THE DONWAY W & LANGBOURNE PL)

Start Time	N Approach THE DONWAY W						E Approach EAST DRIVEWAY						S Approach THE DONWAY W						W Approach LANGBOURNE PL						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		
07:30:00	0	25	1	0	1	26	3	0	1	0	4	4	1	23	3	0	3	27	6	0	2	0	1	8	65	
07:45:00	0	50	0	0	2	50	1	0	1	0	5	2	1	17	2	0	2	20	3	0	1	0	1	4	76	
08:00:00	3	56	1	0	2	60	2	0	2	0	6	4	1	24	5	1	5	31	9	0	4	0	3	13	108	
08:15:00	4	74	1	0	7	79	3	0	1	0	7	4	0	30	3	0	0	33	5	0	4	0	3	9	125	374
08:30:00	1	79	1	0	0	81	1	0	2	0	4	3	2	44	3	0	4	49	7	0	3	0	4	10	143	452
08:45:00	5	75	0	0	6	80	0	0	2	0	11	2	1	50	3	0	2	54	7	0	1	0	5	8	144	520
09:00:00	2	82	2	0	16	86	1	0	3	0	14	4	2	57	6	1	4	66	9	0	4	0	9	13	169	581
09:15:00	6	92	1	0	12	99	1	0	3	0	16	4	1	46	2	1	4	50	7	0	3	0	7	10	163	619
BREAK																										
16:00:00	1	51	0	0	3	52	3	0	1	0	9	4	6	73	5	0	2	84	10	0	13	0	7	23	163	
16:15:00	5	50	0	0	0	55	1	0	4	0	5	5	3	74	4	0	2	81	8	0	8	0	4	16	157	
16:30:00	2	73	0	0	0	75	0	0	2	0	13	2	4	67	9	0	7	80	6	1	7	0	3	14	171	
16:45:00	4	68	5	0	6	77	3	0	3	0	14	6	2	87	8	0	1	97	8	1	13	0	7	22	202	693
17:00:00	6	56	2	0	2	64	3	0	2	0	8	5	2	77	3	0	4	82	12	0	16	0	4	28	179	709
17:15:00	2	52	3	0	2	57	0	0	2	0	5	2	3	74	3	0	2	80	10	0	10	0	5	20	159	711
17:30:00	1	65	2	0	1	68	4	0	1	0	2	5	2	74	5	0	0	81	2	0	7	0	6	9	163	703
17:45:00	5	46	1	0	2	52	0	0	0	0	3	0	6	70	0	0	0	76	1	0	3	0	3	4	132	633
Grand Total	47	994	20	0	62	1061	26	0	30	0	126	56	37	887	64	3	42	991	110	2	99	0	72	211	**2319**	-
Approach%	4.4%	93.7%	1.9%	0%		-	46.4%	0%	53.6%	0%		-	3.7%	89.5%	6.5%	0.3%		-	52.1%	0.9%	46.9%	0%		-	**-**	-
Totals %	2%	42.9%	0.9%	0%		45.8%	1.1%	0%	1.3%	0%		2.4%	1.6%	38.2%	2.8%	0.1%		42.7%	4.7%	0.1%	4.3%	0%		9.1%	**-**	-
Heavy	2	17	2	0		-	1	0	1	0		-	2	23	4	0		-	0	1	3	0		-	**-**	-
Heavy %	4.3%	1.7%	10%	0%		-	3.8%	0%	3.3%	0%		-	5.4%	2.6%	6.3%	0%		-	0%	50%	3%	0%		-	**-**	-
Bicycles	0	1	0	0		-	0	0	0	0		-	0	0	0	0		-	2	0	0	0		-	**-**	-
Bicycle %	0%	0.1%	0%	0%		-	0%	0%	0%	0%		-	0%	0%	0%	0%		-	1.8%	0%	0%	0%		-	**-**	-

Spectrum

Turning Movement Count
Location Name: THE DONWAY W & LANGBOURNE PL
Date: Tue, Dec 20, 2022 Deployment Lead: Peter Ilias

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 08:30 AM - 09:30 AM Weather: Broken Clouds (-4.7 °C)

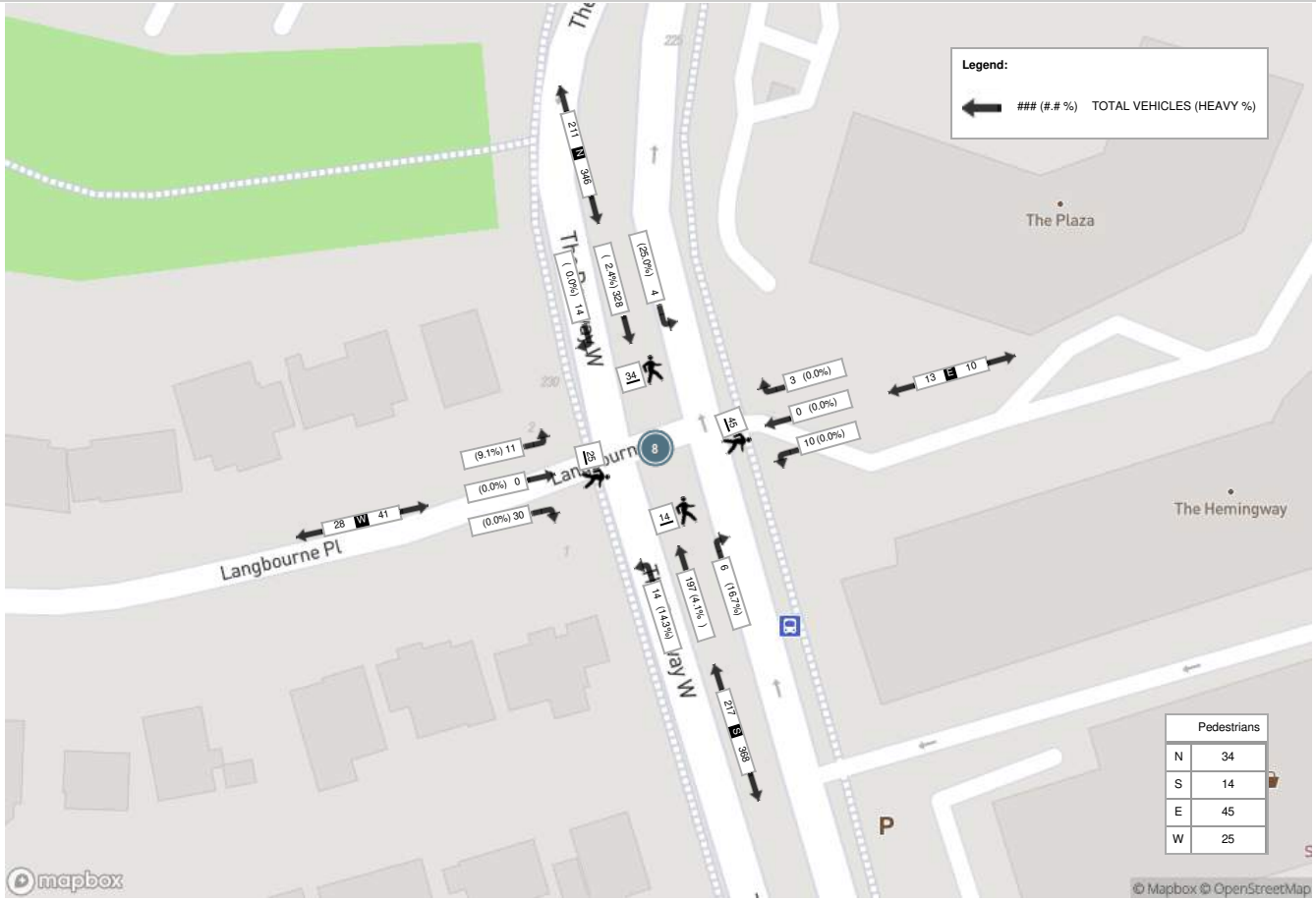
Start Time	N Approach THE DONWAY W						E Approach EAST DRIVEWAY						S Approach THE DONWAY W						W Approach LANGBOURNE PL						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
08:30:00	1	79	1	0	0	81	1	0	2	0	4	3	2	44	3	0	4	49	7	0	3	0	4	10	143
08:45:00	5	75	0	0	6	80	0	0	2	0	11	2	1	50	3	0	2	54	7	0	1	0	5	8	144
09:00:00	2	82	2	0	16	86	1	0	3	0	14	4	2	57	6	1	4	66	9	0	4	0	9	13	169
09:15:00	6	92	1	0	12	99	1	0	3	0	16	4	1	46	2	1	4	50	7	0	3	0	7	10	163
Grand Total	14	328	4	0	34	346	3	0	10	0	45	13	6	197	14	2	14	219	30	0	11	0	25	41	**619**
Approach%	4%	94.8%	1.2%	0%		-	23.1%	0%	76.9%	0%		-	2.7%	90%	6.4%	0.9%		-	73.2%	0%	26.8%	0%		-	**-**
Totals %	2.3%	53%	0.6%	0%		55.9%	0.5%	0%	1.6%	0%		2.1%	1%	31.8%	2.3%	0.3%		35.4%	4.8%	0%	1.8%	0%		6.6%	**-**
PHF	0.58	0.89	0.5	0		0.87	0.75	0	0.83	0		0.81	0.75	0.86	0.58	0.5		0.83	0.83	0	0.69	0		0.79	**-**
Heavy	0	8	1	0		9	0	0	0	0		0	1	8	2	0		11	0	0	1	0		1	**-**
Heavy %	0%	2.4%	25%	0%		2.6%	0%	0%	0%	0%		0%	16.7%	4.1%	14.3%	0%		5%	0%	0%	9.1%	0%		2.4%	**-**
Lights	14	320	3	0		337	3	0	10	0		13	5	189	12	2		208	30	0	10	0		40	**-**
Lights %	100%	97.6%	75%	0%		97.4%	100%	0%	100%	0%		100%	83.3%	95.9%	85.7%	100%		95%	100%	0%	90.9%	0%		97.6%	**-**
Single-Unit Trucks	0	1	1	0		2	0	0	0	0		0	1	2	1	0		4	0	0	1	0		1	**-**
Single-Unit Trucks %	0%	0.3%	25%	0%		0.6%	0%	0%	0%	0%		0%	16.7%	1%	7.1%	0%		1.8%	0%	0%	9.1%	0%		2.4%	**-**
Buses	0	7	0	0		7	0	0	0	0		0	0	6	1	0		7	0	0	0	0		0	**-**
Buses %	0%	2.1%	0%	0%		2%	0%	0%	0%	0%		0%	0%	3%	7.1%	0%		3.2%	0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	-	34	-	-	-	-	-	45	-	-	-	-	-	14	-	-	-	-	-	25	-	**-**
Pedestrians%	-	-	-	-	28.8%		-	-	-	-	38.1%		-	-	-	-	11.9%		-	-	-	-	21.2%		**-**
Bicycles on Road	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	2	0	0	0	0	-	**-**
Bicycles on Road%	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	0%		**-**

Peak Hour: 04:30 PM - 05:30 PM Weather: Overcast Clouds (0.21 °C)

Start Time	N Approach THE DONWAY W						E Approach EAST DRIVEWAY						S Approach THE DONWAY W						W Approach LANGBOURNE PL						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	
16:30:00	2	73	0	0	0	75	0	0	2	0	13	2	4	67	9	0	7	80	6	1	7	0	3	14	171
16:45:00	4	68	5	0	6	77	3	0	3	0	14	6	2	87	8	0	1	97	8	1	13	0	7	22	202
17:00:00	6	56	2	0	2	64	3	0	2	0	8	5	2	77	3	0	4	82	12	0	16	0	4	28	179
17:15:00	2	52	3	0	2	57	0	0	2	0	5	2	3	74	3	0	2	80	10	0	10	0	5	20	159
Grand Total	14	249	10	0	10	273	6	0	9	0	40	15	11	305	23	0	14	339	36	2	46	0	19	84	**711**
Approach%	5.1%	91.2%	3.7%	0%		-	40%	0%	60%	0%		-	3.2%	90%	6.8%	0%		-	42.9%	2.4%	54.8%	0%		-	**-**
Totals %	2%	35%	1.4%	0%		38.4%	0.8%	0%	1.3%	0%		2.1%	1.5%	42.9%	3.2%	0%		47.7%	5.1%	0.3%	6.5%	0%		11.8%	**-**
PHF	0.58	0.85	0.5	0		0.89	0.5	0	0.75	0		0.63	0.69	0.88	0.64	0		0.87	0.75	0.5	0.72	0		0.75	**-**
Heavy	0	2	0	0		2	1	0	0	0		1	0	5	0	0		5	0	1	0	0		1	**-**
Heavy %	0%	0.8%	0%	0%		0.7%	16.7%	0%	0%	0%		6.7%	0%	1.6%	0%	0%		1.5%	0%	50%	0%	0%		1.2%	**-**
Lights	14	247	10	0		271	5	0	9	0		14	11	300	23	0		334	36	1	46	0		83	**-**
Lights %	100%	99.2%	100%	0%		99.3%	83.3%	0%	100%	0%		93.3%	100%	98.4%	100%	0%		98.5%	100%	50%	100%	0%		98.8%	**-**
Single-Unit Trucks	0	2	0	0		2	1	0	0	0		1	0	2	0	0		2	0	1	0	0		1	**-**
Single-Unit Trucks %	0%	0.8%	0%	0%		0.7%	16.7%	0%	0%	0%		6.7%	0%	0.7%	0%	0%		0.6%	0%	50%	0%	0%		1.2%	**-**
Buses	0	0	0	0		0	0	0	0	0		0	0	3	0	0		3	0	0	0	0		0	**-**
Buses %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	1%	0%	0%		0.9%	0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	-	10	-	-	-	-	-	40	-	-	-	-	-	14	-	-	-	-	-	19	-	**-**
Pedestrians%	-	-	-	-	12%		-	-	-	-	48.2%		-	-	-	-	16.9%		-	-	-	-	22.9%		**-**
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%		**-**

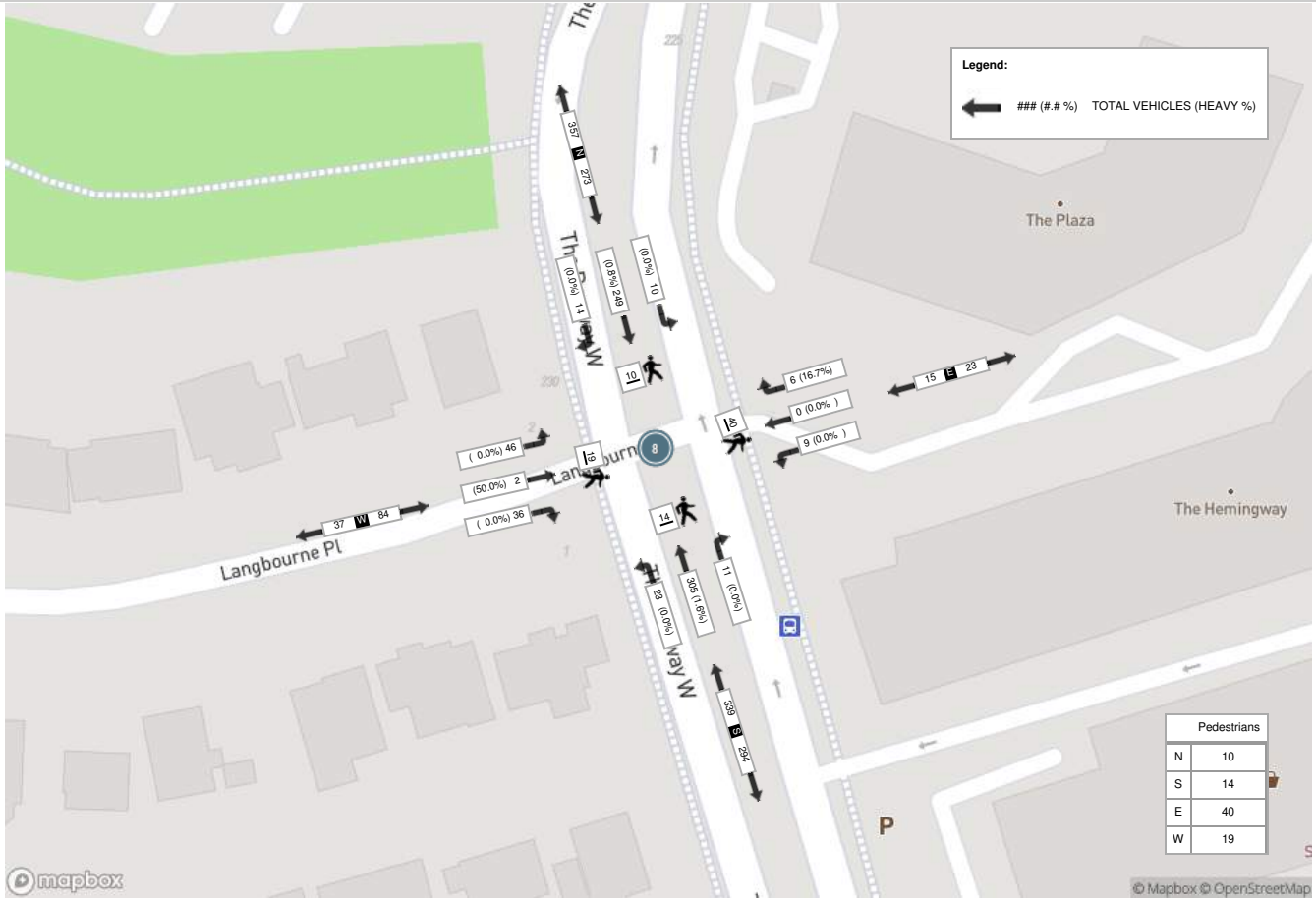
BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 08:30 AM - 09:30 AM **Weather: Broken Clouds (-4.7 °C)**



BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 04:30 PM - 05:30 PM Weather: Overcast Clouds (0.21 °C)



Spectrum

Turning Movement Count
Location Name: THE DONWAY W & OVERTON CRES
Date: Sun, Dec 18, 2022 Deployment Lead: Peter Ilias

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Turning Movement Count (4 . THE DONWAY W & OVERTON CRES)

Start Time	N Approach OVERTON CRES					E Approach THE DONWAY W					W Approach THE DONWAY W					Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Left N:E	UTurn N:N	Peds N:	Approach Total	Right E:N	Thru E:W	UTurn E:E	Peds E:	Approach Total	Thru W:E	Left W:N	UTurn W:W	Peds W:	Approach Total		
11:00:00	1	2	0	2	3	0	21	1	0	22	24	0	0	0	24	49	
11:15:00	0	0	0	0	0	0	16	0	0	16	30	0	0	0	30	46	
11:30:00	0	1	0	0	1	2	29	1	2	32	35	0	0	1	35	68	
11:45:00	0	1	0	2	1	1	20	2	0	23	39	0	0	0	39	63	226
12:00:00	1	1	0	1	2	4	27	0	0	31	31	0	0	2	31	64	241
12:15:00	1	2	0	3	3	1	30	0	0	31	27	1	0	0	28	62	257
12:30:00	2	1	0	1	3	1	26	1	0	28	24	0	0	0	24	55	244
12:45:00	0	3	0	0	3	3	24	1	0	28	30	2	0	0	32	63	244
13:00:00	1	0	0	2	1	3	37	0	1	40	36	0	0	0	36	77	257
13:15:00	0	0	0	5	0	0	26	0	1	26	36	3	0	4	39	65	260
13:30:00	0	2	0	4	2	1	34	0	0	35	47	1	0	1	48	85	290
13:45:00	0	2	0	4	2	0	31	0	0	31	42	0	0	0	42	75	302
14:00:00	0	2	0	4	2	1	35	1	0	37	38	0	0	2	38	77	302
14:15:00	0	0	0	0	0	2	37	2	1	41	35	1	0	0	36	77	314
14:30:00	1	1	0	1	2	3	27	3	0	33	22	2	0	0	24	59	288
14:45:00	1	2	0	3	3	1	43	0	0	44	45	0	0	0	45	92	305
Grand Total	8	20	0	32	28	23	463	12	5	498	541	10	0	10	551	**1077**	-
Approach%	28.6%	71.4%	0%		-	4.6%	93%	2.4%		-	98.2%	1.8%	0%		-	**-**	-
Totals %	0.7%	1.9%	0%		2.6%	2.1%	43%	1.1%		46.2%	50.2%	0.9%	0%		51.2%	**-**	-
Heavy	1	0	0		-	1	2	0		-	12	0	0		-	**-**	-
Heavy %	12.5%	0%	0%		-	4.3%	0.4%	0%		-	2.2%	0%	0%		-	**-**	-
Bicycles	0	0	0		-	0	1	0		-	0	0	0		-	**-**	-
Bicycle %	0%	0%	0%		-	0%	0.2%	0%		-	0%	0%	0%		-	**-**	-

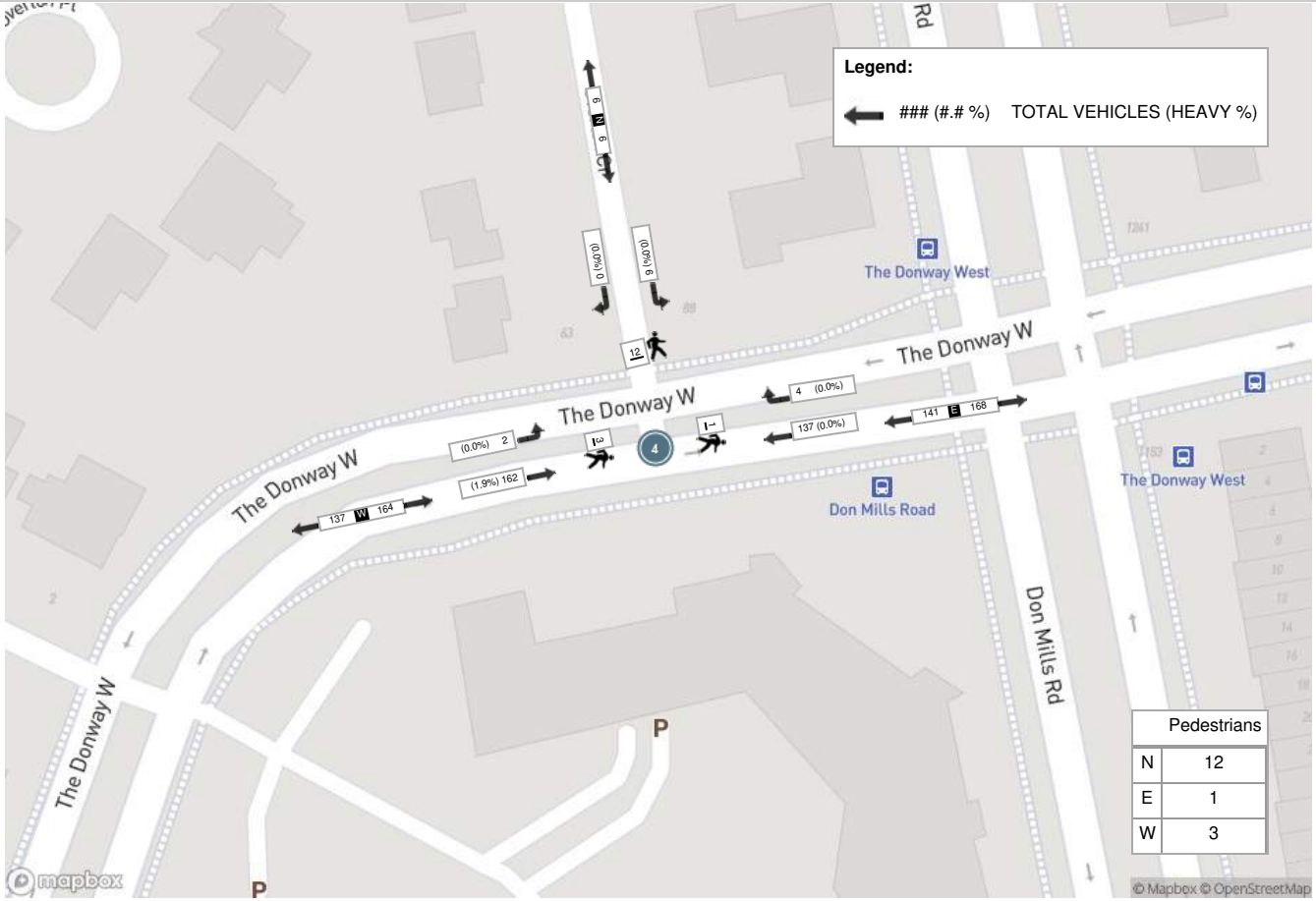
BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 01:30 PM - 02:30 PM Weather: Overcast Clouds (-0.34 °C)

Start Time	N Approach OVERTON CRES					E Approach THE DONWAY W					W Approach THE DONWAY W					Int. Total (15 min)
	Right	Left	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds	Approach Total	Thru	Left	UTurn	Peds	Approach Total	
13:30:00	0	2	0	4	2	1	34	0	0	35	47	1	0	1	48	85
13:45:00	0	2	0	4	2	0	31	0	0	31	42	0	0	0	42	75
14:00:00	0	2	0	4	2	1	35	1	0	37	38	0	0	2	38	77
14:15:00	0	0	0	0	0	2	37	2	1	41	35	1	0	0	36	77
Grand Total	0	6	0	12	6	4	137	3	1	144	162	2	0	3	164	**314**
Approach%	0%	100%	0%		-	2.8%	95.1%	2.1%		-	98.8%	1.2%	0%		-	**-**
Totals %	0%	1.9%	0%		1.9%	1.3%	43.6%	1%		45.9%	51.6%	0.6%	0%		52.2%	**-**
PHF	0	0.75	0		0.75	0.5	0.93	0.38		0.88	0.86	0.5	0		0.85	**-**
Heavy	0	0	0		0	0	0	0		0	3	0	0		3	**-**
Heavy %	0%	0%	0%		0%	0%	0%	0%		0%	1.9%	0%	0%		1.8%	**-**
Lights	0	6	0		6	4	137	3		144	159	2	0		161	**-**
Lights %	0%	100%	0%		100%	100%	100%	100%		100%	98.1%	100%	0%		98.2%	**-**
Single-Unit Trucks	0	0	0		0	0	0	0		0	1	0	0		1	**-**
Single-Unit Trucks %	0%	0%	0%		0%	0%	0%	0%		0%	0.6%	0%	0%		0.6%	**-**
Buses	0	0	0		0	0	0	0		0	2	0	0		2	**-**
Buses %	0%	0%	0%		0%	0%	0%	0%		0%	1.2%	0%	0%		1.2%	**-**
Pedestrians	-	-	-	12	-	-	-	-	1	-	-	-	-	3	-	**-**
Pedestrians%	-	-	-	75%		-	-	-	6.3%		-	-	-	18.8%		**-**
Bicycles on Road	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	**-**
Bicycles on Road%	-	-	-	0%		-	-	-	0%		-	-	-	0%		**-**

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 01:30 PM - 02:30 PM Weather: Overcast Clouds (-0.34 °C)



BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Turning Movement Count (4 . THE DONWAY W & OVERTON CRES)

Start Time	N Approach OVERTON CRES					E Approach THE DONWAY W					W Approach THE DONWAY W					Int. Total (15 min)	Int. Total (1 hr)
	Right N:W	Left N:E	UTurn N:N	Peds N:	Approach Total	Right E:N	Thru E:W	UTurn E:E	Peds E:	Approach Total	Thru W:E	Left W:N	UTurn W:W	Peds W:	Approach Total		
07:30:00	0	2	0	3	2	0	24	1	4	25	31	0	0	0	31	58	
07:45:00	1	0	0	3	1	1	37	1	0	39	28	0	0	1	28	68	
08:00:00	0	0	0	0	0	1	50	1	0	52	33	0	0	0	33	85	
08:15:00	2	1	0	5	3	0	59	0	0	59	33	0	0	0	33	95	306
08:30:00	2	4	0	5	6	2	57	0	1	59	38	2	0	0	40	105	353
08:45:00	1	1	0	3	2	8	66	3	0	77	32	1	0	2	33	112	397
09:00:00	1	2	0	6	3	3	97	0	0	100	43	1	0	0	44	147	459
09:15:00	1	3	0	3	4	2	63	2	0	67	67	0	0	2	67	138	502
BREAK																	
16:00:00	1	1	0	1	2	1	40	2	0	43	92	1	0	0	93	138	
16:15:00	0	5	0	2	5	3	50	0	0	53	64	0	0	2	64	122	
16:30:00	2	1	0	5	3	2	63	0	0	65	65	0	0	0	65	133	
16:45:00	2	2	0	4	4	4	61	1	0	66	79	0	0	0	79	149	542
17:00:00	0	0	0	3	0	2	47	1	0	50	83	2	0	0	85	135	539
17:15:00	0	3	0	1	3	5	53	2	0	60	68	0	0	0	68	131	548
17:30:00	0	1	0	1	1	4	68	0	0	72	88	1	0	0	89	162	577
17:45:00	2	1	0	2	3	3	51	1	1	55	60	1	0	0	61	119	547
Grand Total	15	27	0	47	42	41	886	15	6	942	904	9	0	7	913	**1897**	-
Approach%	35.7%	64.3%	0%		-	4.4%	94.1%	1.6%		-	99%	1%	0%		-	**-**	-
Totals %	0.8%	1.4%	0%		2.2%	2.2%	46.7%	0.8%		49.7%	47.7%	0.5%	0%		48.1%	**-**	-
Heavy	1	2	0		-	1	19	0		-	24	0	0		-	**-**	-
Heavy %	6.7%	7.4%	0%		-	2.4%	2.1%	0%		-	2.7%	0%	0%		-	**-**	-
Bicycles	0	0	0		-	1	1	0		-	0	0	0		-	**-**	-
Bicycle %	0%	0%	0%		-	2.4%	0.1%	0%		-	0%	0%	0%		-	**-**	-

Peak Hour: 08:30 AM - 09:30 AM Weather: Broken Clouds (-4.7 °C)

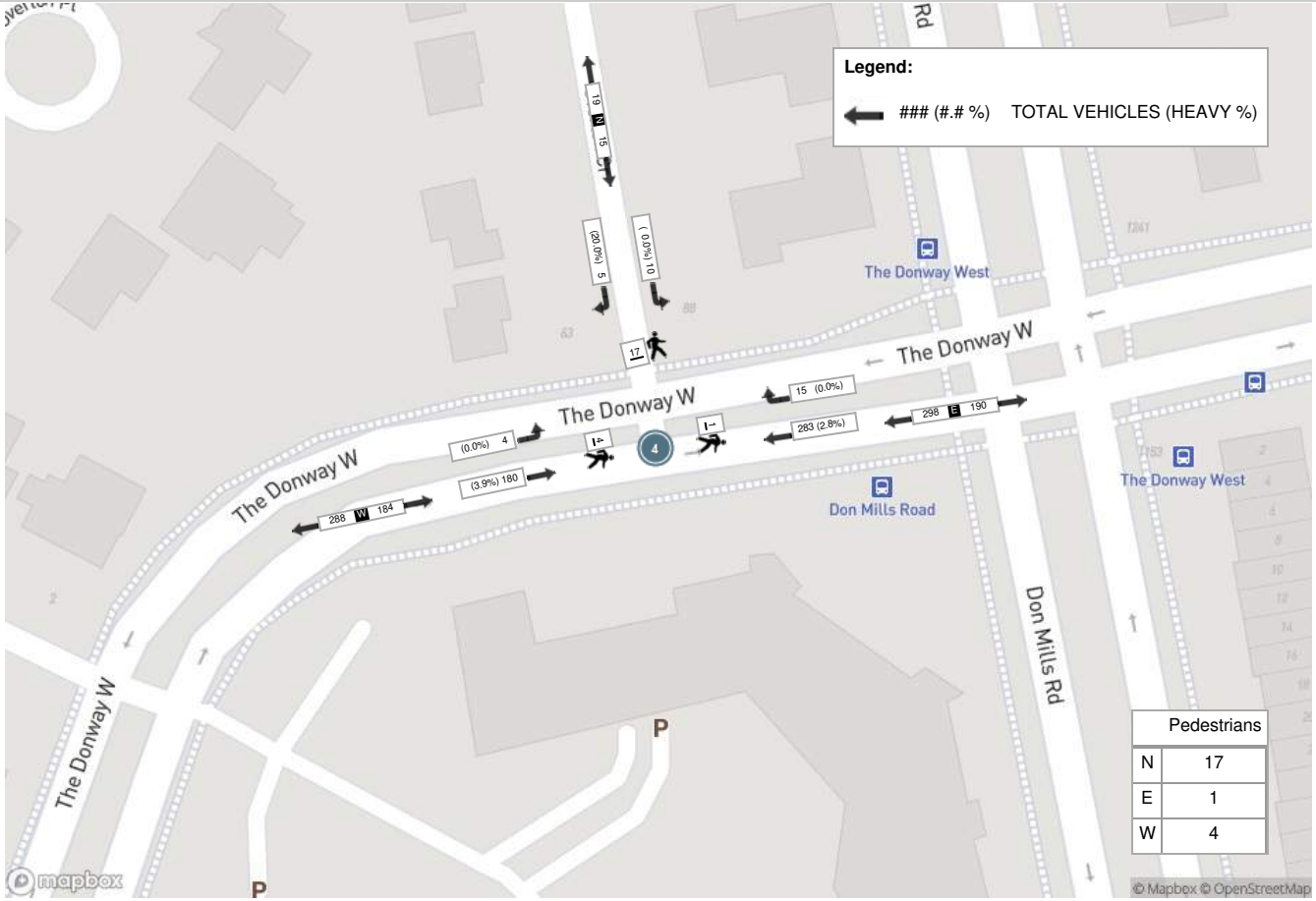
Start Time	N Approach OVERTON CRES					E Approach THE DONWAY W					W Approach THE DONWAY W					Int. Total (15 min)
	Right	Left	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds	Approach Total	Thru	Left	UTurn	Peds	Approach Total	
08:30:00	2	4	0	5	6	2	57	0	1	59	38	2	0	0	40	105
08:45:00	1	1	0	3	2	8	66	3	0	77	32	1	0	2	33	112
09:00:00	1	2	0	6	3	3	97	0	0	100	43	1	0	0	44	147
09:15:00	1	3	0	3	4	2	63	2	0	67	67	0	0	2	67	138
Grand Total	5	10	0	17	15	15	283	5	1	303	180	4	0	4	184	**502**
Approach%	33.3%	66.7%	0%		-	5%	93.4%	1.7%		-	97.8%	2.2%	0%		-	-
Totals %	1%	2%	0%		3%	3%	56.4%	1%		60.4%	35.9%	0.8%	0%		36.7%	-
PHF	0.63	0.63	0		0.63	0.47	0.73	0.42		0.76	0.67	0.5	0		0.69	-
Heavy	1	0	0		1	0	8	0		8	7	0	0		7	-
Heavy %	20%	0%	0%		6.7%	0%	2.8%	0%		2.6%	3.9%	0%	0%		3.8%	-
Lights	4	10	0		14	15	275	5		295	173	4	0		177	-
Lights %	80%	100%	0%		93.3%	100%	97.2%	100%		97.4%	96.1%	100%	0%		96.2%	-
Single-Unit Trucks	1	0	0		1	0	3	0		3	3	0	0		3	-
Single-Unit Trucks %	20%	0%	0%		6.7%	0%	1.1%	0%		1%	1.7%	0%	0%		1.6%	-
Buses	0	0	0		0	0	5	0		5	4	0	0		4	-
Buses %	0%	0%	0%		0%	0%	1.8%	0%		1.7%	2.2%	0%	0%		2.2%	-
Articulated Trucks	0	0	0		0	0	0	0		0	0	0	0		0	-
Articulated Trucks %	0%	0%	0%		0%	0%	0%	0%		0%	0%	0%	0%		0%	-
Pedestrians	-	-	-	17	-	-	-	-	1	-	-	-	-	4	-	-
Pedestrians%	-	-	-	77.3%		-	-	-	4.5%		-	-	-	18.2%		-
Bicycles on Road	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	-
Bicycles on Road%	-	-	-	0%		-	-	-	0%		-	-	-	0%		-

Peak Hour: 04:45 PM - 05:45 PM Weather: Overcast Clouds (0.21 °C)

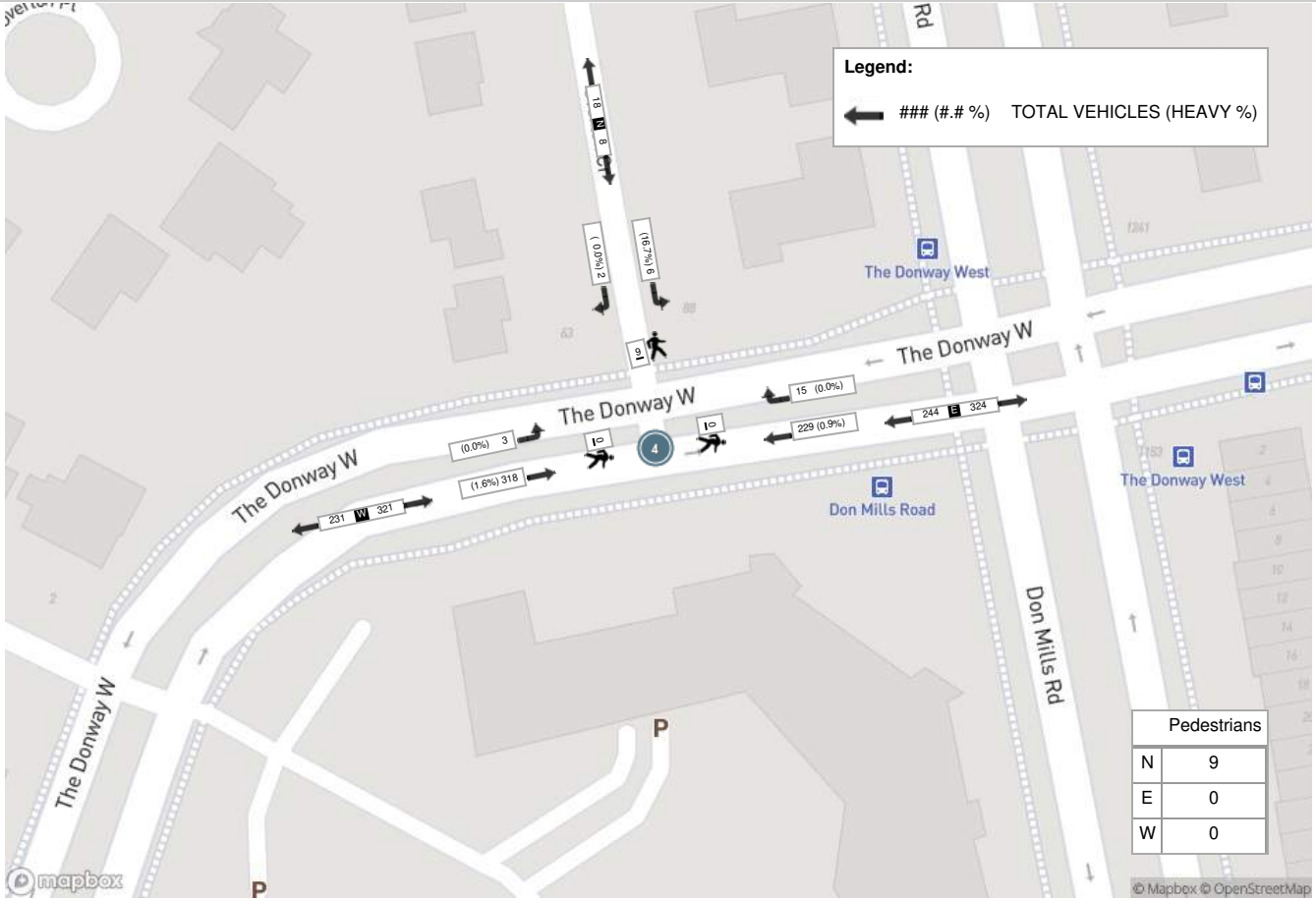
Start Time	N Approach OVERTON CRES					E Approach THE DONWAY W					W Approach THE DONWAY W					Int. Total (15 min)
	Right	Left	UTurn	Peds	Approach Total	Right	Thru	UTurn	Peds	Approach Total	Thru	Left	UTurn	Peds	Approach Total	
16:45:00	2	2	0	4	4	4	61	1	0	66	79	0	0	0	79	149
17:00:00	0	0	0	3	0	2	47	1	0	50	83	2	0	0	85	135
17:15:00	0	3	0	1	3	5	53	2	0	60	68	0	0	0	68	131
17:30:00	0	1	0	1	1	4	68	0	0	72	88	1	0	0	89	162
Grand Total	2	6	0	9	8	15	229	4	0	248	318	3	0	0	321	**577**
Approach%	25%	75%	0%		-	6%	92.3%	1.6%		-	99.1%	0.9%	0%		-	**-**
Totals %	0.3%	1%	0%		1.4%	2.6%	39.7%	0.7%		43%	55.1%	0.5%	0%		55.6%	**-**
PHF	0.25	0.5	0		0.5	0.75	0.84	0.5		0.86	0.9	0.38	0		0.9	**-**
Heavy	0	1	0		1	0	2	0		2	5	0	0		5	**-**
Heavy %	0%	16.7%	0%		12.5%	0%	0.9%	0%		0.8%	1.6%	0%	0%		1.6%	**-**
Lights	2	5	0		7	15	227	4		246	313	3	0		316	**-**
Lights %	100%	83.3%	0%		87.5%	100%	99.1%	100%		99.2%	98.4%	100%	0%		98.4%	**-**
Single-Unit Trucks	0	1	0		1	0	2	0		2	2	0	0		2	**-**
Single-Unit Trucks %	0%	16.7%	0%		12.5%	0%	0.9%	0%		0.8%	0.6%	0%	0%		0.6%	**-**
Buses	0	0	0		0	0	0	0		0	3	0	0		3	**-**
Buses %	0%	0%	0%		0%	0%	0%	0%		0%	0.9%	0%	0%		0.9%	**-**
Articulated Trucks	0	0	0		0	0	0	0		0	0	0	0		0	**-**
Articulated Trucks %	0%	0%	0%		0%	0%	0%	0%		0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	9	-	-	-	-	0	-	-	-	-	0	-	**-**
Pedestrians%	-	-	-	100%		-	-	-	0%		-	-	-	0%		**-**
Bicycles on Road	0	0	0	0	-	0	1	0	0	-	0	0	0	0	-	**-**
Bicycles on Road%	-	-	-	0%		-	-	-	0%		-	-	-	0%		**-**

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 08:30 AM - 09:30 AM Weather: Broken Clouds (-4.7 °C)



Peak Hour: 04:45 PM - 05:45 PM Weather: Overcast Clouds (0.21 °C)



Spectrum

Turning Movement Count
Location Name: THE DONWAY W & SITE DRIVEWAY (230 THE DONWAY)
Date: Sun, Dec 18, 2022 Deployment Lead: Peter Ilias

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Turning Movement Count (7 . THE DONWAY W & SITE DRIVEWAY (230 THE DONWAY))

Start Time	N Approach THE DONWAY W						E Approach SITE ACCESS						S Approach THE DONWAY W						W Approach 225 THE DONWAY W						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		
11:00:00	0	28	0	0	0	28	0	0	1	0	4	1	1	29	0	0	0	30	1	0	0	0	1	1	60	
11:15:00	0	24	0	0	0	24	2	0	0	0	1	2	1	28	0	0	0	29	0	0	0	0	0	0	55	
11:30:00	0	32	1	1	4	34	0	0	0	0	3	0	1	29	0	0	2	30	12	0	3	0	3	15	79	
11:45:00	0	19	0	0	0	19	0	0	2	0	3	2	2	33	0	0	1	35	4	0	2	0	0	6	62	256
12:00:00	0	22	1	0	0	23	1	0	0	0	0	1	0	27	1	0	4	28	2	0	4	0	1	6	58	254
12:15:00	0	33	2	0	0	35	1	0	0	0	5	1	0	31	1	0	1	32	8	0	0	0	8	8	76	275
12:30:00	0	34	1	0	0	35	0	0	2	0	3	2	1	35	0	0	0	36	2	0	0	0	2	2	75	271
12:45:00	1	25	1	0	0	27	1	0	3	0	0	4	3	32	0	0	0	35	0	0	0	0	0	0	66	275
13:00:00	0	38	1	0	0	39	0	0	3	0	3	3	6	30	1	0	0	37	0	0	0	0	0	0	79	296
13:15:00	0	32	0	0	0	32	0	0	2	0	4	2	0	45	0	0	1	45	1	0	0	0	9	1	80	300
13:30:00	1	40	0	0	0	41	0	0	1	0	4	1	2	40	1	0	0	43	1	0	0	0	3	1	86	311
13:45:00	0	42	0	0	0	42	1	0	3	0	8	4	0	40	0	0	0	40	0	0	0	0	2	0	86	331
14:00:00	0	42	1	0	1	43	0	0	0	0	11	0	3	37	0	0	0	40	0	0	1	0	3	1	84	336
14:15:00	0	41	0	0	2	41	0	0	2	0	2	2	2	30	1	0	0	33	0	0	1	0	2	1	77	333
14:30:00	2	34	0	0	0	36	0	0	1	0	3	1	3	37	1	1	0	42	0	0	0	0	2	0	79	326
14:45:00	1	45	2	0	1	48	1	0	2	0	2	3	2	40	0	1	0	43	2	0	1	0	5	3	97	337
Grand Total	5	531	10	1	8	547	7	0	22	0	56	29	27	543	6	2	9	578	33	0	12	0	41	45	**1199**	-
Approach%	0.9%	97.1%	1.8%	0.2%		-	24.1%	0%	75.9%	0%		-	4.7%	93.9%	1%	0.3%		-	73.3%	0%	26.7%	0%		-	**-**	-
Totals %	0.4%	44.3%	0.8%	0.1%		45.6%	0.6%	0%	1.8%	0%		2.4%	2.3%	45.3%	0.5%	0.2%		48.2%	2.8%	0%	1%	0%		3.8%	**-**	-
Heavy	0	3	1	0		-	1	0	0	0		-	0	10	1	0		-	0	0	1	0		-	**-**	-
Heavy %	0%	0.6%	10%	0%		-	14.3%	0%	0%	0%		-	0%	1.8%	16.7%	0%		-	0%	0%	8.3%	0%		-	**-**	-
Bicycles	0	1	0	0		-	0	0	0	0		-	0	0	0	0		-	0	0	0	0		-	**-**	-
Bicycle %	0%	0.2%	0%	0%		-	0%	0%	0%	0%		-	0%	0%	0%	0%		-	0%	0%	0%	0%		-	**-**	-

Spectrum

Turning Movement Count
Location Name: THE DONWAY W & SITE DRIVEWAY (230 THE DONWAY)
Date: Sun, Dec 18, 2022 Deployment Lead: Peter Ilias

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 02:00 PM - 03:00 PM Weather: Overcast Clouds (-0.34 °C)

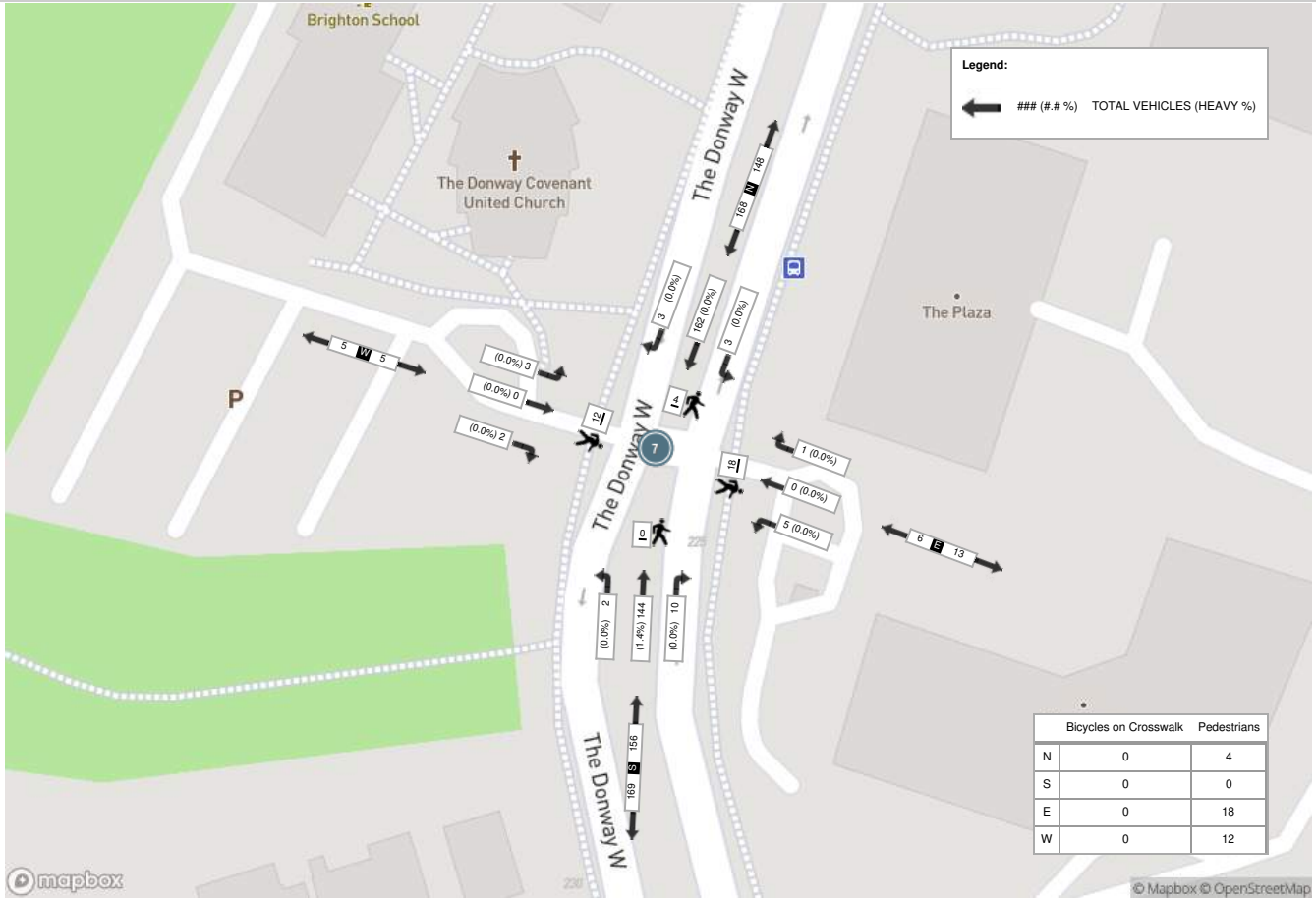
Start Time	N Approach THE DONWAY W						E Approach SITE ACCESS						S Approach THE DONWAY W						W Approach 225 THE DONWAY W						Int. Total (15 min)
	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	Right	Thru	Left	UTurn	Peds	Approach Total	
14:00:00	0	42	1	0	1	43	0	0	0	0	11	0	3	37	0	0	0	40	0	0	1	0	3	1	84
14:15:00	0	41	0	0	2	41	0	0	2	0	2	2	2	30	1	0	0	33	0	0	1	0	2	1	77
14:30:00	2	34	0	0	0	36	0	0	1	0	3	1	3	37	1	1	0	42	0	0	0	0	2	0	79
14:45:00	1	45	2	0	1	48	1	0	2	0	2	3	2	40	0	1	0	43	2	0	1	0	5	3	97
Grand Total	3	162	3	0	4	168	1	0	5	0	18	6	10	144	2	2	0	158	2	0	3	0	12	5	**337**
Approach%	1.8%	96.4%	1.8%	0%		-	16.7%	0%	83.3%	0%		-	6.3%	91.1%	1.3%	1.3%		-	40%	0%	60%	0%		-	**-**
Totals %	0.9%	48.1%	0.9%	0%		49.9%	0.3%	0%	1.5%	0%		1.8%	3%	42.7%	0.6%	0.6%		46.9%	0.6%	0%	0.9%	0%		1.5%	**-**
PHF	0.38	0.9	0.38	0		0.88	0.25	0	0.63	0		0.5	0.83	0.9	0.5	0.5		0.92	0.25	0	0.75	0		0.42	**-**
Heavy	0	0	0	0		0	0	0	0	0		0	0	2	0	0		2	0	0	0	0		0	**-**
Heavy %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	1.4%	0%	0%		1.3%	0%	0%	0%	0%		0%	**-**
Lights	3	162	3	0		168	1	0	5	0		6	10	142	2	2		156	2	0	3	0		5	**-**
Lights %	100%	100%	100%	0%		100%	100%	0%	100%	0%		100%	100%	98.6%	100%	100%		98.7%	100%	0%	100%	0%		100%	**-**
Single-Unit Trucks	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	**-**
Single-Unit Trucks %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	**-**
Buses	0	0	0	0		0	0	0	0	0		0	0	2	0	0		2	0	0	0	0		0	**-**
Buses %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	1.4%	0%	0%		1.3%	0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	-	4	-	-	-	-	-	18	-	-	-	-	-	0	-	-	-	-	-	12	-	**-**
Pedestrians%	-	-	-	-	11.8%		-	-	-	-	52.9%		-	-	-	-	0%		-	-	-	-	35.3%		**-**
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	**-**
Bicycles on Crosswalk%	-	-	-	-	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%		**-**

Spectrum

Turning Movement Count
Location Name: THE DONWAY W & SITE DRIVEWAY (230 THE DONWAY)
Date: Sun, Dec 18, 2022 Deployment Lead: Peter Ilias

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 02:00 PM - 03:00 PM **Weather: Overcast Clouds (-0.34 °C)**



	Bicycles on Crosswalk	Pedestrians
N	0	4
S	0	0
E	0	18
W	0	12

Spectrum

Turning Movement Count
Location Name: THE DONWAY W & SITE DRIVEWAY (230 THE DONWAY)
Date: Tue, Dec 20, 2022 Deployment Lead: Peter Ilias

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Turning Movement Count (7 . THE DONWAY W & SITE DRIVEWAY (230 THE DONWAY))

Start Time	N Approach THE DONWAY W						E Approach SITE ACCESS						S Approach THE DONWAY W						W Approach 225 THE DONWAY W						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		
07:30:00	0	25	0	0	0	25	0	0	0	0	3	0	0	27	1	0	0	28	0	0	0	0	0	0	53	
07:45:00	0	51	1	0	0	52	0	0	0	0	2	0	0	19	0	0	1	19	0	0	0	0	1	0	71	
08:00:00	0	60	0	0	0	60	0	0	0	0	4	0	0	30	0	0	0	30	0	0	1	0	0	1	91	
08:15:00	2	81	0	0	1	83	0	0	1	0	3	1	1	34	2	0	0	37	0	0	0	0	3	0	121	336
08:30:00	0	79	1	0	0	80	1	0	1	0	4	2	0	47	1	0	0	48	1	0	0	0	2	1	131	414
08:45:00	2	75	2	1	1	80	1	0	2	0	8	3	1	47	3	0	2	51	1	0	0	0	1	1	135	478
09:00:00	0	84	1	0	0	85	0	0	2	0	5	2	1	58	3	0	2	62	0	0	0	0	6	0	149	536
09:15:00	1	90	0	0	0	91	1	0	3	0	6	4	2	45	3	0	1	50	3	0	1	0	4	4	149	564
BREAK																										
16:00:00	0	42	0	0	0	42	0	0	4	0	6	4	5	83	1	0	0	89	2	0	1	0	1	3	138	
16:15:00	0	56	1	0	0	57	2	0	2	0	1	4	3	80	0	0	0	83	0	0	0	0	1	0	144	
16:30:00	0	73	1	0	0	74	0	0	1	0	7	1	1	72	1	0	1	74	0	0	0	0	4	0	149	
16:45:00	0	75	1	1	1	77	3	0	0	0	8	3	4	98	0	1	0	103	0	0	0	0	4	0	183	614
17:00:00	0	58	0	0	0	58	1	0	3	0	5	4	0	94	2	0	1	96	1	0	0	0	3	1	159	635
17:15:00	1	57	0	0	0	58	1	0	1	0	4	2	1	83	0	0	1	84	0	0	1	0	1	1	145	636
17:30:00	0	66	0	0	0	66	1	0	1	0	2	2	1	84	1	0	0	86	0	0	0	0	4	0	154	641
17:45:00	0	52	1	1	0	54	0	0	1	0	2	1	1	69	1	0	1	71	0	0	1	0	2	1	127	585
Grand Total	6	1024	9	3	3	1042	11	0	22	0	70	33	21	970	19	1	10	1011	8	0	5	0	37	13	**2099**	-
Approach%	0.6%	98.3%	0.9%	0.3%		-	33.3%	0%	66.7%	0%		-	2.1%	95.9%	1.9%	0.1%		-	61.5%	0%	38.5%	0%		-	**-**	-
Totals %	0.3%	48.8%	0.4%	0.1%		49.6%	0.5%	0%	1%	0%		1.6%	1%	46.2%	0.9%	0%		48.2%	0.4%	0%	0.2%	0%		0.6%	**-**	-
Heavy	0	21	0	0		-	1	0	0	0		-	1	24	1	0		-	0	0	1	0		-	**-**	-
Heavy %	0%	2.1%	0%	0%		-	9.1%	0%	0%	0%		-	4.8%	2.5%	5.3%	0%		-	0%	0%	20%	0%		-	**-**	-
Bicycles	0	1	0	0		-	0	0	0	0		-	0	0	0	0		-	0	0	0	0		-	**-**	-
Bicycle %	0%	0.1%	0%	0%		-	0%	0%	0%	0%		-	0%	0%	0%	0%		-	0%	0%	0%	0%		-	**-**	-

Spectrum

Turning Movement Count
Location Name: THE DONWAY W & SITE DRIVEWAY (230 THE DONWAY)
Date: Tue, Dec 20, 2022 Deployment Lead: Peter Ilias

BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 08:30 AM - 09:30 AM Weather: Broken Clouds (-4.7 °C)

Start Time	N Approach THE DONWAY W						E Approach SITE ACCESS						S Approach THE DONWAY W						W Approach 225 THE DONWAY W						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	
08:30:00	0	79	1	0	0	80	1	0	1	0	4	2	0	47	1	0	0	48	1	0	0	0	2	1	131
08:45:00	2	75	2	1	1	80	1	0	2	0	8	3	1	47	3	0	2	51	1	0	0	0	1	1	135
09:00:00	0	84	1	0	0	85	0	0	2	0	5	2	1	58	3	0	2	62	0	0	0	0	6	0	149
09:15:00	1	90	0	0	0	91	1	0	3	0	6	4	2	45	3	0	1	50	3	0	1	0	4	4	149
Grand Total	3	328	4	1	1	336	3	0	8	0	23	11	4	197	10	0	5	211	5	0	1	0	13	6	**564**
Approach%	0.9%	97.6%	1.2%	0.3%		-	27.3%	0%	72.7%	0%		-	1.9%	93.4%	4.7%	0%		-	83.3%	0%	16.7%	0%		-	**-**
Totals %	0.5%	58.2%	0.7%	0.2%		59.6%	0.5%	0%	1.4%	0%		2%	0.7%	34.9%	1.8%	0%		37.4%	0.9%	0%	0.2%	0%		1.1%	**-**
PHF	0.38	0.91	0.5	0.25		0.92	0.75	0	0.67	0		0.69	0.5	0.85	0.83	0		0.85	0.42	0	0.25	0		0.38	**-**
Heavy	0	9	0	0		9	0	0	0	0		0	0	9	0	0		9	0	0	0	0		0	**-**
Heavy %	0%	2.7%	0%	0%		2.7%	0%	0%	0%	0%		0%	0%	4.6%	0%	0%		4.3%	0%	0%	0%	0%		0%	**-**
Lights	3	319	4	1		327	3	0	8	0		11	4	188	10	0		202	5	0	1	0		6	**-**
Lights %	100%	97.3%	100%	100%		97.3%	100%	0%	100%	0%		100%	100%	95.4%	100%	0%		95.7%	100%	0%	100%	0%		100%	**-**
Single-Unit Trucks	0	2	0	0		2	0	0	0	0		0	0	3	0	0		3	0	0	0	0		0	**-**
Single-Unit Trucks %	0%	0.6%	0%	0%		0.6%	0%	0%	0%	0%		0%	0%	1.5%	0%	0%		1.4%	0%	0%	0%	0%		0%	**-**
Buses	0	7	0	0		7	0	0	0	0		0	0	6	0	0		6	0	0	0	0		0	**-**
Buses %	0%	2.1%	0%	0%		2.1%	0%	0%	0%	0%		0%	0%	3%	0%	0%		2.8%	0%	0%	0%	0%		0%	**-**
Pedestrians	-	-	-	-	1	-	-	-	-	-	23	-	-	-	-	-	5	-	-	-	-	-	13	-	**-**
Pedestrians%	-	-	-	-	2.4%		-	-	-	-	54.8%		-	-	-	-	11.9%		-	-	-	-	31%		**-**
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%		**-**

Spectrum

Turning Movement Count
Location Name: THE DONWAY W & SITE DRIVEWAY (230 THE DONWAY)
Date: Tue, Dec 20, 2022 Deployment Lead: Peter Ilias

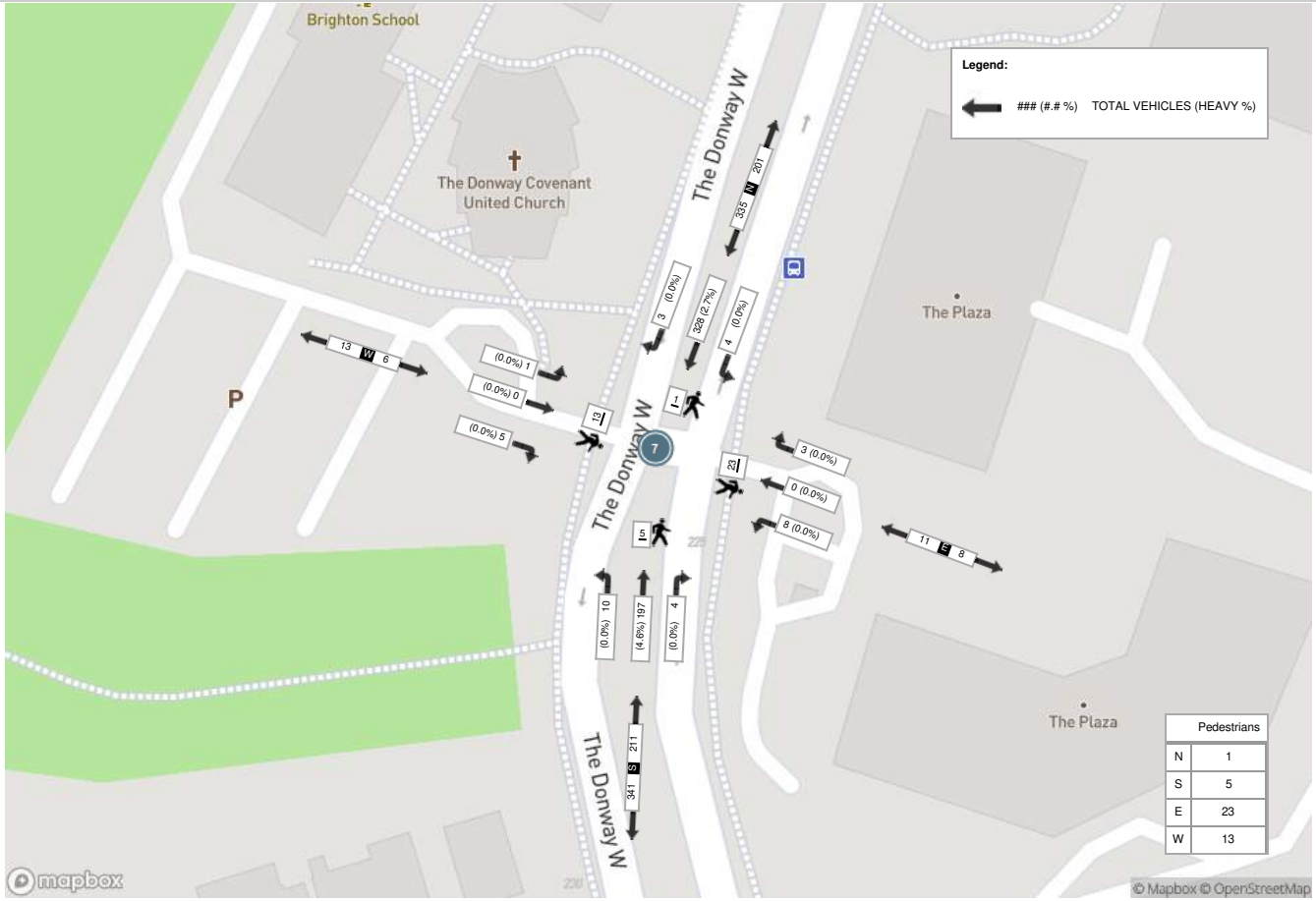
BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 04:45 PM - 05:45 PM Weather: Overcast Clouds (0.21 °C)

Start Time	N Approach THE DONWAY W						E Approach SITE ACCESS						S Approach THE DONWAY W						W Approach 225 THE DONWAY W						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	
16:45:00	0	75	1	1	1	77	3	0	0	0	8	3	4	98	0	1	0	103	0	0	0	0	4	0	183
17:00:00	0	58	0	0	0	58	1	0	3	0	5	4	0	94	2	0	1	96	1	0	0	0	3	1	159
17:15:00	1	57	0	0	0	58	1	0	1	0	4	2	1	83	0	0	1	84	0	0	1	0	1	1	145
17:30:00	0	66	0	0	0	66	1	0	1	0	2	2	1	84	1	0	0	86	0	0	0	0	4	0	154
Grand Total	1	256	1	1	1	259	6	0	5	0	19	11	6	359	3	1	2	369	1	0	1	0	12	2	**641**
Approach%	0.4%	98.8%	0.4%	0.4%		-	54.5%	0%	45.5%	0%		-	1.6%	97.3%	0.8%	0.3%		-	50%	0%	50%	0%		-	**-**
Totals %	0.2%	39.9%	0.2%	0.2%		40.4%	0.9%	0%	0.8%	0%		1.7%	0.9%	56%	0.5%	0.2%		57.6%	0.2%	0%	0.2%	0%		0.3%	**-**
PHF	0.25	0.85	0.25	0.25		0.84	0.5	0	0.42	0		0.69	0.38	0.92	0.38	0.25		0.9	0.25	0	0.25	0		0.5	**-**
Heavy	0	2	0	0		2	1	0	0	0		1	1	4	1	0		6	0	0	1	0		1	**-**
Heavy %	0%	0.8%	0%	0%		0.8%	16.7%	0%	0%	0%		9.1%	16.7%	1.1%	33.3%	0%		1.6%	0%	0%	100%	0%		50%	**-**
Lights	1	254	1	1		257	5	0	5	0		10	5	355	2	1		363	1	0	0	0		1	**-**
Lights %	100%	99.2%	100%	100%		99.2%	83.3%	0%	100%	0%		90.9%	83.3%	98.9%	66.7%	100%		98.4%	100%	0%	0%	0%		50%	**-**
Single-Unit Trucks	0	2	0	0		2	1	0	0	0		1	1	2	0	0		3	0	0	0	0		0	**-**
Single-Unit Trucks %	0%	0.8%	0%	0%		0.8%	16.7%	0%	0%	0%		9.1%	16.7%	0.6%	0%	0%		0.8%	0%	0%	0%	0%		0%	**-**
Buses	0	0	0	0		0	0	0	0	0		0	0	2	1	0		3	0	0	1	0		1	**-**
Buses %	0%	0%	0%	0%		0%	0%	0%	0%	0%		0%	0%	0.6%	33.3%	0%		0.8%	0%	0%	100%	0%		50%	**-**
Pedestrians	-	-	-	-	1	-	-	-	-	-	19	-	-	-	-	-	2	-	-	-	-	-	12	-	**-**
Pedestrians%	-	-	-	-	2.9%		-	-	-	-	55.9%		-	-	-	-	5.9%		-	-	-	-	35.3%		**-**
Bicycles on Road	0	1	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%		**-**

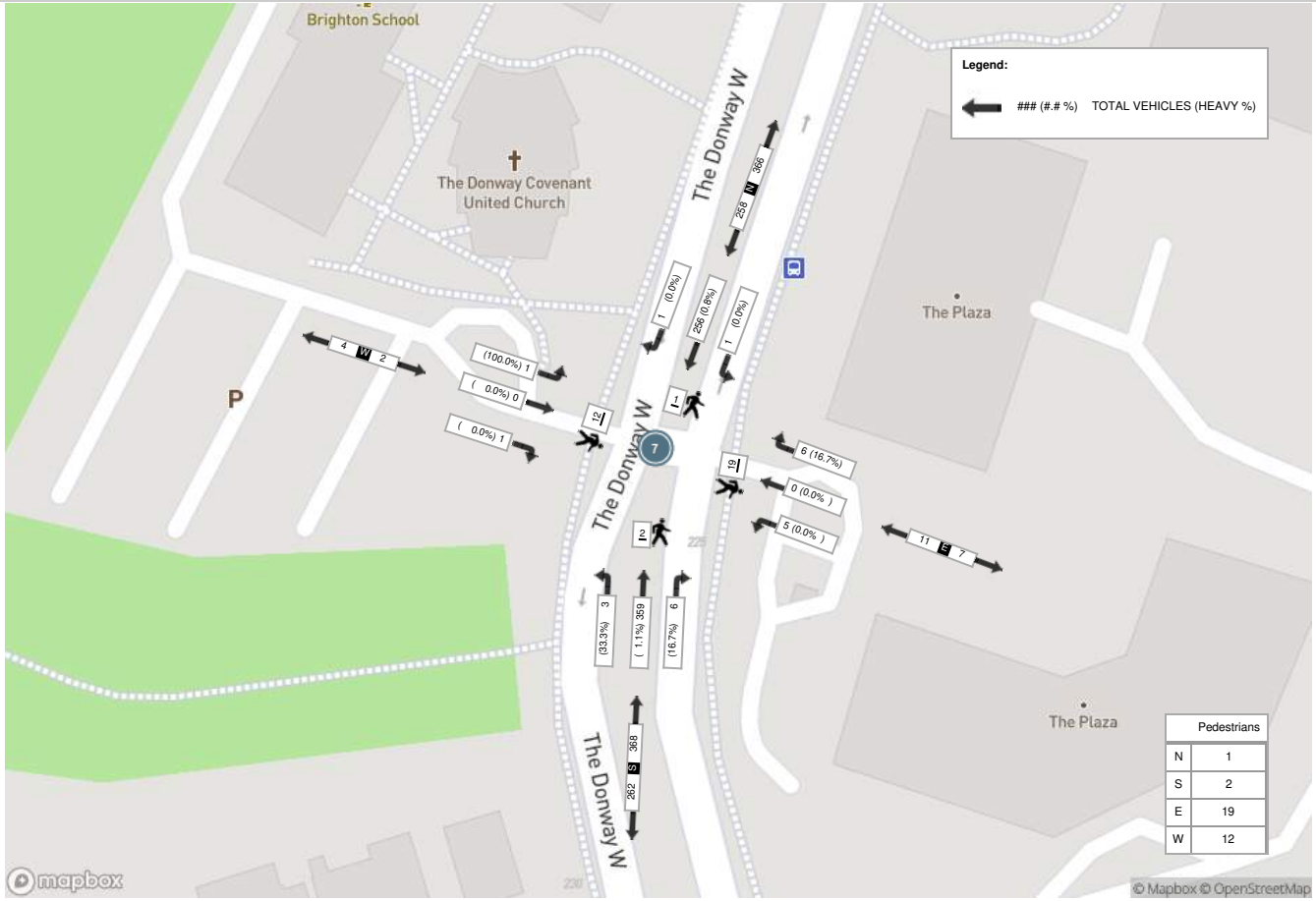
BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

Peak Hour: 08:30 AM - 09:30 AM **Weather: Broken Clouds (-4.7 °C)**



BA Group
300 45 ST. CLAIR AVE W
TORONTO ONTARIO, M4V 1K9
CANADA

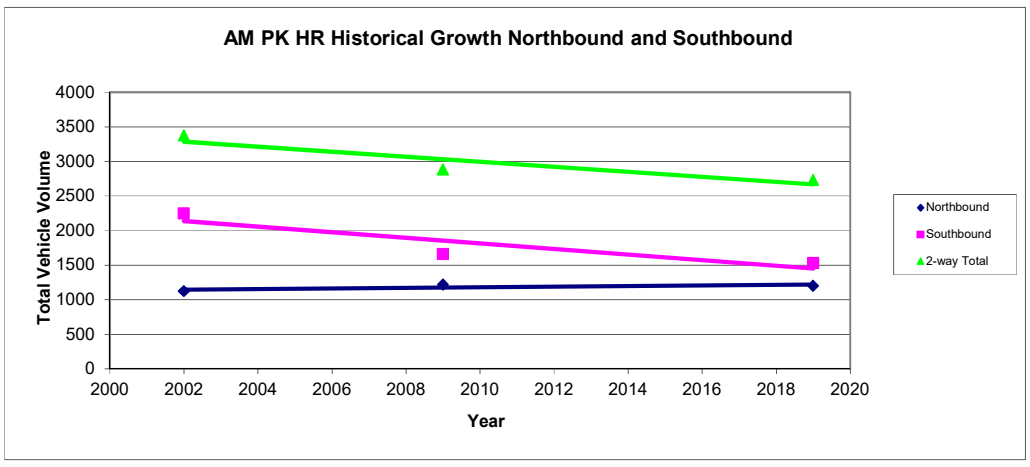
Peak Hour: 04:45 PM - 05:45 PM **Weather: Overcast Clouds (0.21 °C)**



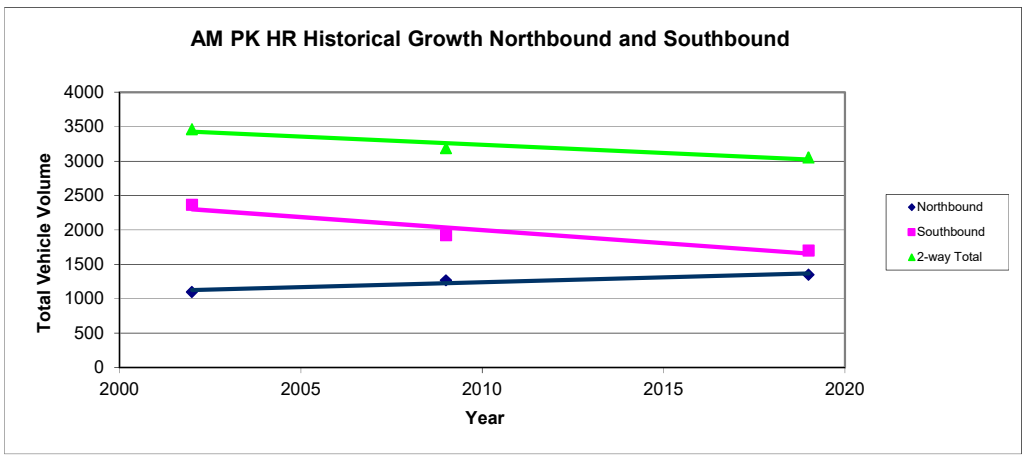
Appendix F:
Corridor Growth Analysis

Project: 230 The Donway
Project ID: 7054-10
Intersection: Don Mills / Lawrence Ave
Peak Hour: AM

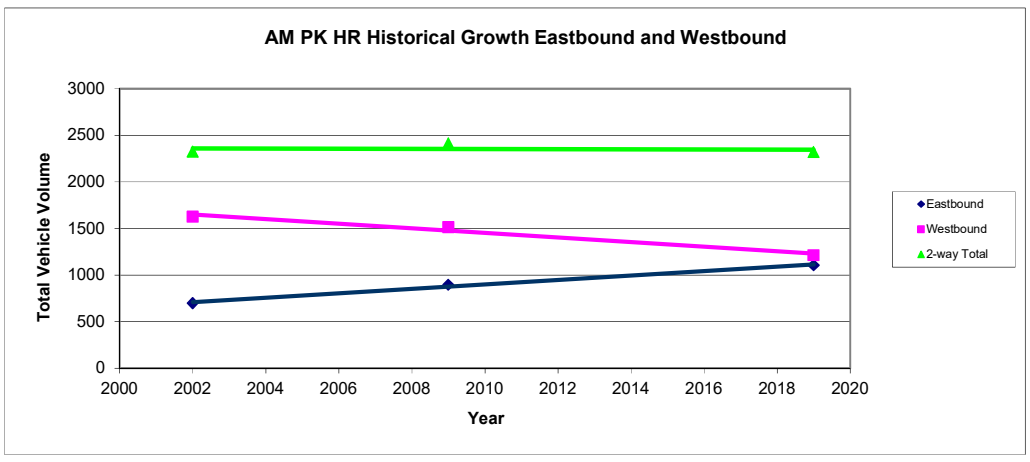
Count Information Date	Year	North of Don Mills / Lawrence Ave Northbound	Southbound	2-way
Mon, Jan 2	2002	1122	2251	3373
Tue, Feb 17	2009	1219	1662	2881
Tue, Oct 22	2019	1201	1530	2731
				0
				0
				0
Trend Point		1147.02	2137.62	3284.64
Slope		4.21	-40.41	-36.21
Growth		**0.37%**	**-1.89%**	**-1.10%**



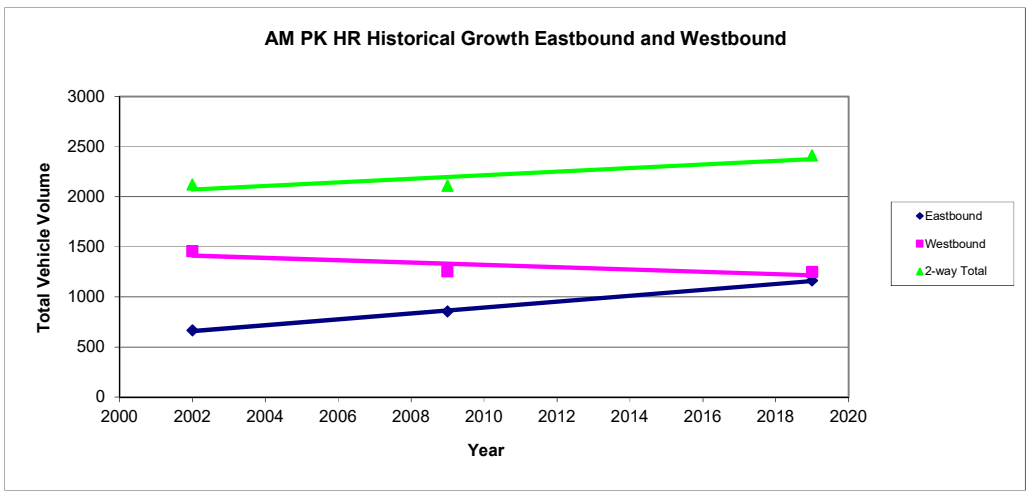
Count Information Date	Year	South of Don Mills / Lawrence Ave Northbound	Southbound	2-way
Mon, Jan 2	2002	1101	2365	3466
Tue, Feb 17	2009	1267	1924	3191
Tue, Oct 22	2019	1350	1702	3052
				0
				0
				0
Trend Point		1125.63	2299.79	3425.43
Slope		14.21	-37.85	-23.64
Growth		**1.26%**	**-1.65%**	**-0.69%**



Count Information Date	Year	East of Don Mills / Lawrence Ave Eastbound	Westbound	2-way
Mon, Jan 2	2002	698	1626	2324
Tue, Feb 17	2009	897	1516	2413
Tue, Oct 22	2019	1106	1215	2321
				0
				0
				0
Trend Point		710.03	1648.99	2359.02
Slope		23.79	-24.58	-0.79
Growth		**3.35%**	**-1.49%**	**-0.03%**

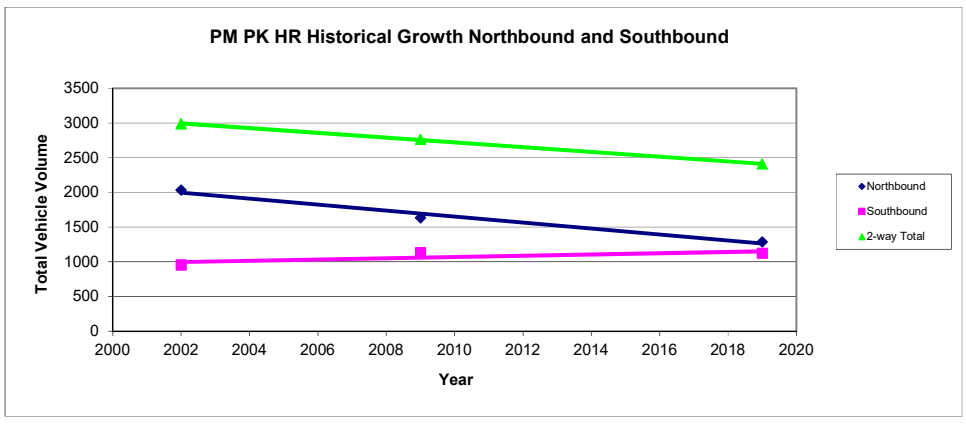


Count Information Date	Year	West of Don Mills / Lawrence Ave Eastbound	Westbound	2-way
Mon, Jan 2	2002	665	1458	2123
Tue, Feb 17	2009	854	1256	2110
Tue, Oct 22	2019	1163	1249	2412
				0
				0
				0
Trend Point		658.77	1413.00	2071.77
Slope		29.40	-11.50	17.90
Growth		**4.46%**	**-0.81%**	**0.86%**

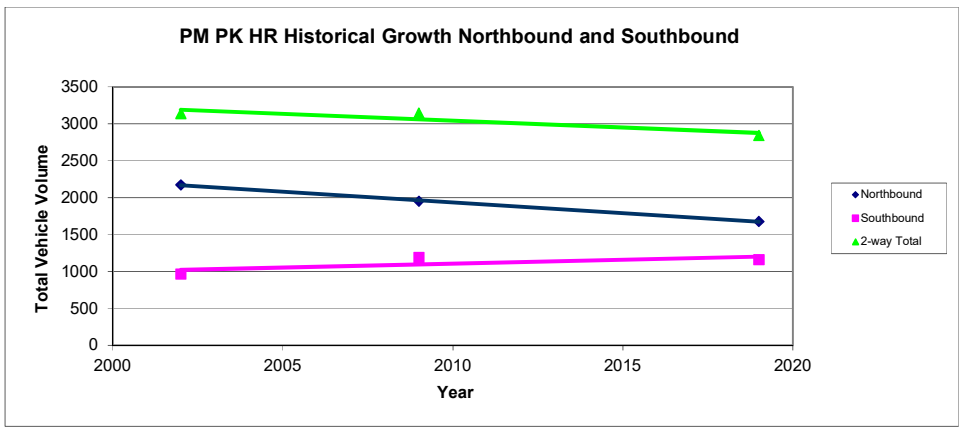


Project: 230 The Donway
Project ID: 7054-10
Intersection: Don Mills / Lawrence Ave
Peak Hour: PM

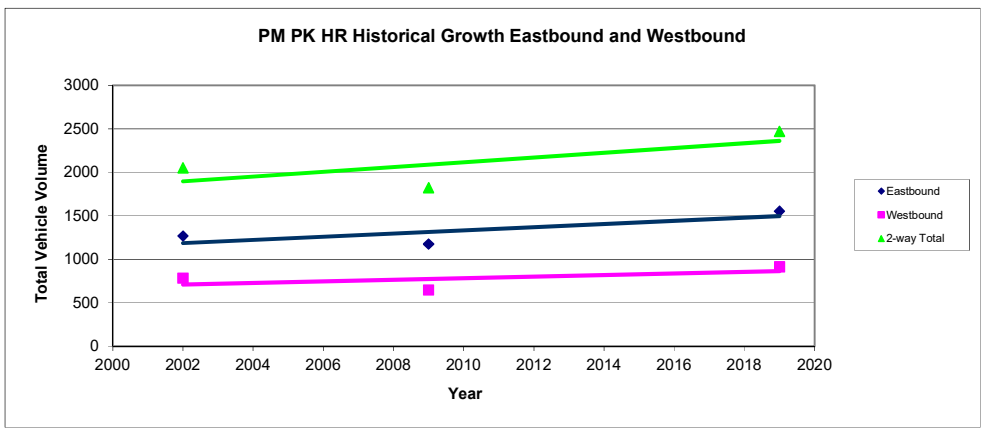
Count Information Date	Year	North of Don Mills / Lawrence Ave Northbound	Southbound	2-way
Mon, Jan 2	2002	2032	956	2988
Tue, Feb 17	2009	1635	1129	2764
Tue, Oct 22	2019	1286	1121	2407
				0
				0
				0
Trend Point		1997.14	996.78	2993.91
Slope		-43.27	8.99	-34.28
Growth		**-2.17%**	**0.90%**	**-1.15%**



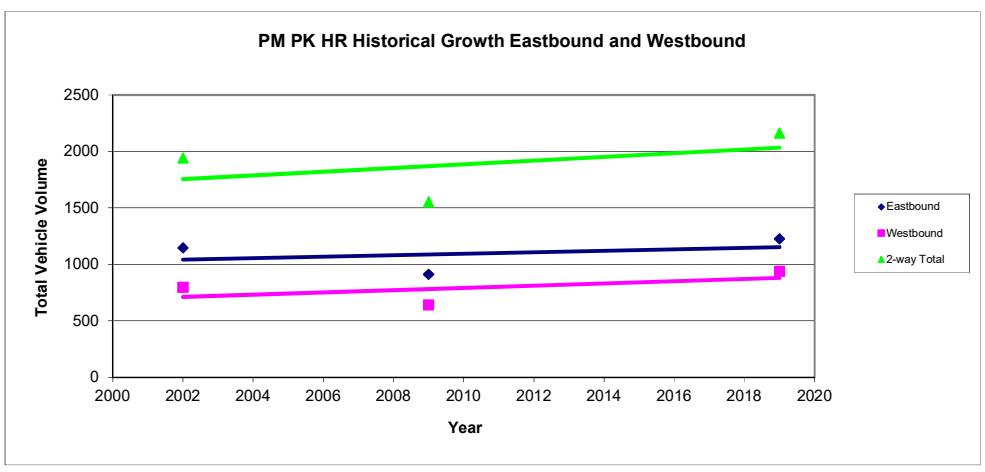
Count Information Date	Year	South of Don Mills / Lawrence Ave Northbound	Southbound	2-way
Mon, Jan 2	2002	2175	965	3140
Tue, Feb 17	2009	1954	1192	3146
Tue, Oct 22	2019	1679	1163	2842
				0
				0
				0
Trend Point		2168.49	1021.46	3189.95
Slope		-29.06	10.65	-18.41
Growth		**-1.34%**	**1.04%**	**-0.58%**



Count Information Date	Year	East of Don Mills / Lawrence Ave Eastbound	Westbound	2-way
Mon, Jan 2	2002	1269	784	2053
Tue, Feb 17	2009	1175	648	1823
Tue, Oct 22	2019	1555	916	2471
				0
				0
				0
Trend Point		1186.81	710.12	1896.93
Slope		18.27	9.07	27.34
Growth		**1.54%**	**1.28%**	**1.44%**

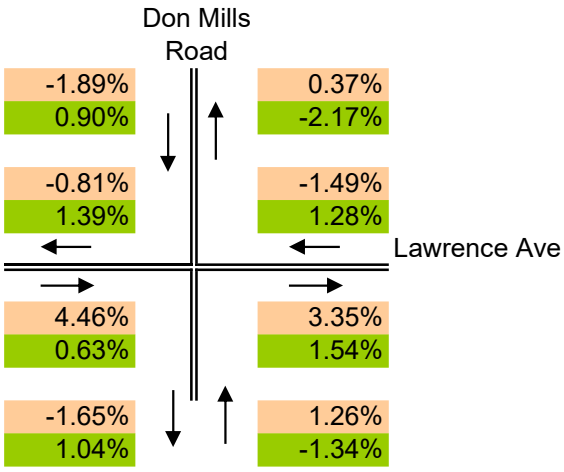


Count Information Date	Year	West of Don Mills / Lawrence Ave Eastbound	Westbound	2-way
Mon, Jan 2	2002	1146	795	1941
Tue, Feb 17	2009	912	641	1553
Tue, Oct 22	2019	1226	938	2164
				0
				0
				0
Trend Point		1042.39	712.37	1754.77
Slope		6.53	9.87	16.40
Growth		**0.63%**	**1.39%**	**0.93%**



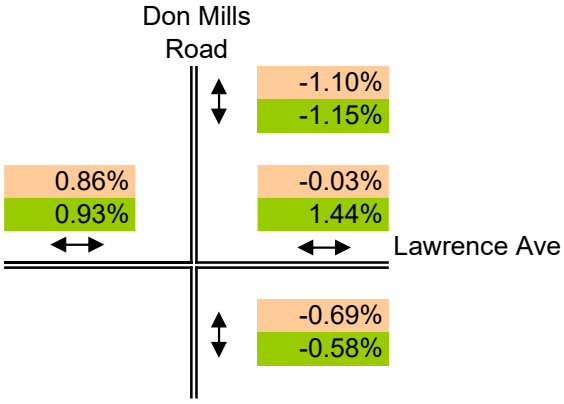
Background Traffic Growth Rates

AM
PM



Background Traffic Growth Rates (2-way)

AM
PM



Appendix G:
Synchro Analysis Worksheets

HCM Unsignalized Intersection Capacity Analysis
1: The Donway W & Overton Cres

Existing AM Peak Hour

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	245	345	5	15	5
Future Volume (Veh/h)	5	245	345	5	15	5
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	6	285	401	6	17	6
Pedestrians		5			30	
Lane Width (m)		3.5			3.0	
Walking Speed (m/s)		1.2			1.2	
Percent Blockage		0			2	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		176	64			
pX, platoon unblocked						
vC, conflicting volume	437				731	439
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	437				731	439
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				96	99
cM capacity (veh/h)	1110				382	607

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	291	407	23
Volume Left	6	0	17
Volume Right	0	6	6
cSH	1110	1700	422
Volume to Capacity	0.01	0.24	0.05
Queue Length 95th (m)	0.1	0.0	1.4
Control Delay (s)	0.2	0.0	14.0
Lane LOS	A		B
Approach Delay (s)	0.2	0.0	14.0
Approach LOS			B

Intersection Summary			
Average Delay		0.5	
Intersection Capacity Utilization		30.0%	ICU Level of Service A
Analysis Period (min)		15	

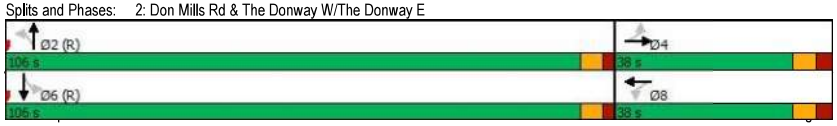
Queues
2: Don Mills Rd & The Donway W/The Donway E

Existing AM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	175	50	20	95	25	1170	220	1495
Future Volume (vph)	175	50	20	95	25	1170	220	1495
Lane Group Flow (vph)	182	88	21	458	26	1224	229	1797
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	56.0	56.0	56.0	56.0
Minimum Split (s)	38.0	38.0	38.0	38.0	82.0	82.0	82.0	82.0
Total Split (s)	38.0	38.0	38.0	38.0	106.0	106.0	106.0	106.0
Total Split (%)	26.4%	26.4%	26.4%	26.4%	73.6%	73.6%	73.6%	73.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	3.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	5.0	5.0	5.0	5.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min	C-Min
v/c Ratio	0.89	0.25	0.09	0.91	0.31	0.44	0.99	0.59
Control Delay	93.4	35.4	45.8	50.2	11.3	2.8	80.6	10.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	93.4	35.4	45.8	50.2	11.3	2.8	80.6	10.9
Queue Length 50th (m)	54.7	16.8	5.0	71.2	0.6	13.6	~68.5	106.0
Queue Length 95th (m)	#93.7	28.4	13.1	#134.1	m1.1	18.4	#127.6	120.7
Internal Link Dist (m)		40.0		170.7		392.8		113.4
Turn Bay Length (m)	25.0		50.0		35.0		80.0	
Base Capacity (vph)	222	383	267	527	85	2791	231	3044
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.82	0.23	0.08	0.87	0.31	0.44	0.99	0.59

Intersection Summary
Cycle Length: 144
Actuated Cycle Length: 144
Offset: 101 (70%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Don Mills Rd & The Donway W/The Donway E



HCM Signalized Intersection Capacity Analysis
2: Don Mills Rd & The Donway W/The Donway E

Existing AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	175	50	35	20	95	345	25	1170	5	220	1495	230
Future Volume (vph)	175	50	35	20	95	345	25	1170	5	220	1495	230
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.5	3.0	3.5	3.5	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.71		1.00	*0.79	
Frpb, ped/bikes	1.00	0.98		1.00	0.96		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.98	1.00		0.97	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.94		1.00	0.88		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1637	1648		1633	1567		1683	3883		1664	4217	
Flt Permitted	0.58	1.00		0.70	1.00		0.07	1.00		0.18	1.00	
Satd. Flow (perm)	1000	1648		1203	1567		119	3883		322	4217	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	182	52	36	21	99	359	26	1219	5	229	1557	240
RTOR Reduction (vph)	0	17	0	0	184	0	0	0	0	0	11	0
Lane Group Flow (vph)	182	71	0	21	274	0	26	1224	0	229	1786	0
Confl. Peds. (#/hr)	25		25	25		25	15		15	15		15
Heavy Vehicles (%)	1%	7%	0%	0%	2%	2%	0%	3%	0%	1%	3%	3%
Bus Blockages (#/hr)	0	2	2	0	0	0	0	0	12	0	0	12
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	28.5	28.5		28.5	28.5		102.5	102.5		102.5	102.5	
Effective Green, g (s)	29.5	29.5		29.5	29.5		103.5	103.5		103.5	103.5	
Actuated g/C Ratio	0.20	0.20		0.20	0.20		0.72	0.72		0.72	0.72	
Clearance Time (s)	7.0	7.0		7.0	7.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	204	337		246	321		85	2790		231	3030	
v/s Ratio Prot		0.04			0.18			0.32			0.42	
v/s Ratio Perm	c0.18			0.02			0.22			c0.71		
v/c Ratio	0.89	0.21		0.09	0.85		0.31	0.44		0.99	0.59	
Uniform Delay, d1	55.7	47.6		46.3	55.2		7.3	8.3		19.8	9.9	
Progression Factor	0.98	0.97		1.00	1.00		0.37	0.27		1.00	1.00	
Incremental Delay, d2	34.4	0.3		0.2	19.3		7.4	0.4		57.0	0.8	
Delay (s)	89.0	46.2		46.5	74.5		10.1	2.7		76.9	10.7	
Level of Service	F	D		D	E		B	A		E	B	
Approach Delay (s)		75.0			73.3			2.8			18.2	
Approach LOS		E			E			A			B	

Intersection Summary				
HCM 2000 Control Delay	23.8	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.97			
Actuated Cycle Length (s)	144.0	Sum of lost time (s)	11.0	
Intersection Capacity Utilization	166.1%	ICU Level of Service	H	
Analysis Period (min)	15			

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
3: The Donway W & Belton Rd

Existing AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	0	5	10	0	25	5	220	5	5	340	5
Future Volume (Veh/h)	5	0	5	10	0	25	5	220	5	5	340	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Hourly flow rate (vph)	6	0	6	12	0	31	6	272	6	6	420	6
Pedestrians		25			10						5	
Lane Width (m)		3.5			3.5						3.2	
Walking Speed (m/s)		1.2			1.2						1.2	
Percent Blockage		2			1						0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								77			162	
pX, platoon unblocked	0.98	0.98		0.98	0.98	0.98				0.98		
vC, conflicting volume	780	760	448	735	760	290	451			288		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	769	749	448	723	749	271	451			269		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	100	99	96	100	96	99			100		
cM capacity (veh/h)	287	325	602	323	325	751	1097			1276		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	12	43	6	278	6	426
Volume Left	6	12	6	0	6	0
Volume Right	6	31	0	6	0	6
cSH	389	548	1097	1700	1276	1700
Volume to Capacity	0.03	0.08	0.01	0.16	0.00	0.25
Queue Length 95th (m)	0.8	2.0	0.1	0.0	0.1	0.0
Control Delay (s)	14.6	12.1	8.3	0.0	7.8	0.0
Lane LOS	B	B	A		A	
Approach Delay (s)	14.6	12.1	0.2		0.1	
Approach LOS	B	B				

Intersection Summary				
Average Delay	1.0			
Intersection Capacity Utilization	29.8%	ICU Level of Service	A	
Analysis Period (min)	15			

Queues
4: The Donway W & Duncairn Rd

Existing AM Peak Hour

Lane Group	EBL	NBL	NBT	SBT	Ø8
Lane Configurations					
Traffic Volume (vph)	70	70	160	275	
Future Volume (vph)	70	70	160	275	
Lane Group Flow (vph)	240	0	284	439	
Turn Type	Perm	Perm	NA	NA	
Protected Phases			2	6	8
Permitted Phases	4	2			
Detector Phase	4	2	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	29.0	26.0	26.0	26.0	29.0
Total Split (s)	29.0	43.0	43.0	43.0	29.0
Total Split (%)	40.3%	59.7%	59.7%	59.7%	40%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0		-1.0	-1.0	
Total Lost Time (s)	5.0		5.0	5.0	
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	C-Min	C-Min	C-Min	None
v/c Ratio	0.62		0.29	0.37	
Control Delay	18.3		7.6	6.0	
Queue Delay	0.0		0.0	0.0	
Total Delay	18.3		7.6	6.0	
Queue Length 50th (m)	13.7		10.4	18.6	
Queue Length 95th (m)	22.5		37.0	42.3	
Internal Link Dist (m)	90.7		123.1	53.4	
Turn Bay Length (m)					
Base Capacity (vph)	597		976	1196	
Starvation Cap Reductn	0		0	0	
Spillback Cap Reductn	0		0	0	
Storage Cap Reductn	0		0	0	
Reduced v/c Ratio	0.40		0.29	0.37	

Intersection Summary

Cycle Length: 72
Actuated Cycle Length: 72
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 4: The Donway W & Duncairn Rd

HCM Signalized Intersection Capacity Analysis
4: The Donway W & Duncairn Rd

Existing AM Peak Hour

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	70	125	70	160	275	80
Future Volume (vph)	70	125	70	160	275	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.5	3.5	3.5	3.5
Total Lost time (s)	5.0			5.0	5.0	
Lane Util. Factor	1.00			1.00	1.00	
Frpb, ped/bikes	0.97			1.00	0.99	
Flpb, ped/bikes	1.00			0.99	1.00	
Frt	0.91			1.00	0.97	
Flt Protected	0.98			0.99	1.00	
Satd. Flow (prot)	1524			1798	1750	
Flt Permitted	0.98			0.79	1.00	
Satd. Flow (perm)	1524			1439	1750	
Peak-hour factor, PHF	0.81	0.81	0.81	0.81	0.81	0.81
Adj. Flow (vph)	86	154	86	198	340	99
RTOR Reduction (vph)	109	0	0	0	10	0
Lane Group Flow (vph)	131	0	0	284	429	0
Confl. Peds. (#/hr)		20	20			20
Heavy Vehicles (%)	1%	1%	1%	3%	3%	2%
Turn Type	Perm		Perm	NA	NA	
Protected Phases				2	6	
Permitted Phases	4		2			
Actuated Green, G (s)	12.2			47.8	47.8	
Effective Green, g (s)	13.2			48.8	48.8	
Actuated g/C Ratio	0.18			0.68	0.68	
Clearance Time (s)	6.0			6.0	6.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	279			975	1186	
v/s Ratio Prot					c0.25	
v/s Ratio Perm	c0.09			0.20		
v/c Ratio	0.47			0.29	0.36	
Uniform Delay, d1	26.3			4.7	5.0	
Progression Factor	1.00			1.16	0.92	
Incremental Delay, d2	1.2			0.8	0.7	
Delay (s)	27.5			6.2	5.3	
Level of Service	C			A	A	
Approach Delay (s)	27.5			6.2	5.3	
Approach LOS	C			A	A	

Intersection Summary

HCM 2000 Control Delay	11.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	72.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	60.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
5: The Donway W & Site Access

Existing AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	0	30	10	0	0	45	215	5	0	370	30
Future Volume (Veh/h)	15	0	30	10	0	0	45	215	5	0	370	30
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	18	0	36	12	0	0	54	256	6	0	440	36
Pedestrians		10			10							
Lane Width (m)		3.5			3.5							
Walking Speed (m/s)		1.2			1.2							
Percent Blockage		1			1							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								224			147	
pX, platoon unblocked	0.95	0.95	0.95	0.95	0.95		0.95					
vC, conflicting volume	832	848	468	853	863	269	486			272		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	798	815	416	820	831	269	435			272		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	93	100	94	95	100	100	95			100		
cM capacity (veh/h)	275	279	605	250	273	768	1062			1292		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	54	12	54	262	0	476
Volume Left	18	12	54	0	0	0
Volume Right	36	0	0	6	0	36
cSH	432	250	1062	1700	1700	1700
Volume to Capacity	0.13	0.05	0.05	0.15	0.00	0.28
Queue Length 95th (m)	3.4	1.2	1.3	0.0	0.0	0.0
Control Delay (s)	14.5	20.2	8.6	0.0	0.0	0.0
Lane LOS	B	C	A			
Approach Delay (s)	14.5	20.2	1.5		0.0	
Approach LOS	B	C				

Intersection Summary					
Average Delay	1.7				
Intersection Capacity Utilization	38.0%	ICU Level of Service		A	
Analysis Period (min)	15				

HCM Unsignalized Intersection Capacity Analysis
6: The Donway W & Langbourne Pl

Existing AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	0	25	15	0	15	15	225	5	5	390	15
Future Volume (Veh/h)	25	0	25	15	0	15	15	225	5	5	390	15
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	29	0	29	17	0	17	17	262	6	6	453	17
Pedestrians		20			20			15			5	
Lane Width (m)		3.5			3.5			3.2			3.2	
Walking Speed (m/s)		1.2			1.2			1.2			1.2	
Percent Blockage		2			2			1			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								137			234	
pX, platoon unblocked	0.98	0.98		0.98	0.98	0.98				0.98		
vC, conflicting volume	812	816	496	828	821	290	490			288		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	798	802	496	815	807	266	490			264		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	89	100	95	93	100	98	98			100		
cM capacity (veh/h)	272	297	562	259	295	747	1066			1265		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	58	34	17	268	6	470
Volume Left	29	17	17	0	6	0
Volume Right	29	17	0	6	0	17
cSH	367	385	1066	1700	1265	1700
Volume to Capacity	0.16	0.09	0.02	0.16	0.00	0.28
Queue Length 95th (m)	4.4	2.3	0.4	0.0	0.1	0.0
Control Delay (s)	16.7	15.3	8.4	0.0	7.9	0.0
Lane LOS	C	C	A		A	
Approach Delay (s)	16.7	15.3	0.5		0.1	
Approach LOS	C	C				

Intersection Summary					
Average Delay	2.0				
Intersection Capacity Utilization	36.1%	ICU Level of Service		A	
Analysis Period (min)	15				

HCM Unsignalized Intersection Capacity Analysis
7: The Donway W & Jocelyn Cres

Existing AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	0	5	30	5	15	10	220	25	10	415	5
Future Volume (Veh/h)	10	0	5	30	5	15	10	220	25	10	415	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	11	0	6	34	6	17	11	253	29	11	477	6
Pedestrians		20			15						5	
Lane Width (m)		3.5			3.5						3.5	
Walking Speed (m/s)		1.2			1.2						1.2	
Percent Blockage		2			1						0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								57			315	
pX, platoon unblocked	0.94	0.94		0.94	0.94	0.94				0.94		
vC, conflicting volume	822	841	500	812	830	288	503			297		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	782	802	500	772	790	217	503			227		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	100	99	88	98	98	99			99		
cM capacity (veh/h)	270	288	566	284	292	770	1054			1263		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	17	57	11	282	494
Volume Left	11	34	11	0	11
Volume Right	6	17	0	29	6
cSH	331	351	1054	1700	1263
Volume to Capacity	0.05	0.16	0.01	0.17	0.01
Queue Length 95th (m)	1.3	4.6	0.3	0.0	0.2
Control Delay (s)	16.5	17.2	8.5	0.0	0.3
Lane LOS	C	C	A		A
Approach Delay (s)	16.5	17.2	0.3		0.3
Approach LOS	C	C			

Intersection Summary					
Average Delay			1.7		
Intersection Capacity Utilization			41.8%	ICU Level of Service	A
Analysis Period (min)			15		

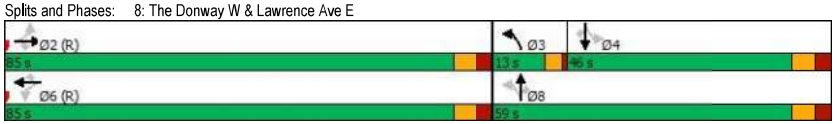
Queues
8: The Donway W & Lawrence Ave E

Existing AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	1010	355	95	965	60	250	100	100	90	155	205
Future Volume (vph)	95	1010	355	95	965	60	250	100	100	90	155	205
Lane Group Flow (vph)	97	1031	362	97	985	61	255	102	102	92	158	209
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases		2			6		3	8			4	
Permitted Phases	2		2	6		6	8		8	4		4
Detector Phase	2	2	2	6	6	6	3	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	6.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	36.0	36.0	36.0	36.0	36.0	36.0	10.0	37.0	37.0	37.0	37.0	37.0
Total Split (s)	85.0	85.0	85.0	85.0	85.0	85.0	13.0	59.0	59.0	46.0	46.0	46.0
Total Split (%)	59.0%	59.0%	59.0%	59.0%	59.0%	59.0%	9.0%	41.0%	41.0%	31.9%	31.9%	31.9%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	1.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	3.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag							Lead			Lag	Lag	Lag
Lead-Lag Optimize?							Yes			Yes	Yes	Yes
Recall Mode	C-Min	C-Min	C-Min	C-Min	C-Min	C-Min	None	Min	Min	Min	Min	Min
v/c Ratio	0.42	0.51	0.43	0.44	0.49	0.08	0.66	0.17	0.20	0.52	0.56	0.70
Control Delay	25.9	19.7	12.9	11.7	9.5	0.4	44.1	33.2	9.4	64.0	62.2	39.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.9	19.7	12.9	11.7	9.5	0.4	44.1	33.2	9.4	64.0	62.2	39.8
Queue Length 50th (m)	14.9	89.8	34.7	8.4	45.3	0.3	59.7	22.0	3.9	26.5	45.7	27.1
Queue Length 95th (m)	35.5	122.1	65.2	m3.5	m17.8	m0.0	80.2	34.6	16.9	42.3	63.7	57.1
Internal Link Dist (m)		160.9			236.6			191.1			32.6	
Turn Bay Length (m)	45.0		20.0	45.0		25.0	80.0		45.0	15.0		
Base Capacity (vph)	236	2070	859	224	2050	803	387	705	571	323	516	464
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.50	0.42	0.43	0.48	0.08	0.66	0.14	0.18	0.28	0.31	0.45

Intersection Summary
Cycle Length: 144
Actuated Cycle Length: 144
Offset: 70 (49%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: The Donway W & Lawrence Ave E



HCM Signalized Intersection Capacity Analysis
8: The Donway W & Lawrence Ave E

Existing AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	1010	355	95	965	60	250	100	100	90	155	205
Future Volume (vph)	95	1010	355	95	965	60	250	100	100	90	155	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0	3.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.94	1.00	1.00	0.92	1.00	1.00	0.95	1.00	1.00	0.95
Flpb, ped/bikes	0.99	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.97	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1618	3433	1341	1642	3400	1293	1620	1860	1370	1600	1860	1408
Flt Permitted	0.23	1.00	1.00	0.21	1.00	1.00	0.42	1.00	1.00	0.69	1.00	1.00
Satd. Flow (perm)	392	3433	1341	371	3400	1293	724	1860	1370	1164	1860	1408
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	97	1031	362	97	985	61	255	102	102	92	158	209
RTOR Reduction (vph)	0	0	53	0	0	25	0	0	56	0	0	87
Lane Group Flow (vph)	97	1031	309	97	985	36	255	102	46	92	158	122
Confl. Peds. (#/hr)	25		15	15		25	25		25	25		25
Heavy Vehicles (%)	3%	4%	1%	2%	5%	2%	3%	1%	4%	2%	1%	2%
Bus Blockages (#/hr)	0	0	12	0	0	12	0	0	2	0	0	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases		2			6		3	8			4	
Permitted Phases	2		2	6		6	8		8	4		4
Actuated Green, G (s)	84.2	84.2	84.2	84.2	84.2	84.2	45.8	45.8	45.8	20.8	20.8	20.8
Effective Green, g (s)	85.2	85.2	85.2	85.2	85.2	85.2	46.8	46.8	46.8	21.8	21.8	21.8
Actuated g/C Ratio	0.59	0.59	0.59	0.59	0.59	0.59	0.32	0.32	0.32	0.15	0.15	0.15
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	4.0	7.0	7.0	7.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	231	2031	793	219	2011	765	372	604	445	176	281	213
v/s Ratio Prot		c0.30			0.29		c0.10	0.05			0.08	
v/s Ratio Perm	0.25		0.23	0.26		0.03	c0.12		0.03	0.08		0.09
v/c Ratio	0.42	0.51	0.39	0.44	0.49	0.05	0.69	0.17	0.10	0.52	0.56	0.57
Uniform Delay, d1	16.0	17.2	15.6	16.3	16.9	12.3	39.3	34.7	33.9	56.3	56.7	56.8
Progression Factor	1.00	1.00	1.00	0.42	0.49	0.08	1.00	1.00	1.00	0.99	0.99	0.99
Incremental Delay, d2	5.5	0.9	1.4	3.0	0.4	0.1	5.2	0.1	0.1	2.7	2.5	3.6
Delay (s)	21.5	18.1	17.1	9.8	8.7	1.0	44.4	34.8	34.0	58.2	58.6	59.6
Level of Service	C	B	B	A	A	A	D	C	C	E	E	E
Approach Delay (s)		18.0			8.4			40.0			59.0	
Approach LOS		B			A			D			E	

Intersection Summary				
HCM 2000 Control Delay	23.1	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.58			
Actuated Cycle Length (s)	144.0	Sum of lost time (s)	15.0	
Intersection Capacity Utilization	83.0%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

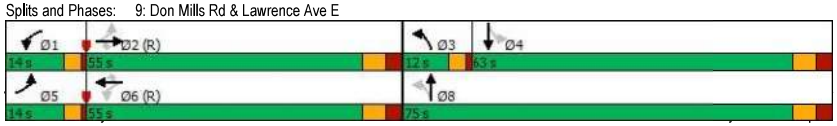
Queues
9: Don Mills Rd & Lawrence Ave E

Existing AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	100	865	195	190	985	40	185	1060	140	1320
Future Volume (vph)	100	865	195	190	985	40	185	1060	140	1320
Lane Group Flow (vph)	101	874	197	192	995	40	187	1177	141	1414
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	NA
Protected Phases	5	2		1	6		3	8		4
Permitted Phases	2		2	6		6	8		4	
Detector Phase	5	2	2	1	6	6	3	8	4	4
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	10.0	42.0	42.0	10.0	42.0	42.0	10.0	42.0	42.0	42.0
Total Split (s)	14.0	55.0	55.0	14.0	55.0	55.0	12.0	75.0	63.0	63.0
Total Split (%)	9.7%	38.2%	38.2%	9.7%	38.2%	38.2%	8.3%	52.1%	43.8%	43.8%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)	1.0	3.0	3.0	1.0	3.0	3.0	1.0	3.0	3.0	3.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.9	-1.0	-1.0	-2.2	-1.0	-1.0	-1.0
Total Lost Time (s)	3.0	6.0	6.0	2.1	6.0	6.0	1.8	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead		Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	Min	Min	Min	Min
v/c Ratio	0.59	0.79	0.43	0.92	0.88	0.10	0.98	0.63	0.99	0.82
Control Delay	51.5	41.1	13.7	72.8	56.0	0.5	98.4	28.6	102.3	33.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.5	41.1	13.7	72.8	56.0	0.5	98.4	28.6	102.3	33.3
Queue Length 50th (m)	9.6	125.1	8.9	34.5	145.8	0.0	~50.1	122.0	40.5	81.8
Queue Length 95th (m)	41.4	120.7	33.2	#80.3	175.1	0.0	#101.8	143.8	#89.0	95.7
Internal Link Dist (m)		236.6			112.1			201.1		392.8
Turn Bay Length (m)	45.0		160.0	85.0		30.0	65.0		95.0	
Base Capacity (vph)	178	1168	473	208	1168	429	190	1872	142	1725
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.75	0.42	0.92	0.85	0.09	0.98	0.63	0.99	0.82

Intersection Summary
Cycle Length: 144
Actuated Cycle Length: 144
Offset: 48 (33%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 105
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 9: Don Mills Rd & Lawrence Ave E



HCM Signalized Intersection Capacity Analysis
9: Don Mills Rd & Lawrence Ave E

Existing AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	865	195	190	985	40	185	1060	105	140	1320	80
Future Volume (vph)	100	865	195	190	985	40	185	1060	105	140	1320	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	6.0	6.0	2.1	6.0	6.0	1.8	6.0		6.0	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	*0.71		1.00	*0.81	
Frpb, ped/bikes	1.00	1.00	0.80	1.00	1.00	0.79	1.00	0.98		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		0.96	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1666	3433	1115	1584	3433	1086	1604	3767		1571	4351	
Flt Permitted	0.09	1.00	1.00	0.14	1.00	1.00	0.07	1.00		0.22	1.00	
Satd. Flow (perm)	151	3433	1115	225	3433	1086	113	3767		359	4351	
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	101	874	197	192	995	40	187	1071	106	141	1333	81
RTOR Reduction (vph)	0	0	97	0	0	27	0	6	0	0	4	0
Lane Group Flow (vph)	101	874	100	192	995	13	187	1171	0	141	1410	0
Confl. Peds. (#/hr)	160		155	155		160	135		165	165		135
Heavy Vehicles (%)	1%	4%	3%	6%	4%	5%	5%	3%	1%	3%	3%	3%
Bus Blockages (#/hr)	0	0	12	0	0	12	0	0	12	0	0	12
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	
Protected Phases	5	2		1	6		3	8			4	
Permitted Phases	2		2	6		6	8			4		
Actuated Green, G (s)	54.9	45.6	45.6	56.3	46.3	46.3	70.4	70.4		56.0	56.0	
Effective Green, g (s)	56.9	46.6	46.6	60.1	47.3	47.3	72.6	71.4		57.0	57.0	
Actuated g/C Ratio	0.40	0.32	0.32	0.42	0.33	0.33	0.50	0.50		0.40	0.40	
Clearance Time (s)	4.0	7.0	7.0	4.0	7.0	7.0	4.0	7.0		7.0	7.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	168	1110	360	206	1127	356	187	1867		142	1722	
v/s Ratio Prot	0.04	0.25		c0.08	c0.29		c0.09	0.31			0.32	
v/s Ratio Perm	0.20		0.09	0.31		0.01	0.42			c0.39		
v/c Ratio	0.60	0.79	0.28	0.93	0.88	0.04	1.00	0.63		0.99	0.82	
Uniform Delay, d1	32.7	44.2	36.2	32.1	45.7	32.9	43.4	26.6		43.3	38.9	
Progression Factor	1.48	0.81	1.00	1.00	1.00	1.00	1.00	1.00		0.76	0.76	
Incremental Delay, d2	5.4	5.2	1.7	43.8	10.1	0.2	65.8	0.7		66.2	2.6	
Delay (s)	53.8	41.1	38.1	75.8	55.8	33.1	109.2	27.2		99.2	32.0	
Level of Service	D	D	D	E	E	C	F	C		F	C	
Approach Delay (s)		41.7			58.2			38.5			38.1	
Approach LOS		D			E			D			D	

Intersection Summary				
HCM 2000 Control Delay	43.6	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.95			
Actuated Cycle Length (s)	144.0	Sum of lost time (s)	16.8	
Intersection Capacity Utilization	95.8%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
1: The Donway W & Overton Cres

Existing PM Peak Hour

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	285	285	15	5	5
Future Volume (Veh/h)	5	285	285	15	5	5
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	310	310	16	5	5
Pedestrians					10	
Lane Width (m)					3.0	
Walking Speed (m/s)					1.2	
Percent Blockage					1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		176	64			
pX, platoon unblocked						
vC, conflicting volume	336				648	328
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	336				648	328
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				99	99
cM capacity (veh/h)	1226				433	713

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	315	326	10
Volume Left	5	0	5
Volume Right	0	16	5
cSH	1226	1700	539
Volume to Capacity	0.00	0.19	0.02
Queue Length 95th (m)	0.1	0.0	0.5
Control Delay (s)	0.2	0.0	11.8
Lane LOS	A		B
Approach Delay (s)	0.2	0.0	11.8
Approach LOS			B

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	29.0%	ICU Level of Service	A
Analysis Period (min)	15		

Queues
2: Don Mills Rd & The Donway W/The Donway E

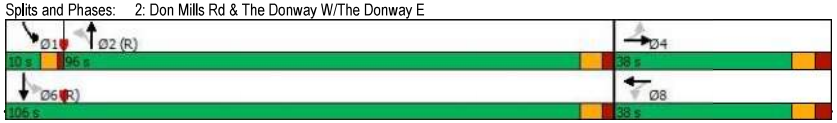
Existing PM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	190	65	20	35	25	1245	315	1170
Future Volume (vph)	190	65	20	35	25	1245	315	1170
Lane Group Flow (vph)	204	108	22	199	27	1361	339	1516
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases		4		8		2	1	6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	1	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	45.0	45.0	5.0	45.0
Minimum Split (s)	38.0	38.0	38.0	38.0	71.0	71.0	9.0	71.0
Total Split (s)	38.0	38.0	38.0	38.0	96.0	96.0	10.0	106.0
Total Split (%)	26.4%	26.4%	26.4%	26.4%	66.7%	66.7%	6.9%	73.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0
All-Red Time (s)	3.0	3.0	3.0	3.0	2.0	2.0	1.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	5.0	5.0	3.0	5.0
Lead/Lag					Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	
Recall Mode	None	None	None	None	C-Min	C-Min	None	C-Min
v/c Ratio	0.57	0.17	0.05	0.29	0.40	0.81	0.97	0.66
Control Delay	48.8	30.8	30.5	7.3	22.5	17.9	67.1	23.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.8	30.8	30.5	7.3	22.5	17.9	67.1	23.3
Queue Length 50th (m)	47.7	19.4	4.4	5.0	1.7	44.1	50.1	125.0
Queue Length 95th (m)	84.5	41.9	10.7	22.1	m2.6	52.2	#144.6	155.9
Internal Link Dist (m)		40.0		170.7		392.8		113.4
Turn Bay Length (m)	25.0		50.0		35.0		80.0	
Base Capacity (vph)	356	631	440	692	99	2474	348	2862
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.17	0.05	0.29	0.27	0.55	0.97	0.53

Intersection Summary

Cycle Length: 144
Actuated Cycle Length: 144
Offset: 24 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Don Mills Rd & The Donway W/The Donway E



HCM Signalized Intersection Capacity Analysis
2: Don Mills Rd & The Donway W/The Donway E

Existing PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	65	35	20	35	150	25	1245	20	315	1170	240
Future Volume (vph)	190	65	35	20	35	150	25	1245	20	315	1170	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.5	3.0	3.5	3.5	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		5.0	5.0		3.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.71		1.00	*0.76	
Frpb, ped/bikes	1.00	0.99		1.00	0.97		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.98	1.00		0.98	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.95		1.00	0.88		1.00	1.00		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1620	1691		1654	1586		1680	3913		1684	4060	
Flt Permitted	0.57	1.00		0.69	1.00		0.09	1.00		0.20	1.00	
Satd. Flow (perm)	970	1691		1197	1586		158	3913		363	4060	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	204	70	38	22	38	161	27	1339	22	339	1258	258
RTOR Reduction (vph)	0	11	0	0	110	0	0	1	0	0	24	0
Lane Group Flow (vph)	204	97	0	22	89	0	27	1360	0	339	1492	0
Confl. Peds. (#/hr)	20		15	15		20	25		10	10		25
Heavy Vehicles (%)	2%	5%	0%	0%	0%	1%	0%	2%	0%	0%	2%	2%
Bus Blockages (#/hr)	0	2	2	0	0	0	0	0	14	0	0	14
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	51.9	51.9		51.9	51.9		60.7	60.7		79.1	79.1	
Effective Green, g (s)	52.9	52.9		52.9	52.9		61.7	61.7		80.1	80.1	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.43	0.43		0.56	0.56	
Clearance Time (s)	7.0	7.0		7.0	7.0		6.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	356	621		439	582		67	1676		343	2258	
v/s Ratio Prot		0.06			0.06			0.35		c0.11	0.37	
v/s Ratio Perm	c0.21			0.02			0.17			c0.44		
v/c Ratio	0.57	0.16		0.05	0.15		0.40	0.81		0.99	0.66	
Uniform Delay, d1	36.5	30.6		29.4	30.5		28.4	36.1		18.1	22.4	
Progression Factor	1.11	1.14		1.00	1.00		0.39	0.42		1.00	1.00	
Incremental Delay, d2	2.2	0.1		0.0	0.1		11.2	2.9		45.0	1.5	
Delay (s)	42.9	35.1		29.4	30.7		22.2	18.1		63.1	24.0	
Level of Service	D	D		C	C		C	B		E	C	
Approach Delay (s)		40.2			30.5			18.2			31.1	
Approach LOS		D			C			B			C	

Intersection Summary

HCM 2000 Control Delay	27.1	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.84			
Actuated Cycle Length (s)	144.0	Sum of lost time (s)	14.0	
Intersection Capacity Utilization	139.6%	ICU Level of Service	H	
Analysis Period (min)	15			

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
3: The Donway W & Belton Rd

Existing PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	0	5	5	0	10	10	275	5	10	275	5
Future Volume (Veh/h)	5	0	5	5	0	10	10	275	5	10	275	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	5	0	5	5	0	11	11	293	5	11	293	5
Pedestrians		10			15						5	
Lane Width (m)		3.5			3.5						3.2	
Walking Speed (m/s)		1.2			1.2						1.2	
Percent Blockage		1			1						0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								77			162	
pX, platoon unblocked	0.97	0.97		0.97	0.97	0.97				0.97		
vC, conflicting volume	658	662	306	652	662	316	308			313		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	629	633	306	623	633	274	308			272		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	100	99	99	100	98	99			99		
cM capacity (veh/h)	363	372	733	370	372	732	1254			1244		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	10	16	11	298	11	298
Volume Left	5	5	11	0	11	0
Volume Right	5	11	0	5	0	5
cSH	486	560	1254	1700	1244	1700
Volume to Capacity	0.02	0.03	0.01	0.18	0.01	0.18
Queue Length 95th (m)	0.5	0.7	0.2	0.0	0.2	0.0
Control Delay (s)	12.6	11.6	7.9	0.0	7.9	0.0
Lane LOS	B	B	A		A	
Approach Delay (s)	12.6	11.6	0.3		0.3	
Approach LOS	B	B				

Intersection Summary					
Average Delay	0.8				
Intersection Capacity Utilization	26.3%	ICU Level of Service	A		
Analysis Period (min)	15				

Queues
4: The Donway W & Duncairn Rd

Existing PM Peak Hour

Lane Group	EBL	NBL	NBT	SBT	Ø8
Lane Configurations					
Traffic Volume (vph)	40	80	250	230	
Future Volume (vph)	40	80	250	230	
Lane Group Flow (vph)	112	0	351	304	
Turn Type	Perm	Perm	NA	NA	
Protected Phases			2	6	8
Permitted Phases	4	2			
Detector Phase	4	2	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	29.0	26.0	26.0	26.0	29.0
Total Split (s)	29.0	43.0	43.0	43.0	29.0
Total Split (%)	40.3%	59.7%	59.7%	59.7%	40%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0		-1.0	-1.0	
Total Lost Time (s)	5.0		5.0	5.0	
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	C-Min	C-Min	C-Min	None
v/c Ratio	0.38		0.30	0.22	
Control Delay	14.7		5.6	5.3	
Queue Delay	0.0		0.0	0.0	
Total Delay	14.7		5.6	5.3	
Queue Length 50th (m)	5.7		30.8	10.7	
Queue Length 95th (m)	14.8		56.6	66.2	
Internal Link Dist (m)	90.7		123.1	53.4	
Turn Bay Length (m)					
Base Capacity (vph)	545		1186	1359	
Starvation Cap Reductn	0		0	0	
Spillback Cap Reductn	0		0	0	
Storage Cap Reductn	0		0	0	
Reduced v/c Ratio	0.21		0.30	0.22	

Intersection Summary
Cycle Length: 72
Actuated Cycle Length: 72
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 4: The Donway W & Duncairn Rd

HCM Signalized Intersection Capacity Analysis
4: The Donway W & Duncairn Rd

Existing PM Peak Hour

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	40	65	80	250	230	55
Future Volume (vph)	40	65	80	250	230	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.5	3.5	3.5	3.5
Total Lost time (s)	5.0			5.0	5.0	
Lane Util. Factor	1.00			1.00	1.00	
Frpb, ped/bikes	0.97			1.00	0.99	
Flpb, ped/bikes	1.00			1.00	1.00	
Frt	0.92			1.00	0.97	
Flt Protected	0.98			0.99	1.00	
Satd. Flow (prot)	1498			1819	1802	
Flt Permitted	0.98			0.86	1.00	
Satd. Flow (perm)	1498			1580	1802	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	43	69	85	266	245	59
RTOR Reduction (vph)	59	0	0	0	7	0
Lane Group Flow (vph)	53	0	0	351	297	0
Confl. Peds. (#/hr)		20	10			10
Heavy Vehicles (%)	5%	2%	1%	2%	1%	0%
Turn Type	Perm		Perm	NA	NA	
Protected Phases				2	6	
Permitted Phases	4		2			
Actuated Green, G (s)	9.1			50.9	50.9	
Effective Green, g (s)	10.1			51.9	51.9	
Actuated g/C Ratio	0.14			0.72	0.72	
Clearance Time (s)	6.0			6.0	6.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	210			1138	1298	
v/s Ratio Prot					0.16	
v/s Ratio Perm	c0.04			c0.22		
v/c Ratio	0.25			0.31	0.23	
Uniform Delay, d1	27.6			3.6	3.4	
Progression Factor	1.00			0.99	1.17	
Incremental Delay, d2	0.6			0.7	0.4	
Delay (s)	28.2			4.3	4.3	
Level of Service	C			A	A	
Approach Delay (s)	28.2			4.3	4.3	
Approach LOS	C			A	A	

Intersection Summary				
HCM 2000 Control Delay	7.8	HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio	0.30			
Actuated Cycle Length (s)	72.0	Sum of lost time (s)	11.0	
Intersection Capacity Utilization	59.9%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

HCM Unsignalized Intersection Capacity Analysis
5: The Donway W & Site Access

Existing PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	0	10	10	0	0	0	325	15	5	285	5
Future Volume (Veh/h)	5	0	10	10	0	0	0	325	15	5	285	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	5	0	10	10	0	0	0	339	16	5	297	5
Pedestrians		30			20							
Lane Width (m)		3.5			3.5							
Walking Speed (m/s)		1.2			1.2							
Percent Blockage		2			2							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								224			147	
pX, platoon unblocked	0.99	0.99		0.99	0.99	0.99				0.99		
vC, conflicting volume	678	714	330	684	709	367	332			375		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	670	706	330	675	701	355	332			363		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	100	99	97	100	100	100			100		
cM capacity (veh/h)	348	343	699	343	346	675	1209			1175		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	15	10	0	355	5	302
Volume Left	5	10	0	0	5	0
Volume Right	10	0	0	16	0	5
cSH	524	343	1700	1700	1175	1700
Volume to Capacity	0.03	0.03	0.00	0.21	0.00	0.18
Queue Length 95th (m)	0.7	0.7	0.0	0.0	0.1	0.0
Control Delay (s)	12.1	15.8	0.0	0.0	8.1	0.0
Lane LOS	B	C			A	
Approach Delay (s)	12.1	15.8	0.0		0.1	
Approach LOS	B	C				

Intersection Summary				
Average Delay	0.6			
Intersection Capacity Utilization	28.1%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
6: The Donway W & Langbourne Pl

Existing PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	0	25	5	0	10	25	290	5	5	280	20
Future Volume (Veh/h)	40	0	25	5	0	10	25	290	5	5	280	20
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	43	0	27	5	0	11	27	309	5	5	298	21
Pedestrians		45			35			15			5	
Lane Width (m)		3.5			3.5			3.2			3.2	
Walking Speed (m/s)		1.2			1.2			1.2			1.2	
Percent Blockage		4			3			1			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								137			234	
pX, platoon unblocked	0.96	0.96		0.96	0.96	0.96				0.96		
vC, conflicting volume	742	766	368	750	774	352	364			349		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	711	736	368	720	745	304	364			302		
tC, single (s)	7.1	6.5	6.2	7.2	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.6	4.0	3.3	2.2			2.2		
p0 queue free %	85	100	96	98	100	98	98			100		
cM capacity (veh/h)	296	305	649	270	302	688	1162			1186		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	70	16	27	314	5	319
Volume Left	43	5	27	0	5	0
Volume Right	27	11	0	5	0	21
cSH	375	464	1162	1700	1186	1700
Volume to Capacity	0.19	0.03	0.02	0.18	0.00	0.19
Queue Length 95th (m)	5.4	0.9	0.6	0.0	0.1	0.0
Control Delay (s)	16.8	13.0	8.2	0.0	8.0	0.0
Lane LOS	C	B	A		A	
Approach Delay (s)	16.8	13.0	0.6		0.1	
Approach LOS	C	B				

Intersection Summary					
Average Delay	2.2				
Intersection Capacity Utilization	37.1%	ICU Level of Service	A		
Analysis Period (min)	15				

HCM Unsignalized Intersection Capacity Analysis
7: The Donway W & Jocelyn Cres

Existing PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	0	20	90	0	30	20	275	55	30	275	5
Future Volume (Veh/h)	15	0	20	90	0	30	20	275	55	30	275	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	16	0	21	96	0	32	21	293	59	32	293	5
Pedestrians		35			40						5	
Lane Width (m)		3.5			3.5						3.5	
Walking Speed (m/s)		1.2			1.2						1.2	
Percent Blockage		3			3						0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								57			315	
pX, platoon unblocked	0.90	0.90		0.90	0.90	0.90				0.90		
vC, conflicting volume	766	828	330	785	802	368	333			392		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	687	755	330	707	725	244	333			271		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	94	100	97	65	100	95	98			97		
cM capacity (veh/h)	279	275	695	275	286	695	1203			1138		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	37	128	21	352	330
Volume Left	16	96	21	0	32
Volume Right	21	32	0	59	5
cSH	423	324	1203	1700	1138
Volume to Capacity	0.09	0.40	0.02	0.21	0.03
Queue Length 95th (m)	2.3	14.6	0.4	0.0	0.7
Control Delay (s)	14.3	23.2	8.0	0.0	1.1
Lane LOS	B	C	A		A
Approach Delay (s)	14.3	23.2	0.5		1.1
Approach LOS	B	C			

Intersection Summary					
Average Delay	4.6				
Intersection Capacity Utilization	56.7%	ICU Level of Service	B		
Analysis Period (min)	15				

Queues
8: The Donway W & Lawrence Ave E

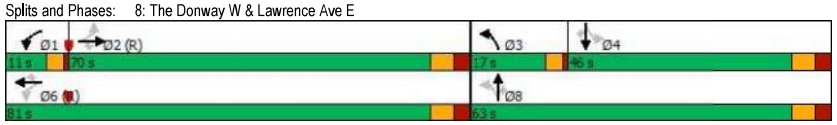
Existing PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	905	250	130	620	70	295	160	185	80	155	150
Future Volume (vph)	120	905	250	130	620	70	295	160	185	80	155	150
Lane Group Flow (vph)	124	933	258	134	639	72	304	165	191	82	160	155
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases		2		1	6		3	8			4	
Permitted Phases	2		2	6		6	8		8	4		4
Detector Phase	2	2	2	1	6	6	3	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	6.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	36.0	36.0	36.0	9.0	36.0	36.0	10.0	37.0	37.0	37.0	37.0	37.0
Total Split (s)	70.0	70.0	70.0	11.0	81.0	81.0	17.0	63.0	63.0	46.0	46.0	46.0
Total Split (%)	48.6%	48.6%	48.6%	7.6%	56.3%	56.3%	11.8%	43.8%	43.8%	31.9%	31.9%	31.9%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	3.0	3.0	3.0	1.0	3.0	3.0	1.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	6.0	6.0	6.0	3.0	6.0	6.0	3.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lag	Lag	Lag	Lead			Lead			Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes			Yes	Yes	Yes
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	Min	Min	Min	Min	Min
v/c Ratio	0.44	0.61	0.49	0.47	0.34	0.11	0.68	0.24	0.35	0.45	0.45	0.41
Control Delay	37.8	35.1	24.1	29.5	13.1	2.4	39.8	30.6	10.3	70.3	66.8	20.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.8	35.1	24.1	29.5	13.1	2.4	39.8	30.6	10.3	70.3	66.8	20.4
Queue Length 50th (m)	27.8	120.8	38.1	17.6	35.4	0.5	62.1	31.4	9.1	22.9	44.8	7.6
Queue Length 95th (m)	49.4	143.5	66.9	m27.6	39.5	m2.2	93.7	51.4	29.2	40.5	68.0	27.6
Internal Link Dist (m)		160.9			236.6			191.1			32.6	
Turn Bay Length (m)	45.0		20.0	45.0		25.0	80.0		45.0	15.0		
Base Capacity (vph)	307	1675	561	285	1933	664	450	757	580	268	516	483
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.56	0.46	0.47	0.33	0.11	0.68	0.22	0.33	0.31	0.31	0.32

Intersection Summary

Cycle Length: 144
Actuated Cycle Length: 144
Offset: 95 (66%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 95
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: The Donway W & Lawrence Ave E



HCM Signalized Intersection Capacity Analysis
8: The Donway W & Lawrence Ave E

Existing PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	905	250	130	620	70	295	160	185	80	155	150
Future Volume (vph)	120	905	250	130	620	70	295	160	185	80	155	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	6.0	6.0	6.0	3.0	6.0	6.0	3.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.75	1.00	1.00	0.80	1.00	1.00	0.83	1.00	1.00	0.90
Flpb, ped/bikes	0.92	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00	0.87	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1510	3535	1084	1660	3500	1154	1604	1860	1222	1407	1860	1338
Flt Permitted	0.41	1.00	1.00	0.18	1.00	1.00	0.47	1.00	1.00	0.65	1.00	1.00
Satd. Flow (perm)	651	3535	1084	311	3500	1154	801	1860	1222	966	1860	1338
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	124	933	258	134	639	72	304	165	191	82	160	155
RTOR Reduction (vph)	0	0	51	0	0	28	0	0	88	0	0	126
Lane Group Flow (vph)	124	933	207	134	639	44	304	165	103	82	160	29
Confl. Peds. (#/hr)	75		95	95		75	65		115	115		65
Heavy Vehicles (%)	3%	1%	0%	1%	2%	0%	2%	1%	1%	4%	1%	1%
Bus Blockages (#/hr)	0	0	10	0	0	10	0	0	2	0	0	0
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases		2		1	6		3	8			4	
Permitted Phases	2		2	6		6	8		8	4		4
Actuated Green, G (s)	61.6	61.6	61.6	76.9	76.9	76.9	53.1	53.1	53.1	26.3	26.3	26.3
Effective Green, g (s)	62.6	62.6	62.6	77.9	77.9	77.9	54.1	54.1	54.1	27.3	27.3	27.3
Actuated g/C Ratio	0.43	0.43	0.43	0.54	0.54	0.54	0.38	0.38	0.38	0.19	0.19	0.19
Clearance Time (s)	7.0	7.0	7.0	4.0	7.0	7.0	4.0	7.0	7.0	7.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	283	1536	471	283	1893	624	433	698	459	183	352	253
v/s Ratio Prot		c0.26		c0.04	0.18		c0.12	0.09			0.09	
v/s Ratio Perm	0.19		0.19	0.22		0.04	c0.15		0.08	0.08		0.02
v/c Ratio	0.44	0.61	0.44	0.47	0.34	0.07	0.70	0.24	0.22	0.45	0.45	0.12
Uniform Delay, d1	28.4	31.3	28.4	20.0	18.6	15.8	35.0	30.8	30.6	51.7	51.7	48.4
Progression Factor	1.00	1.00	1.00	1.50	0.64	0.38	1.00	1.00	1.00	1.24	1.24	2.50
Incremental Delay, d2	4.9	1.8	3.0	1.0	0.4	0.2	5.1	0.2	0.2	1.7	0.9	0.2
Delay (s)	33.3	33.1	31.4	31.1	12.4	6.2	40.1	31.0	30.9	65.8	64.9	121.3
Level of Service	C	C	C	C	B	A	D	C	C	E	E	F
Approach Delay (s)		32.7			14.8			35.1			87.1	
Approach LOS		C			B			D			F	

Intersection Summary

HCM 2000 Control Delay	35.2	HCM 2000 Level of Service		D	
HCM 2000 Volume to Capacity ratio	0.65				
Actuated Cycle Length (s)	144.0	Sum of lost time (s)		18.0	
Intersection Capacity Utilization	88.6%	ICU Level of Service		E	
Analysis Period (min)	15				

c Critical Lane Group

Queues
9: Don Mills Rd & Lawrence Ave E

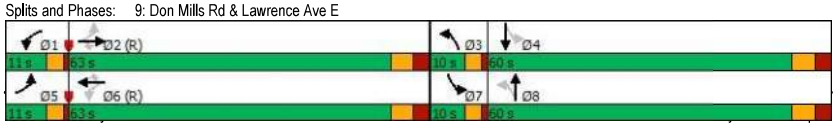
Existing PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	80	1035	110	175	670	75	180	1135	155	880
Future Volume (vph)	80	1035	110	175	670	75	180	1135	155	880
Lane Group Flow (vph)	82	1067	113	180	691	77	186	1546	160	1000
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases	5	2		1	6		3	8	7	4
Permitted Phases	2		2	6		6	8		4	
Detector Phase	5	2	2	1	6	6	3	8	7	4
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	10.0	42.0	42.0	10.0	42.0	42.0	10.0	42.0	10.0	42.0
Total Split (s)	11.0	63.0	63.0	11.0	63.0	63.0	10.0	60.0	10.0	60.0
Total Split (%)	7.6%	43.8%	43.8%	7.6%	43.8%	43.8%	6.9%	41.7%	6.9%	41.7%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	1.0	3.0	3.0	1.0	3.0	3.0	1.0	3.0	1.0	3.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-2.2	-1.0	-1.0	-1.8	-1.0	-1.0	-1.0
Total Lost Time (s)	3.0	6.0	6.0	1.8	6.0	6.0	2.2	6.0	3.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	Min	None	Min
v/c Ratio	0.31	0.86	0.25	0.99	0.54	0.16	0.81	0.89	0.79	0.72
Control Delay	16.6	33.2	4.8	99.9	37.4	4.3	52.8	48.3	79.9	36.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.6	33.2	4.8	99.9	37.4	4.3	52.8	48.3	79.9	36.1
Queue Length 50th (m)	6.3	50.9	0.0	~44.9	85.9	0.0	31.4	148.7	39.0	53.1
Queue Length 95th (m)	17.0	96.5	8.6	#93.4	100.8	8.0	#92.2	169.7	#91.9	101.0
Internal Link Dist (m)		236.6			112.1			201.1		392.8
Turn Bay Length (m)	45.0		160.0	85.0		30.0	65.0		95.0	
Base Capacity (vph)	269	1385	489	181	1385	526	231	1807	202	1440
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.77	0.23	0.99	0.50	0.15	0.81	0.86	0.79	0.69

Intersection Summary

Cycle Length: 144
Actuated Cycle Length: 144
Offset: 86 (60%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 105
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 9: Don Mills Rd & Lawrence Ave E



HCM Signalized Intersection Capacity Analysis
9: Don Mills Rd & Lawrence Ave E

Existing PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	1035	110	175	670	75	180	1135	365	155	880	90
Future Volume (vph)	80	1035	110	175	670	75	180	1135	365	155	880	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	6.0	6.0	1.8	6.0	6.0	2.2	6.0		3.0	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	*0.92		1.00	*0.73	
Frpb, ped/bikes	1.00	1.00	0.76	1.00	1.00	0.83	1.00	0.96		1.00	0.98	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1666	3500	1063	1668	3500	1190	1664	4711		1685	3825	
Flt Permitted	0.27	1.00	1.00	0.08	1.00	1.00	0.11	1.00		0.08	1.00	
Satd. Flow (perm)	477	3500	1063	141	3500	1190	194	4711		136	3825	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	82	1067	113	180	691	77	186	1170	376	160	907	93
RTOR Reduction (vph)	0	0	73	0	0	49	0	41	0	0	6	0
Lane Group Flow (vph)	82	1067	40	180	691	28	186	1505	0	160	994	0
Confl. Peds. (#/hr)	130		185	185		130	195		120	120		195
Heavy Vehicles (%)	0%	2%	4%	1%	2%	1%	1%	2%	2%	0%	4%	0%
Bus Blockages (#/hr)	0	0	10	0	0	10	0	0	14	0	0	14
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8			4		
Actuated Green, G (s)	57.3	50.1	50.1	60.7	51.8	51.8	63.0	51.1		63.0	51.1	
Effective Green, g (s)	59.3	51.1	51.1	65.1	52.8	52.8	66.6	52.1		65.0	52.1	
Actuated g/C Ratio	0.41	0.35	0.35	0.45	0.37	0.37	0.46	0.36		0.45	0.36	
Clearance Time (s)	4.0	7.0	7.0	4.0	7.0	7.0	4.0	7.0		4.0	7.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	264	1242	377	181	1283	436	229	1704		200	1383	
v/s Ratio Prot	0.02	c0.30		c0.08	0.20		c0.08	c0.32		0.07	0.26	
v/s Ratio Perm	0.11		0.04	0.37		0.02	0.30			0.29		
v/c Ratio	0.31	0.86	0.11	0.99	0.54	0.06	0.81	0.88		0.80	0.72	
Uniform Delay, d1	27.1	43.1	31.1	39.2	36.0	29.6	27.9	43.1		35.5	39.6	
Progression Factor	0.66	0.61	0.75	1.00	1.00	1.00	1.00	1.00		2.17	0.85	
Incremental Delay, d2	0.6	7.1	0.5	64.9	1.6	0.3	19.3	5.8		17.8	1.6	
Delay (s)	18.5	33.4	23.9	104.2	37.6	29.9	47.1	48.9		95.0	35.3	
Level of Service	B	C	C	F	D	C	D	D		F	D	
Approach Delay (s)		31.6			49.6			48.7			43.5	
Approach LOS		C			D			D			D	

Intersection Summary

HCM 2000 Control Delay	43.5	HCM 2000 Level of Service		D	
HCM 2000 Volume to Capacity ratio	0.88				
Actuated Cycle Length (s)	144.0	Sum of lost time (s)		18.0	
Intersection Capacity Utilization	95.8%	ICU Level of Service		F	
Analysis Period (min)	15				

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
5: The Donway W & Site Access

Existing Weekend Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	0	0	5	0	0	0	145	10	5	160	5
Future Volume (Veh/h)	5	0	0	5	0	0	0	145	10	5	160	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	6	0	0	6	0	0	0	173	12	6	190	6
Pedestrians		10			10							
Lane Width (m)		3.5			3.5							
Walking Speed (m/s)		1.2			1.2							
Percent Blockage		1			1							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								224			147	
pX, platoon unblocked												
vC, conflicting volume	388	410	203	391	407	189	206			195		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	388	410	203	391	407	189	206			195		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	100	100	99	100	100	100			100		
cM capacity (veh/h)	561	524	836	558	526	851	1366			1379		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	6	6	0	185	6	196
Volume Left	6	6	0	0	6	0
Volume Right	0	0	0	12	0	6
cSH	561	558	1700	1700	1379	1700
Volume to Capacity	0.01	0.01	0.00	0.11	0.00	0.12
Queue Length 95th (m)	0.3	0.3	0.0	0.0	0.1	0.0
Control Delay (s)	11.5	11.5	0.0	0.0	7.6	0.0
Lane LOS	B	B			A	
Approach Delay (s)	11.5	11.5	0.0		0.2	
Approach LOS	B	B				

Intersection Summary				
Average Delay	0.5			
Intersection Capacity Utilization	20.1%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
1: The Donway W & Overton Cres

Future Background AM Peak Hour

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	255	345	5	15	5
Future Volume (Veh/h)	5	255	345	5	15	5
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	6	297	401	6	17	6
Pedestrians		5			30	
Lane Width (m)		3.5			3.0	
Walking Speed (m/s)		1.2			1.2	
Percent Blockage		0			2	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		176	64			
pX, platoon unblocked						
vC, conflicting volume	437				743	439
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	437				743	439
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				95	99
cM capacity (veh/h)	1110				375	607

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	303	407	23
Volume Left	6	0	17
Volume Right	0	6	6
cSH	1110	1700	417
Volume to Capacity	0.01	0.24	0.06
Queue Length 95th (m)	0.1	0.0	1.4
Control Delay (s)	0.2	0.0	14.1
Lane LOS	A		B
Approach Delay (s)	0.2	0.0	14.1
Approach LOS			B

Intersection Summary				
Average Delay	0.5			
Intersection Capacity Utilization	30.0%	ICU Level of Service	A	
Analysis Period (min)	15			

Queues
2: Don Mills Rd & The Donway W/The Donway E

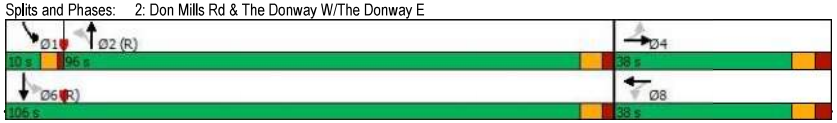
Future Background AM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	175	60	20	95	25	1255	220	1575
Future Volume (vph)	175	60	20	95	25	1255	220	1575
Lane Group Flow (vph)	182	99	21	464	26	1312	229	1881
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases		4		8		2	1	6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	1	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	56.0	56.0	5.0	56.0
Minimum Split (s)	38.0	38.0	38.0	38.0	82.0	82.0	9.0	82.0
Total Split (s)	38.0	38.0	38.0	38.0	96.0	96.0	10.0	106.0
Total Split (%)	26.4%	26.4%	26.4%	26.4%	66.7%	66.7%	6.9%	73.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0
All-Red Time (s)	3.0	3.0	3.0	3.0	2.0	2.0	1.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	5.0	5.0	3.0	5.0
Lead/Lag					Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	
Recall Mode	None	None	None	None	C-Min	C-Min	None	C-Min
v/c Ratio	0.83	0.26	0.08	0.89	0.37	0.56	0.66	0.63
Control Delay	81.1	36.6	43.5	46.4	42.5	26.9	19.1	12.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	81.1	36.6	43.5	46.4	42.5	26.9	19.1	12.7
Queue Length 50th (m)	50.2	20.2	5.0	72.2	6.8	177.4	21.9	121.3
Queue Length 95th (m)	#93.0	37.9	12.9	#135.2	m10.4	209.3	#39.9	134.7
Internal Link Dist (m)		40.0		170.7		392.8		113.4
Turn Bay Length (m)	25.0		50.0		35.0		80.0	
Base Capacity (vph)	235	404	276	545	76	2491	345	3046
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.25	0.08	0.85	0.34	0.53	0.66	0.62

Intersection Summary

Cycle Length: 144
Actuated Cycle Length: 144
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Don Mills Rd & The Donway W/The Donway E



HCM Signalized Intersection Capacity Analysis
2: Don Mills Rd & The Donway W/The Donway E

Future Background AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	175	60	35	20	95	350	25	1255	5	220	1575	230
Future Volume (vph)	175	60	35	20	95	350	25	1255	5	220	1575	230
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.5	3.0	3.5	3.5	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		5.0	5.0		3.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.71		1.00	*0.79	
Frpb, ped/bikes	1.00	0.98		1.00	0.96		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.98	1.00		0.97	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.95		1.00	0.88		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1637	1659		1634	1566		1683	3883		1667	4222	
Flt Permitted	0.58	1.00		0.68	1.00		0.07	1.00		0.18	1.00	
Satd. Flow (perm)	1000	1659		1171	1566		118	3883		323	4222	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	182	62	36	21	99	365	26	1307	5	229	1641	240
RTOR Reduction (vph)	0	14	0	0	181	0	0	0	0	0	11	0
Lane Group Flow (vph)	182	85	0	21	283	0	26	1312	0	229	1870	0
Confl. Peds. (#/hr)	25		25	25		25	15		15	15		15
Heavy Vehicles (%)	1%	7%	0%	0%	2%	2%	0%	3%	0%	1%	3%	3%
Bus Blockages (#/hr)	0	2	2	0	0	0	0	0	12	0	0	12
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	30.4	30.4		30.4	30.4		85.5	85.5		100.6	100.6	
Effective Green, g (s)	31.4	31.4		31.4	31.4		86.5	86.5		101.6	101.6	
Actuated g/C Ratio	0.22	0.22		0.22	0.22		0.60	0.60		0.71	0.71	
Clearance Time (s)	7.0	7.0		7.0	7.0		6.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	218	361		255	341		70	2332		340	2978	
v/s Ratio Prot		0.05			0.18			0.34		c0.06	0.44	
v/s Ratio Perm	c0.18			0.02			0.22			c0.42		
v/c Ratio	0.83	0.24		0.08	0.83		0.37	0.56		0.67	0.63	
Uniform Delay, d1	53.8	46.4		44.8	53.8		14.8	17.3		7.2	11.2	
Progression Factor	0.97	0.95		1.00	1.00		1.65	1.43		1.00	1.00	
Incremental Delay, d2	22.7	0.3		0.1	15.7		9.3	0.6		5.2	1.0	
Delay (s)	74.8	44.2		45.0	69.4		33.7	25.5		12.4	12.2	
Level of Service	E	D		D	E		C	C		B	B	
Approach Delay (s)		64.0			68.4			25.6			12.2	
Approach LOS		E			E			C			B	

Intersection Summary

HCM 2000 Control Delay	26.4	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.72			
Actuated Cycle Length (s)	144.0	Sum of lost time (s)	14.0	
Intersection Capacity Utilization	166.4%	ICU Level of Service	H	
Analysis Period (min)	15			

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
3: The Donway W & Belton Rd

Future Background AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	0	5	10	0	25	5	230	5	5	340	5
Future Volume (Veh/h)	5	0	5	10	0	25	5	230	5	5	340	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Hourly flow rate (vph)	6	0	6	12	0	31	6	284	6	6	420	6
Pedestrians		25			10						5	
Lane Width (m)		3.5			3.5						3.2	
Walking Speed (m/s)		1.2			1.2						1.2	
Percent Blockage		2			1						0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								77			162	
pX, platoon unblocked	0.98	0.98		0.98	0.98	0.98				0.98		
vC, conflicting volume	792	772	448	747	772	302	451			300		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	776	756	448	730	756	275	451			273		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	100	99	96	100	96	99			100		
cM capacity (veh/h)	282	320	602	317	320	743	1097			1263		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	12	43	6	290	6	426
Volume Left	6	12	6	0	6	0
Volume Right	6	31	0	6	0	6
cSH	384	540	1097	1700	1263	1700
Volume to Capacity	0.03	0.08	0.01	0.17	0.00	0.25
Queue Length 95th (m)	0.8	2.1	0.1	0.0	0.1	0.0
Control Delay (s)	14.7	12.2	8.3	0.0	7.9	0.0
Lane LOS	B	B	A		A	
Approach Delay (s)	14.7	12.2	0.2		0.1	
Approach LOS	B	B				

Intersection Summary					
Average Delay	1.0				
Intersection Capacity Utilization	29.8%	ICU Level of Service	A		
Analysis Period (min)	15				

Queues
4: The Donway W & Duncairn Rd

Future Background AM Peak Hour

Lane Group	EBL	NBL	NBT	SBT	Ø8
Lane Configurations					
Traffic Volume (vph)	70	70	170	275	
Future Volume (vph)	70	70	170	275	
Lane Group Flow (vph)	240	0	296	439	
Turn Type	Perm	Perm	NA	NA	
Protected Phases			2	6	8
Permitted Phases	4	2			
Detector Phase	4	2	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	29.0	26.0	26.0	26.0	29.0
Total Split (s)	29.0	43.0	43.0	43.0	29.0
Total Split (%)	40.3%	59.7%	59.7%	59.7%	40%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0		-1.0	-1.0	
Total Lost Time (s)	5.0		5.0	5.0	
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	C-Min	C-Min	C-Min	None
v/c Ratio	0.62		0.30	0.37	
Control Delay	18.3		8.0	6.6	
Queue Delay	0.0		0.0	0.0	
Total Delay	18.3		8.0	6.6	
Queue Length 50th (m)	13.7		11.4	16.9	
Queue Length 95th (m)	22.5		40.5	55.7	
Internal Link Dist (m)	90.7		123.1	53.4	
Turn Bay Length (m)					
Base Capacity (vph)	597		983	1196	
Starvation Cap Reductn	0		0	0	
Spillback Cap Reductn	0		0	0	
Storage Cap Reductn	0		0	0	
Reduced v/c Ratio	0.40		0.30	0.37	

Intersection Summary
Cycle Length: 72
Actuated Cycle Length: 72
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 4: The Donway W & Duncairn Rd

HCM Signalized Intersection Capacity Analysis
4: The Donway W & Duncairn Rd

Future Background AM Peak Hour

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	70	125	70	170	275	80
Future Volume (vph)	70	125	70	170	275	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.5	3.5	3.5	3.5
Total Lost time (s)	5.0			5.0	5.0	
Lane Util. Factor	1.00			1.00	1.00	
Frpb, ped/bikes	0.97			1.00	0.99	
Flpb, ped/bikes	1.00			0.99	1.00	
Frt	0.91			1.00	0.97	
Flt Protected	0.98			0.99	1.00	
Satd. Flow (prot)	1524			1799	1750	
Flt Permitted	0.98			0.80	1.00	
Satd. Flow (perm)	1524			1451	1750	
Peak-hour factor, PHF	0.81	0.81	0.81	0.81	0.81	0.81
Adj. Flow (vph)	86	154	86	210	340	99
RTOR Reduction (vph)	109	0	0	0	10	0
Lane Group Flow (vph)	131	0	0	296	429	0
Confl. Peds. (#/hr)		20	20			20
Heavy Vehicles (%)	1%	1%	1%	3%	3%	2%
Turn Type	Perm		Perm	NA	NA	
Protected Phases				2	6	
Permitted Phases	4		2			
Actuated Green, G (s)	12.2			47.8	47.8	
Effective Green, g (s)	13.2			48.8	48.8	
Actuated g/C Ratio	0.18			0.68	0.68	
Clearance Time (s)	6.0			6.0	6.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	279			983	1186	
v/s Ratio Prot					c0.25	
v/s Ratio Perm	c0.09			0.20		
v/c Ratio	0.47			0.30	0.36	
Uniform Delay, d1	26.3			4.7	5.0	
Progression Factor	1.00			1.21	1.02	
Incremental Delay, d2	1.2			0.8	0.7	
Delay (s)	27.5			6.5	5.8	
Level of Service	C			A	A	
Approach Delay (s)	27.5			6.5	5.8	
Approach LOS	C			A	A	

Intersection Summary				
HCM 2000 Control Delay	11.3	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.39			
Actuated Cycle Length (s)	72.0	Sum of lost time (s)	11.0	
Intersection Capacity Utilization	61.0%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

HCM Unsignalized Intersection Capacity Analysis
5: The Donway W & Site Access

Future Background AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	0	30	10	0	0	45	225	5	0	370	30
Future Volume (Veh/h)	15	0	30	10	0	0	45	225	5	0	370	30
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	18	0	36	12	0	0	54	268	6	0	440	36
Pedestrians		10			10							
Lane Width (m)		3.5			3.5							
Walking Speed (m/s)		1.2			1.2							
Percent Blockage		1			1							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								224			147	
pX, platoon unblocked	0.95	0.95	0.95	0.95	0.95		0.95					
vC, conflicting volume	844	860	468	865	875	281	486			284		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	811	828	416	833	844	281	435			284		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	93	100	94	95	100	100	95			100		
cM capacity (veh/h)	269	275	605	245	269	757	1062			1279		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	54	12	54	274	0	476
Volume Left	18	12	54	0	0	0
Volume Right	36	0	0	6	0	36
cSH	427	245	1062	1700	1700	1700
Volume to Capacity	0.13	0.05	0.05	0.16	0.00	0.28
Queue Length 95th (m)	3.4	1.2	1.3	0.0	0.0	0.0
Control Delay (s)	14.6	20.5	8.6	0.0	0.0	0.0
Lane LOS	B	C	A			
Approach Delay (s)	14.6	20.5	1.4		0.0	
Approach LOS	B	C				

Intersection Summary				
Average Delay	1.7			
Intersection Capacity Utilization	38.0%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
6: The Donway W & Langbourne Pl

Future Background AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	0	25	15	0	15	15	235	5	5	390	15
Future Volume (Veh/h)	25	0	25	15	0	15	15	235	5	5	390	15
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	29	0	29	17	0	17	17	273	6	6	453	17
Pedestrians		20			20			15			5	
Lane Width (m)		3.5			3.5			3.2			3.2	
Walking Speed (m/s)		1.2			1.2			1.2			1.2	
Percent Blockage		2			2			1			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								137			234	
pX, platoon unblocked	0.98	0.98		0.98	0.98	0.98				0.98		
vC, conflicting volume	822	826	496	839	832	301	490			299		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	806	810	496	823	816	271	490			269		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	89	100	95	93	100	98	98			100		
cM capacity (veh/h)	267	293	562	255	290	739	1066			1254		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	58	34	17	279	6	470
Volume Left	29	17	17	0	6	0
Volume Right	29	17	0	6	0	17
cSH	362	379	1066	1700	1254	1700
Volume to Capacity	0.16	0.09	0.02	0.16	0.00	0.28
Queue Length 95th (m)	4.5	2.3	0.4	0.0	0.1	0.0
Control Delay (s)	16.8	15.4	8.4	0.0	7.9	0.0
Lane LOS	C	C	A		A	
Approach Delay (s)	16.8	15.4	0.5		0.1	
Approach LOS	C	C				

Intersection Summary					
Average Delay	2.0				
Intersection Capacity Utilization	36.1%	ICU Level of Service	A		
Analysis Period (min)	15				

HCM Unsignalized Intersection Capacity Analysis
7: The Donway W & Jocelyn Cres

Future Background AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	0	5	30	5	15	10	230	25	10	415	5
Future Volume (Veh/h)	10	0	5	30	5	15	10	230	25	10	415	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	11	0	6	34	6	17	11	264	29	11	477	6
Pedestrians		20			15						5	
Lane Width (m)		3.5			3.5						3.5	
Walking Speed (m/s)		1.2			1.2						1.2	
Percent Blockage		2			1						0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								57			315	
pX, platoon unblocked	0.94	0.94		0.94	0.94	0.94				0.94		
vC, conflicting volume	833	852	500	824	840	298	503			308		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	791	811	500	781	799	222	503			232		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	100	99	88	98	98	99			99		
cM capacity (veh/h)	265	283	566	279	288	761	1054			1251		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	17	57	11	293	494
Volume Left	11	34	11	0	11
Volume Right	6	17	0	29	6
cSH	326	345	1054	1700	1251
Volume to Capacity	0.05	0.17	0.01	0.17	0.01
Queue Length 95th (m)	1.3	4.7	0.3	0.0	0.2
Control Delay (s)	16.6	17.5	8.5	0.0	0.3
Lane LOS	C	C	A		A
Approach Delay (s)	16.6	17.5	0.3		0.3
Approach LOS	C	C			

Intersection Summary					
Average Delay	1.7				
Intersection Capacity Utilization	41.8%	ICU Level of Service	A		
Analysis Period (min)	15				

Queues
8: The Donway W & Lawrence Ave E

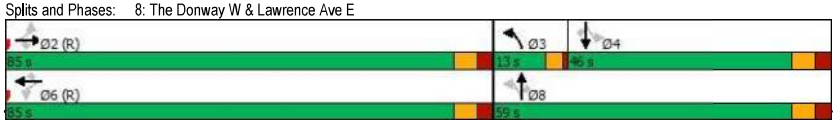
Future Background AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	1060	395	120	1020	60	320	110	140	90	155	205
Future Volume (vph)	95	1060	395	120	1020	60	320	110	140	90	155	205
Lane Group Flow (vph)	97	1082	403	122	1041	61	327	112	143	92	158	209
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases		2			6		3	8			4	
Permitted Phases	2		2	6		6	8		8	4		4
Detector Phase	2	2	2	6	6	6	3	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	6.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	36.0	36.0	36.0	36.0	36.0	36.0	10.0	37.0	37.0	37.0	37.0	37.0
Total Split (s)	85.0	85.0	85.0	85.0	85.0	85.0	13.0	59.0	59.0	46.0	46.0	46.0
Total Split (%)	59.0%	59.0%	59.0%	59.0%	59.0%	59.0%	9.0%	41.0%	41.0%	31.9%	31.9%	31.9%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	1.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	3.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag							Lead			Lag	Lag	Lag
Lead-Lag Optimize?							Yes			Yes	Yes	Yes
Recall Mode	C-Min	C-Min	C-Min	C-Min	C-Min	C-Min	None	Min	Min	Min	Min	Min
v/c Ratio	0.48	0.54	0.48	0.63	0.53	0.08	0.80	0.18	0.28	0.52	0.56	0.73
Control Delay	28.5	20.6	13.9	37.9	21.5	9.3	53.8	33.8	17.9	64.3	62.2	48.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.5	20.6	13.9	37.9	21.5	9.3	53.8	33.8	17.9	64.3	62.2	48.1
Queue Length 50th (m)	17.5	108.7	47.1	35.9	144.8	4.1	74.7	22.6	14.0	25.7	44.4	36.1
Queue Length 95th (m)	32.5	110.3	64.2	m40.2	m177.1	m8.7	#173.8	41.4	34.6	42.6	64.5	62.4
Internal Link Dist (m)		160.9			236.6			191.1			32.6	
Turn Bay Length (m)	45.0		20.0	45.0		25.0	80.0		45.0	15.0		
Base Capacity (vph)	208	2026	847	198	2007	788	408	705	565	320	516	451
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.53	0.48	0.62	0.52	0.08	0.80	0.16	0.25	0.29	0.31	0.46

Intersection Summary

Cycle Length: 144
Actuated Cycle Length: 144
Offset: 70 (49%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 95
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: The Donway W & Lawrence Ave E



HCM Signalized Intersection Capacity Analysis
8: The Donway W & Lawrence Ave E

Future Background AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	1060	395	120	1020	60	320	110	140	90	155	205
Future Volume (vph)	95	1060	395	120	1020	60	320	110	140	90	155	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0	3.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.94	1.00	1.00	0.92	1.00	1.00	0.95	1.00	1.00	0.95
Flpb, ped/bikes	0.99	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.97	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1620	3433	1341	1643	3400	1293	1620	1860	1370	1601	1860	1408
Flt Permitted	0.21	1.00	1.00	0.19	1.00	1.00	0.43	1.00	1.00	0.68	1.00	1.00
Satd. Flow (perm)	353	3433	1341	336	3400	1293	728	1860	1370	1154	1860	1408
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	97	1082	403	122	1041	61	327	112	143	92	158	209
RTOR Reduction (vph)	0	0	58	0	0	26	0	0	48	0	0	70
Lane Group Flow (vph)	97	1082	345	122	1041	35	327	112	95	92	158	139
Confl. Peds. (#/hr)	25		15	15		25	25		25	25		25
Heavy Vehicles (%)	3%	4%	1%	2%	5%	2%	3%	1%	4%	2%	1%	2%
Bus Blockages (#/hr)	0	0	12	0	0	12	0	0	2	0	0	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases		2			6		3	8			4	
Permitted Phases	2		2	6		6	8		8	4		4
Actuated Green, G (s)	82.3	82.3	82.3	82.3	82.3	82.3	47.7	47.7	47.7	21.0	21.0	21.0
Effective Green, g (s)	83.3	83.3	83.3	83.3	83.3	83.3	48.7	48.7	48.7	22.0	22.0	22.0
Actuated g/C Ratio	0.58	0.58	0.58	0.58	0.58	0.58	0.34	0.34	0.34	0.15	0.15	0.15
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	4.0	7.0	7.0	7.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	204	1985	775	194	1966	747	393	629	463	176	284	215
v/s Ratio Prot		0.32			0.31		c0.14	0.06			0.08	
v/s Ratio Perm	0.27		0.26	c0.36		0.03	c0.14		0.07	0.08		0.10
v/c Ratio	0.48	0.55	0.45	0.63	0.53	0.05	0.83	0.18	0.20	0.52	0.56	0.65
Uniform Delay, d1	17.6	18.7	17.2	20.1	18.4	13.2	40.0	33.6	33.9	56.2	56.5	57.3
Progression Factor	1.00	1.00	1.00	1.30	1.10	2.91	1.00	1.00	1.00	1.00	1.00	0.99
Incremental Delay, d2	7.7	1.1	1.9	6.0	0.4	0.0	13.9	0.1	0.2	2.7	2.3	6.3
Delay (s)	25.4	19.8	19.1	32.2	20.6	38.4	54.0	33.7	34.1	58.6	58.6	63.3
Level of Service	C	B	B	C	C	D	D	C	C	E	E	E
Approach Delay (s)		19.9			22.6			45.2			60.8	
Approach LOS		B			C			D			E	

Intersection Summary

HCM 2000 Control Delay	29.5	HCM 2000 Level of Service		C	
HCM 2000 Volume to Capacity ratio	0.72				
Actuated Cycle Length (s)	144.0	Sum of lost time (s)		15.0	
Intersection Capacity Utilization	89.7%	ICU Level of Service		E	
Analysis Period (min)	15				

c Critical Lane Group

Queues
9: Don Mills Rd & Lawrence Ave E

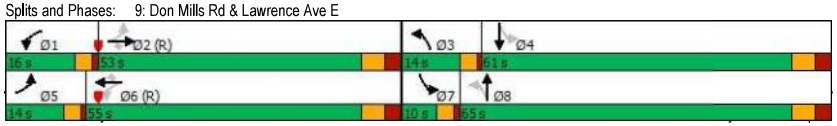
Future Background AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	115	935	200	205	1050	40	190	1130	140	1390
Future Volume (vph)	115	935	200	205	1050	40	190	1130	140	1390
Lane Group Flow (vph)	116	944	202	207	1061	40	192	1272	141	1495
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases	5	2		1	6		3	8	7	4
Permitted Phases	2		2	6		6	8		4	
Detector Phase	5	2	2	1	6	6	3	8	7	4
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	10.0	42.0	42.0	10.0	42.0	42.0	10.0	42.0	10.0	42.0
Total Split (s)	14.0	53.0	53.0	16.0	55.0	55.0	14.0	65.0	10.0	61.0
Total Split (%)	9.7%	36.8%	36.8%	11.1%	38.2%	38.2%	9.7%	45.1%	6.9%	42.4%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	1.0	3.0	3.0	1.0	3.0	3.0	1.0	3.0	1.0	3.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.9	-1.0	-1.0	-2.2	-1.0	-1.0	-1.0
Total Lost Time (s)	3.0	6.0	6.0	2.1	6.0	6.0	1.8	6.0	3.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	Min	Min	None	Min
v/c Ratio	0.67	0.87	0.47	0.96	0.91	0.09	0.95	0.82	0.62	0.91
Control Delay	48.5	62.8	30.2	88.2	58.3	0.4	87.6	42.7	41.5	63.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.5	62.8	30.2	88.2	58.3	0.4	87.6	42.7	41.5	63.8
Queue Length 50th (m)	29.9	146.6	36.4	45.7	159.8	0.0	~45.7	157.1	34.3	195.5
Queue Length 95th (m)	#42.9	173.5	57.7	#101.1	#200.4	0.0	#98.1	184.3	36.1	203.0
Internal Link Dist (m)		236.6			112.1			201.1		392.8
Turn Bay Length (m)	45.0		160.0	85.0		30.0	65.0		95.0	
Base Capacity (vph)	177	1120	440	216	1169	429	203	1551	227	1664
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.84	0.46	0.96	0.91	0.09	0.95	0.82	0.62	0.90

Intersection Summary

Cycle Length: 144
Actuated Cycle Length: 144
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 105
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 9: Don Mills Rd & Lawrence Ave E



HCM Signalized Intersection Capacity Analysis
9: Don Mills Rd & Lawrence Ave E

Future Background AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	115	935	200	205	1050	40	190	1130	130	140	1390	90
Future Volume (vph)	115	935	200	205	1050	40	190	1130	130	140	1390	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	6.0	6.0	2.1	6.0	6.0	1.8	6.0		3.0	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	*0.71		1.00	*0.81	
Frpb, ped/bikes	1.00	1.00	0.80	1.00	1.00	0.79	1.00	0.98		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		0.99	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1666	3433	1115	1587	3433	1086	1604	3750		1626	4345	
Flt Permitted	0.09	1.00	1.00	0.09	1.00	1.00	0.07	1.00		0.22	1.00	
Satd. Flow (perm)	155	3433	1115	153	3433	1086	118	3750		371	4345	
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	116	944	202	207	1061	40	192	1141	131	141	1404	91
RTOR Reduction (vph)	0	0	78	0	0	27	0	7	0	0	4	0
Lane Group Flow (vph)	116	944	124	207	1061	14	192	1265	0	141	1491	0
Confl. Peds. (#/hr)	160		155	155		160	135		165	165		135
Heavy Vehicles (%)	1%	4%	3%	6%	4%	5%	5%	3%	1%	3%	3%	3%
Bus Blockages (#/hr)	0	0	12	0	0	12	0	0	12	0	0	12
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8			4		
Actuated Green, G (s)	53.9	44.3	44.3	60.5	47.6	47.6	68.8	58.3		59.6	53.1	
Effective Green, g (s)	55.9	45.3	45.3	63.1	48.6	48.6	71.0	59.3		61.6	54.1	
Actuated g/C Ratio	0.39	0.31	0.31	0.44	0.34	0.34	0.49	0.41		0.43	0.38	
Clearance Time (s)	4.0	7.0	7.0	4.0	7.0	7.0	4.0	7.0		4.0	7.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	171	1079	350	214	1158	366	201	1544		224	1632	
v/s Ratio Prot	0.05	0.28		c0.10	c0.31		c0.09	0.34		0.03	c0.34	
v/s Ratio Perm	0.21		0.11	0.32		0.01	0.38			0.24		
v/c Ratio	0.68	0.87	0.35	0.97	0.92	0.04	0.96	0.82		0.63	0.91	
Uniform Delay, d1	33.8	46.7	38.1	40.7	45.7	32.0	43.4	37.6		25.8	42.7	
Progression Factor	1.13	1.16	1.63	1.00	1.00	1.00	1.00	1.00		1.41	1.32	
Incremental Delay, d2	9.1	8.9	2.5	51.6	12.7	0.2	50.3	3.5		4.4	6.8	
Delay (s)	47.4	62.9	64.5	92.3	58.5	32.2	93.7	41.1		40.7	63.1	
Level of Service	D	E	E	F	E	C	F	D		D	E	
Approach Delay (s)		61.8			63.0			48.0			61.2	
Approach LOS		E			E			D			E	

Intersection Summary

HCM 2000 Control Delay	58.3	HCM 2000 Level of Service		E	
HCM 2000 Volume to Capacity ratio	0.95				
Actuated Cycle Length (s)	144.0	Sum of lost time (s)		18.0	
Intersection Capacity Utilization	97.0%	ICU Level of Service		F	
Analysis Period (min)	15				

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
1: The Donway W & Overton Cres

Future Background PM Peak Hour

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	290	290	15	5	5
Future Volume (Veh/h)	5	290	290	15	5	5
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	315	315	16	5	5
Pedestrians					10	
Lane Width (m)					3.0	
Walking Speed (m/s)					1.2	
Percent Blockage					1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		176	64			
pX, platoon unblocked						
vC, conflicting volume	341				658	333
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	341				658	333
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				99	99
cM capacity (veh/h)	1221				427	708

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	320	331	10
Volume Left	5	0	5
Volume Right	0	16	5
cSH	1221	1700	533
Volume to Capacity	0.00	0.19	0.02
Queue Length 95th (m)	0.1	0.0	0.5
Control Delay (s)	0.2	0.0	11.9
Lane LOS	A		B
Approach Delay (s)	0.2	0.0	11.9
Approach LOS			B

Intersection Summary			
Average Delay			0.3
Intersection Capacity Utilization			29.3%
Analysis Period (min)			15
ICU Level of Service			A

Queues
2: Don Mills Rd & The Donway W/The Donway E

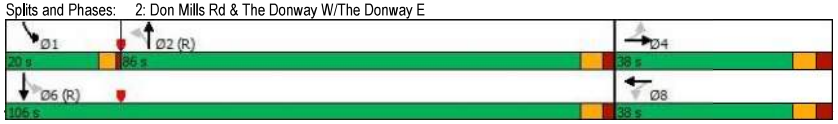
Future Background PM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	190	70	20	40	25	1340	320	1250
Future Volume (vph)	190	70	20	40	25	1340	320	1250
Lane Group Flow (vph)	204	113	22	204	27	1463	344	1602
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases		4		8		2	1	6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	1	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	45.0	45.0	5.0	45.0
Minimum Split (s)	38.0	38.0	38.0	38.0	71.0	71.0	9.0	71.0
Total Split (s)	38.0	38.0	38.0	38.0	86.0	86.0	20.0	106.0
Total Split (%)	26.4%	26.4%	26.4%	26.4%	59.7%	59.7%	13.9%	73.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0
All-Red Time (s)	3.0	3.0	3.0	3.0	2.0	2.0	1.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	5.0	5.0	3.0	5.0
Lead/Lag					Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	
Recall Mode	None	None	None	None	C-Min	C-Min	None	C-Min
v/c Ratio	0.68	0.20	0.06	0.32	0.39	0.81	0.91	0.65
Control Delay	64.5	41.1	38.9	10.2	15.1	10.8	44.8	19.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.5	41.1	38.9	10.2	15.1	10.8	44.8	19.2
Queue Length 50th (m)	55.7	25.1	4.7	6.4	1.1	31.5	45.3	122.1
Queue Length 95th (m)	#109.5	49.8	13.0	28.8	m1.4	m32.3	#69.8	119.2
Internal Link Dist (m)		40.0		170.7		392.8		113.4
Turn Bay Length (m)	25.0		50.0		35.0		80.0	
Base Capacity (vph)	298	558	380	632	84	2203	379	2867
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.20	0.06	0.32	0.32	0.66	0.91	0.56

Intersection Summary

Cycle Length: 144
Actuated Cycle Length: 144
Offset: 24 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Don Mills Rd & The Donway W/The Donway E



HCM Signalized Intersection Capacity Analysis
2: Don Mills Rd & The Donway W/The Donway E

Future Background PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	70	35	20	40	150	25	1340	20	320	1250	240
Future Volume (vph)	190	70	35	20	40	150	25	1340	20	320	1250	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.5	3.0	3.5	3.5	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		5.0	5.0		3.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.71		1.00	*0.76	
Frpb, ped/bikes	1.00	0.99		1.00	0.97		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.98	1.00		0.98	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.95		1.00	0.88		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1621	1694		1655	1592		1680	3914		1684	4067	
Flt Permitted	0.54	1.00		0.68	1.00		0.09	1.00		0.20	1.00	
Satd. Flow (perm)	925	1694		1178	1592		151	3914		363	4067	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	204	75	38	22	43	161	27	1441	22	344	1344	258
RTOR Reduction (vph)	0	11	0	0	118	0	0	1	0	0	20	0
Lane Group Flow (vph)	204	102	0	22	86	0	27	1462	0	344	1582	0
Confl. Peds. (#/hr)	20		15	15		20	25		10	10		25
Heavy Vehicles (%)	2%	5%	0%	0%	0%	1%	0%	2%	0%	0%	2%	2%
Bus Blockages (#/hr)	0	2	2	0	0	0	0	0	14	0	0	14
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	45.5	45.5		45.5	45.5		65.5	65.5		85.5	85.5	
Effective Green, g (s)	46.5	46.5		46.5	46.5		66.5	66.5		86.5	86.5	
Actuated g/C Ratio	0.32	0.32		0.32	0.32		0.46	0.46		0.60	0.60	
Clearance Time (s)	7.0	7.0		7.0	7.0		6.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	298	547		380	514		69	1807		374	2443	
v/s Ratio Prot		0.06			0.05			0.37		c0.11	0.39	
v/s Ratio Perm	c0.22			0.02			0.18			c0.44		
v/c Ratio	0.68	0.19		0.06	0.17		0.39	0.81		0.92	0.65	
Uniform Delay, d1	42.4	35.1		33.6	34.9		25.5	33.3		14.4	18.8	
Progression Factor	1.17	1.21		1.00	1.00		0.24	0.26		1.00	1.00	
Incremental Delay, d2	6.2	0.2		0.1	0.2		8.9	2.2		27.0	1.3	
Delay (s)	55.8	42.8		33.7	35.1		15.0	10.9		41.4	20.1	
Level of Service	E	D		C	D		B	B		D	C	
Approach Delay (s)		51.1			34.9			11.0			23.9	
Approach LOS		D			C			B			C	

Intersection Summary				
HCM 2000 Control Delay	21.9	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.85			
Actuated Cycle Length (s)	144.0	Sum of lost time (s)	14.0	
Intersection Capacity Utilization	139.7%	ICU Level of Service	H	
Analysis Period (min)	15			

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
3: The Donway W & Belton Rd

Future Background PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	0	5	5	0	10	10	280	5	10	280	5
Future Volume (Veh/h)	5	0	5	5	0	10	10	280	5	10	280	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	5	0	5	5	0	11	11	298	5	11	298	5
Pedestrians		10			15						5	
Lane Width (m)		3.5			3.5						3.2	
Walking Speed (m/s)		1.2			1.2						1.2	
Percent Blockage		1			1						0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								77			162	
pX, platoon unblocked	0.96	0.96		0.96	0.96	0.96				0.96		
vC, conflicting volume	668	672	310	662	672	320	313			318		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	638	642	310	631	642	277	313			274		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	100	99	99	100	98	99			99		
cM capacity (veh/h)	358	367	728	364	367	728	1249			1239		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	10	16	11	303	11	303
Volume Left	5	5	11	0	11	0
Volume Right	5	11	0	5	0	5
cSH	480	555	1249	1700	1239	1700
Volume to Capacity	0.02	0.03	0.01	0.18	0.01	0.18
Queue Length 95th (m)	0.5	0.7	0.2	0.0	0.2	0.0
Control Delay (s)	12.7	11.7	7.9	0.0	7.9	0.0
Lane LOS	B	B	A		A	
Approach Delay (s)	12.7	11.7	0.3		0.3	
Approach LOS	B	B				

Intersection Summary				
Average Delay	0.7			
Intersection Capacity Utilization	26.6%	ICU Level of Service	A	
Analysis Period (min)	15			

Queues
4: The Donway W & Duncairn Rd

Future Background PM Peak Hour

Lane Group	EBL	NBL	NBT	SBT	Ø8
Lane Configurations					
Traffic Volume (vph)	40	80	255	235	
Future Volume (vph)	40	80	255	235	
Lane Group Flow (vph)	112	0	356	309	
Turn Type	Perm	Perm	NA	NA	
Protected Phases			2	6	8
Permitted Phases	4	2			
Detector Phase	4	2	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	29.0	26.0	26.0	26.0	29.0
Total Split (s)	29.0	43.0	43.0	43.0	29.0
Total Split (%)	40.3%	59.7%	59.7%	59.7%	40%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0		-1.0	-1.0	
Total Lost Time (s)	5.0		5.0	5.0	
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	C-Min	C-Min	C-Min	None
v/c Ratio	0.38		0.30	0.23	
Control Delay	14.7		4.4	6.1	
Queue Delay	0.0		0.0	0.0	
Total Delay	14.7		4.4	6.1	
Queue Length 50th (m)	5.7		7.2	10.7	
Queue Length 95th (m)	14.8		60.2	64.2	
Internal Link Dist (m)	90.7		123.1	53.4	
Turn Bay Length (m)					
Base Capacity (vph)	545		1186	1359	
Starvation Cap Reductn	0		0	0	
Spillback Cap Reductn	0		0	0	
Storage Cap Reductn	0		0	0	
Reduced v/c Ratio	0.21		0.30	0.23	

Intersection Summary

Cycle Length: 72
Actuated Cycle Length: 72
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 4: The Donway W & Duncairn Rd

HCM Signalized Intersection Capacity Analysis
4: The Donway W & Duncairn Rd

Future Background PM Peak Hour

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	40	65	80	255	235	55
Future Volume (vph)	40	65	80	255	235	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.5	3.5	3.5	3.5
Total Lost time (s)	5.0			5.0	5.0	
Lane Util. Factor	1.00			1.00	1.00	
Frpb, ped/bikes	0.97			1.00	0.99	
Flpb, ped/bikes	1.00			1.00	1.00	
Frt	0.92			1.00	0.97	
Flt Protected	0.98			0.99	1.00	
Satd. Flow (prot)	1498			1819	1803	
Flt Permitted	0.98			0.86	1.00	
Satd. Flow (perm)	1498			1581	1803	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	43	69	85	271	250	59
RTOR Reduction (vph)	59	0	0	0	7	0
Lane Group Flow (vph)	53	0	0	356	302	0
Confl. Peds. (#/hr)		20	10			10
Heavy Vehicles (%)	5%	2%	1%	2%	1%	0%
Turn Type	Perm		Perm	NA	NA	
Protected Phases				2	6	
Permitted Phases	4		2			
Actuated Green, G (s)	9.1			50.9	50.9	
Effective Green, g (s)	10.1			51.9	51.9	
Actuated g/C Ratio	0.14			0.72	0.72	
Clearance Time (s)	6.0			6.0	6.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	210			1139	1299	
v/s Ratio Prot					0.17	
v/s Ratio Perm	c0.04			c0.23		
v/c Ratio	0.25			0.31	0.23	
Uniform Delay, d1	27.6			3.6	3.4	
Progression Factor	1.00			0.76	1.35	
Incremental Delay, d2	0.6			0.7	0.4	
Delay (s)	28.2			3.5	4.9	
Level of Service	C			A	A	
Approach Delay (s)	28.2			3.5	4.9	
Approach LOS	C			A	A	

Intersection Summary

HCM 2000 Control Delay	7.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	72.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	60.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
5: The Donway W & Site Access

Future Background PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	0	10	10	0	0	0	330	15	5	290	5
Future Volume (Veh/h)	5	0	10	10	0	0	0	330	15	5	290	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	5	0	10	10	0	0	0	344	16	5	302	5
Pedestrians		30			20							
Lane Width (m)		3.5			3.5							
Walking Speed (m/s)		1.2			1.2							
Percent Blockage		2			2							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								224			147	
pX, platoon unblocked	0.99	0.99		0.99	0.99	0.99				0.99		
vC, conflicting volume	688	724	334	694	719	372	337			380		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	677	714	334	683	708	357	337			365		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	100	99	97	100	100	100			100		
cM capacity (veh/h)	343	339	695	338	341	672	1204			1170		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	15	10	0	360	5	307
Volume Left	5	10	0	0	5	0
Volume Right	10	0	0	16	0	5
cSH	518	338	1700	1700	1170	1700
Volume to Capacity	0.03	0.03	0.00	0.21	0.00	0.18
Queue Length 95th (m)	0.7	0.7	0.0	0.0	0.1	0.0
Control Delay (s)	12.2	16.0	0.0	0.0	8.1	0.0
Lane LOS	B	C			A	
Approach Delay (s)	12.2	16.0	0.0		0.1	
Approach LOS	B	C				

Intersection Summary					
Average Delay	0.5				
Intersection Capacity Utilization	28.4%	ICU Level of Service		A	
Analysis Period (min)	15				

HCM Unsignalized Intersection Capacity Analysis
6: The Donway W & Langbourne Pl

Future Background PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	0	25	5	0	10	25	295	5	5	285	20
Future Volume (Veh/h)	40	0	25	5	0	10	25	295	5	5	285	20
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	43	0	27	5	0	11	27	314	5	5	303	21
Pedestrians		45			35			15			5	
Lane Width (m)		3.5			3.5			3.2			3.2	
Walking Speed (m/s)		1.2			1.2			1.2			1.2	
Percent Blockage		4			3			1			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								137			234	
pX, platoon unblocked	0.95	0.95		0.95	0.95	0.95				0.95		
vC, conflicting volume	752	776	374	760	784	356	369			354		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	717	742	374	725	750	302	369			300		
tC, single (s)	7.1	6.5	6.2	7.2	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.6	4.0	3.3	2.2			2.2		
p0 queue free %	85	100	96	98	100	98	98			100		
cM capacity (veh/h)	292	301	645	266	297	686	1157			1181		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	70	16	27	319	5	324
Volume Left	43	5	27	0	5	0
Volume Right	27	11	0	5	0	21
cSH	370	460	1157	1700	1181	1700
Volume to Capacity	0.19	0.03	0.02	0.19	0.00	0.19
Queue Length 95th (m)	5.5	0.9	0.6	0.0	0.1	0.0
Control Delay (s)	17.0	13.1	8.2	0.0	8.1	0.0
Lane LOS	C	B	A		A	
Approach Delay (s)	17.0	13.1	0.6		0.1	
Approach LOS	C	B				

Intersection Summary					
Average Delay	2.2				
Intersection Capacity Utilization	37.1%	ICU Level of Service		A	
Analysis Period (min)	15				

HCM Unsignalized Intersection Capacity Analysis
7: The Donway W & Jocelyn Cres

Future Background PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	0	20	90	0	30	20	280	55	30	280	5
Future Volume (Veh/h)	15	0	20	90	0	30	20	280	55	30	280	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	16	0	21	96	0	32	21	298	59	32	298	5
Pedestrians		35			40						5	
Lane Width (m)		3.5			3.5						3.5	
Walking Speed (m/s)		1.2			1.2						1.2	
Percent Blockage		3			3						0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								57			315	
pX, platoon unblocked	0.90	0.90		0.90	0.90	0.90				0.90		
vC, conflicting volume	776	838	336	795	812	372	338			397		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	694	763	336	715	733	244	338			271		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	94	100	97	65	100	95	98			97		
cM capacity (veh/h)	275	271	691	271	282	692	1198			1132		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	37	128	21	357	335
Volume Left	16	96	21	0	32
Volume Right	21	32	0	59	5
cSH	417	319	1198	1700	1132
Volume to Capacity	0.09	0.40	0.02	0.21	0.03
Queue Length 95th (m)	2.3	14.9	0.4	0.0	0.7
Control Delay (s)	14.5	23.6	8.1	0.0	1.0
Lane LOS	B	C	A		A
Approach Delay (s)	14.5	23.6	0.4		1.0
Approach LOS	B	C			

Intersection Summary					
Average Delay			4.6		
Intersection Capacity Utilization			57.3%	ICU Level of Service	B
Analysis Period (min)			15		

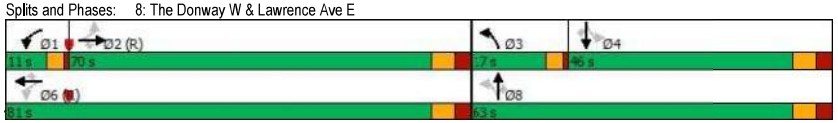
Queues
8: The Donway W & Lawrence Ave E

Future Background PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	970	340	195	655	70	370	165	245	80	160	150
Future Volume (vph)	120	970	340	195	655	70	370	165	245	80	160	150
Lane Group Flow (vph)	124	1000	351	201	675	72	381	170	253	82	165	155
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases		2		1	6		3	8			4	
Permitted Phases	2		2	6		6	8		8	4		4
Detector Phase	2	2	2	1	6	6	3	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	6.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	36.0	36.0	36.0	9.0	36.0	36.0	10.0	37.0	37.0	37.0	37.0	37.0
Total Split (s)	70.0	70.0	70.0	11.0	81.0	81.0	17.0	63.0	63.0	46.0	46.0	46.0
Total Split (%)	48.6%	48.6%	48.6%	7.6%	56.3%	56.3%	11.8%	43.8%	43.8%	31.9%	31.9%	31.9%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	3.0	3.0	3.0	1.0	3.0	3.0	1.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	6.0	6.0	6.0	3.0	6.0	6.0	3.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lag	Lag	Lag	Lead			Lead			Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes			Yes	Yes	Yes
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	Min	Min	Min	Min	Min
v/c Ratio	0.49	0.70	0.70	0.69	0.36	0.11	0.84	0.24	0.46	0.45	0.47	0.43
Control Delay	40.5	39.5	33.6	55.8	13.1	2.5	52.8	31.7	18.0	64.7	61.5	19.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.5	39.5	33.6	55.8	13.1	2.5	52.8	31.7	18.0	64.7	61.5	19.4
Queue Length 50th (m)	30.8	146.3	70.5	39.0	38.6	0.7	78.4	30.9	22.3	19.5	39.1	4.0
Queue Length 95th (m)	46.1	144.5	96.9	m52.7	m35.9	m1.6	#193.5	57.5	56.4	40.4	68.8	29.9
Internal Link Dist (m)		160.9			236.6			191.1			32.6	
Turn Bay Length (m)	45.0		20.0	45.0		25.0	80.0		45.0	15.0		
Base Capacity (vph)	288	1618	553	291	1938	666	453	768	584	267	516	469
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.62	0.63	0.69	0.35	0.11	0.84	0.22	0.43	0.31	0.32	0.33

Intersection Summary
Cycle Length: 144
Actuated Cycle Length: 144
Offset: 95 (66%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 95
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: The Donway W & Lawrence Ave E



HCM Signalized Intersection Capacity Analysis
8: The Donway W & Lawrence Ave E

Future Background PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	970	340	195	655	70	370	165	245	80	160	150
Future Volume (vph)	120	970	340	195	655	70	370	165	245	80	160	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	6.0	6.0	6.0	3.0	6.0	6.0	3.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.75	1.00	1.00	0.80	1.00	1.00	0.83	1.00	1.00	0.90
Flpb, ped/bikes	0.93	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00	0.87	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1516	3535	1084	1668	3500	1154	1606	1860	1222	1408	1860	1338
Flt Permitted	0.40	1.00	1.00	0.14	1.00	1.00	0.46	1.00	1.00	0.65	1.00	1.00
Satd. Flow (perm)	631	3535	1084	237	3500	1154	785	1860	1222	963	1860	1338
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	124	1000	351	201	675	72	381	170	253	82	165	155
RTOR Reduction (vph)	0	0	62	0	0	28	0	0	84	0	0	109
Lane Group Flow (vph)	124	1000	289	201	675	44	381	170	169	82	165	46
Confl. Peds. (#/hr)	75		95	95		75	65		115	115		65
Heavy Vehicles (%)	3%	1%	0%	1%	2%	0%	2%	1%	1%	4%	1%	1%
Bus Blockages (#/hr)	0	0	10	0	0	10	0	0	2	0	0	0
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases		2		1	6		3	8			4	
Permitted Phases	2		2	6		6	8		8	4		4
Actuated Green, G (s)	57.3	57.3	57.3	76.3	76.3	76.3	53.7	53.7	53.7	26.4	26.4	26.4
Effective Green, g (s)	58.3	58.3	58.3	77.3	77.3	77.3	54.7	54.7	54.7	27.4	27.4	27.4
Actuated g/C Ratio	0.40	0.40	0.40	0.54	0.54	0.54	0.38	0.38	0.38	0.19	0.19	0.19
Clearance Time (s)	7.0	7.0	7.0	4.0	7.0	7.0	4.0	7.0	7.0	7.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	1431	438	286	1878	619	436	706	464	183	353	254
v/s Ratio Prot		0.28		c0.08	0.19		c0.15	0.09			0.09	
v/s Ratio Perm	0.20		0.27	c0.30		0.04	c0.18		0.14	0.09		0.03
v/c Ratio	0.49	0.70	0.66	0.70	0.36	0.07	0.87	0.24	0.36	0.45	0.47	0.18
Uniform Delay, d1	31.8	35.6	34.8	23.6	19.1	16.1	37.8	30.5	32.1	51.6	51.8	48.9
Progression Factor	1.00	1.00	1.00	2.37	0.65	0.50	1.00	1.00	1.00	1.13	1.12	1.49
Incremental Delay, d2	6.5	2.9	7.6	5.8	0.4	0.2	17.3	0.2	0.5	1.7	1.0	0.3
Delay (s)	38.3	38.4	42.3	61.9	12.8	8.1	55.2	30.7	32.6	59.9	59.2	73.1
Level of Service	D	D	D	E	B	A	E	C	C	E	E	E
Approach Delay (s)		39.3			22.8			42.9			64.7	
Approach LOS		D			C			D			E	

Intersection Summary				
HCM 2000 Control Delay	38.6	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.81			
Actuated Cycle Length (s)	144.0	Sum of lost time (s)	18.0	
Intersection Capacity Utilization	97.9%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

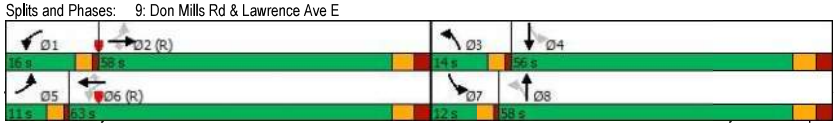
Queues
9: Don Mills Rd & Lawrence Ave E

Future Background PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	105	1125	120	195	740	75	180	1205	155	930
Future Volume (vph)	105	1125	120	195	740	75	180	1205	155	930
Lane Group Flow (vph)	108	1160	124	201	763	77	186	1634	160	1083
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases	5	2		1	6		3	8	7	4
Permitted Phases	2		2	6		6	8		4	
Detector Phase	5	2	2	1	6	6	3	8	7	4
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	10.0	42.0	42.0	10.0	42.0	42.0	10.0	42.0	10.0	42.0
Total Split (s)	11.0	58.0	58.0	16.0	63.0	63.0	14.0	58.0	12.0	56.0
Total Split (%)	7.6%	40.3%	40.3%	11.1%	43.8%	43.8%	9.7%	40.3%	8.3%	38.9%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	1.0	3.0	3.0	1.0	3.0	3.0	1.0	3.0	1.0	3.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-2.2	-1.0	-1.0	-1.8	-1.0	-1.0	-1.0
Total Lost Time (s)	3.0	6.0	6.0	1.8	6.0	6.0	2.2	6.0	3.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	Min	None	Min
v/c Ratio	0.41	0.93	0.27	0.92	0.56	0.15	0.95	0.94	0.96	0.82
Control Delay	25.0	49.5	10.7	80.5	35.9	4.2	88.3	54.6	110.4	41.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.0	49.5	10.7	80.5	35.9	4.2	88.3	54.6	110.4	41.6
Queue Length 50th (m)	14.8	106.0	4.3	43.8	92.4	0.0	40.6	166.2	~41.3	76.7
Queue Length 95th (m)	28.9	#163.6	13.5	#94.4	113.3	8.0	#93.2	#197.9	#85.5	99.2
Internal Link Dist (m)		236.6			112.1			201.1		392.8
Turn Bay Length (m)	45.0		160.0	85.0		30.0	65.0		95.0	
Base Capacity (vph)	261	1263	463	218	1385	526	196	1742	166	1326
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.92	0.27	0.92	0.55	0.15	0.95	0.94	0.96	0.82

Intersection Summary
Cycle Length: 144
Actuated Cycle Length: 144
Offset: 86 (60%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 105
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 9: Don Mills Rd & Lawrence Ave E



HCM Signalized Intersection Capacity Analysis
9: Don Mills Rd & Lawrence Ave E

Future Background PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	1125	120	195	740	75	180	1205	380	155	930	120
Future Volume (vph)	105	1125	120	195	740	75	180	1205	380	155	930	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	6.0	6.0	1.8	6.0	6.0	2.2	6.0		3.0	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	*0.92		1.00	*0.73	
Frpb, ped/bikes	1.00	1.00	0.76	1.00	1.00	0.83	1.00	0.96		1.00	0.97	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1668	3500	1063	1668	3500	1190	1667	4716		1685	3795	
Flt Permitted	0.26	1.00	1.00	0.07	1.00	1.00	0.08	1.00		0.08	1.00	
Satd. Flow (perm)	461	3500	1063	130	3500	1190	133	4716		142	3795	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	108	1160	124	201	763	77	186	1242	392	160	959	124
RTOR Reduction (vph)	0	0	80	0	0	47	0	40	0	0	9	0
Lane Group Flow (vph)	108	1160	44	201	763	30	186	1594	0	160	1074	0
Confl. Peds. (#/hr)	130		185	185		130	195		120	120		195
Heavy Vehicles (%)	0%	2%	4%	1%	2%	1%	1%	2%	2%	0%	4%	0%
Bus Blockages (#/hr)	0	0	10	0	0	10	0	0	14	0	0	14
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8			4		
Actuated Green, G (s)	57.3	50.2	50.2	66.4	55.3	55.3	61.6	50.8		57.6	48.8	
Effective Green, g (s)	59.3	51.2	51.2	68.6	56.3	56.3	65.2	51.8		59.6	49.8	
Actuated g/C Ratio	0.41	0.36	0.36	0.48	0.39	0.39	0.45	0.36		0.41	0.35	
Clearance Time (s)	4.0	7.0	7.0	4.0	7.0	7.0	4.0	7.0		4.0	7.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	257	1244	377	215	1368	465	194	1696		163	1312	
v/s Ratio Prot	0.02	c0.33		c0.09	0.22		c0.08	c0.34		0.07	0.28	
v/s Ratio Perm	0.15		0.04	0.35		0.03	0.35			0.34		
v/c Ratio	0.42	0.93	0.12	0.93	0.56	0.06	0.96	0.94		0.98	0.82	
Uniform Delay, d1	27.5	44.7	31.2	43.0	34.2	27.4	40.4	44.6		37.6	43.0	
Progression Factor	1.02	0.83	1.88	1.00	1.00	1.00	1.00	1.00		1.91	0.86	
Incremental Delay, d2	0.9	12.1	0.5	43.2	1.6	0.3	52.1	10.8		59.4	3.5	
Delay (s)	28.9	49.1	59.1	86.1	35.8	27.7	92.5	55.4		130.9	40.3	
Level of Service	C	D	E	F	D	C	F	E		F	D	
Approach Delay (s)		48.5			44.9			59.1			52.0	
Approach LOS		D			D			E			D	

Intersection Summary				
HCM 2000 Control Delay	52.1	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.96			
Actuated Cycle Length (s)	144.0	Sum of lost time (s)	18.0	
Intersection Capacity Utilization	100.5%	ICU Level of Service	G	
Analysis Period (min)	15			

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
5: The Donway W & Site Access

Future Background Weekend Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	0	0	5	0	0	0	150	10	5	165	5
Future Volume (Veh/h)	5	0	0	5	0	0	0	150	10	5	165	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	6	0	0	6	0	0	0	179	12	6	196	6
Pedestrians		10			10							
Lane Width (m)		3.5			3.5							
Walking Speed (m/s)		1.2			1.2							
Percent Blockage		1			1							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								224			147	
pX, platoon unblocked												
vC, conflicting volume	400	422	209	403	419	195	212			201		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	400	422	209	403	419	195	212			201		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	100	100	99	100	100	100			100		
cM capacity (veh/h)	551	515	830	548	517	845	1359			1372		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	6	6	0	191	6	202
Volume Left	6	6	0	0	6	0
Volume Right	0	0	0	12	0	6
cSH	551	548	1700	1700	1372	1700
Volume to Capacity	0.01	0.01	0.00	0.11	0.00	0.12
Queue Length 95th (m)	0.3	0.3	0.0	0.0	0.1	0.0
Control Delay (s)	11.6	11.6	0.0	0.0	7.6	0.0
Lane LOS	B	B			A	
Approach Delay (s)	11.6	11.6	0.0		0.2	
Approach LOS	B	B				

Intersection Summary				
Average Delay	0.5			
Intersection Capacity Utilization	20.2%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
1: The Donway W & Overton Cres

Future Total AM Peak Hour

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	260	335	5	15	5
Future Volume (Veh/h)	5	260	335	5	15	5
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	6	302	390	6	17	6
Pedestrians		5			30	
Lane Width (m)		3.5			3.0	
Walking Speed (m/s)		1.2			1.2	
Percent Blockage		0			2	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		176	64			
pX, platoon unblocked						
vC, conflicting volume	426				737	428
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	426				737	428
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				96	99
cM capacity (veh/h)	1120				379	615

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	308	396	23
Volume Left	6	0	17
Volume Right	0	6	6
cSH	1120	1700	421
Volume to Capacity	0.01	0.23	0.05
Queue Length 95th (m)	0.1	0.0	1.4
Control Delay (s)	0.2	0.0	14.1
Lane LOS	A		B
Approach Delay (s)	0.2	0.0	14.1
Approach LOS			B

Intersection Summary			
Average Delay			0.5
Intersection Capacity Utilization			29.5%
Analysis Period (min)			15

ICU Level of Service A

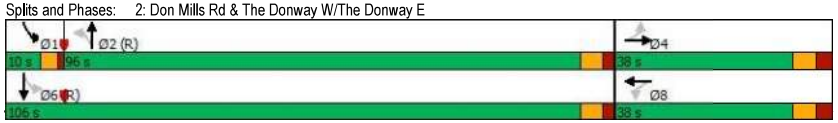
Queues
2: Don Mills Rd & The Donway W/The Donway E

Future Total AM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	180	60	20	90	25	1255	220	1575
Future Volume (vph)	180	60	20	90	25	1255	220	1575
Lane Group Flow (vph)	188	99	21	459	26	1312	229	1875
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases		4		8		2	1	6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	1	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	56.0	56.0	5.0	56.0
Minimum Split (s)	38.0	38.0	38.0	38.0	82.0	82.0	9.0	82.0
Total Split (s)	38.0	38.0	38.0	38.0	96.0	96.0	10.0	106.0
Total Split (%)	26.4%	26.4%	26.4%	26.4%	66.7%	66.7%	6.9%	73.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0
All-Red Time (s)	3.0	3.0	3.0	3.0	2.0	2.0	1.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	5.0	5.0	3.0	5.0
Lead/Lag					Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	
Recall Mode	None	None	None	None	C-Min	C-Min	None	C-Min
v/c Ratio	0.84	0.26	0.08	0.87	0.37	0.57	0.67	0.63
Control Delay	80.5	36.2	43.0	42.8	43.6	27.9	19.5	13.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	80.5	36.2	43.0	42.8	43.6	27.9	19.5	13.2
Queue Length 50th (m)	51.4	20.0	4.9	69.2	6.9	179.7	22.7	125.4
Queue Length 95th (m)	#97.0	37.6	12.9	#132.3	m10.4	209.3	#39.9	134.2
Internal Link Dist (m)		40.0		170.7		392.8		113.4
Turn Bay Length (m)	25.0		50.0		35.0		80.0	
Base Capacity (vph)	238	409	280	549	76	2483	344	3030
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.79	0.24	0.07	0.84	0.34	0.53	0.67	0.62

Intersection Summary
Cycle Length: 144
Actuated Cycle Length: 144
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Don Mills Rd & The Donway W/The Donway E



HCM Signalized Intersection Capacity Analysis
2: Don Mills Rd & The Donway W/The Donway E

Future Total AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	60	35	20	90	350	25	1255	5	220	1575	225
Future Volume (vph)	180	60	35	20	90	350	25	1255	5	220	1575	225
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.5	3.0	3.5	3.5	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		5.0	5.0		3.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.71		1.00	*0.79	
Frpb, ped/bikes	1.00	0.98		1.00	0.96		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.98	1.00		0.97	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.95		1.00	0.88		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1637	1659		1634	1563		1683	3883		1667	4224	
Flt Permitted	0.58	1.00		0.68	1.00		0.07	1.00		0.18	1.00	
Satd. Flow (perm)	1000	1659		1174	1563		118	3883		323	4224	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	188	62	36	21	94	365	26	1307	5	229	1641	234
RTOR Reduction (vph)	0	14	0	0	179	0	0	0	0	0	11	0
Lane Group Flow (vph)	188	85	0	21	280	0	26	1312	0	229	1864	0
Confl. Peds. (#/hr)	25		25	25		25	15		15	15		15
Heavy Vehicles (%)	1%	7%	0%	0%	2%	2%	0%	3%	0%	1%	3%	3%
Bus Blockages (#/hr)	0	2	2	0	0	0	0	0	12	0	0	12
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	31.4	31.4		31.4	31.4		84.3	84.3		99.6	99.6	
Effective Green, g (s)	32.4	32.4		32.4	32.4		85.3	85.3		100.6	100.6	
Actuated g/C Ratio	0.22	0.22		0.22	0.22		0.59	0.59		0.70	0.70	
Clearance Time (s)	7.0	7.0		7.0	7.0		6.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	225	373		264	351		69	2300		340	2950	
v/s Ratio Prot		0.05			0.18			0.34		c0.06	0.44	
v/s Ratio Perm	c0.19			0.02			0.22			c0.41		
v/c Ratio	0.84	0.23		0.08	0.80		0.38	0.57		0.67	0.63	
Uniform Delay, d1	53.3	45.6		44.0	52.7		15.4	18.1		7.6	11.7	
Progression Factor	0.98	0.95		1.00	1.00		1.66	1.44		1.00	1.00	
Incremental Delay, d2	22.2	0.3		0.1	11.9		9.6	0.7		5.2	1.0	
Delay (s)	74.2	43.7		44.2	64.6		35.2	26.7		12.8	12.8	
Level of Service	E	D		D	E		D	C		B	B	
Approach Delay (s)		63.7			63.7			26.8			12.8	
Approach LOS		E			E			C			B	

Intersection Summary				
HCM 2000 Control Delay	26.5	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.73			
Actuated Cycle Length (s)	144.0	Sum of lost time (s)	14.0	
Intersection Capacity Utilization	166.5%	ICU Level of Service	H	
Analysis Period (min)	15			

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
3: The Donway W & Belton Rd

Future Total AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	0	5	10	0	25	5	235	5	5	330	5
Future Volume (Veh/h)	5	0	5	10	0	25	5	235	5	5	330	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Hourly flow rate (vph)	6	0	6	12	0	31	6	290	6	6	407	6
Pedestrians		25			10						5	
Lane Width (m)		3.5			3.5						3.2	
Walking Speed (m/s)		1.2			1.2						1.2	
Percent Blockage		2			1						0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								77			162	
pX, platoon unblocked	0.97	0.97		0.97	0.97	0.97				0.97		
vC, conflicting volume	785	765	435	740	765	308	438			306		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	766	746	435	720	746	277	438			275		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	100	99	96	100	96	99			100		
cM capacity (veh/h)	285	323	613	321	323	738	1110			1257		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	12	43	6	296	6	413
Volume Left	6	12	6	0	6	0
Volume Right	6	31	0	6	0	6
cSH	389	542	1110	1700	1257	1700
Volume to Capacity	0.03	0.08	0.01	0.17	0.00	0.24
Queue Length 95th (m)	0.8	2.1	0.1	0.0	0.1	0.0
Control Delay (s)	14.6	12.2	8.3	0.0	7.9	0.0
Lane LOS	B	B	A		A	
Approach Delay (s)	14.6	12.2	0.2		0.1	
Approach LOS	B	B				

Intersection Summary				
Average Delay	1.0			
Intersection Capacity Utilization	29.2%	ICU Level of Service	A	
Analysis Period (min)	15			

Queues
4: The Donway W & Duncairn Rd

Future Total AM Peak Hour

Lane Group	EBL	NBL	NBT	SBT	Ø8
Lane Configurations					
Traffic Volume (vph)	70	65	175	265	
Future Volume (vph)	70	65	175	265	
Lane Group Flow (vph)	228	0	296	426	
Turn Type	Perm	Perm	NA	NA	
Protected Phases			2	6	8
Permitted Phases	4	2			
Detector Phase	4	2	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	29.0	26.0	26.0	26.0	29.0
Total Split (s)	29.0	43.0	43.0	43.0	29.0
Total Split (%)	40.3%	59.7%	59.7%	59.7%	40%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0		-1.0	-1.0	
Total Lost Time (s)	5.0		5.0	5.0	
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	C-Min	C-Min	C-Min	None
v/c Ratio	0.60		0.29	0.36	
Control Delay	18.3		7.8	6.5	
Queue Delay	0.0		0.0	0.0	
Total Delay	18.3		7.8	6.5	
Queue Length 50th (m)	13.5		11.9	16.8	
Queue Length 95th (m)	22.1		39.7	54.5	
Internal Link Dist (m)	90.7		123.1	53.4	
Turn Bay Length (m)					
Base Capacity (vph)	592		1008	1198	
Starvation Cap Reductn	0		0	0	
Spillback Cap Reductn	0		0	0	
Storage Cap Reductn	0		0	0	
Reduced v/c Ratio	0.39		0.29	0.36	

Intersection Summary

Cycle Length: 72
Actuated Cycle Length: 72
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 4: The Donway W & Duncairn Rd

HCM Signalized Intersection Capacity Analysis
4: The Donway W & Duncairn Rd

Future Total AM Peak Hour

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	70	115	65	175	265	80
Future Volume (vph)	70	115	65	175	265	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.5	3.5	3.5	3.5
Total Lost time (s)	5.0			5.0	5.0	
Lane Util. Factor	1.00			1.00	1.00	
Frpb, ped/bikes	0.97			1.00	0.99	
Flpb, ped/bikes	1.00			0.99	1.00	
Frt	0.92			1.00	0.97	
Flt Protected	0.98			0.99	1.00	
Satd. Flow (prot)	1529			1800	1748	
Flt Permitted	0.98			0.81	1.00	
Satd. Flow (perm)	1529			1484	1748	
Peak-hour factor, PHF	0.81	0.81	0.81	0.81	0.81	0.81
Adj. Flow (vph)	86	142	80	216	327	99
RTOR Reduction (vph)	101	0	0	0	10	0
Lane Group Flow (vph)	127	0	0	296	416	0
Confl. Peds. (#/hr)		20	20			20
Heavy Vehicles (%)	1%	1%	1%	3%	3%	2%
Turn Type	Perm		Perm	NA	NA	
Protected Phases				2	6	
Permitted Phases	4		2			
Actuated Green, G (s)	12.1			47.9	47.9	
Effective Green, g (s)	13.1			48.9	48.9	
Actuated g/C Ratio	0.18			0.68	0.68	
Clearance Time (s)	6.0			6.0	6.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	278			1007	1187	
v/s Ratio Prot					c0.24	
v/s Ratio Perm	c0.08			0.20		
v/c Ratio	0.46			0.29	0.35	
Uniform Delay, d1	26.3			4.6	4.9	
Progression Factor	1.00			1.21	1.04	
Incremental Delay, d2	1.2			0.7	0.7	
Delay (s)	27.5			6.3	5.7	
Level of Service	C			A	A	
Approach Delay (s)	27.5			6.3	5.7	
Approach LOS	C			A	A	

Intersection Summary

HCM 2000 Control Delay	11.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	72.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	60.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
5: The Donway W & Site Access

Future Total AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	0	45	10	0	0	20	225	5	0	370	10
Future Volume (Veh/h)	15	0	45	10	0	0	20	225	5	0	370	10
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	18	0	54	12	0	0	24	268	6	0	440	12
Pedestrians		10			10							
Lane Width (m)		3.5			3.5							
Walking Speed (m/s)		1.2			1.2							
Percent Blockage		1			1							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								224			147	
pX, platoon unblocked	0.96	0.96	0.96	0.96	0.96		0.96					
vC, conflicting volume	772	788	456	823	791	281	462			284		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	742	758	412	795	761	281	419			284		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	94	100	91	95	100	100	98			100		
cM capacity (veh/h)	309	313	613	260	312	757	1086			1279		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	72	12	24	274	0	452
Volume Left	18	12	24	0	0	0
Volume Right	54	0	0	6	0	12
cSH	492	260	1086	1700	1700	1700
Volume to Capacity	0.15	0.05	0.02	0.16	0.00	0.27
Queue Length 95th (m)	4.1	1.2	0.5	0.0	0.0	0.0
Control Delay (s)	13.6	19.5	8.4	0.0	0.0	0.0
Lane LOS	B	C	A			
Approach Delay (s)	13.6	19.5	0.7		0.0	
Approach LOS	B	C				

Intersection Summary					
Average Delay	1.7				
Intersection Capacity Utilization	30.1%	ICU Level of Service		A	
Analysis Period (min)	15				

HCM Unsignalized Intersection Capacity Analysis
6: The Donway W & Langbourne Pl

Future Total AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	0	25	15	0	15	15	215	5	5	405	15
Future Volume (Veh/h)	20	0	25	15	0	15	15	215	5	5	405	15
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	23	0	29	17	0	17	17	250	6	6	471	17
Pedestrians		20			20			15			5	
Lane Width (m)		3.5			3.5			3.2			3.2	
Walking Speed (m/s)		1.2			1.2			1.2			1.2	
Percent Blockage		2			2			1			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								137			234	
pX, platoon unblocked	0.98	0.98		0.98	0.98	0.98				0.98		
vC, conflicting volume	818	822	514	834	827	278	508			276		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	805	809	514	822	815	256	508			254		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	91	100	95	93	100	98	98			100		
cM capacity (veh/h)	270	295	549	257	292	758	1050			1278		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	52	34	17	256	6	488
Volume Left	23	17	17	0	6	0
Volume Right	29	17	0	6	0	17
cSH	376	383	1050	1700	1278	1700
Volume to Capacity	0.14	0.09	0.02	0.15	0.00	0.29
Queue Length 95th (m)	3.8	2.3	0.4	0.0	0.1	0.0
Control Delay (s)	16.1	15.3	8.5	0.0	7.8	0.0
Lane LOS	C	C	A		A	
Approach Delay (s)	16.1	15.3	0.5		0.1	
Approach LOS	C	C				

Intersection Summary					
Average Delay	1.8				
Intersection Capacity Utilization	36.6%	ICU Level of Service		A	
Analysis Period (min)	15				

HCM Unsignalized Intersection Capacity Analysis
7: The Donway W & Jocelyn Cres

Future Total AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	0	5	30	5	15	10	210	25	10	430	5
Future Volume (Veh/h)	10	0	5	30	5	15	10	210	25	10	430	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	11	0	6	34	6	17	11	241	29	11	494	6
Pedestrians		20			15						5	
Lane Width (m)		3.5			3.5						3.5	
Walking Speed (m/s)		1.2			1.2						1.2	
Percent Blockage		2			1						0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								57			315	
pX, platoon unblocked	0.94	0.94		0.94	0.94	0.94				0.94		
vC, conflicting volume	827	846	517	818	834	276	520			285		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	788	808	517	778	796	204	520			214		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	100	99	88	98	98	99			99		
cM capacity (veh/h)	268	286	553	282	290	783	1039			1277		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	17	57	11	270	511
Volume Left	11	34	11	0	11
Volume Right	6	17	0	29	6
cSH	327	349	1039	1700	1277
Volume to Capacity	0.05	0.16	0.01	0.16	0.01
Queue Length 95th (m)	1.3	4.6	0.3	0.0	0.2
Control Delay (s)	16.6	17.3	8.5	0.0	0.3
Lane LOS	C	C	A		A
Approach Delay (s)	16.6	17.3	0.3		0.3
Approach LOS	C	C			

Intersection Summary					
Average Delay			1.7		
Intersection Capacity Utilization			42.6%	ICU Level of Service	A
Analysis Period (min)			15		

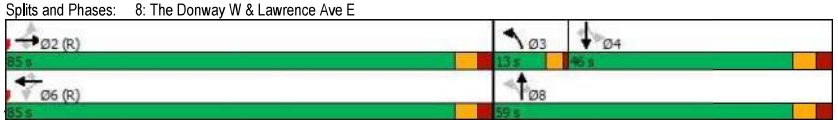
Queues
8: The Donway W & Lawrence Ave E

Future Total AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	1060	395	120	1020	50	320	100	140	100	155	210
Future Volume (vph)	95	1060	395	120	1020	50	320	100	140	100	155	210
Lane Group Flow (vph)	97	1082	403	122	1041	51	327	102	143	102	158	214
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases		2			6		3	8			4	
Permitted Phases	2		2	6		6	8		8	4		4
Detector Phase	2	2	2	6	6	6	3	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	6.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	36.0	36.0	36.0	36.0	36.0	36.0	10.0	37.0	37.0	37.0	37.0	37.0
Total Split (s)	85.0	85.0	85.0	85.0	85.0	85.0	13.0	59.0	59.0	46.0	46.0	46.0
Total Split (%)	59.0%	59.0%	59.0%	59.0%	59.0%	59.0%	9.0%	41.0%	41.0%	31.9%	31.9%	31.9%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	1.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	3.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag							Lead			Lag	Lag	Lag
Lead-Lag Optimize?							Yes			Yes	Yes	Yes
Recall Mode	C-Min	C-Min	C-Min	C-Min	C-Min	C-Min	None	Min	Min	Min	Min	Min
v/c Ratio	0.48	0.54	0.48	0.63	0.53	0.07	0.80	0.16	0.28	0.57	0.56	0.75
Control Delay	28.4	20.6	13.9	38.1	21.6	8.8	54.0	33.5	17.9	67.7	62.6	50.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.4	20.6	13.9	38.1	21.6	8.8	54.0	33.5	17.9	67.7	62.6	50.4
Queue Length 50th (m)	17.5	109.1	47.3	36.1	145.3	3.0	74.5	20.4	13.9	28.4	43.9	37.5
Queue Length 95th (m)	32.5	110.3	64.2	m40.7	m178.6	m6.5	#173.6	38.3	34.6	46.9	64.6	65.3
Internal Link Dist (m)		160.9			236.6			191.1			32.6	
Turn Bay Length (m)	45.0		20.0	45.0		25.0	80.0		45.0	15.0		
Base Capacity (vph)	208	2026	847	198	2007	788	407	705	564	323	516	451
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.53	0.48	0.62	0.52	0.06	0.80	0.14	0.25	0.32	0.31	0.47

Intersection Summary
Cycle Length: 144
Actuated Cycle Length: 144
Offset: 70 (49%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 95
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: The Donway W & Lawrence Ave E



HCM Signalized Intersection Capacity Analysis
8: The Donway W & Lawrence Ave E

Future Total AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	1060	395	120	1020	50	320	100	140	100	155	210
Future Volume (vph)	95	1060	395	120	1020	50	320	100	140	100	155	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0	3.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.94	1.00	1.00	0.92	1.00	1.00	0.95	1.00	1.00	0.95
Flpb, ped/bikes	0.99	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.97	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1620	3433	1341	1643	3400	1293	1620	1860	1370	1600	1860	1408
Flt Permitted	0.21	1.00	1.00	0.19	1.00	1.00	0.43	1.00	1.00	0.69	1.00	1.00
Satd. Flow (perm)	354	3433	1341	336	3400	1293	730	1860	1370	1164	1860	1408
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	97	1082	403	122	1041	51	327	102	143	102	158	214
RTOR Reduction (vph)	0	0	58	0	0	21	0	0	48	0	0	70
Lane Group Flow (vph)	97	1082	345	122	1041	30	327	102	95	102	158	144
Confl. Peds. (#/hr)	25		15	15		25	25		25	25		25
Heavy Vehicles (%)	3%	4%	1%	2%	5%	2%	3%	1%	4%	2%	1%	2%
Bus Blockages (#/hr)	0	0	12	0	0	12	0	0	2	0	0	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases		2			6		3	8			4	
Permitted Phases	2		2	6		6	8		8	4		4
Actuated Green, G (s)	82.4	82.4	82.4	82.4	82.4	82.4	47.6	47.6	47.6	21.1	21.1	21.1
Effective Green, g (s)	83.4	83.4	83.4	83.4	83.4	83.4	48.6	48.6	48.6	22.1	22.1	22.1
Actuated g/C Ratio	0.58	0.58	0.58	0.58	0.58	0.58	0.34	0.34	0.34	0.15	0.15	0.15
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	4.0	7.0	7.0	7.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	205	1988	776	194	1969	748	391	627	462	178	285	216
v/s Ratio Prot		0.32			0.31		c0.14	0.05			0.08	
v/s Ratio Perm	0.27		0.26	c0.36		0.02	c0.15		0.07	0.09		0.10
v/c Ratio	0.47	0.54	0.45	0.63	0.53	0.04	0.84	0.16	0.20	0.57	0.55	0.67
Uniform Delay, d1	17.6	18.6	17.2	20.1	18.4	13.0	40.2	33.4	33.9	56.6	56.4	57.5
Progression Factor	1.00	1.00	1.00	1.31	1.10	3.91	1.00	1.00	1.00	1.01	1.01	1.01
Incremental Delay, d2	7.6	1.1	1.8	6.2	0.4	0.0	14.3	0.1	0.2	4.3	2.3	7.4
Delay (s)	25.2	19.7	19.0	32.4	20.7	51.1	54.5	33.6	34.2	61.4	59.1	65.5
Level of Service	C	B	B	C	C	D	D	C	C	E	E	E
Approach Delay (s)		19.9			23.2			45.7			62.5	
Approach LOS		B			C			D			E	

Intersection Summary				
HCM 2000 Control Delay	30.0	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.72			
Actuated Cycle Length (s)	144.0	Sum of lost time (s)	15.0	
Intersection Capacity Utilization	89.7%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

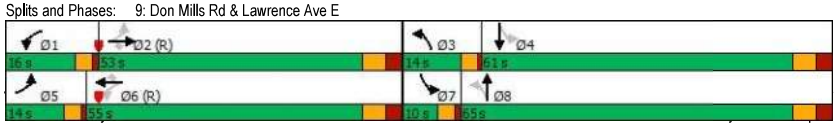
Queues
9: Don Mills Rd & Lawrence Ave E

Future Total AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	115	945	200	205	1045	40	185	1130	140	1390
Future Volume (vph)	115	945	200	205	1045	40	185	1130	140	1390
Lane Group Flow (vph)	116	955	202	207	1056	40	187	1272	141	1495
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases	5	2		1	6		3	8	7	4
Permitted Phases	2		2	6		6	8		4	
Detector Phase	5	2	2	1	6	6	3	8	7	4
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	10.0	42.0	42.0	10.0	42.0	42.0	10.0	42.0	10.0	42.0
Total Split (s)	14.0	53.0	53.0	16.0	55.0	55.0	14.0	65.0	10.0	61.0
Total Split (%)	9.7%	36.8%	36.8%	11.1%	38.2%	38.2%	9.7%	45.1%	6.9%	42.4%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	1.0	3.0	3.0	1.0	3.0	3.0	1.0	3.0	1.0	3.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.9	-1.0	-1.0	-2.2	-1.0	-1.0	-1.0
Total Lost Time (s)	3.0	6.0	6.0	2.1	6.0	6.0	1.8	6.0	3.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	Min	Min	None	Min
v/c Ratio	0.67	0.89	0.47	0.97	0.91	0.09	0.92	0.82	0.62	0.91
Control Delay	48.4	63.8	29.9	92.7	58.1	0.4	80.9	42.7	40.9	63.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.4	63.8	29.9	92.7	58.1	0.4	80.9	42.7	40.9	63.4
Queue Length 50th (m)	29.6	147.2	36.0	~47.6	158.8	0.0	~41.5	157.1	34.3	195.5
Queue Length 95th (m)	#43.0	175.8	56.9	#103.0	#198.8	0.0	#94.3	184.3	36.2	203.2
Internal Link Dist (m)		236.6			112.1			201.1		392.8
Turn Bay Length (m)	45.0		160.0	85.0		30.0	65.0		95.0	
Base Capacity (vph)	177	1120	440	213	1168	429	204	1552	228	1664
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.85	0.46	0.97	0.90	0.09	0.92	0.82	0.62	0.90

Intersection Summary
Cycle Length: 144
Actuated Cycle Length: 144
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 105
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 9: Don Mills Rd & Lawrence Ave E



HCM Signalized Intersection Capacity Analysis
9: Don Mills Rd & Lawrence Ave E

Future Total AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	115	945	200	205	1045	40	185	1130	130	140	1390	90
Future Volume (vph)	115	945	200	205	1045	40	185	1130	130	140	1390	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	6.0	6.0	2.1	6.0	6.0	1.8	6.0		3.0	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	*0.71		1.00	*0.81	
Frpb, ped/bikes	1.00	1.00	0.80	1.00	1.00	0.79	1.00	0.98		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		0.99	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1666	3433	1115	1588	3433	1086	1604	3750		1626	4345	
Flt Permitted	0.09	1.00	1.00	0.09	1.00	1.00	0.07	1.00		0.22	1.00	
Satd. Flow (perm)	155	3433	1115	144	3433	1086	118	3750		371	4345	
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	116	955	202	207	1056	40	187	1141	131	141	1404	91
RTOR Reduction (vph)	0	0	78	0	0	27	0	7	0	0	4	0
Lane Group Flow (vph)	116	955	124	207	1056	13	187	1265	0	141	1491	0
Confl. Peds. (#/hr)	160		155	155		160	135		165	165		135
Heavy Vehicles (%)	1%	4%	3%	6%	4%	5%	5%	3%	1%	3%	3%	3%
Bus Blockages (#/hr)	0	0	12	0	0	12	0	0	12	0	0	12
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8			4		
Actuated Green, G (s)	53.8	44.2	44.2	60.4	47.5	47.5	68.9	58.4		59.6	53.1	
Effective Green, g (s)	55.8	45.2	45.2	63.0	48.5	48.5	71.1	59.4		61.6	54.1	
Actuated g/C Ratio	0.39	0.31	0.31	0.44	0.34	0.34	0.49	0.41		0.43	0.38	
Clearance Time (s)	4.0	7.0	7.0	4.0	7.0	7.0	4.0	7.0		4.0	7.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	171	1077	349	211	1156	365	202	1546		224	1632	
v/s Ratio Prot	0.05	0.28		c0.10	c0.31		c0.09	0.34		0.03	c0.34	
v/s Ratio Perm	0.21		0.11	0.33		0.01	0.36			0.24		
v/c Ratio	0.68	0.89	0.35	0.98	0.91	0.04	0.93	0.82		0.63	0.91	
Uniform Delay, d1	33.8	47.0	38.1	42.3	45.7	32.1	42.6	37.5		25.8	42.7	
Progression Factor	1.13	1.15	1.61	1.00	1.00	1.00	1.00	1.00		1.39	1.31	
Incremental Delay, d2	9.1	9.7	2.5	56.3	12.5	0.2	42.6	3.5		4.4	6.8	
Delay (s)	47.4	64.0	63.9	98.6	58.2	32.3	85.2	41.0		40.3	62.7	
Level of Service	D	E	E	F	E	C	F	D		D	E	
Approach Delay (s)		62.4			63.8			46.7			60.7	
Approach LOS		E			E			D			E	

Intersection Summary				
HCM 2000 Control Delay	58.2	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	0.95			
Actuated Cycle Length (s)	144.0	Sum of lost time (s)	18.0	
Intersection Capacity Utilization	96.7%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
1: The Donway W & Overton Cres

Future Total PM Peak Hour

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	295	300	15	5	5
Future Volume (Veh/h)	5	295	300	15	5	5
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	321	326	16	5	5
Pedestrians					10	
Lane Width (m)					3.0	
Walking Speed (m/s)					1.2	
Percent Blockage					1	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		176	64			
pX, platoon unblocked						
vC, conflicting volume	352				675	344
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	352				675	344
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				99	99
cM capacity (veh/h)	1210				418	698

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	326	342	10
Volume Left	5	0	5
Volume Right	0	16	5
cSH	1210	1700	523
Volume to Capacity	0.00	0.20	0.02
Queue Length 95th (m)	0.1	0.0	0.5
Control Delay (s)	0.2	0.0	12.0
Lane LOS	A		B
Approach Delay (s)	0.2	0.0	12.0
Approach LOS			B

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	29.5%	ICU Level of Service	A
Analysis Period (min)	15		

Queues
2: Don Mills Rd & The Donway W/The Donway E

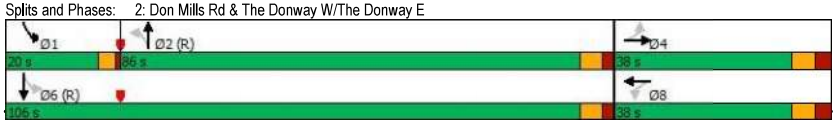
Future Total PM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	190	75	20	45	25	1340	320	1250
Future Volume (vph)	190	75	20	45	25	1340	320	1250
Lane Group Flow (vph)	204	119	22	209	27	1463	344	1607
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA
Protected Phases		4		8		2	1	6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	1	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	45.0	45.0	5.0	45.0
Minimum Split (s)	38.0	38.0	38.0	38.0	71.0	71.0	9.0	71.0
Total Split (s)	38.0	38.0	38.0	38.0	86.0	86.0	20.0	106.0
Total Split (%)	26.4%	26.4%	26.4%	26.4%	59.7%	59.7%	13.9%	73.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0
All-Red Time (s)	3.0	3.0	3.0	3.0	2.0	2.0	1.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	5.0	5.0	3.0	5.0
Lead/Lag					Lag	Lag	Lead	
Lead-Lag Optimize?					Yes	Yes	Yes	
Recall Mode	None	None	None	None	C-Min	C-Min	None	C-Min
v/c Ratio	0.70	0.21	0.06	0.33	0.39	0.81	0.91	0.65
Control Delay	67.3	43.4	39.0	10.7	14.9	10.5	44.3	19.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.3	43.4	39.0	10.7	14.9	10.5	44.3	19.0
Queue Length 50th (m)	56.4	27.4	4.7	7.5	1.1	31.5	45.3	122.8
Queue Length 95th (m)	#110.3	52.7	13.0	30.6	m1.4	m32.3	#69.8	119.7
Internal Link Dist (m)		40.0		170.7		392.8		113.4
Turn Bay Length (m)	25.0		50.0		35.0		80.0	
Base Capacity (vph)	292	554	373	630	84	2203	380	2864
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.70	0.21	0.06	0.33	0.32	0.66	0.91	0.56

Intersection Summary

Cycle Length: 144
Actuated Cycle Length: 144
Offset: 24 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Don Mills Rd & The Donway W/The Donway E



HCM Signalized Intersection Capacity Analysis
2: Don Mills Rd & The Donway W/The Donway E

Future Total PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	75	35	20	45	150	25	1340	20	320	1250	245
Future Volume (vph)	190	75	35	20	45	150	25	1340	20	320	1250	245
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.5	3.0	3.5	3.5	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		5.0	5.0		3.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.71		1.00	*0.76	
Frpb, ped/bikes	1.00	0.99		1.00	0.97		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	0.98	1.00		0.98	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.95		1.00	0.88		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1621	1698		1655	1599		1680	3914		1684	4065	
Flt Permitted	0.53	1.00		0.67	1.00		0.08	1.00		0.20	1.00	
Satd. Flow (perm)	911	1698		1162	1599		150	3914		363	4065	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	204	81	38	22	48	161	27	1441	22	344	1344	263
RTOR Reduction (vph)	0	10	0	0	118	0	0	1	0	0	20	0
Lane Group Flow (vph)	204	109	0	22	91	0	27	1462	0	344	1587	0
Confl. Peds. (#/hr)	20		15	15		20	25		10	10		25
Heavy Vehicles (%)	2%	5%	0%	0%	0%	1%	0%	2%	0%	0%	2%	2%
Bus Blockages (#/hr)	0	2	2	0	0	0	0	0	14	0	0	14
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	45.2	45.2		45.2	45.2		65.8	65.8		85.8	85.8	
Effective Green, g (s)	46.2	46.2		46.2	46.2		66.8	66.8		86.8	86.8	
Actuated g/C Ratio	0.32	0.32		0.32	0.32		0.46	0.46		0.60	0.60	
Clearance Time (s)	7.0	7.0		7.0	7.0		6.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	292	544		372	513		69	1815		374	2450	
v/s Ratio Prot		0.06			0.06			0.37		c0.11	0.39	
v/s Ratio Perm	c0.22			0.02			0.18			c0.44		
v/c Ratio	0.70	0.20		0.06	0.18		0.39	0.81		0.92	0.65	
Uniform Delay, d1	42.8	35.5		33.9	35.2		25.3	33.0		14.3	18.6	
Progression Factor	1.20	1.25		1.00	1.00		0.24	0.26		1.00	1.00	
Incremental Delay, d2	7.0	0.2		0.1	0.2		8.8	2.2		27.0	1.3	
Delay (s)	58.5	44.6		33.9	35.4		14.9	10.7		41.3	20.0	
Level of Service	E	D		C	D		B	B		D	B	
Approach Delay (s)		53.4			35.2			10.8			23.7	
Approach LOS		D			D			B			C	

Intersection Summary

HCM 2000 Control Delay	22.0	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.86			
Actuated Cycle Length (s)	144.0	Sum of lost time (s)	14.0	
Intersection Capacity Utilization	139.8%	ICU Level of Service	H	
Analysis Period (min)	15			

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
3: The Donway W & Belton Rd

Future Total PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	0	5	5	0	10	10	285	5	10	290	5
Future Volume (Veh/h)	5	0	5	5	0	10	10	285	5	10	290	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	5	0	5	5	0	11	11	303	5	11	309	5
Pedestrians		10			15						5	
Lane Width (m)		3.5			3.5						3.2	
Walking Speed (m/s)		1.2			1.2						1.2	
Percent Blockage		1			1						0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								77			162	
pX, platoon unblocked	0.96	0.96		0.96	0.96	0.96				0.96		
vC, conflicting volume	684	688	322	678	688	326	324			323		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	653	657	322	646	657	279	324			277		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	100	99	99	100	98	99			99		
cM capacity (veh/h)	349	359	718	355	359	724	1237			1234		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	10	16	11	308	11	314
Volume Left	5	5	11	0	11	0
Volume Right	5	11	0	5	0	5
cSH	470	546	1237	1700	1234	1700
Volume to Capacity	0.02	0.03	0.01	0.18	0.01	0.18
Queue Length 95th (m)	0.5	0.7	0.2	0.0	0.2	0.0
Control Delay (s)	12.8	11.8	7.9	0.0	7.9	0.0
Lane LOS	B	B	A		A	
Approach Delay (s)	12.8	11.8	0.3		0.3	
Approach LOS	B	B				

Intersection Summary					
Average Delay	0.7				
Intersection Capacity Utilization	27.1%	ICU Level of Service	A		
Analysis Period (min)	15				

Queues
4: The Donway W & Duncairn Rd

Future Total PM Peak Hour

Lane Group	EBL	NBL	NBT	SBT	Ø8
Lane Configurations					
Traffic Volume (vph)	40	80	260	245	
Future Volume (vph)	40	80	260	245	
Lane Group Flow (vph)	112	0	362	320	
Turn Type	Perm	Perm	NA	NA	
Protected Phases			2	6	8
Permitted Phases	4	2			
Detector Phase	4	2	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	29.0	26.0	26.0	26.0	29.0
Total Split (s)	29.0	43.0	43.0	43.0	29.0
Total Split (%)	40.3%	59.7%	59.7%	59.7%	40%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0		-1.0	-1.0	
Total Lost Time (s)	5.0		5.0	5.0	
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	C-Min	C-Min	C-Min	None
v/c Ratio	0.38		0.31	0.24	
Control Delay	14.7		4.4	6.1	
Queue Delay	0.0		0.0	0.0	
Total Delay	14.7		4.4	6.1	
Queue Length 50th (m)	5.7		7.8	11.2	
Queue Length 95th (m)	14.8		57.4	65.4	
Internal Link Dist (m)	90.7		123.1	53.4	
Turn Bay Length (m)					
Base Capacity (vph)	545		1186	1361	
Starvation Cap Reductn	0		0	0	
Spillback Cap Reductn	0		0	0	
Storage Cap Reductn	0		0	0	
Reduced v/c Ratio	0.21		0.31	0.24	

Intersection Summary
Cycle Length: 72
Actuated Cycle Length: 72
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 4: The Donway W & Duncairn Rd

HCM Signalized Intersection Capacity Analysis
4: The Donway W & Duncairn Rd

Future Total PM Peak Hour

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	40	65	80	260	245	55
Future Volume (vph)	40	65	80	260	245	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.5	3.5	3.5	3.5
Total Lost time (s)	5.0			5.0	5.0	
Lane Util. Factor	1.00			1.00	1.00	
Frpb, ped/bikes	0.97			1.00	0.99	
Flpb, ped/bikes	1.00			1.00	1.00	
Frt	0.92			1.00	0.98	
Flt Protected	0.98			0.99	1.00	
Satd. Flow (prot)	1498			1820	1805	
Flt Permitted	0.98			0.86	1.00	
Satd. Flow (perm)	1498			1579	1805	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	43	69	85	277	261	59
RTOR Reduction (vph)	59	0	0	0	7	0
Lane Group Flow (vph)	53	0	0	362	313	0
Confl. Peds. (#/hr)		20	10			10
Heavy Vehicles (%)	5%	2%	1%	2%	1%	0%
Turn Type	Perm		Perm	NA	NA	
Protected Phases				2	6	
Permitted Phases	4		2			
Actuated Green, G (s)	9.1			50.9	50.9	
Effective Green, g (s)	10.1			51.9	51.9	
Actuated g/C Ratio	0.14			0.72	0.72	
Clearance Time (s)	6.0			6.0	6.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	210			1138	1301	
v/s Ratio Prot					0.17	
v/s Ratio Perm	c0.04			c0.23		
v/c Ratio	0.25			0.32	0.24	
Uniform Delay, d1	27.6			3.6	3.4	
Progression Factor	1.00			0.74	1.34	
Incremental Delay, d2	0.6			0.7	0.4	
Delay (s)	28.2			3.4	4.9	
Level of Service	C			A	A	
Approach Delay (s)	28.2			3.4	4.9	
Approach LOS	C			A	A	

Intersection Summary				
HCM 2000 Control Delay	7.5	HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio	0.31			
Actuated Cycle Length (s)	72.0	Sum of lost time (s)	11.0	
Intersection Capacity Utilization	60.4%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

HCM Unsignalized Intersection Capacity Analysis
5: The Donway W & Site Access

Future Total PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	0	25	10	0	0	35	330	15	5	290	15
Future Volume (Veh/h)	10	0	25	10	0	0	35	330	15	5	290	15
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	10	0	26	10	0	0	36	344	16	5	302	16
Pedestrians		30			20							
Lane Width (m)		3.5			3.5							
Walking Speed (m/s)		1.2			1.2							
Percent Blockage		2			2							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								224			147	
pX, platoon unblocked	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
vC, conflicting volume	766	802	340	782	802	372	348			380		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	762	798	339	778	798	369	347			377		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	97	100	96	96	100	100	97			100		
cM capacity (veh/h)	298	297	690	282	297	668	1192			1170		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	36	10	36	360	5	318
Volume Left	10	10	36	0	5	0
Volume Right	26	0	0	16	0	16
cSH	505	282	1192	1700	1170	1700
Volume to Capacity	0.07	0.04	0.03	0.21	0.00	0.19
Queue Length 95th (m)	1.8	0.9	0.7	0.0	0.1	0.0
Control Delay (s)	12.7	18.2	8.1	0.0	8.1	0.0
Lane LOS	B	C	A		A	
Approach Delay (s)	12.7	18.2	0.7		0.1	
Approach LOS	B	C				

Intersection Summary				
Average Delay	1.3			
Intersection Capacity Utilization	35.0%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
6: The Donway W & Langbourne Pl

Future Total PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	0	25	5	0	10	25	330	5	5	300	20
Future Volume (Veh/h)	40	0	25	5	0	10	25	330	5	5	300	20
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	43	0	27	5	0	11	27	351	5	5	319	21
Pedestrians		45			35			15			5	
Lane Width (m)		3.5			3.5			3.2			3.2	
Walking Speed (m/s)		1.2			1.2			1.2			1.2	
Percent Blockage		4			3			1			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								137			234	
pX, platoon unblocked	0.94	0.94		0.94	0.94	0.94				0.94		
vC, conflicting volume	806	830	390	814	838	394	385			391		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	761	787	390	770	795	323	385			321		
tC, single (s)	7.1	6.5	6.2	7.2	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.6	4.0	3.3	2.2			2.2		
p0 queue free %	84	100	96	98	100	98	98			100		
cM capacity (veh/h)	268	279	632	244	276	658	1141			1143		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	70	16	27	356	5	340
Volume Left	43	5	27	0	5	0
Volume Right	27	11	0	5	0	21
cSH	345	430	1141	1700	1143	1700
Volume to Capacity	0.20	0.04	0.02	0.21	0.00	0.20
Queue Length 95th (m)	6.0	0.9	0.6	0.0	0.1	0.0
Control Delay (s)	18.1	13.7	8.2	0.0	8.2	0.0
Lane LOS	C	B	A		A	
Approach Delay (s)	18.1	13.7	0.6		0.1	
Approach LOS	C	B				

Intersection Summary					
Average Delay	2.1				
Intersection Capacity Utilization	37.1%	ICU Level of Service	A		
Analysis Period (min)	15				

HCM Unsignalized Intersection Capacity Analysis
7: The Donway W & Jocelyn Cres

Future Total PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	0	20	90	0	30	20	315	55	30	295	5
Future Volume (Veh/h)	15	0	20	90	0	30	20	315	55	30	295	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	16	0	21	96	0	32	21	335	59	32	314	5
Pedestrians		35			40						5	
Lane Width (m)		3.5			3.5						3.5	
Walking Speed (m/s)		1.2			1.2						1.2	
Percent Blockage		3			3						0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								57			315	
pX, platoon unblocked	0.89	0.89		0.89	0.89	0.89				0.89		
vC, conflicting volume	830	892	352	848	864	410	354			434		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	747	817	352	768	786	276	354			303		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	94	100	97	61	100	95	98			97		
cM capacity (veh/h)	250	250	677	247	260	659	1181			1094		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	37	128	21	394	351
Volume Left	16	96	21	0	32
Volume Right	21	32	0	59	5
cSH	390	293	1181	1700	1094
Volume to Capacity	0.09	0.44	0.02	0.23	0.03
Queue Length 95th (m)	2.5	16.9	0.4	0.0	0.7
Control Delay (s)	15.2	26.5	8.1	0.0	1.0
Lane LOS	C	D	A		A
Approach Delay (s)	15.2	26.5	0.4		1.0
Approach LOS	C	D			

Intersection Summary					
Average Delay	4.8				
Intersection Capacity Utilization	59.4%	ICU Level of Service	B		
Analysis Period (min)	15				

Queues
8: The Donway W & Lawrence Ave E

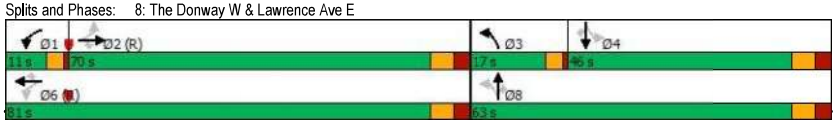
Future Total PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	135	970	340	195	655	90	370	165	245	90	160	155
Future Volume (vph)	135	970	340	195	655	90	370	165	245	90	160	155
Lane Group Flow (vph)	139	1000	351	201	675	93	381	170	253	93	165	160
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases		2		1	6		3	8			4	
Permitted Phases	2		2	6		6	8		8	4		4
Detector Phase	2	2	2	1	6	6	3	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	6.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	36.0	36.0	36.0	9.0	36.0	36.0	10.0	37.0	37.0	37.0	37.0	37.0
Total Split (s)	70.0	70.0	70.0	11.0	81.0	81.0	17.0	63.0	63.0	46.0	46.0	46.0
Total Split (%)	48.6%	48.6%	48.6%	7.6%	56.3%	56.3%	11.8%	43.8%	43.8%	31.9%	31.9%	31.9%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	3.0	3.0	3.0	1.0	3.0	3.0	1.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	6.0	6.0	6.0	3.0	6.0	6.0	3.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lag	Lag	Lag	Lead			Lead			Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes			Yes	Yes	Yes
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	Min	Min	Min	Min	Min
v/c Ratio	0.54	0.70	0.70	0.69	0.36	0.14	0.85	0.24	0.46	0.51	0.47	0.44
Control Delay	43.0	39.1	33.3	55.0	12.8	3.5	53.7	31.9	18.1	67.2	61.2	20.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.0	39.1	33.3	55.0	12.8	3.5	53.7	31.9	18.1	67.2	61.2	20.1
Queue Length 50th (m)	35.1	144.3	69.5	38.1	37.3	1.1	79.8	31.4	22.7	22.1	39.2	4.3
Queue Length 95th (m)	52.6	144.5	96.9	m52.7	m35.1	m3.6	#193.5	57.5	56.4	45.3	68.9	31.3
Internal Link Dist (m)		160.9			236.6			191.1			32.6	
Turn Bay Length (m)	45.0		20.0	45.0		25.0	80.0		45.0	15.0		
Base Capacity (vph)	288	1618	553	293	1938	666	450	764	581	267	516	469
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.62	0.63	0.69	0.35	0.14	0.85	0.22	0.44	0.35	0.32	0.34

Intersection Summary

Cycle Length: 144
Actuated Cycle Length: 144
Offset: 95 (66%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 95
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: The Donway W & Lawrence Ave E



HCM Signalized Intersection Capacity Analysis
8: The Donway W & Lawrence Ave E

Future Total PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	135	970	340	195	655	90	370	165	245	90	160	155
Future Volume (vph)	135	970	340	195	655	90	370	165	245	90	160	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.0
Total Lost time (s)	6.0	6.0	6.0	3.0	6.0	6.0	3.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.75	1.00	1.00	0.80	1.00	1.00	0.83	1.00	1.00	0.90
Flpb, ped/bikes	0.93	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00	0.87	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1516	3535	1084	1668	3500	1154	1606	1860	1222	1408	1860	1338
Flt Permitted	0.40	1.00	1.00	0.14	1.00	1.00	0.46	1.00	1.00	0.65	1.00	1.00
Satd. Flow (perm)	631	3535	1084	239	3500	1154	785	1860	1222	963	1860	1338
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	139	1000	351	201	675	93	381	170	253	93	165	160
RTOR Reduction (vph)	0	0	62	0	0	28	0	0	84	0	0	109
Lane Group Flow (vph)	139	1000	289	201	675	65	381	170	169	93	165	51
Confl. Peds. (#/hr)	75		95	95		75	65		115	115		65
Heavy Vehicles (%)	3%	1%	0%	1%	2%	0%	2%	1%	1%	4%	1%	1%
Bus Blockages (#/hr)	0	0	10	0	0	10	0	0	2	0	0	0
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases		2		1	6		3	8			4	
Permitted Phases	2		2	6		6	8		8	4		4
Actuated Green, G (s)	57.5	57.5	57.5	76.5	76.5	76.5	53.5	53.5	53.5	26.4	26.4	26.4
Effective Green, g (s)	58.5	58.5	58.5	77.5	77.5	77.5	54.5	54.5	54.5	27.4	27.4	27.4
Actuated g/C Ratio	0.41	0.41	0.41	0.54	0.54	0.54	0.38	0.38	0.38	0.19	0.19	0.19
Clearance Time (s)	7.0	7.0	7.0	4.0	7.0	7.0	4.0	7.0	7.0	7.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	256	1436	440	287	1883	621	434	703	462	183	353	254
v/s Ratio Prot		0.28		c0.08	0.19		c0.15	0.09			0.09	
v/s Ratio Perm	0.22		0.27	c0.30		0.06	c0.19		0.14	0.10		0.04
v/c Ratio	0.54	0.70	0.66	0.70	0.36	0.10	0.88	0.24	0.37	0.51	0.47	0.20
Uniform Delay, d1	32.6	35.4	34.6	23.5	19.0	16.3	38.1	30.6	32.3	52.3	51.8	49.1
Progression Factor	1.00	1.00	1.00	2.39	0.64	0.48	1.00	1.00	1.00	1.12	1.12	1.44
Incremental Delay, d2	8.0	2.8	7.4	5.7	0.4	0.3	17.8	0.2	0.5	2.2	1.0	0.4
Delay (s)	40.6	38.2	42.1	61.8	12.5	8.0	55.9	30.8	32.8	60.7	58.8	71.2
Level of Service	D	D	D	E	B	A	E	C	C	E	E	E
Approach Delay (s)		39.3			22.3			43.3			64.0	
Approach LOS		D			C			D			E	

Intersection Summary

HCM 2000 Control Delay	38.5	HCM 2000 Level of Service		D	
HCM 2000 Volume to Capacity ratio	0.81				
Actuated Cycle Length (s)	144.0	Sum of lost time (s)		18.0	
Intersection Capacity Utilization	97.9%	ICU Level of Service		F	
Analysis Period (min)	15				

c Critical Lane Group

Queues
9: Don Mills Rd & Lawrence Ave E

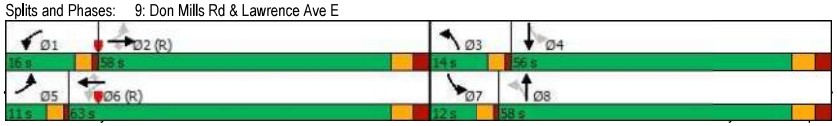
Future Total PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	105	1130	125	195	760	75	180	1205	155	930
Future Volume (vph)	105	1130	125	195	760	75	180	1205	155	930
Lane Group Flow (vph)	108	1165	129	201	784	77	186	1634	160	1083
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases	5	2		1	6		3	8	7	4
Permitted Phases	2		2	6		6	8		4	
Detector Phase	5	2	2	1	6	6	3	8	7	4
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	10.0	42.0	42.0	10.0	42.0	42.0	10.0	42.0	10.0	42.0
Total Split (s)	11.0	58.0	58.0	16.0	63.0	63.0	14.0	58.0	12.0	56.0
Total Split (%)	7.6%	40.3%	40.3%	11.1%	43.8%	43.8%	9.7%	40.3%	8.3%	38.9%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	1.0	3.0	3.0	1.0	3.0	3.0	1.0	3.0	1.0	3.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-2.2	-1.0	-1.0	-1.8	-1.0	-1.0	-1.0
Total Lost Time (s)	3.0	6.0	6.0	1.8	6.0	6.0	2.2	6.0	3.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	Min	None	Min
v/c Ratio	0.43	0.94	0.28	0.92	0.57	0.15	0.95	0.94	0.96	0.82
Control Delay	25.2	50.1	10.6	80.3	36.3	4.2	89.0	54.6	111.3	41.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.2	50.1	10.6	80.3	36.3	4.2	89.0	54.6	111.3	41.7
Queue Length 50th (m)	14.8	107.1	4.2	43.8	95.7	0.0	40.6	166.2	~41.2	76.9
Queue Length 95th (m)	28.7	#173.9	13.8	#94.4	117.1	8.0	#93.2	#197.9	#85.4	99.4
Internal Link Dist (m)		236.6			112.1			201.1		392.8
Turn Bay Length (m)	45.0		160.0	85.0		30.0	65.0		95.0	
Base Capacity (vph)	254	1263	466	218	1385	526	196	1742	166	1326
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.92	0.28	0.92	0.57	0.15	0.95	0.94	0.96	0.82

Intersection Summary

Cycle Length: 144
Actuated Cycle Length: 144
Offset: 86 (60%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 105
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 9: Don Mills Rd & Lawrence Ave E



HCM Signalized Intersection Capacity Analysis
9: Don Mills Rd & Lawrence Ave E

Future Total PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	1130	125	195	760	75	180	1205	380	155	930	120
Future Volume (vph)	105	1130	125	195	760	75	180	1205	380	155	930	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.5	3.0	3.0	3.5	3.0	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	6.0	6.0	1.8	6.0	6.0	2.2	6.0		3.0	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	*0.92		1.00	*0.73	
Frpb, ped/bikes	1.00	1.00	0.76	1.00	1.00	0.83	1.00	0.96		1.00	0.97	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1670	3500	1063	1668	3500	1190	1667	4716		1685	3795	
Flt Permitted	0.25	1.00	1.00	0.07	1.00	1.00	0.08	1.00		0.08	1.00	
Satd. Flow (perm)	441	3500	1063	130	3500	1190	133	4716		142	3795	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	108	1165	129	201	784	77	186	1242	392	160	959	124
RTOR Reduction (vph)	0	0	83	0	0	47	0	40	0	0	9	0
Lane Group Flow (vph)	108	1165	46	201	784	30	186	1594	0	160	1074	0
Confl. Peds. (#/hr)	130		185	185		130	195		120	120		195
Heavy Vehicles (%)	0%	2%	4%	1%	2%	1%	1%	2%	2%	0%	4%	0%
Bus Blockages (#/hr)	0	0	10	0	0	10	0	0	14	0	0	14
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8			4		
Actuated Green, G (s)	57.3	50.2	50.2	66.4	55.3	55.3	61.6	50.8		57.6	48.8	
Effective Green, g (s)	59.3	51.2	51.2	68.6	56.3	56.3	65.2	51.8		59.6	49.8	
Actuated g/C Ratio	0.41	0.36	0.36	0.48	0.39	0.39	0.45	0.36		0.41	0.35	
Clearance Time (s)	4.0	7.0	7.0	4.0	7.0	7.0	4.0	7.0		4.0	7.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	250	1244	377	215	1368	465	194	1696		163	1312	
v/s Ratio Prot	0.02	c0.33		c0.09	0.22		c0.08	c0.34		0.07	0.28	
v/s Ratio Perm	0.15		0.04	0.35		0.03	0.35			0.34		
v/c Ratio	0.43	0.94	0.12	0.93	0.57	0.06	0.96	0.94		0.98	0.82	
Uniform Delay, d1	27.6	44.8	31.3	43.0	34.4	27.4	40.4	44.6		37.6	43.0	
Progression Factor	1.01	0.83	1.86	1.00	1.00	1.00	1.00	1.00		1.90	0.86	
Incremental Delay, d2	1.0	12.6	0.6	43.2	1.8	0.3	52.1	10.8		59.3	3.5	
Delay (s)	29.0	49.9	58.7	86.2	36.2	27.7	92.5	55.4		130.5	40.4	
Level of Service	C	D	E	F	D	C	F	E		F	D	
Approach Delay (s)		49.1			45.0			59.1			52.0	
Approach LOS		D			D			E			D	

Intersection Summary

HCM 2000 Control Delay	52.3	HCM 2000 Level of Service		D	
HCM 2000 Volume to Capacity ratio	0.96				
Actuated Cycle Length (s)	144.0	Sum of lost time (s)		18.0	
Intersection Capacity Utilization	100.6%	ICU Level of Service		G	
Analysis Period (min)	15				

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
5: The Donway W & Site Access

Future Total Weekend Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	0	30	5	0	0	30	150	10	5	165	15
Future Volume (Veh/h)	15	0	30	5	0	0	30	150	10	5	165	15
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	17	0	34	6	0	0	34	172	11	6	190	17
Pedestrians		10			10							
Lane Width (m)		3.5			3.5							
Walking Speed (m/s)		1.2			1.2							
Percent Blockage		1			1							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								224			147	
pX, platoon unblocked												
vC, conflicting volume	460	482	208	492	484	188	217			193		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	460	482	208	492	484	188	217			193		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	97	100	96	99	100	100	97			100		
cM capacity (veh/h)	493	465	830	451	463	853	1354			1381		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	51	6	34	183	6	207
Volume Left	17	6	34	0	6	0
Volume Right	34	0	0	11	0	17
cSH	676	451	1354	1700	1381	1700
Volume to Capacity	0.08	0.01	0.03	0.11	0.00	0.12
Queue Length 95th (m)	2.0	0.3	0.6	0.0	0.1	0.0
Control Delay (s)	10.8	13.1	7.7	0.0	7.6	0.0
Lane LOS	B	B	A		A	
Approach Delay (s)	10.8	13.1	1.2		0.2	
Approach LOS	B	B				

Intersection Summary					
Average Delay	1.9				
Intersection Capacity Utilization	27.4%	ICU Level of Service		A	
Analysis Period (min)	15				

Appendix H:
Queuing Tables

Intersection Queue Lengths - Signalized Intersections

General Notes:

- xx (xx) – AM Peak (PM Peak)

Don Mills Rd / The Donway W / The Donway E							
Movement	Approx. Storage Length (m)	Existing		Future Background		Future Total	
		50%ile (m)	95%ile (m)	50%ile (m)	95%ile (m)	50%ile (m)	95%ile (m)
EBL	25	54.7 (47.7)	#93.7 (84.5)	50.2 (55.7)	#93.0 (#109.5)	51.4 (56.4)	#97.0 (#110.3)
EBTR	-	16.8 (19.4)	28.4 (41.9)	20.2 (25.1)	37.9 (49.8)	20.0 (27.4)	37.6 (52.7)
WBL	50	5.0 (4.4)	13.1 (10.7)	5.0 (4.7)	12.9 (13.0)	4.9 (4.7)	12.9 (13.0)
WBTR	-	71.2 (5.0)	#134.1 (22.1)	72.2 (6.4)	#135.2 (28.8)	69.2 (7.5)	#132.3 (30.6)
NBL	35	0.6 (1.7)	m1.1 (m2.6)	6.8 (1.1)	m10.4 (m1.4)	6.9 (1.1)	m10.4 (m1.4)
NBTR	-	13.6 (44.1)	18.4 (52.2)	177.4 (31.5)	209.3 (m32.3)	179.7 (31.5)	209.3 (m32.3)
SBL	80	68.5 (50.1)	#127.6 (#144.6)	21.9 (45.3)	#39.9 (#69.8)	22.7 (45.3)	#39.9 (#69.8)
SBTR	-	106.0 (125.0)	120.7 (155.9)	121.3 (122.1)	134.7 (119.2)	125.4 (122.8)	134.2 (119.7)

The Donway W / Duncairn Rd							
Movement	Approx. Storage Length (m)	Existing		Future Background		Future Total	
		50%ile (m)	95%ile (m)	50%ile (m)	95%ile (m)	50%ile (m)	95%ile (m)
EBLR	-	13.7 (5.7)	22.5 (14.8)	13.7 (5.7)	22.5 (14.8)	13.5 (5.7)	22.1 (14.8)
NBTL	-	10.4 (30.8)	37.0 (56.6)	11.4 (7.2)	40.5 (60.2)	11.9 (7.8)	39.7 (57.4)
SBTR	-	18.6 (10.7)	42.3 (66.2)	16.9 (10.7)	55.7 (64.2)	16.8 (11.2)	54.5 (65.4)

The Donway W / Lawrence Ave E							
Movement	Approx. Storage Length (m)	Existing		Future Background		Future Total	
		50%ile (m)	95%ile (m)	50%ile (m)	95%ile (m)	50%ile (m)	95%ile (m)
EBL	45	14.9 (27.8)	35.5 (49.4)	17.5 (30.8)	32.5 (46.1)	17.5 (35.1)	32.5 (52.6)
EBT	-	89.8 (120.8)	122.1 (143.5)	108.7 (146.3)	110.3 (144.5)	109.1 (144.3)	110.3 (144.5)
EBR	20	34.7 (38.1)	65.2 (66.9)	47.1 (70.5)	64.2 (96.9)	47.3 (69.5)	64.2 (96.9)
WBL	45	8.4 (17.6)	m3.5 (m27.6)	35.9 (39.0)	m40.2 (m52.7)	36.1 (38.1)	m40.7 (m52.7)
WBT	-	45.3 (35.4)	m17.8 (39.5)	144.8 (38.6)	m177.1 (m35.9)	145.3 (37.3)	m178.6 (m35.1)
WBR	25	0.3 (0.5)	m0.0 (m2.2)	4.1 (0.7)	m8.7 (m1.6)	3.0 (1.1)	m6.5 (m3.6)
NBL	80	59.7 (62.1)	80.2 (93.7)	74.7 (78.4)	#173.8 (#193.5)	74.5 (79.8)	#173.6 (#193.5)
NBT	-	22.0 (31.4)	34.6 (51.4)	22.6 (30.9)	41.4 (57.5)	20.4 (31.4)	38.3 (57.5)
NBR	45	3.9 (9.1)	16.9 (29.2)	14.0 (22.3)	34.6 (56.4)	13.9 (22.7)	34.6 (56.4)
SBL	15	26.5 (22.9)	42.3 (40.5)	25.7 (19.5)	42.6 (40.4)	28.4 (22.1)	46.9 (45.3)
SBT	-	45.7 (44.8)	63.7 (68.0)	44.4 (39.1)	64.5 (68.8)	43.9 (39.2)	64.6 (68.9)
SBR	-	27.1 (7.6)	57.1 (27.6)	36.1 (4.0)	62.4 (29.9)	37.5 (4.3)	65.3 (31.3)

Don Mills Rd / Lawrence Ave E							
Movement	Approx. Storage Length (m)	Existing		Future Background		Future Total	
		50%ile (m)	95%ile (m)	50%ile (m)	95%ile (m)	50%ile (m)	95%ile (m)
EBL	45	9.6 (6.3)	41.4 (17.0)	29.9 (14.8)	#42.9 (28.9)	29.6 (14.8)	#43.0 (28.7)
EBT	-	125.1 (50.9)	120.7 (96.5)	146.6 (106.0)	173.5 (#163.6)	147.2 (107.1)	175.8 (#173.9)
EBR	160	8.9 (0.0)	33.2 (8.6)	36.4 (4.3)	57.7 (13.5)	36.0 (4.2)	56.9 (13.8)
WBL	85	34.5 (~44.9)	#80.3 (#93.4)	45.7 (43.8)	#101.1 (#94.4)	~47.6 (43.8)	#103.0 (#94.4)
WBT	-	145.8 (85.9)	175.1 (100.8)	159.8 (92.4)	#200.4 (113.3)	158.8 (95.7)	#198.8 (117.1)
WBR	30	0.0 (0.0)	0.0 (8.0)	0.0 (0.0)	0.0 (8.0)	0.0 (0.0)	0.0 (8.0)
NBL	65	~50.1 (31.4)	#101.8 (#92.2)	~45.7 (40.6)	#98.1 (#93.2)	~41.5 (40.6)	#94.3 (#93.2)
NBTR	-	122.0 (148.7)	143.8 (169.7)	157.1 (166.2)	184.3 (#197.9)	157.1 (166.2)	184.3 (#197.9)
SBL	95	40.5 (39.0)	#89.0 (#91.9)	34.3 (~41.3)	36.1 (#85.5)	34.3 (~41.2)	36.2 (#85.4)
SBTR	-	81.8 (53.1)	95.7 (101.0)	195.5 (76.7)	203.0 (99.2)	195.5 (76.9)	203.2 (99.4)

Intersection Queue Lengths - Unsignalized Intersections

General Notes:

- xx (xx) – AM Peak (PM Peak) [SUN peak]

The Donway W / Overton Cres				
Movement	Approx. Storage Length (m)	Existing	Future Background	Future Total
		95%ile (m)	95%ile (m)	95%ile (m)
EBTL	-	0.1 (0.1)	0.1 (0.1)	0.1 (0.1)
SBLR	-	1.4 (0.5)	1.4 (0.5)	1.4 (0.5)

The Donway W / Belton Rd				
Movement	Approx. Storage Length (m)	Existing	Future Background	Future Total
		95%ile (m)	95%ile (m)	95%ile (m)
EBTLR	-	0.8 (0.5)	0.8 (0.5)	0.8 (0.5)
WBTLR	-	2.0 (0.7)	2.1 (0.7)	2.1 (0.7)
NBL	20	0.1 (0.2)	0.1 (0.2)	0.1 (0.2)
SBL	15	0.1 (0.2)	0.1 (0.2)	0.1 (0.2)

The Donway W / Site Driveway (230 The Donway W)				
Movement	Approx. Storage Length (m)	Existing	Future Background	Future Total
		95%ile (m)	95%ile (m)	95%ile (m)
EBTLR	-	3.4 (0.7) [0.3]	3.4 (0.7) [0.3]	4.1 (1.8) [2.0]
WBTLR	-	1.2 (0.7) [0.3]	1.2 (0.7) [0.3]	1.2 (0.9) [0.3]
NBL	25	1.3 (0.0) [0.0]	1.3 (0.0) [0.0]	0.5 (0.7) 0.6]
SBL	20	0.0 (0.1) [0.1]	0.0 (0.1) [0.1]	0.0 (0.1) [0.1]

The Donway W / Langbourne Pl				
Movement	Approx. Storage Length (m)	Existing	Future Background	Future Total
		95%ile (m)	95%ile (m)	95%ile (m)
EBTLR	-	4.4 (5.4)	4.5 (5.5)	3.8 (6.0)
WBTLR	-	2.3 (0.9)	2.3 (0.9)	2.3 (0.9)
NBL	20	0.4 (0.6)	0.4 (0.6)	0.4 (0.6)
SBL	25	0.1 (0.1)	0.1 (0.1)	0.1 (0.1)

The Donway W / Jocelyn Cres				
Movement	Approx. Storage Length (m)	Existing	Future Background	Future Total
		95%ile (m)	95%ile (m)	95%ile (m)
EBTLR	-	1.3 (2.3)	1.3 (2.3)	1.3 (2.5)
WBTLR	-	4.6 (14.6)	4.7 (14.9)	4.6 (16.9)
NBL	10	0.3 (0.4)	0.3 (0.4)	0.3 (0.4)
SBTLR	-	0.2 (0.7)	0.2 (0.7)	0.2 (0.7)

Appendix I:
Calibration Studies

Project: **230 The Donway**
Project No **7054-10**
Location: **Don Mills Rd & The Donway**
Date: **Tuesday October 22, 2019**

AM Lane Utilization

Time	Northbound Traffic				Southbound Traffic			
	Left	Middle	Curb	Total	Left	Middle	Curb	Total
8:00	22	19	2	43	29	38	9	76
8:03	17	16	3	36	25	33	4	62
8:05	24	26	3	53	22	38	12	72
8:07	19	18	2	39	28	35	3	66
8:10	19	17	1	37	30	32	9	71
8:12	22	27	7	56	27	30	11	68
8:15	19	18	2	39	28	31	8	67
8:17	19	18	5	42	26	34	13	73
8:20	19	24	6	49	23	30	7	60
8:22	24	23	2	49	30	34	6	70
8:24	24	27	4	55	21	32	8	61
8:27	14	14	3	31	25	27	8	60
8:29	13	13	4	30	34	40	8	82
8:32	14	21	5	40	26	28	5	59
8:34	16	19	6	41	25	24	5	54
8:36	20	22	6	48	18	29	3	50
8:39	26	34	8	68	21	22	3	46
8:41	28	31	6	65	20	28	6	54
8:44	24	30	5	59	24	18	5	47
8:46	26	23	5	54	25	26	2	53
8:48	24	30	4	58	18	17	1	36
8:51	15	16	3	34	25	26	7	58
8:53	23	21	2	46	25	30	3	58
8:56	21	29	3	53	24	20	3	47
8:58	22	19	6	47	16	23	3	42
Right			7				218	
Total	**514**	**555**	**110**	**1179**	**615**	**725**	**370**	**1710**
Percent	**44%**	**47%**	**9%**		**36%**	**42%**	**22%**	
Factor		0.708108				0.786207		

PM Lane Utilization

Time	Northbound Traffic				Southbound Traffic			
	Left	Middle	Curb	Total	Left	Middle	Curb	Total
5:00	3	4	0	7	8	10	1	19

5:01	17	22	2	41	21	17	6	44
5:03	19	19	2	40	15	18	5	38
5:06	21	22	3	46	19	27	3	49
5:08	21	24	3	48	23	25	3	51
5:11	27	22	4	53	17	24	4	45
5:13	20	20	2	42	10	22	6	38
5:15	22	25	5	52	22	33	3	58
5:18	28	29	3	60	21	25	6	52
5:20	24	27	3	54	16	24	4	44
5:23	23	23	5	51	23	24	8	55
5:25	19	22	6	47	21	32	4	57
5:28	21	25	3	49	20	26	3	49
5:30	20	30	8	58	14	28	7	49
5:33	19	24	7	50	14	23	2	39
5:35	22	21	6	49	19	23	8	50
5:37	20	23	8	51	19	32	3	54
5:40	22	24	5	51	20	27	3	50
5:42	21	27	5	53	17	21	5	43
5:45	29	23	4	56	18	27	5	50
5:47	24	27	5	56	17	22	6	45
5:49	21	20	3	44	18	24	3	45
5:52	22	17	2	41	11	17	2	30
5:54	21	29	4	54	17	20	3	40
5:56	19	24	4	47	16	18	5	39
5:59	12	15	1	28	3	8	1	12
Right			21				214	
Total	**537**	**588**	**124**	**1249**	**439**	**597**	**323**	**1359**
Percent	**43%**	**47%**	**10%**		**32%**	**44%**	**24%**	
Factor		0.70805				0.758794		

Project: **230 The Donway**
Project No **7054-10**
Location: **Don Mills Rd & Lawrence Ave**
Date: **Tuesday October 22, 2019**

AM Lane Utilization

Time	Northbound Traffic				Southbound Traffic			
	Left	Middle	Curb	Total	Left	Middle	Curb	Total
8:00	3	3	0	6	6	5	3	14
8:01	14	17	5	36	24	29	10	63
8:03	25	31	4	60	22	24	8	54
8:06	11	11	0	22	30	27	11	68
8:08	19	14	2	35	24	28	7	59
8:11	19	21	2	42	25	28	13	66
8:14	10	15	5	30	23	24	8	55
8:16	16	19	4	39	27	27	14	68
8:18	13	22	8	43	25	21	12	58
8:20	19	27	1	47	26	25	10	61
8:23	16	31	2	49	25	27	12	64
8:25	13	16	2	31	26	27	10	63
8:28	15	14	2	31	25	21	6	52
8:30	14	22	5	41	29	29	14	72
8:33	9	18	3	30	19	24	7	50
8:35	17	22	5	44	26	25	6	57
8:37	19	27	7	53	16	17	5	38
8:40	20	34	9	63	18	20	3	41
8:42	23	30	4	57	17	18	2	37
8:44	24	30	2	56	21	22	10	53
8:47	23	26	5	54	13	19	4	36
8:49	14	18	3	35	18	18	6	42
8:52	14	15	4	33	19	20	1	40
8:54	17	25	6	48	19	18	4	41
8:56	15	25	2	42	22	22	5	49
8:59	17	17	3	37	9	17	3	29
Right			104				79	
Total	**419**	**550**	**199**	**1168**	**554**	**582**	**273**	**1409**
Percent	**36%**	**47%**	**17%**		**39%**	**41%**	**19%**	
Factor		0.707879				0.806987		

PM Lane Utilization

Time	Northbound Traffic				Southbound Traffic			
	Left	Middle	Curb	Total	Left	Middle	Curb	Total

5:01	17	18	3	38	9	11	5	25
5:03	18	19	1	38	13	12	9	34
5:06	22	17	2	41	8	14	3	25
5:08	23	16	1	40	18	19	5	42
5:11	24	20	3	47	15	16	3	34
5:13	22	17	1	40	12	17	2	31
5:16	22	21	1	44	15	20	5	40
5:18	24	23	2	49	21	23	6	50
5:20	26	16	6	48	8	14	6	28
5:23	21	25	1	47	19	26	2	47
5:25	24	23	1	48	14	22	6	42
5:28	19	21	3	43	16	23	5	44
5:30	20	29	4	53	15	21	1	37
5:32	21	26	4	51	15	19	3	37
5:35	19	24	3	46	13	16	4	33
5:37	23	21	6	50	17	21	2	40
5:40	18	25	3	46	12	17	7	36
5:42	19	20	8	47	16	19	2	37
5:44	25	23	4	52	11	16	3	30
5:47	25	25	2	52	15	17	5	37
5:49	22	21	1	44	15	19	2	36
5:52	17	15	2	34	14	18	4	36
5:54	22	21	1	44	11	15	2	28
5:56	22	23	0	45	10	14	4	28
5:59	18	14	1	33	11	14	5	30
Right			364				88	
Total	**533**	**523**	**428**	**1484**	**343**	**443**	**189**	**975**
Percent	**36%**	**35%**	**29%**		**35%**	**45%**	**19%**	
Factor		0.92808				0.733634		

Don Mills/Lawrence
AM Peak
800-900
Southbound

	Perm Left	Intergreen Left	Through	RTOR
8:00 AM	2	3	5	0
8:01 AM	4	3	3	0
8:03 AM	3	2	2	0
8:06 AM	9	1	4	0
8:08 AM	7	2	2	0
8:11 AM	2	2	2	0
8:14 AM	3	0	7	0
8:16 AM	6	2	2	0
8:18 AM	1	0	0	0
8:20 AM	1	2	4	0
8:23 AM	0	2	5	0
8:25 AM	6	2	1	0
8:28 AM	7	0	2	1
8:30 AM	6	3	2	1
8:33 AM	3	0	2	0
8:35 AM	5	3	2	0
8:37 AM	0	2	0	1
8:40 AM	0	2	1	0
8:42 AM	0	2	4	1
8:44 AM	1	2	0	1
8:47 AM	1	4	2	0
8:49 AM	13	3	0	0
8:52 AM	7	2	3	1
8:54 AM	0	2	2	0
8:56 AM	0	3	2	0
8:59 AM	1	0	0	0
Total	88	49	59	6
	137			

Don Mills & The Donway
AM
800-900

		Southbound		Eastbound	
Time		Perm Left	Intergreen Left	Perm Left	Intergreen Left
8:00 AM	800	0	2	5	1
8:03 AM	803	12	2	6	0
8:05 AM	805	9	2	6	1
8:07 AM	807	11	0	1	1
8:10 AM	810	5	1	2	3
8:12 AM	812	11	0	6	2
8:15 AM	815	8	2	8	3
8:17 AM	817	6	3	4	1
8:20 AM	820	7	2	3	2
8:22 AM	822	6	2	7	3
8:25 AM	825	9	3	4	0
8:27 AM	827	8	2	5	3
8:29 AM	829	6	2	6	3
8:32 AM	832	6	2	4	3
8:34 AM	834	7	2	6	2
8:36 AM	836	0	1	6	1
8:39 AM	839	6	2	4	1
8:41 AM	841	8	2	4	0
8:44 AM	844	8	1	3	1
8:46 AM	846	10	1	3	2
8:48 AM	848	9	3	3	2
8:51 AM	851	13	1	1	2
8:53 AM	853	4	2	3	2
8:56 AM	856	5	1	4	2
8:58 AM	858	5			
	25	179	41	104	41
			1.64		

Appendix J:
City of Toronto Staff Comments

TORONTO

Memorandum

Transportation Services
Planning and Capital Program
Ashley Curtis
Director

Development Planning & Review
North York Civic Centre
5100 Yonge St 4th floor
Toronto ON M2N 5V7

Tel: 416-395-7462
Fax: 416-395-7482
Homayoun.harirforoush@toronto.ca

DATE: November 24, 2022

TO: Marija Ilic, P. Eng.
Manager, Development Engineering, North York District
Attention: Yelena Akselord

FROM: Luigi Nicolucci
Manager, Development Planning and Review, Area 2
Attention: Homayoun Harirforoush

RE: **Application: 22 124524 NNY 16 OZ**
Applicant: Heather Tremain
Location: 230 The Donway West

Date of Circulation: April 14, 2022

APPLICATION DESCRIPTION

The Transportation Services Division reviewed the above-noted new Zoning By-Law Amendment application from a transportation engineering perspective and has the following comments.

The subject site is located at the west side of the Donway West, between Don Mills Road and Lawrence Avenue East, in North York. It is generally bounded by the Donway West to the east, the Duncairn Park Trail to the south, the Norman Ingram Public School field to the west, and residential houses to the north.

The site is currently occupied by the Donway Covenant United Church and the Brighton School, as well as a surface parking lot with 86 parking spaces to serve the site. Access to the site is provided by the 2 existing driveways.

The proposed development includes a new 6-storey mid-rise residential building with a multi-purpose facility for the Donway Covenant United Church.

A total of 237 and 234 parking and bicycle parking spaces will be provided for the proposed buildings, respectively.

We provide the following comments and conditions based on the following submissions:

- Plan of Survey of Part of Block B Registered Plan 4332 City of Toronto, dated July 16, 2019, by J.D.Barnes Ltd.;
- Drawing A100, Context Plan Statistics & Templates, dated March 9, 2022, by Architecureunfolded;
- Drawing A101, Site Plan, dated March 9, 2022, by Architecureunfolded;
- Drawing A201, P2 Level Partial, dated March 9, 2022, by Architecureunfolded;
- Drawing A202, P1 Level, dated March 9, 2022, by Architecureunfolded;

- Drawing A301, GND Floor Level, dated March 9, 2022, by Architecureunfolded;
- Drawing L1, Landscape Masterplan Ground Floor, dated Jan 28, 2022, by NAK design group;
- Urban Transportation Consideration, dated March 15 2022, by BA Group; and
- Other associated drawings.

We advise the applicant that unless stated otherwise, all conditions for approval that are described in this report must be completed to the satisfaction of this Division, and at no expense to the City of Toronto.

TRANSPORTATION SERVICES DIVISION REQUIREMENTS

A. REVISIONS AND ADDITIONAL INFORMATION REQUIRED FOR ZONING BY-LAW AMENDMENT

We require that the applicant amend the site drawings or provide additional documentation to address the following comments and conditions. Before receiving site plan approval, the applicant must resubmit their revised site drawing(s) for review and acceptance by this Division.

1. Provide an updated Transportation Impact Study Addendum to address the comments outlined in Traffic Assessment – Section D;

2. Include a notation on the site plan and landscape plan stating that "The 0.40m wide strip of land along The Donway West frontage of the site will be conveyed to the City in an unencumbered manner for a nominal sum, to the satisfaction of the City.";

3. Revise the site plans and landscape plans to show the provision of minimum 2.1m wide linear paths of concrete public sidewalks along all development site frontages, which:
   - **(i) Must be clear of any encumbrances such as utility poles, fire hydrants, bike rings, street furniture, specialized paving areas, landscaping, etc.;**
   - **(ii) Must be entirely within the public right-of-way;**
   - **(iii) Must be continuous through the driveway;**
   - **(iv) Must be offset 0.3m from the property line; and**
   - **(v) Must be aligned with the existing adjacent sidewalks and maintain a linear course.**

4. Include a notation on the site plans and landscape plans stating that "The new reconstructed sidewalks along the development site frontages will be built to the satisfaction of the City and at no cost to the municipality";

5. Demonstrate compliance with the requirements of the Toronto Green Standard (TGS) Version 4.0, as further discussed in Section D; and

6. Please label the dimension of all parking spaces. Clearly identify the distance of the parking spaces from walls and obstructions. The minimum dimensions of a parking space are 2.6m wide by 5.6m long by 2.0m high. The width must be increased by 0.3m for each side of the parking space that is obstructed more than 1.0m from the front or back of a parking space.

B. ZONING BY-LAW AMENDMENT CONDITIONS

The owner is required, as conditions of approval of the Official Plan Amendment / Rezoning Application, to:

1. Provide parking in accordance with the following minimum requirements:

Visitor Residential

- **Visitor Spaces: 2.0 + 0.05 spaces/unit;**

2. Provide parking in accordance with the following maximum requirements:

Residential Condominium Use

- **Bachelor Units: 0.8 spaces per unit;**
- **1-Bedroom Units: 0.9 spaces per unit;**
- **2-Bedroom Units: 1.0 space per unit;**
- **3+ Bedroom Units: 1.2 spaces per unit;**
- **Visitor Spaces: 1.0 per unit up to 5 units, 0.1 per unit thereafter**
- **Church: 6.0 for each 100m^2 of GFA;**

3. The subject site is required to provide a minimum of 1 Type "G" loading space;

4. Include the following definitions in the Site-Specific By-law for this project:

(i) Provide 1 Type "G" loading space with dimensions of 13.0m in length, 4.0m in width, and 6.1m of vertical clearance;

(ii) The minimum dimensions of a parking space are 2.6m wide by 5.6m long by 2.0m high. The width must be increased by 0.3m for each side of the parking space that is obstructed more than 1.0m from the front or back of a parking space.

(iii) Car-share parking space means a parking space that is exclusively reserved and actively used for car-sharing;

(iv) Car-share means the practice where a number of people share the use of one or more cars that are owned by a profit or non-profit car-sharing organization and where such organization may require that use of cars be reserved in advance, charge fees based on time and/or kilometers driven, and set membership requirements of the car-sharing organization, including the payment of a membership fee that may or may not be refundable; and

(v) The provision of a car-share parking space can reduce the residential parking by up to 4 parking spaces for each car-share up to a maximum reduction of 4 x (total number of units) ÷ 60, rounded down to the nearest whole number.

5. Provide accessible parking in accordance with the following minimum requirements:

(i) 5 accessible spaces plus 1 space for every 50 parking spaces in excess of 100 parking spaces are required to be dedicated as accessible spaces.

C. ADVISORY OF OTHER CITY APPROVALS AND REQUIREMENTS

The owner is advised that the following approvals and additional conditions may be required at the site plan stage (or building permit stage where there is no site plan control). These comments are preliminary and are subject to change based on submissions for subsequent planning approval applications. They are provided for the owner's information only.

1. **Additional comments with respect to access, location and layout of the proposed parking facilities, ingress/egress thereto, and other site plan issues will be provided during the Site Plan Review Process;**

2. **All streetscape designs proposed within the abutting public rights-of-way must comply with the requirements of this Division and that materials other than municipal sidewalks, street trees and sod are considered encroachments that the property owner must recognize in either a site plan or encroachment agreement that is registered on title to the property;**

3. **The applicant must submit a financial guarantee in the form of a certified cheque (amount to be determined later) for the new 2.1m wide sidewalks to be constructed on The Donway West, as required by the City of Toronto;**

4. **Prior to the site plan approval, the applicant must submit a financial guarantee in the form of an irrevocable letter of credit or certified cheque (amount to be determined later), for the implementation of the required TDM plan to the City of Toronto. Please contact Transportation Planning for more information;**

5. **Preliminary Site Plan Control Comments:**
   - 5.1. Label on the site plan that the proposed driveway access is to be constructed as per City of Toronto specification T-350.01;
   - 5.2. Reduce the width of the driveway to a maximum of 6.0m;
   - 5.3. Provide internalized on-site pick-up/drop-off areas for residential building and church. A turning loop design must be provided on-site in front of the lobby to ensure this activity does not occur within the public right-of-way;
   - 5.4. All dead-end aisle parking spaces must have sufficient turnaround area to enter/exit the parking space;
   - 5.5. Remove/relocate the proposed parking spaces on the ground floor near the underground ramp;
   - 5.6. Please provide a loading management plan and warning system to caution drivers about truck manoeuvering ahead; and
   - 5.7. The underground parking ramp design must satisfy all the following criteria:
     - The maximum slope of a covered or heated ramp shall be 15 percent;
     - The maximum slope of an outdoor unheated ramp shall be 10 percent;
     - The minimum width of a clear straight one-way driveway shall be 3.65m;
     - The minimum width of a clear straight two-way driveway shall be 3.0m per lane;
     - The maximum sloped floor for direct access to parking areas shall be 5 percent;
     - The minimum centreline radius for two-way driveways, including curved parking ramps, shall be 7.5m;
     - For curved ramp sections, a width of 4.0m shall be provided for a lane on the inside of the curve and a width of 3.5m shall be provided for a lane on the outside of the curve; and
     - For ramp slope changes of 7.5 percent or greater, a transition area with a minimum length of 3.65m (measured parallel to the direction of travel on the ramp) must be provided. The slope of the transition area shall be half the sum of the first slope of the ramp or driveway and the second slope of the ramp or driveway;

6. **Facilities to Provide Access To and From the Land**
   - 6.1. Remove all existing accesses, curb cuts, traffic control sign(s) along the development site frontage that is no longer required and reinstate the curb, gutter, and boulevard within the

City's right-of-way, in accordance with City standards and to the satisfaction of the Executive Director, Engineering and Construction Services.

7. Off-street Vehicle Loading, Parking Lots and Driveways

7.1. Provide and maintain off-street vehicular loading and parking facilities and access driveways in accordance with the approved plans and drawings, to the satisfaction of the Executive Director, Engineering and Construction Services; and

7.2. The owner must install and maintain appropriate signage and pavement markings on-site directing such as but not limited to: vehicle stopping and circulation, designated disabled parking, loading, and pedestrian walkways, to the satisfaction of the Executive Director, Engineering and Construction Services.

8. Road Allowance Permits

8.1. The applicant must obtain the necessary authorizations and permits from our Permits and Enforcement Section before excavating or encroaching into municipal road allowance. The applicant is advised to contact our Permits and Enforcement Section at (416) 395-7112 regarding site-specific permit and licensing requirements.

8.2. Prior to issuance of any permit from the Permits and Enforcement Section, the applicant must submit a financial guarantee and an engineering review fee in form of a letter of credit (amount to be determined by Engineering and Construction Services) to the Permits and Enforcement Section, Transportation Services, for all works required in the City boulevard.

9. Construction Management Plans

9.1. We advise the applicant that they cannot use the municipal right-of-way for construction-related purposes without first receiving written authorization from the Permits and Enforcement Section, including payment of the necessary fees; and

9.2. We advise the applicant that any construction activity that affects the adjacent public rights-of-way including, among other things, the location of construction staging areas and covered public walkways within public roads, which may necessitate the temporary closure of one or more traffic lanes for an extended period of time, will require the submission of an acceptable Construction Management Plan in conjunction with the permit approval process, in order to minimize construction-related impacts on public rights-of-way.

10. Toronto Hydro Approval

10.1. The applicant must obtain approval from Toronto Hydro Street Lighting Incorporated before removing and/or relocating any utility with attached municipal street lighting.

11. Encroachments

11.1. Any encroachments within Municipal Road Allowances will not be permitted unless they are explicitly approved by the Permits and Enforcement Section of Transportation Services Division. The applicant is required to contact the section through the permit approval process to obtain the exact particulars of these requirements. For further information, please contact the Right-of-Way Management Section, North York District at (416) 395-7112.

12. Street Furniture

12.1. The owner is advised that approval for all work that will be carried out within the abutting public rights-of-way, which may include but not be limited to financial responsibility for removal or relocation of existing street furniture (transit shelters, benches, litter bins, bicycle locking rings, etc.). The owner must contact Street Furniture Management to coordinate the removal or relocation of Astral street furniture or bicycle locking

rings. There are Third Party costs associated with the removal and relocation of Astral street furniture and costs to remove the City of Toronto bicycle locking ring(s). The City will not undertake any work associated with removing, reinstalling, or relocating existing street furniture until it receives payment. If clarification is required on how the above standards will apply to this site, the applicant can contact the Street Furniture Management Unit at streetfurniture@toronto.ca.

D. BACKGROUND

GENERAL COMMENTS

The comments and conditions in this report generally pertain to the rezoning aspects of the proposal. This development will be subject to a future Site Plan Control application and additional comments pertaining to parking, access, loading, site circulation etc. will be provided at that time.

TRAFFIC ASSESSMENT

The applicant's transportation consultant, BA Group, submitted a Transportation Study report dated March 15, 2022. The report estimates that the proposed development will generate - 40 and +55 new two-way traffic trips in the weekday morning and afternoon peak hours, respectively.

The estimated vehicular site trips were generated by the consultant based on the following methodologies:

- Residential: residential trip generation rates were established based on a review of several similar sites including 1101-1105 Leslie Street, 151 & 181 Village Green Square, 3303 Don Mills Road & 1555 Finch Avenue East, 55 & 65 Skymark Drive, 138-168 Boins Avenue.
- Church: Land Use Code (LUC) 560 (Church Trip Rates).

Additional information regarding the projected vehicular site trips is provided in Table 1.

Table 1 – Projected Traffic Volumes

Land Use	Scale	Generated Trips[1]					
		AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Existing Traffic							
Existing Private School		75	45	120	0	10	10
Church	735 m^2	0	0	0	5	5	10
Total Existing		-75	-45	-120	-5	-15	-20
Proposed Uses							
Residential Uses	271 units	25	55	80	40	25	65
Church	735 m^2	0	0	0	5	5	10
Total Proposed		25	55	80	45	30	75
Net New Site Trips		**-50**	**+10**	**-40**	**+40**	**+15**	**+55**

[1] Based on the information provided in March 15, 2022 Transportation Study report from BA Group.

The consultant concludes that the proposed development will have a minor impact on the overall

operation of the other network signalized and unsignalized intersections. Despite this conclusion, revisions are required to the Transportation Study report in order to address the following issues:

1) *Traffic Counts*
   Any traffic volumes that are greater than 3 years old must be bumped-up to estimates 2022 levels using an appropriately derived growth rate. All data and all calculations used to obtain this growth rate must be included in the appendices of the study. Traffic analyses shall be revised to reflect the updated traffic counts.

2) *Peak Hour Analysis*
   The analysis must include the weekend (Sunday) peak period for the proposed Church development.

3) *Traffic Analysis Adjustment Factors*
   Section 8.1.3 of the study discusses the parameters (lane utilization factor, saturation flow rate, lost time adjustment, and left turn factor) that were used to adjust the model such that it more closely represents the existing conditions observed in the field. This is acceptable in principle, however, given that a different value was used, a filed survey must be undertaken and documented to support this calibration in the study.

4) *Signal Timing Plans*
   In order to accommodate future traffic volumes, the consultant modifies the signal timing plans at the signalized study area intersections. A summary of all changes in this regard must be provided in separate tables. If deemed acceptable, the applicant is responsible for any associated costs.

5) *Synchro Summary Tables*
   In addition to the level-of-service and v/c information provided in the study, separate tables must also be provided which summarize delay and 50th & 95th percentile queues and available storage areas for all intersections and for each movement under all assessed traffic scenarios. Available storage area for all applicable movements must also be provided in the tables. This information must not include any applicable taper areas. Mitigation measures should be recommended where required.

6) *Pick-Up/Drop-Off Activity*
   - The consultant must provide an assessment of the projected pick-up/drop-off demand for the proposed uses in order to determine if the subject pick-up/drop-off facilities are adequate.

7) *Sight-Line Analysis*
   The consultant should evaluate the safe stopping and corner sight distances for St. Dennis/New Public Road and Grenoble Drive/New Public Road intersections, to ensure there is sufficient stopping sight distance to allow drivers to stop their vehicle completely prior to reaching the back of queue waiting at the intersection.

8) *On-Site Signage and Wayfinding*
   The retained transportation consultant must submit an acceptable on-site signage and wayfinding plan to help facilitate the safe movement of traffic and regulate the parking, loading, and pick-up/drop-off activity that is intended to be accommodated by the site.

9) *Digital Synchro File*
   In order to fully assess the traffic impacts, digital Synchro and SimTraffic files must be provided.

Additional comments pertaining to the Synchro/SimTraffic analysis may be provided upon further review.

10) Multi-modal Analysis and Transportation Demand Management
Please contact Transportation Planning unit of the City's Planning Division to confirm the exact requirements.

Prior to accepting the traffic impacts of the proposal, the TIS from BA Group must be revised to address the above-noted issues. The proponent is advised that additional comments may be provided with respect to the traffic impacts of the proposal once a revised Transportation study is submitted for review and approval.

ROADWAYS

Delineate and identify on all drawings the following lands as being conveyed to City for a nominal sum and free of any obstructions:

- A 0.40m wide strip of land is required along the The Donway West frontage of this property to satisfy the requirement of a 45m wide right-of-way.

The proponent will also be required to submit, for review and approval, a Draft Reference Plan of Survey, in metric units and integrated with the Ontario Co-ordinate System, showing the co-ordinate values at the main corners of the development lands, and delineating thereon, by separate PARTS, the lands to be conveyed to the City, the remainder of the site, and any appurtenant rights-of-way.

SIDEWALKS / BOULEVARDS / STREETSCAPING

The applicant must restore those sections of municipal boulevard where they propose to close existing driveway(s), replacing the access point(s) with appropriate landscaping and continuous poured raised concrete curb.

The applicant must ensure that any streetscape designs proposed within municipal right-of-way comply with the requirements of this Division. We emphasise that anything other than municipal sidewalks, street trees, and sod are encroachments that the property owner must recognise in either a site plan or encroachment agreement that is registered on title to the property. The property owner is responsible for designing, constructing, and maintaining these encroachments.

New 2.1m wide clear linear paths of concrete public sidewalks are required along all development site frontages. Appropriate transition areas must also be provided within the site frontages which connect the new sidewalks to the existing sidewalks at a 5:1 ratio. The required 2.1m wide public sidewalks must be clear widths and shall not include the street curb, specialized paving areas, planting areas, furniture zones, marketing areas, etc. The site plan drawings and landscape plans must be revised to comply with the above-noted requirements. The site plan drawings and landscape plans must also be revised to include a notation stating that, "The reconstructed sidewalks along the development site frontages will be built to the satisfaction of the City and at no cost to the municipality."

DRIVEWAY ACCESS / SITE CIRCULATION

Access to the site is proposed via one full-movement driveway on The Donway West. The site driveway will provide a two-way vehicular access to the proposed underground parking garage, and loading facility for the proposed development.

A dedicated on-site pick-up/drop-off for Buildings A and Building B must be provided. A turning loop design must be provided on-site in front of the lobby to ensure this activity does not occur within the public right-of-way. This will ensure that deliveries and ride-sharing happen on-site and vehicles are not stopping with the new Public Street.

As noted previously, this development will require a future Site Plan Application. Additional comments pertaining to the design of the proposed site access will be provided at that time.

PARKING

The parking space requirements for the project are governed by the applicable parking provisions contained in the former City of North York Zoning By-law No. 7625. However, Zoning By-law 569-2013 was developed by City staff in order to update the parking requirements for developments. In addition, the Toronto Zoning By-law No. 89-2022 was recently passed by City Council as an amendment to Zoning By-law 569-2013 in order to update the parking requirements for developments. The parking provisions contained in this by-law have been accepted by staff on recent development projects, where appropriate, as the associated parking standards are based on more recent information. As a result, Transportation Services can support parking being provided for this project in accordance with Zoning By-law No. 89-2022. The site is located in "All other areas of the City" under By-law 89-2022.

A summary of the parking space requirements for the project is provided in Table 2.

Table 2 – Parking Space Requirements as per Zoning By-law No. 89-2022 (All other areas)

Use		Scale	Parking Rate [1]		Parking Requirement [2]	
			Minimum	Maximum	Minimum	Maximum
Resident	Bachelor	12 units	-	0.8	-	9
	1 Bedroom	149 units	-	0.9	-	134
	2 Bedroom	88 units	-	1.0	-	88
	3 Bedroom	22 units	-	1.2	-	26
Residential (Visitors)		271 units	2.0 + 0.05 spaces/unit	1.0 per unit up to 5 units, 0.1 per unit thereafter	15	31
Church		735 m^2	-	6 spaces / 100m^2	-	44
Total					***15***	***332***

[1]Expressed as number of spaces per unit for the residential use.
[2] Where the calculation of the required parking spaces results in a number containing a fraction, the number must be rounded down to the nearest whole number, but in no case may there be a requirement of less than one parking space.

Based on By-law 89-2022 under Parking Zone All other areas, a minimum of 15 visitor parking spaces are required for the proposed development. According to the site statistics, a total of 237 parking spaces (including 176 residential, 20 visitors, 20 Church, 20 shared visitor non-residential visitor, and 1 car-share parking space) will be provided for this project, which meet the minimum parking requirement. The effective resident and non-resident parking rates are 0.65 and 0.15 spaces per unit, respectively.

The proposed parking rate is considered appropriate for this application based on the following considerations:

- The Site's existing and future transportation context;
- The Site's transportation planning context;

- The provision of a car-share space proposed for the Site;
- The provision of transportation demand management measures;
- Recently reduced residential and visitor parking supply ratio approvals for buildings in similar context; and
- Parking supply information available for existing Options for Homes developments.

Transportation Services accepts the proposed on-site parking supply.

Based on By-law 89-2022 effective parking spaces must be used to determine the required amount of accessible parking spaces. A summary of the effective parking spaces and the accessible parking requirements for the project is provided in Table 3 and Table 4.

Table 3 – Effective Parking Spaces as per Zoning By-law No. 89-2022

Use	Scale	Parking Rate	Effective parking Spaces
Bachelor	10 units	0.8 / unit	9
1 Bedroom	202 units	0.9 / unit	134
2 Bedroom	129 units	1.0 / unit	88
3 Bedroom	36 units	1.2 / unit	26
Residential (Visitors)	271 units	0.1 / unit	27
Church	735 m^2	2.0 / 100m^2	15
Total			***299***

By-law No. 89-2022 requires a minimum of 5 parking spaces plus 1 parking space for every 50 effective parking spaces or part thereof in excess of 100 parking spaces. As per the By-law, the proposed and required number of accessible parking spaces for this development is shown in Table 4.

Table 4 – Accessible Parking Space Requirements as per Zoning By-law No. 89-2022

No. of Spaces Required	No. of Spaces Provided
9	9

A total of 9 accessible parking spaces are shown on the submitted drawings, which satisfy the requirements of By-law 569-2013.

As mentioned, this proposal will be subject to further comments as part of a future Site Plan application. More detailed comments will be provided at that time with regards to the design and configuration of the proposed parking supply.

LOADING

Similar to the parking space requirement, the loading space requirement for the project is governed by the provisions contained in the former City of North York Zoning By-law No. 7625. However, we require that the project complies with the loading space requirements of Zoning By-law 569-2013 since they are based on more recent information.

A summary of the loading requirements for this project in accordance with the subject By-law is provided in the table below.

Table 5 – Minimum Loading Space Requirements – By-law 569-2013

Land Use	Scale	No. of Loading Spaces Required			
		Type 'B'	Type 'C'	Type 'G'	Total
Residential	271 units	0	0	1	**1**
Church	735 m^2	0	0	0	**0**
Grand Total		***0***	***0***	***1***	***1***

As per the above table, the site requires a total of 1 Type 'G' loading space under Zoning By-law No. 569-2013 with the following dimensions:

Type 'G'

i. Minimum length of 13.0 meters;
ii. Minimum width of 4.0 meters; and
iii. Minimum vertical clearance of 6.1 meters.

Given the above, 1 Type 'G' loading space is required for the project. The drawings note the provision of 1 Type 'G' loading space on-site which does meet the parking requirements of Zoning By-law 569-2013. Furthermore, vehicle maneuvering diagrams (VMDs) have been provided illustrating a heavy vehicle entering and exiting the site in a forward motion. However, the VMD-02 is not acceptable. On-site circulation for trucks should avoid reversing or maneuvering onto the underground ramp.

As mentioned, this proposal will be subject to further comments as part of a future Site Plan application. More detailed comments will be provided at that time with regards to the design and configuration of the proposed Loading supply.

TORONTO GREEN STANDARDS

The Toronto Green Standard (TGS) Version 3.0 applies to the site given that the application for the development proposal was received by the City on or after May 1, 2018. Tier 1 of the TGS is mandatory, while Tier 2 is voluntary.

TGS Version 3.0 Tier 1 requirements:

AQ 1.1 – Single-Occupant Auto Vehicle Trips

AQ 1.1 of the TGS requires single-occupancy automobile trips that are generated by the proposed development to be reduced by 15 percent through a variety of multimodal infrastructure strategies and Transportation Demand Management (TDM) measures. Be advised that the bicycle space requirements under the bylaw, existing bike lanes and parking supply reduction and parking supply reduction do not count towards TDM. According to information provided in the March 2022, Transportation Study report, by Burnside, TDM measures including parking supply reduction and transit, cycling incentives are proposed. The consultant concludes that the proposed TDM measures are projected to reduce single automobile occupancy by more than 30%.

The transportation consultant is required to submit acceptable documentation which:

1. Describes in detail all measures that will be adopted to reduce single-occupancy auto vehicle trips; and
2. Individually quantifies how much each measure is expected to reduce single-occupancy auto-vehicle trips using appropriate and reasonable data/methodologies.

As a result, this requirement has not been satisfied.

AQ 1.2 Electric Vehicle Infrastructure
Parking spaces must be equipped with an energized outlet, which is clearly marked and identified for electric vehicle charging, in accordance with Zoning By-law 569-2013, as amended. Tier 1 requirements for 100 percent residential parking spaces and 25 percent non-residential spaces to be EV Ready.

A total of 237 parking spaces (including 176 residential, 20 visitor, 20 church, and 20 shared visitor non-residential visitor, and 1 car-share parking spaces) parking spaces are proposed, hence, 191 EV spaces are required. Based on the plans submitted, this requirement has not been satisfied.

AQ 2.1 Bicycle Parking Rates
Provide bicycle parking rates, spaces and shower and change facilities in accordance with the Bicycle Parking Space Regulations, Chapter 230 of the City-wide Zoning By-law. Refer to the City of Toronto's Guidelines for the Design and Management of Bicycle Parking Facilities for best practice design.

Table 6: Minimum Bicycle Parking Space Requirements – By-law No. 569-2013

Use	Scale	Type	Parking Rate[1]	No. of Spaces Required[2]
Residential	271 units	Long-term	0.68	185
		Short-term	0.07	19
Church	735 m^2	Long-term	N/A	-
		Short-term	N/A	-
Total				**204**

1. If Table 230.5 10.1(1) Bicycle Parking Space Rates, requires a bicycle parking space for one or more uses on a lot, the total number of bicycle parking spaces required is equal to the cumulative total of all bicycle parking spaces required for each use on the lot.
2. If the calculation of the minimum bicycle parking spaces for all uses results in a fraction of a bicycle parking space being required, the number of required bicycle parking spaces must be rounded up to the next whole number.

According to the site statistics, a total of 234 bicycle parking spaces are provided, including 214 long-term and 20 short-term, which meet the minimum requirement.

AQ 2.4 Electric Bicycle Infrastructure
At least 15% of the required long-term bicycle parking spaces, or one parking space, whichever is greater, shall include an Energized Outlet (120V) adjacent to the bicycle rack or parking space. The number of electric bicycle parking spaces is included as part of the total required bicycle parking rate. Locate the Energized outlet at a maximum distance of 1100 mm from the bike rack to accommodate the typical manufacture-supplied power cord. Label the required long-term bicycle parking spaces and electric bicycle charging spaces clearly for users. A total of 185 long-term bicycle spaces are required, hence, 28 EV spaces are required. In addition, the location of those spaces must be labelled on the associated plans. This requirement has not been satisfied.

AQ 2.6 Publicly Accessible Bicycle Parking
For all uses within 500m of the transit station entrance, provide at least 10 additional publicly accessible, short-term bicycle parking spaces, at-grade on the site or within the public boulevard in addition to bicycle parking required under AQ 2.1. Bicycle parking should be weather protected and secure. The site is located outside of the catchment area, therefore, this requirement does not apply.

AQ 3.2 Sidewalk Space
Provide a context-sensitive pedestrian clearway that is a minimum of 2.1m wide, to safely and comfortably accommodate the pedestrian flow. The new 2.1m sidewalks are not provided on all site frontages, therefore, revisions to the site plan are required.

E. CONCLUSIONS

Transportation Services **reserve comments** to the Zoning By-law Amendment (No. 22 124524 NNY 16 OZ) application subject to the above-numbered conditions being satisfied accordingly.

(Homayoun Harirforoush), For
Luigi Nicolucci,
Manager, Development Planning and Review, Area 2
Transportation Services Division
HH/

TORONTO

Memorandum

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October 14, 2022

To: **Geoffrey McGrath (Options for Homes)**

From: John Andreevski, Manager Community Planning

Subject: **City Planning Comments – Submission 1**
Official Plan Amendment & Rezoning Application No.: 22 124524 NNY 16 OZ
230 and 240 The Donway West
PLAN 4332 PT BLK B
Ward 16 - Don Valley East

City Planning staff have reviewed Official Plan Amendment and Zoning By-law Amendment Application 22 124524 NNY 16 OZ (submitted March 18, 2022) as it relates to 230 and 240 The Donway West. The application proposes to replace the existing place of worship on the site with a 6 storey mixed use building containing 271 condominium residential units (5 townhouse units and 266 apartment units), a new place of worship (735 m^2), and 237 parking spaces within 2 levels of underground parking. A strip of land (574 m^2) on the south side of the property is proposed to be conveyed to the City to add to the adjoining Duncairn Park Trail to the south.

The following comments are provided:

Draft Official Plan Amendment

1. The subject site is designated *Neighbourhoods* on both Map 20 – Land Use Plan of the Official Plan (OP) and Map 24-1 – Land Use Areas of the Central Don Mills Secondary Plan (Secondary Plan). The submitted draft Official Plan Amendment (OPA) proposes to amend Map 20 of the OP to redesignate the majority of the lands to *Apartment Neighbourhoods* and the portion of the lands for parkland dedication to *Parks* to facilitate the proposed development.

2. Please revise Map 1 of the draft OPA to show the lands that are proposed to be redesignated *Parks*. The legend under the map should also be revised so that the description for the bold outlined parcel reads "Site Location: Lands to be redesignated from Neighbourhoods to Apartment Neighbourhoods and Parks."

3. The proposal also requires an amendment to Map 24-1 – Land Use Plan of the Secondary Plan. Please revise the draft OPA document as necessary.

4. Staff will continue to review the appropriateness of the OPA to ensure consistency with the Provincial Policy Statement, conformity with A Place to Grow: Growth Plan for the Greater Golden Horseshoe, as well as conformity with the objectives and policies of the OP and the Secondary Plan. The proposal shall also demonstrate conformity with the objectives and principles of relevant design guidelines, and meet all technical requirements as it relates to the capacity of the City's physical infrastructure, among other matters.

Draft Zoning By-law Amendment

5. The Draft Zoning By-law Amendment will continue to be revised as the resubmissions and revisions to plans are made. Staff are deferring comment on the text of the applicant's Site Specific Draft Zoning By-law until the issues identified are resolved.

Parkland Dedication

6. As per Parks comments dated June 1, 2022, the development proposes 574 m^2 of parkland dedication whereas 1,483 m^2 is required. The deficit is not acceptable and the full parkland dedication must be satisfied on-site.

7. While the parkland deficit is not permitted, the proposed location along the south end abutting Duncairn Park is acceptable.

8. Please ensure the proposed development maintains a minimum 5 metre setback from the expanded parkland property line.

Public Realm and Site Organization

9. The Official Plan contains policies requiring development to be located and organized to fit with its existing and planned context. Development shall frame and support adjacent streets, lanes, parks and open spaces to promote civic life and the use of the public realm. The Official Plan also encourages development to include design features that promote pedestrian safety and security to streetscapes, lanes, parks, and other public and private open spaces.

10. City Planning staff are of the opinion that there is an opportunity to improve the proposed development's connection and interface with the existing Don Mills trail system on Duncairn Trail at the southwest corner of the site.

    a. See below images of desire paths that exist leading to and from the subject site. Perceived desire path highlighted in red; blue indicates potential connection.

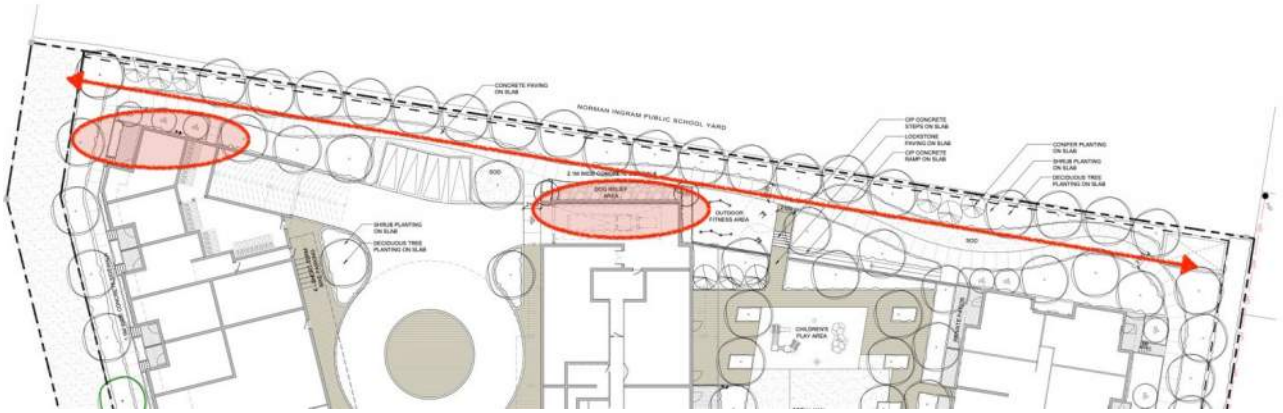
View west towards school site

View southeast towards The Donway

Landscape and Design

11. Redesign of the west walkway and portions of the west building wings required to improve the interface and sightlines through this proposed space. Straightening walkway path may also open up additional areas for landscaping, and improved pet relief area that does not negatively impact the landscaped walkway. City Planning staff encourage increasing the rear setbacks to remove pinch points and to visually open up the walkway area to ensure clear sightlines and to avoid entrapment areas.

    a. See below sketch indicating potential pinch areas along western walkway, and key sightline which needs to be properly aligned.



    b. Consider the use of low-height fences and landscaping along the west lot line to ensure porosity and additional safety to both the proposed site's walkway and amenity courtyard, as well as ensure surveillance of the playfield when not in use.

        i. These requests are in keeping with Crime Prevention Through Environmental Design (CPTED) principles.

        ii. The existing western property line is heavily overgrown, and creates a security concern when the playfield is not in use.

        iii. See image of existing condition, where rear yards have porous fencing. Staff ask the proposed development site improve upon this condition, with improved landscaping, well designed low-height fencing, and pedestrian scaled lighting in keeping with Don Mills design aesthetic.

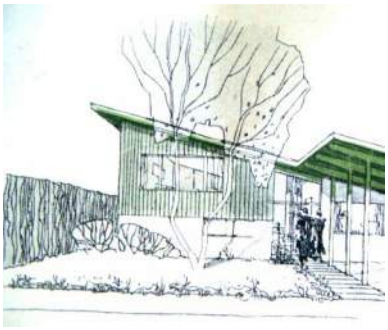
12. Consider the design principles and aesthetics of the Secondary Plan to inform a sensitive, porous, and consistent landscape scheme for the important interfaces along the Donway, the trail system, and the western walkway edge.

    a. Policy 1.1. j) is to ensure the design and landscaping reflect the garden city concept.

    b. Urban design would further encourage how integration of "mid-century design ideals" could be reflected throughout the proposal site.

    c. See the following precedent imagery and historical promotional imagery, illustrating landscape and design qualities of Don Mills, and how this can inform the landscape planting scheme along important interfaces. Buildings integrated "low" into and part of the overall landscape:






13. Below-grade terraces should be eliminated along public streets. Examine alternative designs to ensure clear views to and from the public realm along the Donway.

14. The Official Plan contains policies that require outdoor amenity spaces to have generous and well-designed landscaped areas to offer privacy and to have an attractive interface with the public realm.

    a. Examine ways to physically integrate the residential units surrounding the outdoor amenity space with the amenity space (i.e. not fenced off).

15. It is unclear how the interface of private terraces will interact with the more active central amenity courtyard space. See sketch:

    a. Consider how ground-floor accesses this space, and further add "eyes" onto the space to uphold CPTED principles.

    b. As previously mentioned, ensure sightlines particularly to and from this interior courtyard are maintained to the proposed walkway.

    c. Ensure lighting does not negatively impact surrounding units.

16. For future landscape plans indicate locations of hosebib connections to ensure adequate upkeep of proposed landscape scheme.

    a. Irrigation and maintenance of pet relief areas will need to be demonstrated.

17. The Official Plan contains policies that require the preservation and long-term growth of healthy trees to be a priority for all development. Development proposals are to demonstrate how the protection, provision and maintenance of trees and their growing spaces above and below ground will be achieved.

    a. The southern limit as currently proposed contains a significant amount of hardscape. Please reduce the amount of hardscape and increase the soil volume and tree planting. This may require a slight redesign of the underground parking.

    b. At the detailed design stage, consider appropriate landscaping throughout the site and within the pick-up-drop-off round-about.

18. The Official Plan identifies that new development will provide ground floor uses, clear windows and entrances that allow views from and, where possible access to, adjacent streets, parks and open spaces. Further, the Official Plan and Mid-Rise Guidelines (MRG) encourages appropriate public/private transition between ground-related residential uses and the public realm through the use of raised planters, low fencing and/or landscape buffers.

    a. Provide appropriate transition and integration between the private/public realm by permitting the place of worship direct access to the expanded parkland and installing raised planters, integrated seating, low fencing and/or landscape buffers around the townhouse units abutting the expanded parkland.

19. City Planning staff wish to schedule a design workshop with the applicants to work through the aforementioned comments.

Built Form – Angular Planes

20. The submitted drawings inaccurately illustrate the front and side angular planes and do not include the rear angular plane. While the development as currently proposed will likely fit within the required angular planes, please ensure all future drawings provide angular planes in accordance to the OP and the Mid-Rise Guidelines (MRG) as outlined below:

Angular Plane	**Required**	**Currently Shown**
Front (East) Lot Line	45 degree angular plane taken at a height equivalent to 80% of the adjacent right of way.	Angular plane taken at 60% of adjacent right of way.
Rear (West) Lot Line	45 degree angular plane from rear lot line.	Not provided.
North Side Lot Line	From actual grade due to significant grade difference.	From established grade.
South Side Lot Line	From new south lot line post parkland expansion.	From rear lot line of residential properties fronting onto Langbourne Lane.

21. It should be noted that angular planes is only one of a number of tools to determine appropriate height / transition. The proposed development shall ensure compliance with the policies of the OP and Secondary Plan and have regard to the MRG.

Amenity Space

22. Guideline 2.3 of the Growing Up Guidelines states that the minimum amount and location of amenity space should be in compliance with Zoning By-Law 569-2013.

    The application proposes to rezone the property to a site-specific Residential Apartment zone to facilitate the development. Section 15.10.40.50 of ZBL 569-2013 requires the following minimum amenity space for the development:

Amenity Space	**Required Rate (min)**	**Required Area (min)**	**Provided Area**	**Satisfied?**
Indoor	2 m^2 per dwelling unit	542 m^2	406 m^2	Not satisfied
Outdoor	N/A	40 m^2 - Shall be in a location adjoining or directly accessible to indoor amenity space	406 m^2	Satisfied – size Not satisfied – proposed outdoor amenity space is not directly connected to indoor amenity space

Amenity Space	Required Rate (min)	Required Area (min)	Provided Area	Satisfied?
Overall	4 m^2 per dwelling unit	1,084 m^2	812 m^2	Not satisfied

Staff encourage increasing the provided amenity space and connecting the outdoor amenity space with indoor amenity space to be in keeping with the Growing Up Guidelines.

Growing Up Guidelines

23. The Growing Up Guidelines recommends a minimum of 15% of units to be 2 bedroom units and a minimum of 10% of units to be 3 bedroom units. The application proposes 32.5% of units to be 2 bedroom units and 8.1% of units to be 3 bedroom units. While City Planning staff are satisfied with the proportion of 2 bedroom units, consider increasing the number of 3 bedroom units in accordance with the Guidelines.

24. Refer to the Growing Up Guidelines and demonstrate how the proposal meets the Guidelines with respect to matters, such as:

    a. Building configuration
    b. Common area design
    c. Amenity space provision
    d. Unit location
    e. Unit size
    f. Unit layout

Pet Friendly Guidelines

25. Refer to the Pet Friendly Guidelines and demonstrate how the proposal meets the Guidelines, with respect to matters, such as:

    a. Provision of pet amenity space (e.g. dog run, pet wash stations)
    b. Pet relief area (appropriate location and size) see aforementioned comments regarding better integration of the relief area along the western edge of the site, that does not negatively impact the walkway, landscaping, or enjoyment of nearby residential units.
    c. Irrigation and maintenance strategy of outdoor spaces through landscape plan.

Green Roof Bylaw

26. The development is subject to the City's Green Roof By-law. The proposal does not include a green roof. Should a green roof not be provided in accordance to the By-law, a variance from the By-law is required.

Toronto Green Standards (TGS)

27. City Planning staff will continue to review the proposal against TGS standards as the proposal evolves. While Tier 1 of the TGS is mandatory, staff encourage applicants to drive

for higher Tier levels to respond to increasing climate pressures on the City. Please ensure all future submissions demonstrate compliance with TGS.

Transportation Planning Comments

28. In order to satisfy the 27.0 m right of way requirement as outlined in the City of Toronto Official Plan, a property conveyance of 0.40m+/- is required.

29. The applicant is required to apply for revised municipal numbering prior to the issuance of any building permits. Requests can be submitted to municipaladdress@toronto.ca.

30. Transportation Demand Management (TDM) measures:

    a. Parking Reduction
        i. Further reduce the number of parking spaces. This could be augmented by significantly enhancing other TDM measures.

    b. Bike Share
        i. This is an area that has be identified for the expansion of Bike Share. To meet TGS v.3 TDM requirements, a financial contribution equivalent to the value of one typical 19-space Bike Share Station valued at $50,000 should be provided.

    c. Pre-loaded Presto Card
        i. The proposed value of the pre-loaded Presto Card at a value of $500 for each unit without a parking space is acceptable.
        ii. In addition, each residential unit with one or more parking space should be provided a pre-loaded Presto Card at the typical value of a TTC monthly pass.

    d. Bicycle Parking
        i. The TGS requires long-term bicycle parking to be provided in secure controlled-access bicycle parking facilities or purpose-built lockers. The proposed long-term parking is scattered around the parking area which creates concerns regarding navigation and access. Some bicycle parking also requires accessing the bike stand within the 6m drive aisle, which poses safety concerns. The applicant is requested to consolidate the proposed bicycle parking in enclosed rooms for ease of access and navigation.
        ii. There is an opportunity to provide additional on-site bicycle parking as a TDM measure.
        iii. Cycling is integral to the site, given its location along the Duncairn Park Trail and its close proximity to Lawrence Ave East which will both include cycling infrastructure and connections to the Don Mills Trail.

    e. Bicycle Repair Station
        i. Please indicate location of bicycle repair station on site plan and architectural drawings.

f. Travel Information Screen
    i. Please indicate the location of the travel information screen on site plan and architectural drawings.

g. Sidewalk
    i. Improving the condition of the sidewalk along The Donway West with a 2.1m sidewalk is required and cannot be considered as a TDM measure.

31. Pedestrian/Multi-use Connections:

a. Provide a 3.0m-4.0m multi-use path surrounding the site to improve accessible access.
b. Provide a 4.0m multi-use path connecting to Duncairn Park Trail.

32. Car-Share Space:

a. Consider having the car-share spot located in a marked surface-level parking space rather than in the surface-level lay-by spot.
b. The provision of an annual car-share membership to all residents is acceptable.

33. EV Charging Stations and Spaces:

a. The applicant has achieve the 20% provision of electric vehicle charging stations under EVSE.
b. The applicant must ensure the remaining spaces includes the conduit to provide EVSE as per Toronto Green Standards.

34. Curb Radii:

a. Include curb radii on Site Plans
b. Reduce curb radii
    i. Encourage the use of minimum requirement

35. Driveway:

a. Investigate the opportunity to reduce the size of the turn-around area and expand pedestrian walkways and landscaping.
b. Delineate the pedestrian crossing areas between buildings to provide clear and safe access for pedestrians.

36. To be secured at NOAC:

a. Car-share – Arrangement with car-share operator
b. Bike-share – Secure financial contribution
c. Travel Screen – Identified on Site Plan and financial security
d. Bike-Repair Station – Identified on Site Plan and financial security

e. Transit Passes – Secure pre-loaded Presto Cards with a value of $500 for each residential unit without a parking space and pre-loaded Presto Cards with a value of one TTC monthly pass for each residential unit with one or more parking space.

Heritage

37. The applicant has proposed to mitigate the replacement of the existing buildings on the subject property through an approach to programming and design that conserves identified heritage values, including that the proposal conserves the value of the congregation's long-standing presence through an identifiable church building, and that the proposal will continue to convey the Mid-Century Modern design principles through interpretive building and landscape design. Heritage Planning accepts the proposed approach for this building.

Community Services and Facilities (CS&F)

38. Community Recreation Centres

    Council approved a Parks, Forestry and Recreation (PFR) Facilities Master Plan (FMP) 2019-2038 which provided updated planning priorities and identified emerging needs and opportunities. An implementation strategy was also adopted by Council in October, 2019 to prioritize and provide time lines for recommended facility projects across the city.

    The FMP establishes a CRC City Wide Service provision level of 1 CRC per 34,000 within a 2 to 2.5 KM radius. There are currently 2 community centres serving the application site: Banbury Community Centre and Broadlands Community Centre.

    The FMP identifies the need to address splash pad gaps through wading pools conversion in the area of this site.

39. Community Space/ Human Service Agencies

    Human services sector is complex and highly collaborative involving extensive partnerships among agencies. Most human services spaces are rented rather than owned, leaving service providers vulnerable when leases expire and landlords have the option to sell. High rental costs for facilities was a common challenge across sectors as well.

    City Council adopted a Community Space Tenancy policy that provides a framework for leasing City space to the non-profit community based sector. This policy is led by SDFA and Corporate Real Estate Management (CREM). The City has a history of providing City owned space to community and cultural organizations at below market rents where these groups further the delivery of City programs and services through programs that meet a community need and which are consistent with Council's objectives. The Community Space Tenancy policy establishes a transparent, accountable and fair framework for these leased City owned spaces. The policy is attached below.

    https://www.toronto.ca/legdocs/mmis/2017/ex/bgrd/backgroundfile-107615.pdf

Community Agency Space is often located in ageing buildings and lack accessible space elevators, washrooms, Wheel Trans. There is often an interest/need for co-location of services. Community hubs support shared resources and integrated services among multiple providers and can foster connection to residents and the community being served.

40. Community Benefits

    Should community benefits be considered as part of the evaluation of the proposed development, the following contributions are recommended:

    a. Community agency space, which the owner is to design, construct, finish and convey to the City a minimum of 5,000 square feet

    b. Contribute towards wading pools conversion

General

41. Please ensure all future site plan and floor plan submissions are plotted consistently to assist in future staff review when comparing floor-plans.

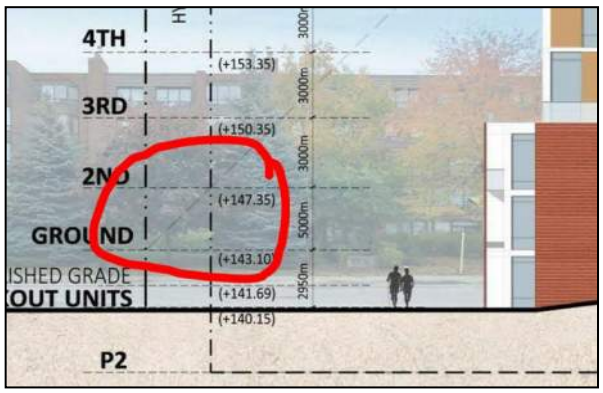
42. Please submit a Lighting Photometric Plan, a Soil Volume Plan, and a Public Utilities Plan (QL-A) in accordance to the City's Terms of Reference.

    a. Photometric plan to indicate light levels, and ensure limited light spillover onto adjacent public realm along the Donway, trail system, and adjacent residential properties.

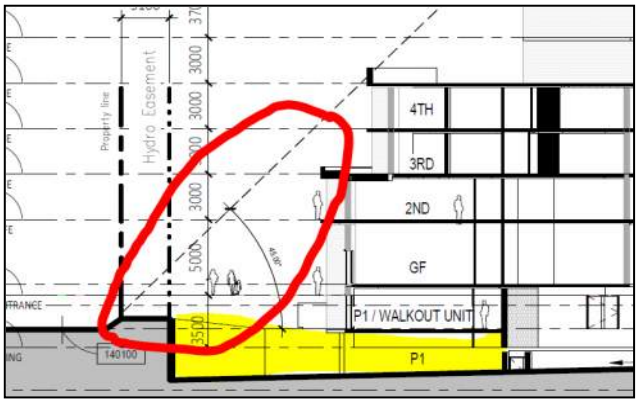
    b. Lighting must comply with Toronto Green Standards and be Darksky compliant, to ensure no negative uplighting.

43. Ensure consistency between drawings. For instance, grading on the north end of the site is inconsistent between the North Elevation and Section 1 drawing (refer to sketches below).

North Angular Plane Shown on West



North Angular Plane Shown on Section 1



44. Clarity is requested with respect to the grade relationship on the north side (see the area highlighted in yellow in sketch below). Confirm what the area highlighted will be. Exposed

P1 level? Will below-grade P1 area be covered? Unclear from sections. Additional sections to demonstrate this grade change condition may be beneficial.

As noted in Comment 19, City Planning staff wish to schedule a design workshop with the applicant to work through certain design elements of the proposal. Please contact Ingrid Fung to arrange the workshop at Ingrid.Fung@toronto.ca.

At the time of resubmission, please include a response memo advising of how the comments above have been addressed.

Should you have any questions or concerns, please do not hesitate to contact Ingrid Fung.

Yours truly,

John Andreevski, Manager
Community Planning, North York District